Jefferson County, Georgia
Multi-Hazard Pre-Disaster Mitigation Plan
Original Plan Approval: 03/27/2009
Update Plan Approval: 12/29/2014

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CHAPTER I. INTRODUCTION TO THE PLANNING PROCESS

Table 1.1 provides a brief description of each section in this chapter and a summary of the changes since 2009.

Table 1.1

Chapter I Section	Updates to Section
I. Purpose and need of the plan, authority & statement of problem	Updated text of this section
II. Local methodology, brief description of plan update process, Participants in update process	Updated the participants, planning process and how data was collected
III. Description of how each section of the original plan was reviewed and analyzed and whether it was revised	There have been numerous changes to the GEMA -PDM planning template since the 2009 approval. All sections of the original plan were analyzed and revised.
IV. Organization of the plan	The plan is organized by GEMA local planning template Local Hazard Mitigation Plan Update Template 5-23-12 and includes a timeline.
V. Local Hazard, Risk, and Vulnerability (HRV) summary, local mitigation goals and objectives	Added new information to summary, new purpose for plan
VI. Multi-Jurisdictional special considerations (HRV, goals, special needs)	Reviewed and updated information regarding multijurisdictional concerns
VII. Adoption, implementation, monitoring and evaluation	This was evaluated and remains the same. Additional text was added to clearly delineate the task of implementation and monitoring. Plan was adopted after GEMA and FEMA review and approves the update plan
VIII. Community Data (demographics, census, commerce, history, etc.)	Updated demographic and added additional information by jurisdiction

SECTION I. PURPOSE AND NEED OF THE PLAN, AUTHORITY AND STATEMENT OF PROBLEM

The Jefferson County 2014 Plan Update is the review and improvement to our Multi-Hazard Pre-Disaster Mitigation Plan approved on March 27, 2009. The plan fulfills the requirements of the Federal Disaster Mitigation Act of 2000 (DMA2K). The Act is administered by the Georgia Emergency Management Agency (GEMA) and the Federal Emergency Management Agency (FEMA). The act provides federal assistance to state and local emergency management and other disaster response organizations in an effort to reduce damage from disasters. The plan has involved many community partners including elected officials, city and county personnel, fire, emergency management, law enforcement, and public works. The ultimate goal of this plan is to identify natural hazards and develop strategies to lessen the impact on our community.
The update is written to comply with Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act Title 44 CFR as amended by Section 102 of the Disaster Mitigation Act of 2000. The act gives state and local governments the framework to evaluate and mitigate all hazards as a condition of receiving federal disaster funds. The 2009 plan and the 2014 update covers all of Jefferson County to include the cities of Avera, Bartow, Louisville, Stapleton,

Wadley, and Wrens. The plan will identify all natural disasters that could threaten the lives and properties of our community. The scope of this update includes both short and long-term mitigation strategies, implementation and possible sources of project funding. It also identifies mitigation strategies that have been implemented since the 2009 plan.

The plan also contains the following information on:

- The vision of mitigation in our community;
- The profile of Jefferson County, its geography, history, physical features and other community indicators;
- The planning process and the involvement of all municipal, state and federal governments, the public, industry and other community players;
- Documentation of Jefferson County's past and predicted exposure to natural hazards and the potential risks that include the impacts on critical infrastructure with anticipated losses;
- Procedures for maintaining an effective, long-range hazard mitigation plan and the strategy to implement;
- An assessment of Jefferson County's and all municipalities' current policies, goals and regulations that pertain to hazard mitigation;
- Critical facilities information; and
- Documentation of the process.

Prior to the development of the 2009 plan, there was little guidance on mitigation strategies. As a result of the mitigation act, the county and municipal leaders came together and adopted the 2009 plan by resolution. The purpose of the plan was to identify risks to Jefferson County, to formulate achievable goals and objectives, and develop a plan of action to reduce losses from natural disasters. The 2009 plan serves as a benchmark for future mitigation activities and identified mitigation goals, objectives, and action steps. The 2014 plan has been completely reformatted to meet the requirements implemented after 2009. The update will examine all parts of the plan to include but not limited to:

- Update Hazard Events that occurred since 2009;
- Update Critical Facilities that have been added since 2009;
- To document current mitigation strategies that have been implemented since 2009; and
- Examine and update Mitigation Strategy Goals, Objectives and Action Steps.

The update is the product of the combined efforts of Jefferson County and its municipalities. Realizing that it is in the county's best interest to identify the community's risks to natural disasters and to lessen their effects, the Jefferson County Emergency Management Agency (EMA) has taken the lead role in the update. Under the agency's leadership, there has been an endorsement and a commitment by Jefferson County and its municipalities.

Continued mitigation planning is imperative to lessen the impacts of disasters in Jefferson County and its municipalities. This plan serves as an excellent method to organize and document current and ongoing mitigation strategies. The implementation of this plan and its components is vital to achieve a community that is more disaster resistant. The objective is implementation of this plan will produce a reduction in the loss of life and property, while allowing the county to prosper with minimal disruption of services.

SECTION II. LOCAL METHODOLOGY, PLAN UPDATE PROCESS AND PARTICIPANTS

The Jefferson County Board of Commissioners contracted with the Central Savannah River Area Regional Commission (RC) to assist in the update to the 2009 plan. The RC has assisted nine counties in the completion of their Pre-Disaster Mitigation Plans including Jefferson County's 2009 plan. The RC has completed updates on five plans and is currently working on six updates. The RC was tasked with the review of the current plan, the identification of new information that needed to be incorporated into the development and completion of the update. The RC in conjunction with the EMA Director, oversaw the project, organized the data, set meeting dates, documented in-kind services, and worked with the GEMA to complete this plan. EMA Director Jim Anderson was tasked with developing the Hazard Mitigation Planning Committee. The 2009 committee consisted of the following organizations.

Jefferson County Board of Education	City of Wrens Public Works Department
Jefferson County Emergency Management Agency	City of Wadley Police Department
Jefferson County Fire Department	City of Wadley Fire Department
Jefferson County Health Department	City of Wrens Police Department
Jefferson County Administor	City of Stapleton Mayor
Jefferson County Public Works Director	City of Wadley Mayor
Jefferson County Building Inspector	City of Avera City Council Member
Jefferson County Road Department	City of Bartow Mayor
Jefferson County Sheriff's Office	City of Louisville Police Department
City of Louisville Fire Department	Georgia Forestry Commission
City of Louisville City Administor	The Jefferson Reporter

All previous members from the 2009 plan were invited to participate in the update. Due to budget constraints and workloads some did not attend meetings but were active in the planning process and available by phone or email if information pertaining to their agency was required. The update committee is comprised of the following officials representing their respective organizations and political subdivisions.

Name	Agency/Title	Jurisdiction
Jim Anderson	EMA Director	Jefferson County
Janet Pilcher	Health Department	Jefferson County
Susan Scarboro	Clerk	Town of Bartow
Robert Morris	Fire Department	Town of Bartow
Frank Parrish	Mayor	City of Stapleton
Larry Cheely	Chief Fire Department	City of Wrens
Robert A. Chalker	Sheriff's Office	Jefferson County
Garry A McCord	Chief of Police Department	City of Wrens
Larry Anderson	Supervisor Waste Water Plant	City of Wrens
Larry Morgan	Mayor	City of Louisville
Lamar Baxley	Fire Chief	City of Louisville
Jimmy Miller	Police Department	City of Louisville
Robert Hoffman	Police Department	City of Stapleton

Name	Agency/Title	Jurisdiction
Robert Morris	Mayor	Town of Bartow
Marc Peebles	Assistant Fire Chief	City of Wrens
Shane Barrow	Georgia Forestry Commission	Glascock-Jefferson County GFC
Andrew Rooks	Georgia Forestry Commission	Glascock-Jefferson County GFC
Joshua Guy	Georgia Forestry Commission	Glascock-Jefferson County GFC
Sallie Adams	Clerk	City of Wadley
Wayne Davis	Public Works Supervisor	City of Wrens
Wesley Lewis	Police department	City of Wadley
Harold Moore	Mayor	City of Wadley
Tommy Sheppard	Mayor	City of Avera
Amy Hadden	Clerk	City of Avera
Larry McGraw	City Council Member	City of Avera
Leisa Hadden	City Council Member	City of Avera
Joey May	Engineer Jefferson Hospital	Jefferson County
Sam Dasher	Board of Education	Jefferson County
Ricky Sapp	City Administrator	City of Louisville
Anna Anderson	EMA	Jefferson County
Leah Lumley	E911	Jefferson County
Louisa Pennington	Tax Assessor	Jefferson County
Carol McLeod	Staff Writer Jefferson Reporter	Jefferson County

The committee is responsible for the organization, data collection and completion of the plan. It was the responsibility of the committee to include all pertinent departments within their respective governments and to request information as needed. The following agencies/departments/organizations provided specific information and support for the original plan and provided any new information for the update:

- Jefferson County School District was responsible for providing structural replacement and content values for all schools as well as square footage and occupancy limits.
- Police Departments for the Cities of Bartow, Louisville, Stapleton, Wadley, and Wrens provided staff support and were responsible for providing structural replacement and content values for all critical facilities located in their respective cities as well as square footage and occupancy limits.
- Jefferson County Sheriff's Office provided staff support to the planning effort.
- Jefferson County Health Department identified vulnerable populations. They also provided replacement value estimates for their properties.
- Fire Departments of Jefferson County and the City of Louisville and Wrens provided staff support and assisted with identifying occupancy limits for some of the critical structures and replacement value estimates.
- City officials from the Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens provided information relative to their jurisdictions and provided replacement value estimates for their critical facilities.
- Georgia Forestry Commission provided data on wildfire events and assisted with the formulation of mitigation measures.
- Jefferson County Chamber of Commerce assisted in identifying major businesses.
- Jefferson County Board of Commission County Administrator provided information

about Jefferson County government buildings including their respective replacement and content values and square footages.

- Jefferson County Tax Assessor's Office provided most of the aggregate values for the critical structures. The valuations had to be converted to full values since they are figured at 40 percent of actual value. This information, combined with demographic data, is compiled on GEMA Worksheet #3a in Appendix A for all jurisdictions.
- CSRA Regional Commission's Geographical Information System (GIS) Department produced several of the maps. Maps are located in Appendix A and C.

Several resources were consulted to facilitate the development of the update. Data was collected from numerous sources, including the National Climatic Data Center (NCDC), Spatial Hazard Events and Losses Database for the United States (SHELDUS™), National Weather Service, US Geological Survey (USGS), Southeast Regional Climate Center (SERCC), US Census Bureau, Georgia Department of Natural Resources (DNR), Georgia Forestry Commission (GFC), Georgia Tornado History Project Database, Georgia Department of Community Affairs (DCA), US Department of Agriculture (USDA), local and regional newspaper articles, as well as personal interviews. The RC assisted in research and analysis, facilitated committee meetings, complied data and composed the updated plan. The committee reviewed the following existing planning documents:

Record of Review		
Existing planning mechanisms	**Reviewed (Yes/No)**	**Method of use in Hazard Mitigation Plan**
Jefferson County Joint 2004-2024 Comprehensive Plan	Yes	Development trends, capability assessment, mitigation strategies
Local Emergency Operations Plan	Yes	Identifying hazards; Assessing vulnerabilities; Capability assessment
Georgia Emergency Operations Plan	Yes	Identifying hazards; Assessing vulnerabilities;
Flood Damage Protection Ordinance	Yes	Mitigation strategies, capability assessment
Building and Zoning Codes and Ordinances	Yes	Development trends; Future growth, capability assessment, mitigation strategies
Mutual Aid Agreements	Yes	Assessing vulnerabilities, Determine assets added to disaster relief and response.
State Hazard Mitigation Plan	Yes	Risk assessment, review of recommended strategies
Land Use Maps	Yes	Assessing vulnerabilities; Development trends; Future growth
Critical Facilities Maps	Yes	Locations
Community Wildfire Protection Plan	Yes	Mitigation strategies, risk assessment
Flood Insurance Study	Yes	Review for historical Data and Information
The Jefferson County Assets Index	Yes	Reviewed for assets data, tax information
CSRA Regional Plan 2035	Yes	Development trends; Future growth, regional concerns and data

It should be noted that the county does not have a Flood Mitigation Assistance Plan. This has been listed as mitigation action in Chapter III.

The committee held eight meetings over an 18-month period to guide the development of the plan. Individual meetings with jurisdictions and/or agencies were held as needed. The committee was responsible for developing the mission statement, as well as the goals, objectives, and action steps identified in the plan. The committee researched previous hazard information in the areas of earthquakes, flooding, wildfires, tornados, winter storms, hurricanes, high winds, dam failure, lightning, hail, and drought. However, some of these hazards were eliminated due to their low level of risk. All committee members collected critical facilities information based on their area of expertise or jurisdiction. The RC was responsible for assessing vulnerability and estimating potential losses from the information collected. Potential losses include people, structures/properties, infrastructure, and other important community assets.

All meetings were open to the public and notices of meetings were posted at all city halls and the county commission office. Four meetings were advertised in *The Jefferson Reporter,* the County's legal organ. This is the most efficient means to disseminate information to residents and organizations located in the county. Notices were also posted at city and county offices. In order to meet the requirement to afford an opportunity for neighboring communities, local and regional agencies, businesses, academia and other private and non-profit interests to be involved in the planning process, invitations were extended by email. The following counties were invited to attend: Burke, Columbia, Hancock, Glascock, Jenkins, Lincoln, McDuffie, Richmond, Taliaferro, Warren, Washington, and Wilkes. Initiations were sent to all municipalities located in these counties also. Copies of correspondence, emails and advertisements are in Appendix E.

Meeting Date	Purpose of Meeting
May 9, 2013	Advertisement ran in *The Jefferson Reporter* Advertising for public meeting on May 15, 2103.
May 15, 2013	To solicit public input on the goals and objectives of the Mitigation Update Plan. Brian Laughlin GEMA, representative provided a PowerPoint presentation about the purpose and need of the plan along with changes to the process since the 2009 planning process. Was advertised in local paper
December 9, 2013	To begin hazard collection and critical facilities adjustments. Discuss the new requirements from the update and to review STAPLEE worksheet as it applied to mitigation strategies
May 15, 2014	Article rain in *The Jefferson Reporter about* FEMA hazards funds and the May 28, 2014 meeting.
May 28, 2014	This meeting was to ensure all data collected to date was correct with regards to critical facilities. The meeting covered in detail the devastation and after effects of the ice storm that occurred February 10-14, 2014 and resulted in a Federally Declared Disaster (DR4165). There was a very in-depth discussion of lessons learned.
June 26 , 2014	This meeting was a continuation of the May 28, 2014 meeting. Ensured all data collected was correct with regards to critical facilities. It also covered in detail the devastation and after effects of the ice storm. The discussion of lessons learned continued.
July10, 2014	Meet with GEMA to discuss grant applications and mitigation strategies.
July 31, 2014	Advertisement ran in *The Jefferson Reporter* for the August 7, 2014 meeting.

Meeting Date	Purpose of Meeting
August 7, 2014	To review draft plan and to ensure the public an opportunity provide input to Also to ensure all data was correct.
August 7, 2014	An advertisement was placed in *The Jefferson Reporter* informing the citizens that a draft was available for review to ensure that the public had ample opportunity to review the first draft of the update and provide input. The notice also included information on the August 18, 2014 before submission to GEMA for review.
August 18, 2014	This meeting was advertised in the legal organ ensure the public had ample opportunity to review the update before submission to GEMA for review.
To Be Added after FEMA Approval	Advertisement ran in *The Jefferson Reporter* Advertising for public review and the final meeting ***date will be added after FEMA approval***
To Be Added after FEMA Approval	After GEMA submitted the plan to FEMA and FEMA Approved Pending Adoption (APA), the public was invited to review the final plan prior to adoption during (will be added after APA) time frame. The meeting was held after the aforementioned review period to ensure that the public was afforded the opportunity provide input.

SECTION III. ORIGINAL PLAN REVIEW AND REVISION

The Federal Disaster Mitigation Act of 2000 requires the Pre-Disaster Mitigation Plan be updated every five years. The EMA Director was responsible for ensuring that this requirement was met. The committee, with the assistance of the RC, was involved in the planning process to ensure thorough data collection. All members of the committee and the EMA Director were responsible for ensuring that the 2009 plan was evaluated as required. During the review process, the committee noted mitigation accomplishments, updated and prioritized mitigation projects, added additional hazard information, developed new goals and objectives, solicited input from the public and made any needed or required revisions. The evaluation included analyzing any changes in the needs and/or capabilities of Jefferson County and its municipalities.

SECTION IV. ORGANIZATION OF THE PLAN

The estimated time to complete the plan update was approximately 20 months. Plan completion is identified by adoption of resolution by all jurisdictions. The update contains a Hazard, Risk, and Vulnerability (HRV) Assessment describing the natural hazards typically occurring within the county, as well as a review of all mitigation goals, objectives, and related courses of action. In addition, plan implementation and maintenance are reviewed, which includes methods to provide opportunities for public involvement.

The hazards included in this plan are considered to have the highest probability of occurrence, vulnerability, potential loss/damages, and highest frequency of occurrence. The plan also identifies and prioritizes hazard mitigation opportunities in each vulnerable area based on the input from the committee members, relevant government agencies, local businesses, and Jefferson County citizens.

SECTION V. LOCAL HAZARD RISK AND VULNERABILITY, SUMMARY LOCAL MITIGATION PLANNING GOALS OBJECTIVES

The committee, early in the update process, established a set of goals and objectives in order to ensure the effectiveness of this plan. These goals and objectives established the paradigm for the planning process and proved very successful by the many accomplishments of the 2009 plan. These goals and objectives are as follow:

- To actively involve and gain support from all municipalities and Jefferson County for the reduction of disasters in our community:
- Prioritize identified mitigation projects;
- Seek and implement any grant funding for the reduction of disasters in Jefferson County and all municipalities;
- Monitor, evaluate, and update the progress of the plan as needed;
- To form partnerships among local, state, and federal agencies to make Jefferson County more resistant to the effects of disaster;
- Strengthen our communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective;
- Reduce and where possible eliminate repetitive damage, loss of life and property from disasters;
- Bring greater awareness throughout the community about potential hazards and the need for community preparedness; and
- To further enhance common mitigation projects and goals between Jefferson County and with its municipalities.

An HRV assessment was accomplished by compiling and reviewing historical data on the location of specific hazards, the value of existing property in hazard locations, and analyzing the risk to life, property and the environment. The committee accomplished the HRV by completing the following steps:

Inventory of Critical Facilities: Critical facilities are crucial for providing essential services for preserving the safety and quality of life of its residents. In addition, these facilities fulfill important public safety, emergency response, and/or disaster recovery functions. All critical facilities have been added to the Georgia Mitigation Information System (GMIS). Critical facilities for Jefferson County and its municipalities have been identified, updated, mapped, and illustrated in Appendix A.

Hazard Identification: Maps and historical data sources were studied and reviewed in order to identify the geographic extent, intensity, and probability of occurrence for various hazard events. The committee identified six major hazards that have the potential to affect Jefferson County: flooding, dam failure, drought, wildfire, severe weather (tornados, tropical storms, thunderstorms winds, lightning and hail) and winter storms. An updated hazard history for Jefferson County and all municipalities is provided in Appendix A.

Profiling Hazard Events: The committee analyzed the causes and characteristics of each hazard, their effects, and the population and infrastructure that has been historically vulnerable to each specific hazard. An updated profile of each hazard is discussed in Chapter II.

Vulnerability Assessment: This step was accomplished by comparing each previously identified hazard with the inventory of affected critical facilities and population exposed to each hazard. Worksheet #3a was updated and is provided in Appendix A outlining this step of the HRV assessment.

Estimating Losses: Using the best available data, to include, tax digest data, parcel maps and GMIS maps and reports for critical facilities allowed the committee to estimate damages and financial losses likely to be sustained in a geographic area. Describing vulnerability in terms of dollar losses provides the county with a common framework in which to measure the effects of hazards on critical facilities. All information in this section has been updated *(Appendix A and Appendix D).*

It should be noted that an attempt was made to use FEMA's HAZUS-MH software to predicate losses. The RC has GIS capabilities in-house but use ArcGIS 10.2 which is not compatible with the software which runs on ArcGIS 10.0. The RC will run scenarios when the next update for HAZUS is released and update the plan during the annual review period. This has been added as a mitigation goal. Documentation of correspondence with FEMA about the software can be founded in Appendix E.

Mitigation Goals and Objectives: After ensuring that all interested persons had been given ample opportunity to contribute to strategy development, mitigation action steps were next given priority status by committee members. To evaluate priorities, committee members used the Social, Technical, Administrative, Political, Legal, Economic, and Environmental (STAPLEE) Worksheet prepared by FEMA. Mitigation steps were evaluated using the worksheet as the guiding principle to identify those actions best for Jefferson County. Steps were ranked as high priority, medium priority, or low priority. Past occurrences of disasters and historical trend data aided committee members in assigning priorities.

SECTION VI. MULTI-JURISDICTIONAL SPECIAL CONSIDERATIONS

Jefferson County and all municipalities provided active participants in the planning process and have identified mitigation goals, objectives and action items specific to their jurisdiction. The governing bodies for the county and all municipalities have formally adopted the Jefferson County Multi-Hazard Pre-Disaster Mitigation Plan.

Jefferson County has six municipalities: Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens. The municipalities were notified in January 2013 of the requirement concerning the update to the 2009 plan. Representatives from all seven jurisdictions have worked collectively over the past months to gather data that included researching old records, newspaper articles, data bases, historical data, past and present flood plain data, and technical information for the plan. The data was forwarded to the EMA Director and the RC for review and plan development. Subsequent meetings were held in an effort to ensure that all information was correct and all agencies and organizations input was included.

The EMA Director led activities for mitigation planning countywide. To be specific, the County's goal was to work in partnership with its municipalities toward a common mitigation strategy that significantly reduces vulnerability to hazards. Most natural threats overlap jurisdictions and all are susceptible to their affects. Jefferson County and its municipalities share the same passion and desire for protecting and reducing risk through the mitigation projects. Specific risks and areas have been identified through working relationships and data collection from all areas of the county and are identified in this plan.

SECTION VII. ADOPTION, IMPLEMENTATION AND MONITORING AND EVALUATION

Adoption Date

Jurisdiction	Adoption Date
Jefferson County	January 13, 2015
City of Avera	December 19, 2015
City of Bartow	December 18, 2015
City of Louisville	December 19, 2015
City of Stapleton	December 18, 2015
City of Wadley	January 12, 2015
City of Wrens	December 18, 2015

The plan was submitted to GEMA for review and then to FEMA for approval. Jefferson County and all municipalities served as active participants in the planning process and have identified mitigation goals, objectives, and actions specific to their jurisdiction. Their respective governing bodies have formally adopted the 2009 plan and have formally adopted the update plan after approval by GEMA and FEMA. The plan is intended to be implemented into policy and to enhance and complement state and federal recommendations for the mitigation of natural hazards in the following ways:

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

FEMA publishes many guidance documents for local governments for mitigating natural disasters. The plan fully recognizes, adopts, incorporates, and endorses the following principals.

- Develop a strategic mitigation plan for Jefferson County.
- Enforce current building codes.
- Develop incentives to promote mitigation.
- Incorporate mitigation of natural hazards into land use plans.
- Promote awareness of mitigation opportunities throughout Jefferson County community on a continual basis.

- 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 as such:

- Develop mitigation incentives with insurance agencies and lending institutions.
- Encourage the creation of a business continuity plan for the continuance of commerce during disasters.
- Partner with businesses in effort to communicate with customers about the community hazards and possible solutions.

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

- Become educated on the hazards that your community and you may face.
- Become part of the process by supporting and encouraging mitigation programs that reduce vulnerability to disasters.
- That individual responsibility for safeguarding you and your family prior to a disaster is essential.

Chapter IV. Plan Integration and Maintenance details the formal process that will ensure that the plan remains an active and relevant document. The plan maintenance process includes monitoring and evaluating the plan annually, and producing a plan revision every five years. Additionally, Jefferson County will develop steps to ensure public participation throughout the plan maintenance process. Finally, this section describes how Jefferson County will incorporate the mitigation strategies identified in this plan into other relevant planning documents such as the Jefferson County Joint Comprehensive Plan, Short-Term Work program (STWP) and Local Emergency Operations Plan (LEOP).

SECTION VIII. COMMUNITY DATA

Political Boundaries - Jefferson County

Jefferson County

GA DCA Region 7

Georgia

History

Jefferson County was created in February 20, 1796 and named for Thomas Jefferson, the third president of the United States Jefferson County was originally part of Burke and Warren counties and named for Thomas Jefferson. Louisville, the county seat, was named in honor of King Louis XVI of France, because of the support given by France to the Colonials in the Revolution. Louisville was Georgia's third state capital, but its first "permanent" one. Louisville was the site of the Constitutional Convention of 1798 in which the state's pre-Civil War constitution was adopted. Georgia's Great Seal, which is still in use today, was adopted at the same time.

Government

Jefferson County operates under a commission-based system of government in which five commissioners are elected to four-year terms. Other county officials are the County Attorney, Clerk of Superior Court, Code Enforcement Officer, Public Works, Roads and Bridges, Probate Judge, Coroner, Magistrate Judge, Sheriff, and Tax Commissioner. Jefferson County contains six municipalities, all of which operate under a mayoral system of government with additional officials providing services to residents.

Jefferson County Georgia: Municipal Governments	AVERA	BARTOW	LOUISVILLE	STAPLETON	WADLEY	WRENS
Mayor	X	X	X	X	X	X
# Council Members	4	5	5	5	5	5
City Clerk	X		X	X	X	X
City Coordinator/Administrator		X	X			X
City Attorney	X	X	X	X	X	X
Police Chief		X	X	X	X	X
Fire Chief	X	X	X	X	X	X
City Engineer						
Public Works Director	X		X			X
Gas Superintendent			X			X
Water Superintendent	X	X	X	X		
Wastewater Superintendent		X	X			X
Sanitation Superintendent		X	X	X		
Building Inspector					X	X
Code Enforcement						X
Municipal Court Judge		X	X	X	X	X
Municipal Court Clerk		X	X	X	X	X

Source: Georgia Municipal Association

Demographics

Presently, Jefferson County has a population of 16,930 persons. The two tables below shows current and historical comparisons of all jurisdictions.

Category	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Population	16,930	246	286	2,493	438	2,061	2,187
Number of Households	6,241	100	110	875	175	752	860
Average Household Size	2.63	2.46	2.6	2.61	2.5	2.62	2.54
Race - White	42.6%	91.1%	41.3%	28.5%	66.2%	17.4%	32%
Race - Black	54.4%	6.9%	58.4%	70.4%	30.8%	79.2%	64.7%
Race - Hispanic	3.1%	0.0%	0.3%	0.7%	1.4%	4.8%	2.5%
Race - Other	1.6%	0.0%	0.0%	0.2%	0.2%	2.4%	1.6%
Median HH Income	$27,612	$35,000	$40,000	$30,597	$27,143	$20,078	$29,620

Source: US Census Bureau

Community	Population				Growth (%)		
	1980	1990	2000	2010	1980-1990	1990-2000	2000-2010
Jefferson County	18,403	17,408	17,266	16,930	-5.45%	-0.8%	-1.95%
Avera	248	215	217	246	-13.3%	0.9%	13.37%
Bartow	357	292	223	286	-18.2%	-23.6%	28.26%
Louisville	2,823	2,486	2,712	2,493	-11.9%	9.1%	-8.08%
Stapleton	388	330	318	438	-14.9%	-3.6%	37.74%
Wadley	2,438	2,416	2,088	2,061	-0.9%	-13.6%	-1.3%
Wrens	2,415	2,414	2,314	2,187	0.0%	-4.1%	-5.49%

Source: US Census Bureau

Economy

In the year 2013, the average weekly wage for employment sectors was $600, compared to the statewide average of $899. The May 2014 unemployment rate was 12.4 percent. In 2013, the total number of employees located in Jefferson County was 4,428. Of the total work force, 45.3 percent were employed in the service providing sector, followed by 30.2 percent in the goods producing sector 24.4 percent in the government sector.

The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The table below provides a list of jobs, number of establishments and jobs along with average weekly wages per job for 2013 in Jefferson County.

Annual Industry Distribution of Jobs and Average Wage in 2013 (NAICS)	Establishments	Jobs	Annual Average Wage Per Job
Total Covered Employment and Wages	**363**	**4,428**	**$600**
Total Private Sector	**320**	**3,347**	**$611**
Total Government	**43**	**1,081**	**$566**
Agriculture, forestry, fishing, hunting	35	260	$681
Mining, Quarrying, and Oil and Gas Extraction	4	268	$1,142
Construction	28	185	$619
Manufacturing	30	623	$686
Wholesale trade	13	206	$588
Retail trade	60	583	$397
Transportation, warehousing	11	59	$708
Utilities	5	*	*
Information	4	20	$401
Finance and Insurance	18	103	$736
Real Estate, rental, leasing	11	45	$476
Professional, technical services	15	48	$899
Mgmt. of companies, enterprises	2	*	*
Administrative and support and waste management services	7	36	$540
Educational services	1	*	*
Health care, social assistance	20	347	$432
Arts, entertainment, recreation	2	*	*
Accommodation and food services	23	249	$238
Other services, except public administration	24	70	$328
Unclassified-Industry not assigned	7	*	*

Source: Georgia Department of Labor **** Industry group does not meet criteria for disclosure***

Climate

According to the National Weather Service Jefferson County experiences all four seasons. Summers typically consist of long spells of warm and humid weather with afternoon high temperatures in the lower 90's and readings of 90 degrees or higher can be expected on 70 to 80 days. Overnight lows usually range from the upper 60's to lower 70's. Weather during winter months is more variable with stretches of mild weather alternating with cold spells. Winter high temperatures average in the mid 50's to lower 60's with lows averaging in the

mid 30's. Temperatures of 32 degrees or lower can be expected on 40 to 50 days. Spring and autumn are characterized by much variability from day to day and from year to year. The average date of first freeze is in mid-November and the last freeze is in mid-to-late March.

Jefferson County averages 45.6 inches of rain per year. The number of days with any measurable precipitation is 93. On average, there are 218 sunny days per year in the county. The average July high is around 92 degrees and the average January low is around 36 degrees.

Physical Features

Jefferson County encompasses an area of roughly 531.2 square miles or 339,936 acres. The County is located at the cusp of two geological regions, the Southern Piedmont and the Georgia Coastal Plain. This gives the county a mixture of geological features and provides for a variety of landscapes and available resources. The fall line, which runs through Jefferson County, is a geological boundary following the Appalachian Mountain range from Alabama to New York. In Georgia and South Carolina the fall line separates the Southern Piedmont from the Southern Coastal Plain. The location has implications for how drinking water is retrieved in the county as the Floridian aquifer closely follows the boundaries of the Fall Line.

Jefferson County and its six incorporated cities are primarily within the Dothan-Fuquay-Tifton and Orangeburg-Faceville-Lucy Soil associations. These two make up 74% of the county. These soils are strong and well drained with slopes range from 0 to 15%. Excess surface water drains into a system of intermittent and perennial streams. There are few areas of open water. The soils are used mainly for field crops, hay, or pasture, but many areas are wooded. Roads, utility lines, fences, and farm homes and associated structures are common. The degree of visual diversity is moderate. These soils are good for most urban and agricultural uses. Soil map is in appendix A.

Transportation

Vehicle Traffic: U.S. Highways 1, 221, 319, and Georgia Highways 102 and 80 all intersect a portion of the county and are the primary arterials in Jefferson County. Interstate Highway 16 passes 32 miles south of the county line, while Interstate Highway 20 passes just 22 miles away via Georgia Highway 17. Roads classified on the map, located in Appendix A, are considered major county thoroughfares and serve as main transportation routes within the county and to surrounding areas. All other county or municipal roads not classified on the thoroughfare map are considered locally serving. Most of the roadway network is rural, with only a handful of urban roads in Louisville, Wadley and Wrens.

Mileage by Route and Road System Report 445 for 2012			
	Total Road Mileage	Lane Mileage	Vehicle Miles Traveled (VMT)
State Route	186.30	436	420,000
County Road	558.46	1,117	150,000
City Street	74.33	148	34,000
Total	**819.09**	**1,701**	**604,000**

Source: Georgia Department of Transportation, Office of Transportation Data, "445 Series Reports."

Public Transportation: In addition to coordinated transportation through the Georgia Department of Human Resources, Jefferson County Transit (WCT) provides public transportation for county residents. Services include transporting residents to and from destinations for shopping, work, school, personal appointments, and recreational opportunities within and outside the county. The county and state fleets include a total of eight vans – two wheelchair accessible and six 12-15-passenger vans. Approximately 2,771 monthly trips are provided to county residents.

Rail Traffic: Rail companies provide crucial cargo transport for industries in Jefferson County. Many items and materials are too bulky or heavy to be shipped by truck and are moved by rail. Norfolk Southern has two lines that pass through Wadley and Wrens en route to Warrenton and Atlanta. In addition, the Central Georgia Railroad has a short line connecting Wadley with Louisville.

Air Service: Airports located in Louisville and Wrens provide small craft aviation services. The airport in Wrens maintains a hangar space of 6,396 sf. and a runway. The airport in Louisville has a runway 5,000 feet long and offers hangars and tie-downs. There is 15,500 sf. of hangar space available as well as one T-hanger that will accommodate four planes. The current terminal building is small and old and needs to be replaced. There are two parallel unpaved taxiways. The nearest commercial air service is in Augusta, 35 miles away. Atlanta-Hartsfield International Airport, located in Atlanta approximately 150 miles from Louisville, provides major commercial airline service.

Utilities

Electricity: Residential electrical service is provided by three companies: Georgia Power, Jefferson Energy Cooperative, and Washington Electric Membership Corp. A part of Georgia's modern integrated electrical transmission system, Jefferson County has excellent ability to supply industrial demands. Compared to 47 percent for the U.S., coal accounts for 84 percent of fuel used by the state's power generating plants. This assures long-term continuity. If demand exceeds 900kw, any supplier can step in and offer service

Natural gas: Natural Gas Services is provided by the City of Louisville and the City of Wrens. The service is available to residents of Louisville and Wrens and some residential customers in the unincorporated area of the county.

Sewer: Public sewer service is provided in Bartow, Louisville, Wadley, and Wrens. A small section of the County is served by the City of Louisville. The remaining unincorporated areas of the County, Avera, and Stapleton are not served with public sanitary sewer service.

Municipality	Sewer and Wastewater Systems
Avera	Septic tanks only.
Bartow	Wastewater Treatment Plant
Louisville	Two water pollution control plants, 2 oxidation ponds
Stapleton	Septic tanks only.
Wadley	One wastewater treatment plant, 1 oxidation pond
Wrens	Wastewater Treatment Plant

Water: Public water supply is provided by the Cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens to residents within their incorporated boundaries. Some unincorporated areas of the County are served by Louisville or Wrens the remainder is served by private wells.

Municipality	Water Distribution System
Avera	Complete water distribution and treatment system: Two wells, distribution lines, one elevated water storage tanks.
Bartow	Complete water distribution and treatment system: Two wells, distribution lines, one water storage tank.
Louisville	Complete water distribution and treatment system: Three water storage tanks, distribution lines, three elevated water storage tank.
Stapleton	Complete water distribution and treatment system: Two water storage tanks and distribution lines.
Wadley	Complete water distribution and treatment system: Two wells, two water storage tanks, distribution lines.
Wrens	Complete water distribution and treatment system: Five wells, four ground storage tanks, distribution lines.

Solid Waste: Jefferson County operates a landfill along U.S.1 under permit # 081-011D (MSWL). The majority of solid waste comes from residential use or household garbage, including paper products, plastics, glass, aluminum, and ferrous metals. A limited amount of commercial and industrial waste consists of corrugated paperboard and wood waste. Green box collection is used in the unincorporated areas for solid waste disposal. Currently there are green boxes at twenty-five (25) separate sites in the county. The county provides solid waste services for Avera. Louisville and Bartow haul their waste to the count landfill while the rest of the municipalities contract with private haulers.

Communications: Jefferson County's communication services is provided by three companies: Comcast, AT&T and Pineland Telephone. Local print media consists of *The News and Farmer and Wadley Herald/The Jefferson Reporter* (which serves as the legal organ of the county) and *The Augusta Chronicle*. Jefferson County is served by 2 local AM radio stations and 2 local FM radio stations. There are seven television stations in metro Augusta that broadcast in Jefferson County. They are WJBF, WAGT, WRDW, WAAU, WBPI, WCES, and WFXG.

Fire and Emergency Services

Response: All residents of Jefferson County have access to 911 service. The 911 service connects residents to police, fire and ambulance service. The dispatch office is in Louisville and a substation in Wrens. The 911 service has 3 employees on staff during the day on weekdays and 2 employees on staff at night and on weekends. The City of Wrens utilize their own system so any 911 calls are transferred over to their departments. The City of Wrens 911 communications center is staffed by four full-time dispatchers and two part-time dispatchers. The Jefferson County 911 service has mutual aid agreements with neighboring counties and therefore can respond to and assist in calls outside their jurisdiction.

Emergency Medical Services: Jefferson County gets its Emergency Medical Services (EMS) through a private corporation called Gold Cross. Services provided include emergency and nonemergency ambulance transportation. The company provides dispatching services as well providing emergency service training. The Gold Cross has its main station at the Jefferson County Hospital. In addition there are substations located in Wrens and Wadley. The Hospital Station and the Wrens Substation operate on a 24-hour basis and the Wadley Substation operates from 7 AM to 7 PM.

The Gold Cross service maintains four ambulances in the county but only operate three at any time. The fourth is kept as a backup. The ambulances are all ALS (Advanced Life Support) units. During the Monday through Friday 7 AM to 7 PM shift the service has three trucks operating. On weekends and from 7 PM to 7 AM during the week they operate with two trucks.

Fire and Rescue: Jefferson County has seven fire departments throughout the county that provide service to both the incorporated and unincorporated areas. There is also a detachment of the Georgia Forestry Commission that combats woodland, wildlife and agricultural fires. Jefferson County itself has two departments with 28 volunteer firefighters and a total of three bays. The county insures six fire trucks, ranging in model years from 1957 to the two newest 1974 International pumper trucks.

Municipality	Fire Department
Avera	Served by an all-volunteer fire department, with 22 volunteer firefighters. The department owns vehicles; two pumpers and a brush truck. The ISO rating for the district is a 6.
Bartow	Served by an all-volunteer fire department, with 18 volunteer firefighters. The department owns four vehicles; three pumpers and a Chevy Impala. The ISO rating for the district is a 7.
Louisville	Served by one fire department staffed with four full-time paid firefighters, and 28 volunteer firefighters. The department owns four vehicles; three pumpers and one fire knocker. The ISO rating for the district is a 5.
Stapleton	Served by an all-volunteer fire department, with 15 volunteer firefighters. The department owns four vehicles; two pumpers a fire knocker and a service truck. The ISO rating for the district is a 7.
Wadley	Served by an all-volunteer fire department, with 15 volunteer firefighters. The department owns four vehicles; four pumpers. The ISO rating for the district is a 7.
Wrens	Served by one fire department with six full-time firefighters and 20 volunteer firefighters. The fire department insures three 750-gallon pumper trucks, two 1,000-gallon knocker/forestry trucks, and one rescue truck. The ISO rating for the department is 4.

Law Enforcement: Jefferson County Sheriff's Office employs the Sheriff, 14 deputies, five jailers, three investigators and two clerical personnel. The Office has a total of 30 vehicles, including 20 police cars, one pickup truck and one van. The County is also served by regional offices of the Georgia Bureau of Investigation and The Georgia State Patrol.

Municipality	Law Enforcement
Avera	Served by Jefferson County Sheriff's Office
Bartow	Served by Bartow Police Department with the Police Chief and two part-time officers.
Louisville	Served by Louisville Police Department with the Police Chief and seven full-time officers.
Stapleton	Served by Stapleton Police Department with the Police Chief and two part-time officers.
Wadley	Served by Wadley Police Department with the Police Chief, one investigator, and five full-time officers.
Wrens	Served by Wrens Police Department with the Police Chief, an Assistant Chief, three full-time and four part-time officers, and one full-time sergeant.

The Jefferson County Jail is currently the only place being used to house inmates at this time. All inmates are brought there instead of being incarcerated in the individual municipality. The Jefferson County Jail has 120 beds and eight holding cells.

CHAPTER II. NATURAL HAZARD, RISK AND VULNERABILITY (HRV)

The committee identified all natural hazards that could potentially affect Jefferson County and all incorporated jurisdictions utilizing FEMA Worksheet #1 (Appendix D). Task A of Worksheet #1 instructed committee members to research newspapers and other historical records, existing community plans and reports, as well as internet websites to determine which hazards might occur. Task B then narrowed the list to only hazards most likely to impact the county by reviewing hazard websites to determine if Jefferson County is located in a high-risk area.

As a result of the planning process, the committee determined that six natural hazards pose a direct, measurable threat: flooding, dam failure, drought, wildfire, severe weather (to include tornados, tropical storms, thunderstorm winds, lightning and hail), and winter storms. The committee profiled each of these hazards using FEMA worksheet #2 and #3a, which included obtaining a base map and then recording hazard event profile information. Of the six hazards mentioned, the entire County is exposed to four: severe weather, winter storms, wildfire and drought. Flooding is isolated to select areas within the floodplain, while dam failure is isolated to areas downstream of the event. Each of these potential hazards is addressed with relevant supporting data.

Chapter II. Section	Updates to Section
I. Natural Hazard Flood	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
II. Natural Hazard Dam Failure	This was added and not in the 2009 plan.
III. Natural Hazard Drought	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
IV. Natural Hazard Wildfire	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
V. Natural Hazard Severe Weather	Updated events, added critical facilities to GMIS, updated tax information. Hail and lightning were added as a hazard. Recalculated hazard frequency data.
VI. Natural Hazard Winter Storms	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.

SECTION I. FLOODING

A. Hazard Identification: Flood plains are relatively flat lands that border streams and rivers that are normally dry, but are covered with water during floods. The severity of a flood is usually measured in terms of depth of flooding. The susceptibility of a stream to flooding is dependent upon several variables. Among these are topography, ground saturation, rainfall intensity and duration, soil types, drainage, drainage patterns of streams, and vegetative cover. A large amount of rainfall over a short time period can result in flash flood conditions.

A small amount of rain can also result in floods in locations where the soil is saturated from a previous wet period or if the rain is concentrated in an area of impermeable surfaces such as large parking lots, paved roadways, etc. Topography and ground cover are contributing factors for floods in that water runoff is greater in areas with steep slopes and little or no vegetation.

Flooding occurs when the volume of water exceeds the ability of a water body (stream, river, or lake) to contain it within its normal banks. Floodplains serve three major purposes: Natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled to construct a building, then valuable water storage areas and recharge areas are lost. This causes unnecessary flooding in previously dry areas and can damage buildings or other structures.

Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens will continue to participate in the NFIP. Avera has no identified flood plains. The following table provides information about each jurisdictions participation level.

Community Name	Init FHBM Identified	Init. FIRM Identified	Curr. Eff. Map Date	Reg-Emer Date	Sanction Date
Jefferson County		12/17/10	12/17/10(M)	12/17/10	
Avera		N/A	N/A	N/A	N/A
Bartow	08/22/75	01/01/92	12/17/10(M)	01/01/92	
Louisville	08/15/75	01/01/92	12/17/10(M)	07/03/86	
Stapleton	04/04/75	08/19/96	12/17/10(M)	08/19/96	
Wadley	08/22/75	08/19/96	12/17/10(M)	08/19/96	
Wrens	05/10/74	06/17/86	12/17/10(M)	06/17/86	

Source: FEMA Community Status Book

B. Hazard Profile: Severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and three lakes which makes the potential for flooding significant. The committee examined historical data from the USGS, NCDC, SHELDUS™, past newspaper articles and conducted interviews during its research on the effects of past flooding events.

In the last 85 years there have been eight reported flooding events where six occurred countywide and two in Wrens. There has been a total of approximately $2.2 million in property and crop damages with three fatalities reported. The rainfall resulted in flash flooding which caused downed trees and power lines, apartment and schools to flood and washed out several roads. Data pinpointing the depth of flood waters and exact locations of all washed out roads and property damage is not available. Limited data is available for the incorporated jurisdictions. The most complete data applies to the county as a whole. The table below is a result of information gathered from interviews, newspaper articles, the USGS, the NCDC and SHELDUS databases.

Details	Begin Date	End Date	Type	PrD	CrD
A result of a hurricane that came ashore at Pensacola Florida	9/30/1929	10/3/1929	Flood	0.00k	0.00
Flooding There was a 3-day rainfall of 19.89 inches in Louisville	10/11/1990	10/12/1990	Flooding	2000.00k	0.00
Flood	10/13/1990	10/15/1990	Flood	50.00k	0.00
Flash Flood	3/1/1991	3/1/1991	Flash Flood	5.00k	0.00
Tropical Storm Tammy caused heavy winds/minor flooding	10/5/1995		Flooding	0.00k	0.00
As a result of Hurricane Dennis widespread flooding	7/10/2005		Flooding	0.00k	0.00
Flood	5/6/2009	5/6/2009	Flooding	1.00k	0.000
The Jefferson County EOC reported washed out roads near Avera. Almost two inches of rainfall in a 3 hour period on already wet soils quickly overwhelmed the drainage systems.	7/13/2013		Flooding	0.00k	0.00

Source: NCDC and SHELDUS

Limited data is available for the infrequent flood events in Jefferson and its municipalities. Based on historical stream gauge data from the USGS major flood stage for the Brushy Creek near Wrens is eight feet. The highest historical crest at this location was 14.02 feet on October 12, 1990. The Ogeechee River near Louisville highest historical crest was 21.3 feet in October 1929.

There have been two major flood events recorded: one in 1929 and one in October 1990. Torrential rain occurred in east-central Georgia on October 10-12, 1990. The largest 24-hour rainfall amount recorded was 16.42 inches at Louisville. Severe flooding caused by the intense rain occurred in several tributaries to the Ogeechee, Ohoopee, and Savannah Rivers. There was a 3-day rainfall of 19.89 inches in Louisville. Maximum discharges of streams in east-central Georgia had recurrence intervals ranging from 2-years to more than 100 years. Record-high stages and discharges occurred at 14 sites in east-central Georgia where stage and discharge data were collected.

The most severe flooding occurred on Big Creek near Louisville, Brushy Creek near Wrens and Buckhead Creek near Waynesboro where the maximum discharges were much greater than the respective 100-year discharges. Known dam failures upstream of the gaged sites on Big Creek and Brushy Creek contributed to the severity of the flooding. Also, there were at least six other streams within about a 50-mile radius of Augusta that experienced maximum discharges equal to or greater than those having a 100-year recurrence interval (fig. 45, table 38). All sites where discharge equaled or exceeded the 100-year discharge within this 50-mile radius had drainage areas of less than 100 square miles, except sites on the Ogeechee River. The Ogeechee River experienced maximum discharges having recurrence intervals ranging from 10 to more than 100 years. The maximum discharge of 27,000 cubic feet per

second for the Ogeechee River near Louisville was the largest since 1929. *(Summary of Floods in the United States during 1990 and 1991 USGS)*

While severe flooding within the county is a relatively infrequent event, there is a potential for flooding. Flooding usually occurs from fall to mid-spring. Flash flooding is the most prominent flooding event that takes place as riverbanks overflow due to rainfall. To date there has been more than $2 million dollars in reported damages and three fatalities. There are no NFIP mitigated properties and no properties have encountered repetitive flooding. The GMIS flood hazard map, located in Appendix A, assigns the following flood zone ratings for each jurisdiction:

- Avera and the unincorporated parts of the County, have a flood zone rating on one where area is not included in survey and undetermined but possible.
- Bartow, Louisville, Stapleton, Wadley and Wrens have a flood zone rating of three where floodplains are known.
- Bartow, Louisville, Stapleton. Wadley and Wrens have a flood zone rating flood zone rating of zero for areas outside of flood zones.

The following table describes the characteristics of the flood zones based on data from the GMIS.

Map Color Code from GMIS

Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Source: GMIS

The magnitude of a major flood event could have approximately 75% of the county experiencing some damage from flooding. The FEMA Flood Zone maps shows the following conditions for:

- the unincorporated areas of the County have flood prone areas along waterways and the rest of the unincorporated areas are outside of known flood hazard areas;
- Avera has no identified flood prone areas;
- Bartow's flood prone areas run along the entire western boundary;

- Louisville's flood prone areas flood prone areas run along the western boundary;
- Stapleton's flood prone areas run through the city trickle throughout the city;
- Wadley's flood prone areas run along the entire southern, eastern and western borders of the city with a small area at the upper northern part of the city; and
- Wrens' flood prone areas run across the lower southern portion of the city, a small area at the northern top of the city and a section on the eastern portion that run into the middle of the city.

While data was collected looking at 85 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle the chance of an annual flooding event occurring is 20% for all of Jefferson County. ***Data is not available for individual jurisdictions*** *(See Appendix A, Section I and Appendix D).*

C. Assets Exposed to Hazard and Estimates of Potential Loss: For determination of assets exposed to risk this plan used maps created from FEMA data and available parcel data. Based on FIRM, tax digests, parcel maps and FEMA Worksheet #3a for inventory of assets, the following assets are at risk during a flood event:

- Avera has no structures/properties at risk;
- Bartow has five structures/properties valued at approximately $1 million with an estimated population of eight;
- Louisville has nine structures/properties valued at approximately $1.5 million with a population of zero;
- Stapleton has 16 structures/properties valued at approximately $332,977 with a population of 31;
- Wadley has 30 structures/properties valued at approximately $1.7 million with a population of 30;
- Wrens has 46 structures/properties valued at approximately $2.9 million with a population of 205; and
- Unincorporated Jefferson County has 102 structures/properties valued at approximately $6.5 million with an estimated population of 75.

All 208 structures/properties have been identified by federal flood plain maps and/or parcel maps. Not all structures that have been identified will experience damage from floods. Further studies, including professional surveys, would have to be conducted to determine exactly which structures are at consistent risk from flooding.

The extent of each flood varies according to the amount of rainfall in a given area. If a complete loss of the 208 structures/properties located within flood zones would result in approximately $14.1 million in damages assuming 100% loss, a 75% loss would represent approximately $10.6 million, a 50% loss would represent approximately $7.1 million, and a 25% loss would represent approximately $3.5 million.

The GMIS has two critical facilities with a hazard score of three: the Wrens Waste Water Treatment Plant and the West Walker Street Lift Station with a replacement value of slightly more than $3.5 million. Of the 107 remaining critical facilities, 40 have a hazard score of one

with a replacement value of more than $111 million and 67 have a hazard score of zero with a replacement value of more than $192 million. The table below shows the breakdown of critical facilities by jurisdiction, flood hazard score, replacement value, content value, and daily occupancy.

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value $	Content Value $	Daily Occupancy
Jefferson County	1	17	102,862,230	6,572,300	1,884
Jefferson County	0	17	157,379,663	3,982,500	1,927
Avera	1	3	737,500	400,000	1
Bartow	1	1	60,500	00	0
Bartow	0	15	3,811,977	402,000	6
Louisville	1	6	2,656,165	00	0
Louisville	0	9	15,486,225	1,700,000	269
Stapleton	0	4	1,778,500	730,000	2
Wadley	0	9	6,876,513	1,788,200	140
Wrens	3	2	3,550,000	125,000	0
Wrens	1	13	5,287,500	25,000	0
Wrens	0	13	7,365,350	1,549,200	70
TOTAL FOR COUNTY		**109**	**307,852,123**	**17,274,200**	**4,299**

The GMIS has no repetitive flooding NFIP property and no NFIP mitigated properties or properties that have encountered repetitive flooding where there was loss. There are no estimate for future structures since future development will be limited and regulated in areas where floodplains exist. *(See Appendix A, Section I and Appendix D).*

D. Land Use and Development Trends: The Joint Jefferson County Comprehensive Plan 2004-2024 presents future development scenarios for Jefferson County and its municipalities. The county has experienced very little growth over the past decade, and future forecasts project relatively slow growth patterns. Despite the slow growth forecasts the county intends to work closely with the cities to preemptively manage future growth. Additionally, as the Fall Line Freeway and US Route 1 corridor widening projects are completed, the county expects growth to occur.

The main areas of the county considered adequate for growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares.

Jefferson County's rural character is illustrated by its abundance of natural resources. The lack of development pressures in the county has contributed to the continued presence of these resources and projected development needs can be well managed without negatively impacting any environmentally sensitive area.

Similarly, the county has an abundance of cultural resources. These are truly fragile resources that must be treated in the same fashion as natural features because of the local importance that they hold. Future development needs to incorporate the preservation of locally significant historic resources as identified in that element of this plan.

Jefferson County's relative isolation from major urban markets decreases outside influences on local development patterns. This is expected to change as the State completes the Fall Line Freeway and as GA 17 is developed into a four-lane highway. As commuting patterns shift and urbanized areas continue to expand Jefferson County may develop a greater attraction to urban commuters as a suburban, "bedroom," community.

The county is considering implementation of zoning as a viable method of controlling future land use. Through the zoning ordinance, the county will be able to limit and regulate development in known flood prone areas. (*Current and Future Land Maps and Tables for each jurisdiction can be found in Appendix B)*

E. Multi-Jurisdictional Concerns: Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens will continue to participate in the NFIP. Avera has no identified floodplains. There are no initial flood hazard base maps for the unincorporated areas of Jefferson County or the city of Avera. The County and Avera need to have FHBM created.

During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County.

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personal that are dispatched to the area, etc.

Since flooding has the potential to affect all of Jefferson County, any mitigation steps taken related to flooding should be undertaken on a countywide basis and include all incorporated jurisdictions.

F. Hazard Summary: There have been no changes since the previous plan was completed that would affect the overall vulnerability of the community to this hazard. The county has seen a decrease in population over the last 30 years and no new development has taken place. All jurisdictions, except Avera, adopted the new floodplain maps in 2010.

While severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and three lakes which makes the potential for flooding

significant. There has been eight flooding events recorded in the last 85 years. These events resulted in school closings, roads washing out and $2 million in property damages. The flood of 1990 also caused a dam failure. The Jefferson County Hazard Frequency table calculates a 20% chance of an annual flooding event. Hazard frequency tables can be found in Appendix D for all jurisdictions. Severe flooding, although relatively rare in occurrence, has the potential to inflict significant damage in Jefferson County. Mitigation of flood damage requires the community to know where flood prone areas are, what roads and bridges may be affected, and which facilities fall below anticipated flood levels. The committee recognized the potential for losses caused by flooding and identified it as a hazard requiring mitigation measures.

Based on tax data, parcel and flood maps all or a portion of 208 known structures/properties valued at approximately $14 million and a population of 349 located in known floodplains. The committee identified specific mitigation goals, objectives and action items related to flooding, which can be found in Chapter III, Section I.

SECTION II. DAM FAILURE

A. Hazard Identification: Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve the total collapse of a dam, that is not always the case. Damaged spillways, overtopping of a dam or other problems may result in a hazardous situation. Dam failures may be caused by structural deficiencies in the dam itself. Dam failures may also come from other factors including but not limited to debris blocking spillways, flooding, earthquakes, improper operation and vandalism. Dam failures are potentially the worst flood events. When a dam fails, a large quantity of water is suddenly released downstream, destroying anything in its path and posing a threat to life and property.

Dams are classified into three categories:

- High Hazard – Dams where failure or disoperation will probably cause loss of human life.
- Significant Hazard – Dams where failure or disoperation will probably not result in loss of life, but can cause economic loss, environmental damage, and disruption of lifeline facilities or other concerns.
- Low Hazard – Dams where failure or disoperation will probably not result in loss of life and cause only low economic and/or environmental loss.

B. Hazard Profile: The 2013 National Inventory of Dams has 40 low hazard dams and 1 high hazard dam located at Lake Marion in Jefferson County. There are 39 dams in the unincorporated areas and two located within the city boundaries of Wadley. There has been one known dam failure to date during the flood of 1990. The committee felt that it was important to address the issue. A map and complete table of the dams can be found in Appendix A by classification.

Based on interviews and best available data one dam failure has occurred within the last 64 years. Based on a 20-year hazard cycle the chance of an annual dam failure occurring is less

than one percent for all of Jefferson County. There is not enough data available to determine rate of onset or the extent a dam failure hazard. Further study needs to be conducted to determine the precise probability of an annual dam failure event. This has been listed as a mitigation action in Chapter III. (*See Appendix A: Section II and Appendix D).*

C. **Assets Exposed to Hazard and Estimate of Potential Losses**: The number of dams posing potential loss of life hazards to Jefferson County residents and the number of residents living downstream from these potentially hazardous dams is unknown at this time. Based on best available data, Avera and Stapleton appear not to be at risk due to dam failure. The data is not available at this time for the committee to determine what assets are exposed to risk due to dam failure in the unincorporated areas of Jefferson County, Bartow, Louisville, Wadley and Wrens.
The potential losses due to dam failure flooding are unknown and cannot be estimated at this time. The GMIS report has critical facilities replacement at more than $307 million with a population of 4,299. The County has population of 16,930 and 37,363 structures/properties valued at slightly less than $1.4 billion at risk of potential loss. (*See Appendix A Section II and Appendix D).*

D. **Land Use and Development Trends**: Projected changes in land use based on the county's multi-jurisdictional comprehensive plan shows that the county has experienced very little growth over the past decade and future forecasts project relatively slow growth patterns. Despite the slow growth forecasts the county intends to work closely with the cities to preemptively manage future growth. Additionally, as the Fall Line Freeway and US Route 1 corridor widening projects are completed, the county expects growth to occur.

The main areas of the county considered adequate for growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares. Vulnerability in terms of future buildings, infrastructure and critical facilities is not known at this time. It can be surmised that this future development will bring an increase in population and efforts must be made to ensure new homes are not built downstream where a dam break may occur. Current and Future Land Use maps, tables and projections can be found in Appendix B. A dam break analysis study is recommended in Chapter III, Section II to determine the exact assets exposed to risk as a result of a dam failure.

E. **Multi-Jurisdictional Concerns**: Areas downstream of dams are most likely to be affected by a dam failure. Until a dam breach analysis is run it is hard to pinpoint what assets will be affected. Any mitigation steps taken related to dam failure should be undertaken on a countywide basis and include all incorporated jurisdictions.

During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will

be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personal that are dispatched to the area, etc.

F. Hazard Summary: There have been no changes since the previous plan that would affect the overall vulnerability of the community to this hazard. This has been no new development in hazard areas or adoption of development or building regulations to increase or decrease the overall vulnerability to dam failure.

Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve total collapse of a dam, that is not always the case. Since there has been one reported dam failure event in Jefferson County, the committee felt that it was important to address the issue due to the fact there are 41 dams in the county with one classified as high hazard. The committee recognized the potential for losses caused by dam failure and identified it as a hazard requiring mitigation measures. To summarize, there are approximately 37,363 structures/properties in the county totaling slightly less than $1.4 billion with a population of 16,930. The committee identified specific mitigation goals, objectives and action items related to dam failure, which can be found in Chapter III, Section II.

SECTION III. DROUGHT

A. Hazard Identification: The committee reviewed historical data from the Palmer Drought Index, NCDC, DNR, and USDA in researching drought conditions in Jefferson County. Drought conditions are identified by a prolonged period of moisture deficiency. Climatologists and hydrologists use five indicators of drought: rainfall, soil moisture, stream flows, lake levels and groundwater level. Drought conditions affect the cultivation of crops as well as water availability and water quality. Drought is also a key factor in wildfire development. Wildfire will be addressed in a separate HRV.

B. Hazard Profile: Drought is not spatially defined and has the potential to affect the entire planning area equally. Jefferson County has a total area of 339,991 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. According to the USDA 2012 Census of Agriculture 17,523 head of livestock. Agricultural losses due to drought have been the primary losses. No critical facilities have sustained any damage or functional downtime due to dry weather conditions. The last drought event in Jefferson County began in January 2012 and ended in October 2012.

Based on historical data from the United States Drought Monitor (USDM) website there have been 84 months from January 2000 to August 2014 that have had drought conditions.

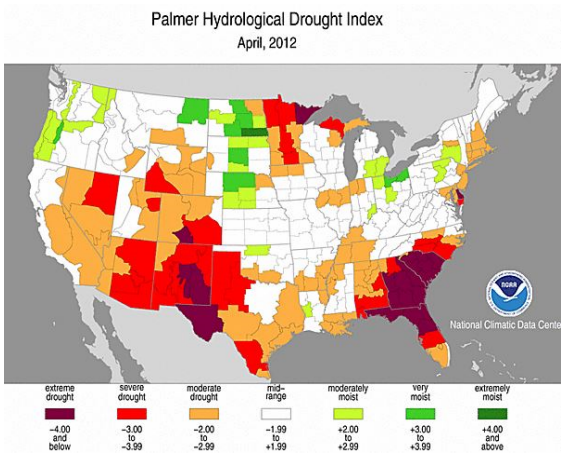
- 27 months with a D0 - Abnormally Dry
- 34 months with a D1 - Moderate Drought
- 21 months with a D2 - Severe Drought
- 26 months with a D3 - Extreme Drought
- 3 months with a D4 - Exceptional Drought

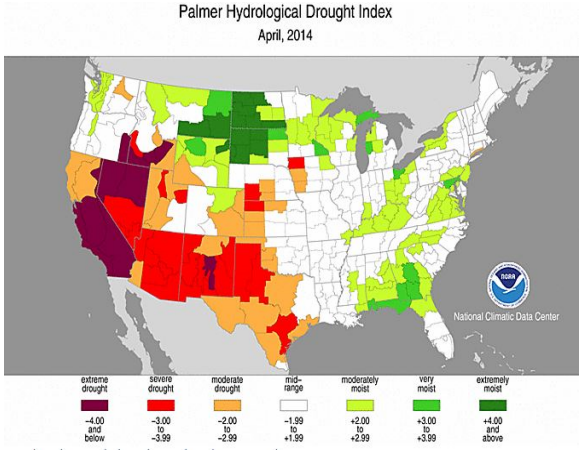
According to the 2003 Georgia Drought Management Plan, Jefferson County is located in Climate Division 6. For this Climate Division, the GA EPD monitors the following indicators for drought triggers, or specific values. If any one of the indicators reaches or passes a trigger value for two consecutive months, a preliminary evaluation is conducted to determine the appropriate response.

- Standard Precipitation Index: This figure compares precipitation levels during the last three, six, and twelve months with historical figures to determine net loss or increase.
- Reservoir Levels: Water level is measured Clarks Hill and Lake Hartwell.
- Streamflow: Annual and monthly discharge levels are monitored and compared with historical figures along Ogeechee River near Eden

A drought event is not considered to be over until all of the indicators for the Climate Division are at an acceptable stress level for at least four consecutive months.

The Palmer Index is most effective in determining long term drought, a matter of several months, and is not as good with short-term forecasts (a matter of weeks). The Palmer Index (from http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html) map below, from the NOAA web site, indicates that Jefferson County and its municipalities' were in Severe to Extreme drought from the spring thru the fall of 2012. The Palmer Index uses a 0 as normal, and drought is shown in terms of minus numbers; for example, minus two is moderate drought, minus three is severe drought, and minus four is extreme drought. The maps below show drought conditions for April 2012 and April 2014.





There have been 25 drought events in the county in the last 64 years with estimated crop losses at $9.7 million. According to the farm subsidies database there has been a total of $8,827,715 in disaster assistance from 1995-2012. ***Historical data is only for the county as a whole.*** A severe, prolonged drought would mainly affect the 88.9% of the county that makes up the timber and agriculture business. This could result in loss of crops, livestock and create the conditions for a major wildfire event. This would also have an impact on the incorporated cities as water restrictions would be enforced. Based on a 20-year hazard cycle history there is a 120% chance of an annual drought event. The chance for an annual drought event is the same for the county as well as all jurisdictions *(See Appendix A, Section III, and Appendix D)*

C. Assets Exposed to Hazard and Estimate of Potential Losses: Drought conditions typically pose little or no threat to structures; however, fires can occur as a result of dry weather. The greatest threat to assets in the county is to forestry and agricultural properties and livestock. No damage to critical facilities is anticipated as a result of drought conditions. Crop damage cannot be accurately quantified due to several unknown variables: duration of the drought, temperatures during the drought, severity of the drought, different crops require different amounts of rainfall, and different growing seasons. Based on FEMA Worksheet #3a the potential loss in agricultural and forestry properties for each jurisdiction is:

- Avera has 16 structures/properties valued at approximately $485,968 with an estimated population of 4.
- Bartow has 4 structures/properties valued at approximately $1.9 million with an estimated population of 0.
- Louisville has 23 structures/properties valued at $675,083 with an estimated population of 8.
- Stapleton has 6 structures/properties valued at approximately $1.1 million with an estimated population of 4;
- Wadley has 50 structures/properties valued at approximately $1.7 million with a population of 12;
- Wrens has 27 structures/properties valued at $1million with a population of 8;
- Unincorporated Jefferson County has 6,663 structures/properties valued at approximately $171 million with an estimated population of 586.

There are a total of 6,789 agricultural/forestry properties in all of Jefferson County valued at more than $495 million with a population of 622 that are at the greatest risk due to a drought event *(Appendix A and Appendix D)*.

D. Land Use and Development Trends: Jefferson County currently has no land use or development trends related to drought conditions. When drought conditions do occur the county and all municipalities follow the restrictions set forth by the Georgia DNR Drought Management Plan and the Statewide Outdoor Water Use Schedule. All six water departments have adopted the Georgia Water Stewardship Act went into effect statewide on June 2, 2010. It allows daily outdoor watering for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs, or other plants only between the hours of 4 p.m. and 10 a.m. by anyone whose water is supplied by a water system permitted by the Environmental Protection Division.

The following outdoor water uses also are allowed daily at any time of the day by anyone:

- Commercial Agriculture
- Alternative sources of water (grey water, rain water, condensate, etc.)
- Irrigation of food gardens
- Irrigation of newly installed or reseeded turf for the first 30 days
- Drip irrigation or soaker hoses
- Hand watering with a shut off nozzle
- Water from a private well
- Irrigation of plants for sale
- Irrigation of athletic fields, golf courses or public recreational turf
- Hydroseeding

Outdoor water use for any purposes other than watering of plants, such as power washing or washing cars, is still restricted to the current odd/even watering schedule.

- Odd-numbered addresses can water on Tuesdays, Thursdays and Sundays.
- Even-numbered and unnumbered addresses are allowed to water on Mondays, Wednesdays and Saturdays.

The main areas of the county considered to experience growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares. Growth for the unincorporated areas of the county will be minimal. Vulnerability in terms of future buildings, infrastructure and critical facilities is not known at this time. Current and Future Land Use maps, tables and projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns: Agricultural losses associated with drought are more likely to occur in the rural, less concentrated areas of the county. Although all incorporated jurisdictions are less likely to experience drought related losses, they should not be excluded from mitigation considerations. Drought creates a deficiency in water supply that affects water availability and water quality. Droughts can and have severely affected private wells, municipal and industrial water supplies, agriculture, stream water quality, recreation at major reservoirs hydropower generation, navigation, and forest resources.

F. Hazard Summary: Drought is not spatially defined and equally affects the entire planning area. Droughts do not have the immediate effects of other natural hazards, but sustained drought can cause severe economic stress to not only the agricultural interests in Jefferson County, but to the entire State of Georgia. The potential negative effects of sustained drought are numerous. ***Historical data is available only for the county as a whole.*** Based on a 20-year cycle hazard history along with available data there is a 120% chance of an annual drought event in Jefferson County. In addition to an increased threat of wildfires, drought

can affect municipal and industrial water supplies, stream-water quality, water recreation facilities, hydropower generation, as well as agricultural and forest resources.

In summary, for Jefferson County as a whole, there are a total of 6,789 agricultural/forestry properties in Jefferson County valued at more than $495 million with a population of 622 and includes 17,523 head of livestock that are at the greatest risk due to a drought event. There is a population of 16,930 and approximately 37,363 structures/properties in the county with a value just slightly more than $1.3 billion which could be affected if wildfires break out as a result of drought conditions. Drought mitigation goals and objectives can be found in Chapter III, Section III.

There has been no new development in the county and no population increase in 30 years. Since the previous plan all six water departments have adopted the Georgia Water Stewardship Act went into effect statewide on June 2, 2010. It allows daily outdoor watering for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs, or other plants only between the hours of 4 p.m. and 10 a.m. by anyone whose water is supplied by a water system permitted by the Environmental Protection Division. The enforcement of these restrictions helps to ensure an ample water supply during drought times. All citizens are informed of water restrictions as they occur. Also Wrens extend water system 3.5 miles and Louisville completed a $1.7 million a new well.

SECTION IV. WILDFIRE

A. Hazard Identification: A wildfire is any uncontrolled fire occurring on undeveloped land that needs fire suppression. The potential for wildfire is influenced by three factors: the presence of fuel, the area's topography and air mass. There are three different classes of wildland fires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around. Wildfires by lightning have a very strong probability of occurring during drought conditions. Drought conditions make natural fuels (grass, brush, trees, dead vegetation) more fire-prone.

B. Hazard Profile: Jefferson County has a total area of 339,991 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. Given the right weather conditions and variables, wildfire, due to natural causes, creates a potential threat to the lives of residents and property in the planning area. The NCDC has never reported a significant wildfire event in Jefferson County.

The committee reviewed historical data from the Georgia Forestry Commission, which is not found in the NCDC database, to research wildfire events. The GFC provides wildfire data on man-made and natural wildfire occurrences for the county as a whole and not for individual jurisdictions. This plan will address only natural disasters. According to Georgia Forestry data, from 1957 to 2013, there have been 2,814 fire events burning a total of 15,997 acres for an average extent of 5.68 acres. Of these 2,814 fire events 168 were a result of lightning

strikes that burned 1,505 acres. Based on best available data 168 wildfire events as a result of lightning occurred in the unincorporated areas of the county. While data was collected looking at 57 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle there is a 455% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4.5 wildfires as a result of lightning annually. The drier the condition the more susceptible the county is to wildfire (*See Appendix A).*

GMIS assigned the following wildfire hazard scores for each jurisdiction:

- Hazard score of two (low wildfire risks)
  - Unincorporated areas of the county – approximately 10%
  - Louisville - approximately 20% of the city
  - Wadley - approximately 65% of the city
  - Wrens - approximately 20% of the city
- Hazard score of one (very low wildfire risk)
  - Unincorporated areas of the county – approximately 55%
  - Avera- approximately 80% of the city
  - Bartow- approximately 60% of the city
  - Louisville - approximately 60% of the city
  - Stapleton - approximately 75% of the city
  - Wadley - approximately 34% of the city
  - Wrens - approximately 30% of the city
- Hazard score of zero (no houses, agriculture, water, or city)
  - Unincorporated areas of the county – approximately 35%
  - Avera- approximately 20% of the city
  - Bartow- approximately 40% of the city
  - Louisville - approximately 20% of the city
  - Stapleton - approximately 25% of the city
  - Wadley - approximately 1% of the city
  - Wrens - approximately 50% of the city

The Jefferson County Community Wildfire Protection Plan references specific areas determined by the GFC to be wildfire hazard areas. The wildland fire risk assessment was conducted in 2011 by the Jefferson County Fire Department and the Georgia Forestry Commission returned an average score of 112, placing Jefferson County in the "very high risk" hazard range. The risk assessment instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The Communities-at-Risk within Jefferson County that led to its **Very High Hazard** risk rating are:

Community	Score	Hazard Rating
Ogeechee Heights	114	Very High Hazard
Taylor Lane	54	Moderate Hazard
Golf Drive	105	Very High Hazard
Berrien Branch	71	Moderate Hazard

Community	Score	Hazard Rating
Casson Creek Subdivision	120	Very High Hazard
Oak Hill Subdivision	101	Very High Hazard
Stellaville Community	128	Extreme Hazard
Mathews Community	105	Very High Hazard
Red McDonald Community	156	Extreme Hazard
Sitadey Oaks Community	147	Extreme Hazard
Gus Perdue Community	116	Very High Hazard
Country Club Circle	74	Moderate Hazard
Kelly Quarter	142	Extreme Hazard
Whitley Community	115	Very High Hazard
Deerwood Circle	110	Very High Hazard
Sylvan Grove	93	High Hazard
Brown Terrace	78	High Hazard
Jefferson County Average	107	Very High Hazard

C. Assets Exposed to Hazard and Estimate of Potential Losses: While wildfires are more likely to occur in the county outside of the incorporated areas. The committee concluded that wildfires present a threat to all existing buildings, infrastructure and critical facilities since wildfires can spread throughout the county and into the urban areas. Damages as a result of a wildfire event are more likely to occur in areas of the county where forestry and woodland are prevalent. Wildfire does have the potential to spread into the incorporated areas and cause extensive damage to existing structures/properties. FEMA Worksheet #3a located in Appendix D shows the number and types of buildings found in Jefferson County, as well as the value of these structures/properties and the population. The following assets by jurisdiction could potentially be exposed to wildfire hazard:

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	22,850	$1,039,928,700	9,219
Avera	745	$6,633,305	246
Bartow	677	$12,453,553	286
Louisville	4,551	$118,097,005	2,493
Stapleton	963	$13,083,513	438
Wadley	3,538	$95,608,332	2,061
Wrens	4,039	$112,293,040	2,187
TOTAL FOR COUNTY	37,363	$1,398,097,448	16,930

Source: Jefferson County Tax Assessor

The following table reveals all critical facilities in the county by jurisdiction, number of facilities, hazard score, replacement value, and daily occupancy exposed to wildfire hazard. A complete breakdown of each jurisdiction by hazard can be found in Appendix A.

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value $	Content Value $	Daily Occupancy
Jefferson County	2	15	78,723,084	3,887,000	1,295
Jefferson County	1	8	82,623,076	3,309,600	1,371
Jefferson County	0	11	98,895,733	3,358,200	1,145
Avera	1	3	737,500	400,000	1
Bartow	1	12	3,615,377	402,000	6
Bartow	0	4	257,100	00	0
Louisville	2	6	6,825,000	1,200,000	14
Louisville	1	4	7,206,165	00	225
Louisville	0	5	4,111,225	500,000	30
Stapleton	0	4	1,778,500	730,000	2
Wadley	2	7	5,776,513	1,788,200	140
Wadley	0	2	1,100,000	00	0
Wrens	2	5	4,140,350	1,449,200	70
Wrens	1	7	2,450,000	25,000	0
Wrens	0	16	9,612,500	225,000	0
TOTAL		**109**	**307,852,123.00**	**17,274,200**	**4,299**

The GMIS has 33 critical facilities with a hazard score of two (low probability) and 34 with a hazard score of one (very low probability). These 77 critical facilities with a wildfire hazard score greater than zero have an estimated potential loss of more than $192 million. The loss for all critical facilities is $307,852,123. According to FEMA Worksheet #3a there are 37,363 structures/properties with a population of 16,930 with a value of slightly more than $1.3 billion worth of assets countywide. If a wildfire started, it is not likely that all of these structures/properties would be affected (*See Appendix A and Appendix D)*.

D. Land Use and Development Trends: Jefferson County currently has no land use or development trends related to wildfire conditions. Land use codes do provide for fire protection to any proposed major and minor developments connected to the public water supply system, and minimum fire flows shall be computed based on standards promulgated by the Jefferson County Fire Department. For those proposed developments that will not have immediate access to the public water supply system, such standards and computations should be based on the National Fire Protection Association *Standards on Water Supply for Suburban and Rural Fire Fighting*.

E. Multi-Jurisdictional Concerns: The majority of Jefferson County is timber, forest or agricultural land. If a wildfire occurs it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The county and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The county and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the county will be without any adequate means to transmit signals. The county and all jurisdictions are aware of the need to develop communication capabilities that will serve their county.

Wildfire does have the potential to spread to urban areas thus affecting the entire county. As a result, any mitigation steps taken related to wildfire should be undertaken on a countywide basis and include all incorporated jurisdictions.

F. Hazard Summary: Jefferson County has a total area of 339,991 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. Given the right weather conditions and variables, wildfire due to natural causes creates a potential threat to the lives and property of residents in the planning area. According to Georgia Forestry data, from 1957 to 2013, there have been 2,814 fire events burning a total of 15,997 acres for an average extent of 5.68 acres. Of these 2,814 fire events 168 were a result of lightning strikes that burned 1,505 acres. Based on a 20-year hazard cycle there is a 455% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4.5 wildfires as a result of lightning annually.

The GMIS has 33 critical facilities with a hazard score of two (low probability) and 34 with a hazard score of one (very low probability). These 77 critical facilities with a wildfire hazard score greater than zero have an estimated potential loss of more than $192 million. The loss for all critical facilities is $307,852,123. According to FEMA Worksheet #3a there are 37,363 structures/properties with a population of 16,930 with a value of slightly more than $1.3 billion worth of assets countywide. Mitigation Goals and Objectives concerning wildfires can be found in Chapter III, Section IV.

Since the previous plan there has been no new development and no increase in population that would affect the overall vulnerability of the community to this hazard. The have been a total of 26 new fire hydrants installed in three jurisdictions. The County continues to follow GFC guidelines to service the construction of firebreaks around forests and structures, maintain fuel breaks along abandoned road beds and recommend a defensible space (30-ft minimum setbacks) between buildings and strictly follow guidelines for control burns and permits. Jefferson County EMA also started a Facebook Page since the previous plan to inform citizens about wildfire conditions.

SECTION V. SEVERE WEATHER, INCLUDING TORNADOS, TROPICAL STORMS THUNDERSTORM WINDS, LIGHTNING, AND HAIL

A. Hazard Identification: The committee reviewed historical data from the county's own weather database, the NCDC, SHELDUS™, newspapers and citizen interviews in researching the past effects of severe weather in Jefferson County. The month of February marks the beginning of the severe weather season in the South, which can last until the month of August. Five types of severe weather were identified by the mitigation team: (1) tornados, (2) tropical storms, (3) thunderstorm winds, (4) lightning and (5) hail.

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm or the result of a hurricane and is produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornados are among the most unpredictable and destructive of weather phenomena and can strike at any time of the

year if the essential conditions are present. The damage from a tornado is a result of the high wind velocity and wind-blown debris. The positions of the subtropical and polar jet streams often are conducive to the formation of storms in the Gulf region. The table below shows the original Fujita Scale and the Enhanced Fujita Scale (in use since 2007) to rate the intensity of a tornado by examining the damage caused by the tornado after it has passed over a man-made structure.

FUJITA SCALE			DERIVED EF SCALE		OPERATIONAL EF SCALE	
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	**EF Number**	**3 Second Gust (mph)**
0	40-72	45-78	0	65-85	**0**	**65-85**
1	73-112	79-117	1	86-109	**1**	**86-110**
2	113-157	118-161	2	110-137	**2**	**111-135**
3	158-207	162-209	3	138-167	**3**	**136-165**
4	208-260	210-261	4	168-199	**4**	**166-200**
5	261-318	262-317	5	200-234	**5**	**Over 200**

Source: NOAA

The second type of severe weather is tropical storms. Tropical Storms are an organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots). In this area they generally occur as a result of a hurricane or tropical system that has come inland.

The third severe weather event, thunderstorm winds, can cause death and injury, power outages, property damage, and can disrupt telephone service, severely affect radio communications and surface/air transportation which may seriously impair the emergency management capabilities of the affected jurisdictions.

Thunderstorm winds are winds that arise from convection (with or without lightning), with speeds of at least 50 knots (58 mph), or winds of any speed producing a fatality, injury, or damage. Severe thunderstorms develop powerful updrafts and downdrafts. An updraft of warm, moist air helps to fuel a towering cumulonimbus cloud reaching tens of thousands of feet into the atmosphere. A downdraft of relatively cool, dense air develops as precipitation begins to fall through the cloud. Winds in the downdraft can reach in excess of 100 miles per hour. When the downdraft reaches the ground it spreads out forming a gust front: the strong wind that kicks up just before the storm hits. As the thunderstorm moves through the area, the full force of the downdraft in a severe thunderstorm can be felt as horizontal, straight-line winds with speeds well over 50 miles per hour. Straight-line winds are often responsible for most of the damage associated with a severe thunderstorm. Damaging straight-line winds occur over a range of scales. At one extreme, a severe single-cell thunderstorm may cause localized damage from a microburst, a severe downdraft extending not more than about two miles across. In contrast, a powerful thunderstorm complex that develops as a squall line can produce damaging winds that carve a path as much as 100 miles wide and 500 miles long.

The fourth severe weather event is lightning. Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. Rising and descending air within a thunderstorm separates these positive and negative charges. Water

and ice particles also affect charge distribution. A cloud-to-ground lightning strike begins as an invisible channel of electrically charged air moving from the cloud toward the ground. When one channel nears an object on the ground, a powerful surge of electricity from the ground moves upward to the clouds and produces the visible lightning strike. Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.

The final severe weather event is hail. Hailstones are created when strong rising currents of air called updrafts carry water droplets high into the upper reaches of thunderstorms where they freeze. These frozen water droplets fall back toward the earth in downdrafts. In their descent, these frozen droplets bump into and coalesce with unfrozen water droplets and are then carried back up high within the storm where they refreeze into larger frozen drops. This cycle may repeat itself several times until the frozen water droplets become so large and heavy that the updraft can no longer support their weight. Eventually, the frozen water droplets fall back to earth as hailstones.

Hail can also be a destructive aspect of severe thunderstorms. Hail causes more monetary loss than any other type of thunderstorm-spawned severe weather in the United States, annually producing about one billion dollars in crop damage. Storms that produce hailstones only the size of a dime can produce dents in the tops of vehicles, damage roofs, break windows and cause significant injury or even death.

B. Hazard Profile: Tornados, tropical storms, thunderstorm winds, lightning and hail can affect the entire county given the right conditions. Since the exact time and location of a severe weather event is not always predictable, all of Jefferson County is vulnerable to the threats of severe weather.

Based on historic data, there have been 13 reported tornados in the planning area. The highest magnitude reported was an F3. Reported property damages for all 13 events totaled more than $9.4 million in property and crop damages with 31 injuries reported. Tornados tend to strike in somewhat random fashion, making the task of calculating a recurrence interval extremely difficult. Using a 20-year hazard cycle, frequency tables calculates an annual chance for a tornado event at:

- 30% for Jefferson County as a whole and for the unincorporated areas;
- 10% for Wrens; and
- 5% for Avera, Bartow, Louisville, Stapleton and Wadley.

The following table was produced from interviews, *The Jefferson Reporter*, and the NCDC and SHELDUS™ databases and shows the event, severity and estimate cost of damages reported. *(See Appendix A, Section I and Appendix D).*

Date	Location	Mag	Inj	PD	CrD
7/22/1970	Jefferson	F0	0	0	0
7/19/1971	Jefferson	F1	0	25.00k	0.00K
1/13/1972	Jefferson	F3	21	2500.00k	0.00K
3/18/1981	Jefferson	F1	1	25.00k	0.00K
7/25/1981	Jefferson	F1	0	250.00k	0.00K

Date	Location	Mag	Inj	PD	CrD
12/4/1983	Jefferson		2	5.00k	0.00K
10/1/1989	Jefferson	F1	2	25.0k	0.00K
3/7/1996	Wrens	F1	5	1000.00k	0.00K
6/15/1996	Bartow	F0	0	10.00k	0.00K
7/1/2003	Jefferson	F1		0	0
3/15/2008	Jefferson	EF2	0	500.00k	0.00K
5/11/2008	Grange	EF0	0	5.000M	0.00K
4/10/2009	Stapleton	EF1	0	100.00k	0.00K

There have been 18 tropical storms reported in Jefferson County by the NCDC and SHELDUS™ with property and crop damages of approximately $155,994. Damages as a result of the storms were due to power outages, downed trees and flash flooding. The tropical storms affected the entire planning area. Data for each jurisdiction is not available. Based on the hazard frequency table there is a 65% chance of an annual tropical storm event for all jurisdictions (*See Appendix D).*

Details	Date	PrD	CrD
as a result of Hurricane Cleo	8/28/1964	1136.36	113.6
as a result of Hurricane Dora	9/9/1964	147.05k	1.47k
as a result of Hurricane Alma	6/8/1966	1.47k	1.47k
as a result of Tropical Storm Abby	6/6/1968	0.14k	0.00K
as a result of Hurricane Angus	6/19/1972	0.00K	314.5
as a result of Hurricane Opal	10/05/1995	0.00K	0.00K
as a result of Result of Hurricane Floyd	9/14/1999	0.00K	0.00K
as a result of Tropical Storm Hanna	9/14/2002	0.00K	0.00K
as a result of Tropical Depression Bill	7/1/2003	0.00K	0.00K
as a result of Hurricane Frances	9/6/2004	0.00K	0.00K
as a result of Hurricane Ivan	9/16/2004	0.00K	0.00K
as a result of Hurricane Jeanne	9/26/2004	0.00K	0.00K
as a result of Tropical Storm Arlene	6/12/2005	0.00K	0.00K
as a result of Hurricane Dennis	7/10/2005	0.00K	0.00K
as a result of Hurricane Katrina	8/29/2005	0.00K	0.00K
as a result of Tropical storm Tammy	10/5/2005	0.00K	0.00K
as a result of Hurricane Ida	11/10/2009	0.00K	0.00K
as a result of Hurricane Jeanne	09/04/2011	0.00K	0.00K
Tropical Depression as a result of Debby	7/3/2012	0.00K	0.00K

Source: NCDC and SHELDUS

Thunderstorms normally occur during the spring and summer months and often carry strong winds. There have been 85 events recorded in the last 64 years with over $6.5 million in property and crop damages reported with seven injuries and one death. The table below breaks down the thunderstorm events by jurisdiction. A complete table of thunderstorm wind events can be found in Appendix A.

Location	# of Events	County-Wide Events*	Total # of events per jurisdiction
Jefferson County(Unincorporated)	1	55	56
Avera	2	55	57
Bartow	2	55	57
Louisville	11	55	66
Stapleton	3	55	58
Wadley	7	55	62
Wrens	4	55	59
TOTAL FOR COUNTY	30	55	**85**

Source: NCDC and SHELDUS

** It is assumed that all 55 county-wide events reported occurred in each jurisdiction*

While data was collected looking at 64 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Using a 20-year hazard cycle, frequency tables calculates an annual chance for a thunderstorm event producing high winds at:

- 115% for the unincorporated areas of the county, Avera and Bartow;
- 165% for Louisville;
- 120% for Stapleton;
- 145% for Wadley; and
- 130% for Wrens

Jefferson County as a whole has an overall probability for a significant thunderstorm event of 260%. Hazard frequency tables for individual jurisdictions can be found in Appendix D.

The fourth weather event is lightning. During the spring and summer months the county experiences numerous storms that can often produce lightning. The VAISALA National Lightning Detection Network has the average flash density per square mile between five and six from 1997 to 2010. There have been 19 reported lightning events to the NCDC and SHELDUS over 64 years with slightly more than $290,000 in property and crop damages with three injury. There have been 168 lightning strikes recorded in the same time frame that resulted in wildfires. When these datasets are combined there has been 187 lightning strikes recorded.

This data is incomplete as the exact location of the 19 NCDC reported events within the county is not available. Best available data has a 75% chance for Avera, Bartow, Stapleton and Wadley and an 80% chance for Louisville and Wrens of an annual lightning strike event. While data was collected looking at 64 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle there is a 475% chance that a lightning strike will occur in Jefferson County.

The fifth weather event is hail. In the last 64 years there have been 53 hail events reported to the NCDC and SHELDUS databases with slightly less than $1 million in property and crop damages. These 53 events produced hailstones ranging .75 to 2.75 inches. While data was collected looking at 64 years of data, frequency rate was calculated using a 20-year hazard

cycle per guidance from GEMA. Using a 20-year hazard cycle, frequency tables calculates an annual chance for a hail event at:

- 20% for the unincorporated areas and Avera;
- 90% for Louisville;
- 25% for Bartow and Stapleton;
- 30% for Wadley; and
- 40% for Wrens.

Overall, there is a 155% that a hail event will take place in Jefferson County. Hazard frequency tables for individual jurisdictions can be found in Appendix D.

C. Assets Exposed to Hazard and Estimate of Potential Losses: In evaluating assets exposed to the natural hazard, the committee determined that all critical facilities, as well as all public, private and commercial property, are susceptible to tornados, tropical storms, thunderstorm winds, lightning and hail events. The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. The table below provides data from FEMA Worksheet #3a that estimates the potential loss for each jurisdiction.

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	22,850	$1,039,928,700	9,219
Avera	745	$6,633,305	246
Bartow	677	$12,453,553	286
Louisville	4,551	$118,097,005	2,493
Stapleton	963	$13,083,513	438
Wadley	3,538	$95,608,332	2,061
Wrens	4,039	$112,293,040	2,187
TOTAL FOR COUNTY	37,363	$1,398,097,448	16,930

Source: Jefferson County Tax Assessor

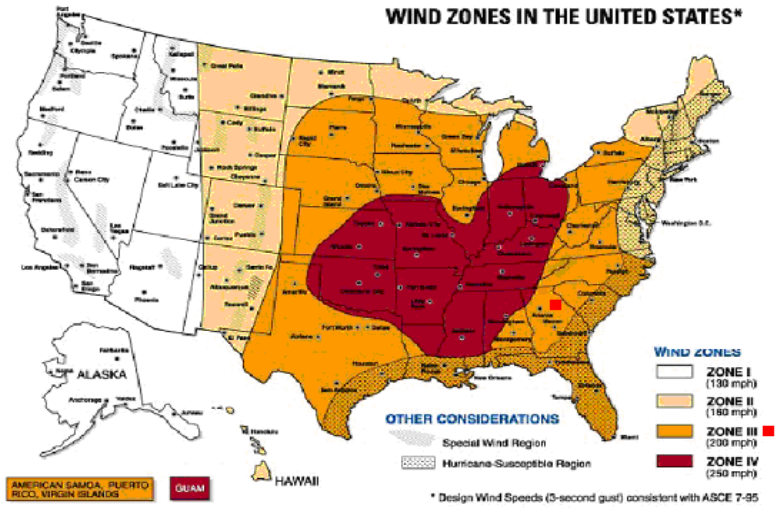
All 109 critical facilities have a wind hazard score of two placing the critical facilities in Zone IV which has a wind speed of 90 to 99 mph. The table below shows the number of critical facilities by jurisdictions, hazard score, replacement value, content value, and daily occupancy.

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value $	Content Value $	Daily Occupancy
Jefferson County	2	34	260,241,893	10,554,800	3,811
Avera	2	3	737,500	400,000	1
Bartow	2	16	3,872,477	402,000	6
Louisville	2	15	18,142,390	1,700,000	269
Stapleton	2	4	1,778,500	730,000	2
Wadley	2	9	6,876,513	1,788,200	140
Wrens	2	21	16,202,850	1,699,200	70
TOTAL		**109**	**307,852,123.00**	**17,274,200**	**4,299**

GMIS critical facility reports for wind and FEMA Worksheet #3a are located in Appendix A for each individual jurisdiction and the county as a whole.

D. Land Use & Development Trends: Jefferson County is located in FEMA wind zone III, which is associated with 200-mph wind speeds. Currently, the county has no land use or development trends related to tornados, tropical storm, thunderstorm winds, lightning, or hail events. Information on current land use and future land use projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns – All of Jefferson County has the same design wind speed of 200 mph as determined by the American Society of Civil Engineers (ASCE) as evidenced by the map and table below.



Wind zones in the United States

NUMBER OF TORNADOES PER 1,000 SQUARE MILES	WIND ZONE I	II	III	IV
<1	LOW RISK	LOW RISK ★	LOW RISK ★	MODERATE RISK
1 - 5	LOW RISK	MODERATE RISK ★	HIGH RISK	HIGH RISK
6 - 10	LOW RISK	MODERATE RISK ★	HIGH RISK	HIGH RISK
11 - 15	HIGH RISK	HIGH RISK	HIGH RISK	HIGH RISK
>15	HIGH RISK	HIGH RISK	HIGH RISK	HIGH RISK

LOW RISK – Need for high-wind shelter is a matter of homeowner preference

MODERATE RISK – Shelter should be considered for protection from high winds

HIGH RISK – Shelter is preferred method of protection from high winds

★ Shelter is preferred method of protection from high winds if house is in hurricane-susceptible region

During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The county and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The county and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the county will be without any adequate means to bounce signals. The county and all jurisdictions are aware of the need to develop communication capabilities that will serve their county.
The entire county has the potential to be affected by tornados, tropical storms, thunderstorm winds, lightning and hail. As a result, any mitigation steps taken related for these five severe weather events should be considered on a county-wide basis to include all jurisdictions.

F. Hazard Summary: Overall, severe weather in the form of thunderstorm winds poses one of the greatest threats to Jefferson County in terms of property damage, injuries, and loss of life. Therefore, the committee recommends that mitigation measures identified in this plan should be aggressively pursued. Tornados do not touch down as frequently; however, the unpredictability and the potential for excessive damage caused by tornados makes it imperative that mitigation measures identified in this plan receive full consideration.

Weather Event	#	Fatalities	Injuries	Approximate Property/Crop Damage
Tornados	13	0	31	$9,400,000
Tropical Storms	18	0	0	$155,994
Thunderstorm Winds	85	1	7	$6,500,000
Lightning	187	0	1	$290,000
Hail	53	0	0	$989,832

The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. All 109 critical facilities have a wind hazard score of two with a replacement cost of more than $307 million**.** To summarize, there are approximately 37,363 structures/properties in the county totaling slightly more than $1.3 billon with a population of 16,930. A breakdown of information for individual jurisdictions can be found in Appendix A and Appendix D. Specific mitigation actions for tornados, tropical storms, thunderstorm winds, lightning and hail events are identified in Chapter III, Section V.

Since the previous plan there has been no new development and no increase in population that would affect the overall vulnerability of the community to this hazard. The city of Wadley has adopted the DCA required building codes. These codes will ensure that any new structures built in Wadley are built to meet the wind zone requirements. Jefferson County EMA also started a Facebook Page since the previous plan to inform citizens about current weather conditions.

SECTION VI. WINTER STORMS

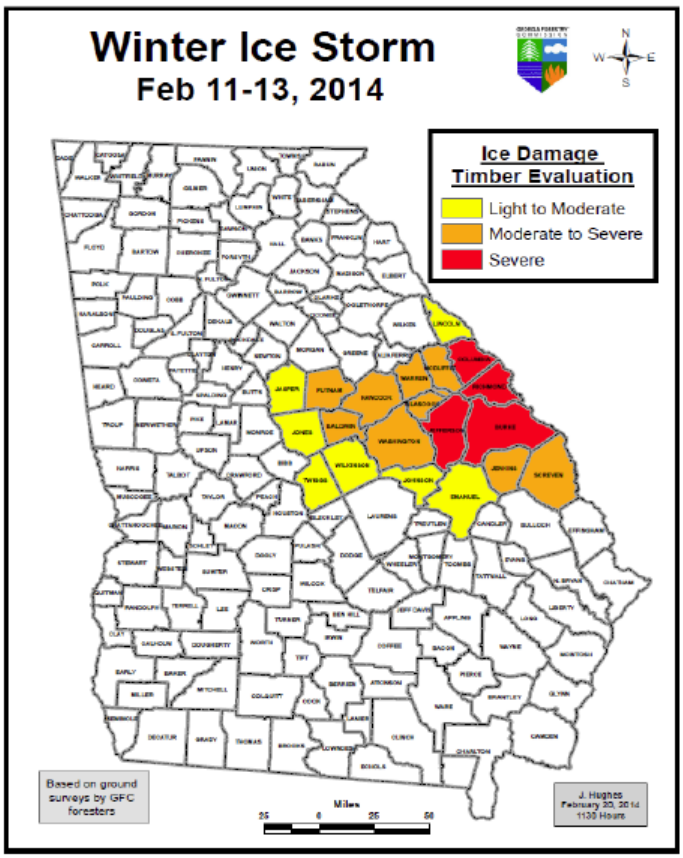
A. Hazard Identification: Southeastern snow or ice storms often form when an area of low pressure moves eastward across the northern Gulf of Mexico. To produce a significant winter

storm in the south, not only must temperatures be cold enough, but there must also be enough moisture in the atmosphere to produce adequate precipitation. A major winter storm can last for several days and be accompanied by high winds, ice and freezing rain, heavy snowfall, and cold temperatures. These conditions can make driving conditions very dangerous, as well as bring down trees and power lines.

B. Hazard Profile: Winter storms are not spatially defined and affect the entire planning equally. The committee researched historical data from the NCDC, SHELDUS™, and SERCC, as well as information from past newspaper articles relating to winter storms in Jefferson County. There have been 41 winter storm events recorded in the county over the last 122 years with an estimated property damage of $417,089. Historical data shows snow depths ranging from .5 inches to 14.8 inches in 1973 and ice depths ranging from .3 to 2.5 inches.

The most recent ice storm on February 11-13, 2014 had travel halted, schools and businesses were closed and approximately 9,000 customers were without power at the height of the storm. Power company officials called the devastation to their lines and the ensuing outages historical for this area, which reportedly took the hardest hit of any in the state. In the more rural parts of the County individuals were without power for up to 10 days.

To date more than 432,000 cubic yards of storm debris has been collected county-wide. To date FEMA reimbursement claims for the cost of debris removal total more than $364,000. Damage calculations are still ongoing from this storm.



The dairy and beef producers felt the effects as electric fences lost power, while others were downed by falling trees and limbs. Without power for their pumps many wells were inoperable. The dairy farms in the county relied on generators to milk their cows. Cows need to increase their calorie intake by 1 percent for every degree the temperature drops below 32 degrees.

The other major after effect was to the timber industry. Jefferson County was one of the four counties hardest hit by the storm and had severe timber damage according to the GFC. The GFC examined the levels of damage within two types of pine that were most frequently damaged: the young pine stands and pine stands on which a first

thinning had recently occurred. The severe damage had more than 30 percent of stems broken, tops broken out across the stand, limbs stripped, and trees bent more than 45 degrees.

Senior Forester Cathy Black stated that the timber industry is a business that takes decades to turn a profit. Some land owners will be set back 30 years. Some of the hardest hit areas crops of trees, called stands in the business, have been reduced to splinters. The tops were broken off the pine trees, some trees were snapped in half, and others blown over laying on the ground. When this happens all that can be done is to clear cut it and plant new trees.

Although winter storms are infrequent in the south, they have the potential to cause excessive damage to a community and disrupt the lives of residents. Based on the hazard frequency table located in Appendix D there is an 80% chance of an annual winter storm event. The percentage is the same for all jurisdictions.

C. Assets Exposed to Hazard and Estimate of Potential Losses: In evaluating assets that may potentially be impacted by the effects of winter storms, the committee determined that all critical facilities, as well as all public, private and commercial property, are susceptible. The table below shows assets by jurisdiction that could be at potential risk of damage from a winter storm event.

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	22,850	$1,039,928,700	9,219
Avera	745	$6,633,305	246
Bartow	677	$12,453,553	286
Louisville	4,551	$118,097,005	2,493
Stapleton	963	$13,083,513	438
Wadley	3,538	$95,608,332	2,061
Wrens	4,039	$112,293,040	2,187
TOTAL FOR COUNTY	37,363	$1,398,097,448	16,930

Source: Jefferson County Tax Assessor

The GMIS does not provide a report for winter storm damage but there is slightly more than $6.2 billion worth of assets with potential loss to winter storm hazards countywide. The table below shows the number of critical facilities by jurisdiction, hazard score, replacement value and daily occupancy (*See Appendix A, Section VI and Appendix D).*

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value $	Daily Occupancy
Jefferson County	2	34	$260,241,893	3,811
Avera	2	3	$737,500	1
Bartow	2	16	$3,872,477	6
Louisville	2	15	$18,142,390	269
Stapleton	2	4	$1,778,500	2
Wadley	2	9	$6,876,513	140
Wrens	2	21	$16,202,850	70
TOTAL		**109**	**$307,852,123.00**	**4,299**

D. Land Use & Development Trends: Jefferson County currently has no land use or development trends related to winter storms. Projected changes in land use based on the county's multi-jurisdictional comprehensive plan has minimal or no change to land use within the incorporated jurisdictions. The greatest change in land use and future development has a decrease in forest land that will be converted to residential. Since it is impossible to determine where future residents will move in the unincorporated areas of the county, vulnerability in terms of future buildings, infrastructure and critical facilities is not known at this time. It can be surmised that this will bring an increase in population and homes. Land use tables and projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns: Jefferson County currently has no land use or development trends related to winter storms. All of the county can potentially be negatively impacted by winter storms. As a result, any mitigation steps taken related to winter storms should be undertaken on a countywide basis and include all incorporated jurisdictions. A concern is the lack of available data for the county and all municipalities. A database needs to be created and maintained that provides information on past and future occurring winter storm events.

Another major issue is county-wide communications capabilities. During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The county and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The county and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the county will be without any adequate means to bounce signals. The county and all jurisdictions are aware of the need to develop communication capabilities that will serve the entire county.

F. Hazard Summary: There have been 41 recorded winter storms. There is an 80% chance of an annual winter storm event. Winter storms can be more accurately predicted than most other natural hazards, making it possible to give advance warning to communities. The National Weather Service issues winter storm warnings and advisories as these storms make their way south. Given the infrequency of these types of storms, southern communities are still not properly equipped to sustain the damage and destruction caused by severe winter storms. To summarize, there are approximately 37,363 structures/properties in the county totaling slightly more than $1.3 billon with a population of 16,930. The committee recognized the dangers posed by winter storms and identified specific mitigation actions in Chapter III, Section VI.

Since the previous plan there has been no new development and no increase in population that would affect the overall vulnerability of the community to this hazard. Jefferson County EMA has started a Facebook Page since the previous plan to inform citizens about winter conditions.

CHAPTER III. MITIGATION STRATEGIES

Table 3.1 provides a brief description of each section in this chapter and a summary of the changes that have been made.

Chapter III. Section	Updates to Section
I. Flooding	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
II. Dam Failure	This hazard was added was not in last plan. Developed Goals, Objective, and Actions Steps.
III. Drought	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
IV. Wildfire	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
V. Severe Weather	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format. Added Lightning and Hail Events
VI. Winter	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
VII. All Hazards	Category added to take goals that apply to all Hazards to reduce redundancy.

SECTION I. INTRODUCTION TO MITIGATION STRATEGY

This chapter addresses the mitigation strategy requirements of 44 CFR Section 201.6 (c)(3): "A mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's

participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

iv) For multi-jurisdictional plans there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan."

A. Priority Changes from Previously Approved Plan

There have been no significant priority changes from the previous plan. The goal of Jefferson County and its jurisdictions, is to protect the safety, health and well-being of all county citizens, and to protect public and private property and to lessen the overall effects of a hazard event.

B. Capability Assessment

The County identified current capabilities for implementing hazard mitigation activities. The capability assessment identifies administrative, technical, legal and fiscal capabilities. This includes a summary of departments and their responsibilities associated with hazard mitigation as well as codes, ordinances, and plans already in place that contain mitigation activities or programmatic structure. The second part of the assessment examined the County and all jurisdictions fiscal capabilities applicable to providing financial resources to implement identified mitigation action items. Below is the annual budgets for each jurisdiction:

- Jefferson County: $16,820,915
- Avera: $140,000
- Bartow: $225,000
- Louisville: $2,643,230
- Stapleton: $355,726
- Wadley: $1,928,009
- Wrens: $12,246,023

The County, Louisville, and Wrens are the only three governmental bodies with the more than adequate fiscal, administrative and technical capabilities to implement mitigation strategies. Wadley can take on smaller mitigation actions but will need additional administrative, technical and funding sources to take on larger mitigations actions. Avera, Bartow, and Stapleton may be able to address small mitigation educational activities but any major project will require assistance from other agencies and additional funding sources. The three tables below identifies administrative, technical, legal and fiscal capabilities of each jurisdiction.

Table 3. 2 Legal and Regulatory Capability (Y/N)

Regulatory Tools (ordinances, codes, plans)	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Does State Prohibit
Building code	Y	N	N	y	N	Y	Y	N
Zoning ordinance	N	N	N	y	N	Y	Y	N
Subdivision ordinance or regulations	Y	N	N	Y	N	N	Y	N
Special purpose ordinances (floodplain management, storm water management, soil erosion)	Y	N	Y	Y	Y	Y	Y	N
Growth management ordinances (also called "smart growth" or anti- sprawl programs)	N	N	N	N	N	N	N	N
Site plan review requirements	Y	N	N	Y	N	N	Y	N
General or comprehensive plan	Y	Y	Y	Y	Y	Y	Y	N
A capital improvements plan	Y	N	N	Y	N	N	Y	N
An economic development plan	Y	N	N	N	N	N	N	N
An emergency response plan	Y	Y	Y	Y	Y	Y	Y	N
A post-disaster recovery plan	Y	Y	Y	Y	Y	Y	Y	N
A post-disaster recovery ordinance	N	N	N	N	N	N	N	N
Real estate disclosure requirements	N	N	N	N	N	N	N	N

Table 3. 3 Fiscal Capability

Financial Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Accessible or Eligible to Use (Yes/No)
Community Development Block Grants (CDBG)	Y	Y	Y	Y	Y	Y	Y	Y
Capital improvements project funding	Y	N	N	Y	N	N	Y	Y
Authority to levy taxes for specific purposes	Y	Y	Y	Y	Y	Y	Y	Y – Vote required
Fees for water, sewer, gas, or electric service	N	Y	Y	Y	Y	Y	Y	Y

Financial Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Accessible or Eligible to Use (Yes/No)
Impact fees for homebuyers or developers for new developments/homes	N	N	N	N	N	N	N	N
Incur debt through general obligation bonds	Y	Y	Y	Y	Y	Y	Y	Y
Incur debt through special tax and revenue bonds	Y	Y	Y	Y	Y	Y	Y	Y – Vote required
Withhold spending in hazard-prone areas	N	N	N	N	N	N	N	N
Other Grants	Y	Y	Y	Y	Y	Y	Y	N

Table 3.4 Administrative and Technical Capacity

Staff/Personnel Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Dept./Agency and Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Y	Y	Y	Y	Y	Y	Building Dept./ Code Enforcement/ Public Works CSRA RC
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Y	Y	Y	Y	Y	Y	Building Dept./ Code Enforcement
Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Y	Y	Y	Y	Y	Y	Y	Public Works/CSRA RC Staff
Floodplain manager	Y	N	N	Y	N	Y	Y	Building Dept.
Surveyors	N	N	N	N	N	N	N	Contracted as needed
Staff with education or expertise to assess the	Y	Y	Y	Y	Y	Y	Y	Public Safety/EMA

Staff/Personnel Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Dept./Agency and Position
community's vulnerability to hazards								
Personnel skilled in GIS and/or HAZUS	Y	Y	Y	Y	Y	Y	Y	CSRA RC Various
Emergency manager	Y	Y	Y	Y	Y	Y	Y	EMA
Grant writers	Y	Y	Y	Y	Y	Y	Y	CSRA RC

C. Community Mitigation Goals

Collectively, the jurisdictions reviewed the hazard profiles and the loss estimates information in Section II and used it as a basis for developing mitigation goals, objectives and action steps. Mitigation goals are preventive measures to lessen the effect of and losses due to hazard events and are typically long-range visions adapted toward jurisdictional policy. Mitigation objectives are strategies to attain identified goals. Goals and objectives are formulated by reviewing hazard historical data, existing local plans, policy documents, regulations, and public input. Each jurisdiction developed objectives and actions unique to specific vulnerabilities or concerns within its boundaries.

Mitigation actions were developed as the means to carrying out the objectives and attain goals. All action steps should be compatible with the plans, policies, and regulations of each jurisdiction. The jurisdictions must also have the legal, administrative, fiscal, and technical capacities to perform each action.

The capabilities assessment above aided in forming realistic mitigation actions. This capabilities assessment can then incorporate results of the STAPLEE worksheet to identified obstacles that may hinder the completion actions. Each jurisdiction identified and prioritized actions steps along with an implementation schedule, funding source, and coordinating individual or agency.

Based on the capabilities assessment, the STAPLEE and six categories listed above the county and all jurisdictions identified the following goals:

- Goal 1: Protect the safety, health and well-being of all county citizens;
- Goal 2: Protect public infrastructure and private property;
- Goal 3: Educate the community about natural hazards;
- Goal 4: Manage development to minimize loss;
- Goal 5: Natural Resources Protection; and
- Goal 6: Structural modifications to reduce the impacts of hazard events.

D. Identification & Analysis of Range of Mitigation Actions

The framework used to guide jurisdictions in identifying mitigation measures was developed by FEMA and is captured by the following six categories:

- **Prevention**: Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities that reduce hazard losses. Examples include building and construction code revisions; zoning regulation changes; and computer hazard modeling.
- **Property Protection**: Actions that involve the medications of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include roadway elevations, improving wind and impact resistance, and flood proofing.
- **Public Education and Awareness**: Action to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Examples include programs that target repetitive loss properties and vulnerable populations.
- **Natural Resources Protection**: Actions that, in addition to minimizing hazard losses also preserve or restore the function of natural systems. Examples include projects to create open space, green space, and stream restoration.
- **Structural Projects**: Actions that involve the construction of structures to reduce the impact of a hazard. Examples include projects that control floodwater, reconstruction of dams, and construction of regional retention areas.
- **Emergency Services**: Actions that protect people and property during and immediately after a disaster event or hazard event. Examples include enhancements that provide advanced warning and redundant communications.

i. **Structural and Non-Structural**

Mitigation relates to concrete actions which are put into practice to reduce the risk of destruction and casualties. Mitigation is generally split into two main types of activities: structural and non-structural. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk with related impacts. The committee has identified both structural and non-structural mitigation measures to ensure that the community adequately addresses all relevant dam failure issues. Structural and non-structural actions are identified in Table 3.7.

ii. **Existing Polices, Regulations, Ordinances, and Land Use**

Louisville, Wadley and Wrens has adopted the following Mandatory codes:

- Georgia State Minimum Standard Building Code (International Building Code with Georgia State Amendments).
- Georgia State Minimum Standard One- and Two-Family Dwelling Code (International Residential Code for One- and Two-Family Dwellings with Georgia State Amendments).
- Georgia State Minimum Standard Fire Code (International Fire Code with Georgia State Amendments).

- Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments).
- Georgia State Minimum Standard Mechanical Code (International Mechanical Code with Georgia State Amendments).
- Georgia State Minimum Standard Gas Code (International Fuel Gas Code with Georgia State Amendments).
- Georgia State Minimum Standard Electrical Code (National Electrical Code with Georgia State Amendments).
- Georgia State Minimum Standard Energy Code (International Energy Conservation Code with Georgia State Supplements and Amendments).
- Life Safety Code (NFPA 101).

They have also adopted the Permissive codes:

- International Property Maintenance Code.
- International Existing Building Code.

Other types of ordinances that have been adopted are:

- Currently the cities of Louisville, Wadley and Wrens have zoning ordinances, which offer groundwater protection and ensure best practices.
- Jefferson County has adopted a Wetlands Protection Ordinance.
- Louisville has adopted historic preservation ordinances
- Jefferson County, Wrens and Louisville has adopted a Soil Erosion and Sedimentation Control Ordinance
- Jefferson County has adopted a Solid Waste Management Facility Ordinance
- Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens have flood plain ordinances.
- Louisville and Wrens have adopted zoning ordinances and subdivision regulations.

The *Jefferson County Comprehensive Plan 2004-2024* was adopted by resolution by the Jefferson County Board of Commissioners and the City Councils of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens. The planning process examines the current and future trends and assess the strengths and opportunities available to achieve their community vision. This document drives the decision making process for the County and each municipality. The joint comprehensive plan also examines existing land use and projects future land use.

iii. Community Values, Historic & Special Considerations

Historical-Cultural

There are four National Register of Historic Places in Jefferson County:

- **Cunningham Coleman House**, listed 1984, southeast of Wadley. An 1825 sand hills house type with Greek Revival details. Raised, weatherboard, two over four room central hall house plan of one and half stories. Representative

of a middle-sized, antebellum cotton plantation and post-Civil War farm area known as "Cunningham Corner."

- **Jefferson County Courthouse**, listed 1980 in Georgia Courthouse Thematic NR nomination, built 1904, architect Willis Franklin Denny, builder F. P. Heifner. Style, Classical Revival. Courtroom remodeled in 1980; Elevator added and new windows in 1990s. Features prominent domed clock tower and two-story pediment porticos supported by classical columns. State level of significance.

- **Louisville Commercial Historic District**, listed 1994. Includes 180 acres, 43 buildings, 1 structure (Old Market NR listed individually). Period of significance, 1750-1949. Architectural styles, Beaux Arts, Romanesque, Early Commercial. Includes Courthouse (NR thematic courthouse nomination). Extends four blocks NW to SE along Broad Street. Majority of buildings brick, typical of small commercial towns. Significant structures, post office designed by U.S. Supervising Architect Louis A. Simon, county jail, telephone exchange, former Baptist Church Sunday School, Jefferson Hotel, Abbot and Stone building, Planter's Cotton Warehouse, Pal Theater. Native Louisville architect Willis F. Denny designed three of the two-story commercial buildings. State level of significance.

- **Old Market House**, Louisville, built 1758. Constructed as a trading market pre-dating the city of Louisville. The open-air market is the only building of its kind still standing in Georgia and one of only a few such remaining in the United States. The market rests on a 24'-square foundation and features twelve heavy wooden piers supporting a pyramidal roof. A small cupola with pointed-arch gothic windows and vent openings rests atop the roof. The historic 1772 bell that hangs serves as a reminder of the gift that was intended for King Louis XVI, but was stolen by a pirate ship before it found its way in Louisville's Market House. State level of significance.

Willis Franklin Denny II (1874-1905) was an important transitional figure in the development of Georgia architecture at the turn of the 20th century. A native of

Louisville, he was one of the first trained architects in America. There are nine Willis Franklin Denny II buildings in Louisville that should be NR listed and noted for preservation opportunities. They are:

- J.D. Polhill Sr. House, 9th and Peachtree, (moved to rural Jefferson County)
- Ramsey-Smith-Ethridge House, 401 Broad
- Rhodes-Stone House, 707 Peachtree (owned by United Methodist Church)
- Abbott House, Mulberry and 8th
- Phillips-Seebach House, 206 West 7th (demolished in 1990)
- Wright-Livingston-Agel House, 208 East 8th
- Denny Building (three storefronts), Broad Street, NR listed in Commercial HD
- Enterprise Building, Broad Street, NR listed in Commercial HD
- Jefferson County Courthouse, Broad Street, NR listed

There is one residential NRHP listing located in Wadley. The Cunningham Coleman House, located southeast of Wadley, was listed on the National Register in 1984. This home is an 1825 sand hills house type with Greek Revival details. Potential National Register of Historic Places residential properties include:

- McDaniel-Little-Patterson House, 702 Mulberry, circa 1880
- Dixon-Cobb House, 718 Screven Street, circa 1880
- Little Brewton House, 403 Broad Street, built 1873
- Marion Little House, 401 Broad Street, built circa 1900
- Ramsey-Smith-Ethridge House, 33 West Broad, built late 1870's
- Abbot House, Mulberry and 8th, built pre 1860
- Sigmund Zacharias House, 115 8th street, built 1879 (owned by the Rollins)
- Austin House, 208 8th street, circa 1830 (oldest house in Louisville)
- Lowry-Edwards-Willie House, US 1, poet Harry Stillwell Edwards lived here with his son.

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Recreation

Jefferson County is home to a segment of the Ogeechee River. This 250-mile river runs through the center of Jefferson County and is the only major river in Georgia with no dam. The river serves many purposes including drinking water, wildlife habitat and recreation such as fishing and boating. The Ogeechee River has been designated as a protected river by the Georgia Department of Natural Resources and an Ogeechee River Corridor Protection plan was adopted by Jefferson County in 2000. The Ogeechee River Protection District includes the land within 100 feet, horizontally, on both sides of the river.

The Atlanta Journal/Constitution and The Macon Telegraph call Bartow the smallest town in America with a thriving community theater. But, in truth, the Schoolhouse Players have evolved into a regional performing group that draws its actors and technicians, as well as its large audiences, from a wide radius. The Players, known for

their attention to sets, lighting, and costumes, present a full season of plays and musicals, as well as additional concerts, which range from classical to country.

Economic Drivers

Jefferson County offers a nationally favorable tax and a 100 percent Freeport inventory tax exemption for qualified companies. Under the Georgia Business Expansion Support Team (BEST) Act, qualified companies that expand in our state may be eligible for incentives to reduce costs and increase the bottom line.

The Development Authority of Jefferson County is a driving force in the success of business development here, working with existing and new businesses to ensure quick response time in developing training, infrastructure capacities, or distribution supports. The Development Authority and The Chamber of Commerce have developed strategic partner programs to support local businesses.

Jefferson County has:

- Metal fabrication cluster with excess water and treatment capacity
- Three industrial sites:
  - 353-acre industrial park adjacent to the airport
  - 650-acre park rail served
  - 170-acre industrial park
- Two airports
  - a 5,000-foot paved runway, perfect for corporate aircraft, at a regionally designated airport with terminal
  - a second airport with a 3,500-foot paved runway with plans to extend to a 5,000-foot runway

There is a network of well-maintained highways and airports, with quick access to one of the nation's largest seaports, links Jefferson County to world markets. US Highways 1 (expanding to four lanes), 88 (four lanes), 221 and 319 traverse Jefferson County while Interstate 16 is just south and Interstate 20 to the north. These main routes are accented by seven different state highways.

Currently expanding airports in Louisville and Wrens service private planes with lighted runways and hangars. Commercial flights are easily accessible at Augusta Airport roughly 35 miles away and two hours away at Savannah International Airport and Atlanta's Hartsfield-Jackson Airport.

The existing Jefferson County business community is strong and diversified.
Major Industries: agriculture, aquaculture, timber, kaolin, and metal fabrication
Major Employers: Fulghum, Battle Lumber, ThermoKing, Glit/Microtron

iv. **Prioritization of Actions:**

Those Mitigation Actions given high priority are in two groups: life safety-related actions that can be accomplished relatively quickly and changes to protect critical facilities on which other emergency management systems are dependent, for example communications focal points. Those actions likely to require extended time frames to accomplish received medium priority status.

The committee used the STAPLEE worksheet to select and prioritize the most appropriate mitigation alternatives. This methodology requires that seven categories be considered when reviewing potential actions. This process helped ensure that the most equitable and feasible actions would be undertaken based on each jurisdictions capabilities. Table 3.6 provides information regarding the review and selection criteria for alternatives.

Table 3.6

STAPLEE REVIEW AND SELECTION CRITERIA FOR ALTERNATIVES
• Is the proposed action acceptable by the community? • Is the action compatible with current and future community values? • Are equity concerns involved that would result in unjust treatment of any segment of the population? • Will the proposed action cause social disruption?
TECHNICAL
• Will the proposed action achieve the stated objective and further mitigation goals? • Will the proposed action create more problems than it solves? • Does the proposed action resolve the problem completely or partially? • It is the most useful action in light of other community values?
ADMINISTRATIVE
• Does the community have the capability to implement proposed action? • Is there someone to lead or coordinate the proposed action? • Is there sufficient funding, staff and technical support to implement the proposed action step? • Are there ongoing administrative needs that are required?
POLITICAL
• Is the proposed action politically acceptable? • Have political leaders participated in the planning process? • Who are the stakeholders for this proposed action? • Have all stakeholders been afforded an opportunity to participate in the planning process? • Is there public support to implement and maintain the action?
LEGAL
• Does the community have the authority to implement the proposed action? • Is there a clear legal basis for the proposed action? • Are there legal side effects? (i.e. could the action be construed as a taking) • IS the proposed action allowed in the general plan? • Will the community be liable for action or lack thereof? • Will the proposed action be challenged??
ECONOMIC
• What is the cost-benefit of the proposed action (do the benefits exceed the cost)? • Have initial, maintenance and administrative costs been taken into account?? • Has funding been secured for the proposed action? If not have funding sources been identified? • Will the proposed action affect the fiscal capabilities and/ or budget of the jurisdiction? • Will the proposed action place a tax burden on the community? • Does the proposed action contribute to other community goals? (capital improvements, economic development)

ENVIRONMENTAL

- Will the proposed action have a positive or negative effect on the environment?
- Does the proposed action require environmental regulatory approvals?
- Does the proposed action meet local and state regulations?
- Does the proposed action impact a threatened or endangered species?

E. Introduction to Action Plan

The next two sections of Chapter III., Section II. Natural Hazards and Section III. Mitigation Actions, comprise the strategies that Jefferson County together with Avera, Bartow, Louisville, Stapleton, Wadley and Wrens have identified to reduce the effects of natural hazards. Mitigation actions given high priority are in two groups: (1) life safety-related actions that can be accomplished relatively quickly and (2) changes to protect critical facilities on which other emergency management systems are dependent, for example communications focal points. Those actions likely to require extended time frames to accomplish received medium priority status.

SECTION II. NATURAL HAZARDS

A. Flooding Action Plan

The committee determined that due to the presence of flood plains in the county efforts to reduce the level of exposure to flooding should be considered. In previous flooding instances, damage has been sustained primarily to roads, bridges and natural resources. Specific mitigation measures identified by the committee are designed to lessen the effects of such damage to new and existing structures in the future.

Objective A1. Improve the effectiveness of existing flood insurance programs.
Objective A2. Evaluate and improve the present drainage infrastructure.
Objective A3. Warn citizens when the potential for flooding exist.
Objective A4. Lessen the impact to existing buildings, critical facilities and infrastructure as a result of flooding.
Objective A5. Limit future development in flood prone areas.
Objective A6. Reduce the threat of water contamination caused by flooding.

B. Dam Failure Action Plan

Dam failure mainly affects areas that are downstream of the event. Further study of this type event is required to determine where property damage and loss of life has the greatest potential to occur. Critical facilities and vulnerable populations are located in all jurisdictions as well as the unincorporated areas of the County. As a result, any mitigation steps taken related to dam failure events should be undertaken on a countywide basis and specifically include all incorporated jurisdictions.

Objective B1. Identify at risk population and properties.
Objective B2. Develop proposal to regulate protective measures for dam breach zones

C. Drought Action Plan

As indicated in Chapter II, Section III, drought conditions can cause costly damage to crops. However, from a danger or hazard perspective, the greatest threat posed by drought conditions is from potential wildfires. As 84.5% of the county is made up of forest and woodlands, the possibility for wildfires is distinct and poses a significant threat. In general, wildfires are the result of dry conditions combined with lightning or carelessness. The committee determined that mitigation goals were necessary to prevent crop damage, as well as damage to new and existing structures.

Objective C1. Ensure that there is an adequate water supply during periods of drought.

Objective C2. Educate citizens on water conservation issues.

D. Wildfire Action Plan

As indicated in Chapter II, Section IV, wildfires have the potential to cause costly damage in Jefferson County. From a danger or hazard perspective, the greatest threat posed by wildfire is the damage to forest, woodlands and agriculture property. The possibility for wildfires is distinct and poses a significant threat to the county. Forest fires are generally the result of dry conditions combined with lightning or carelessness. The committee determined that mitigation goals were necessary to prevent damage to undeveloped areas of the county as well as damage to new and existing structures caused by wildfires.

Objective D1. Ensure that adequate fire protection is available.

Objective D2. Reduce threat of wildfire occurrence.

Objective D3. Increase public awareness of wildfire dangers.

E. Severe Weather (Tornados, Tropical Storms, Thunderstorm Winds, Lightning, Hail)

As with many Georgia communities, if a tornado or tropical storm were to strike Jefferson County, significant damage to both property and agricultural crops could result. In addition, the potential for injuries and loss of life is substantial due to the unpredictability and violent nature of these storms. The committee recognizes the important role advance planning plays in the mitigation process. There is great benefit in identifying appropriate steps that can be taken to help minimize losses to new and existing structures in Jefferson County as a result of a severe weather event. As indicated in Chapter II, Section V, of all of the natural hazards profiled in this plan, tornados have the potential to inflict the greatest amount of damage while thunderstorm winds are the most frequently occurring natural hazard in the county and have the greatest chance of affecting the county each year. The committee has identified several courses of action that both local officials and citizens can use in their mitigation efforts against the effects of tornados, tropical storms, thunderstorm winds, lightning and hail to both new and existing structures.

Objective E1. Minimize damage to property from severe weather events.

Objective E2. Minimize damage to public buildings and critical facilities to ensure continual operations of vital services.

Objective E3. Protect vulnerable populations from the effects of severe weather events.

Objective E4. Educate the public including citizens and business owners on disaster preparedness and safety.

F. Winter Storms Action Plan

Within Jefferson County, and the southeast region in general, there is great concern over the threat of winter storms. Although this area does not typically receive the amounts of snow

and ice that other regions do, nor do they experience winter storms as frequently as other regions, Jefferson County and other southeastern communities must be prepared for the damage caused by winter storms. The fact that winter storms hit Jefferson County infrequently results in other problems, such as lack of equipment and supplies to combat treacherous winter storm conditions. In Jefferson County, the formation of ice on roads and bridges, tree limbs, and power lines is the cause of most damage. In Chapter II, Section VI additional winter storm hazards are addressed, as well as information related to potential losses for the county. The Committee has determined that several steps could be undertaken to minimize the effects of winter storms to protect the health and safety of citizens, as well as damage to new and existing structures.

Objective F1. Educate the public on preparedness and safety issues for winter storm events.

Objective F2. Prevent property damage as a result of a winter storm event.

Objective F3. Minimize power outages during winter storms.

G. All Hazard Action Steps

The purpose of this section is to allow the committee to recommend mitigation measures within this plan that transcend individual hazards. Certain common mitigation measures are needed regardless of the specific hazard event. Rather than list these multiple times within each different hazard category, the committee decided to list these "all-hazards" mitigation measures within a separate section of the plan. The goal with these mitigation measures is again to minimize the loss of life and property, and to prevent disruption of services to the public to the greatest extent possible.

Objective G1. Ensure communication capabilities exist between all Emergency Service Personnel and Agencies.

Objective G2. Ensure the ability to travel for county residents, organizations, and providers of essential services such as Law Enforcement Personnel, hospitals and utilities after a hazard event.

Objective G3. Protect critical facilities from the effects due to power outages as a result of all hazards to ensure a continuation of all vital services.

Objective G4. Provide adequate notification to citizens of Jefferson County pertaining to hazard event.

Objective G5. Guarantee all evacuation plans are up to date and adequate to meet the needs of the citizens of Jefferson County.

Objective G6. Guarantee that all Emergency Response Plans are up to date and adequate to meet the needs of citizens of Jefferson County.

Objective G7. Ensure all emergency shelters are ready to meet the needs of the population of Jefferson County and all jurisdictions.

Objective G8. Provide the citizens of Jefferson County educational information on Emergency Preparedness.

Objective G9. Provide the citizens of Jefferson County with accurate and timely information pertaining to Emergency Preparedness.

Objective G10. Collect accurate and complete data pertaining to hazard events within Jefferson County and all jurisdictions.

SECTION III. MITIGATION ACTIONS

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
1	Have Flood Hazard Base Maps created.	Jefferson County, Avera	BOC, City Council	Flood	A1, A2	1, 2, 4, 5	Non-Structural	$350,000	General Funds, FEMA	3 years	Ongoing	Medium
2	Investigate ways to increase Participation Level in the NFIP and CRS	Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens	BOC/All City Councils	Flood	A1, A2	1, 2, 4, 5	Non-Structural	Staff Time	General Funds	3 years	New	Medium
3	Continue to assess stormwater runoff.	Jefferson County/All Municipalities	Road Dept./Public Works	Flood	A5, C2	2, 6	Non-Structural	Staff time	General Funds	Continual	Ongoing	High
4	Construct as needed, more storm water retention facilities, storm drain improvements and channel improvements to protect existing and new developments.	Jefferson County/All Municipalities	Road Dept./Public Works	Flood/ Drought	A3,	2, 6	Structural	Unknown	General Funds	Continual	Ongoing	High
5	Clear run-off and water retention ditches.	Jefferson County/All Municipalities	Road Dept./Public Works	Flood	A5	2, 1	Structural	Staff Time		Continual	Ongoing	High
6	Seek funding for communication towers and voice repeater systems.	Jefferson County/All Municipalities	EMA/ Police/ Sheriff	All hazards	G1, G9	1	Structural	$750,000	General Fund, FEMA, CJCC, JAG, USDA, DOJ	Continual	Ongoing	High
7	Adopt ordinances to limit and control building and development in known flood prone areas.	Jefferson County/All Municipalities	BOC, City Councils	Flood	A6	1, 2, 4, 5	Non-Structural	Staff time	General Fund	1 year	Ongoing	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
8	Promote the preservation of areas in and around watercourses.	Jefferson County, Wadley, Louisville, Wrens	BOC, City Councils, Code and Building Depts.	Flood	A6	1, 2, 4, 5	Non-Structural	Staff time	CDBG, USDA, EPA, DNR	2 years	Ongoing	High
9	Add greenspace to known flood prone areas.	Jefferson County, Louisville, Wadley and Wrens	BOC, City Councils, Code and Building Depts.	Flood	A6	1, 2, 4, 5	Non-Structural	Staff time	CDBG, USDA, EPA, DNR	2 years	Ongoing	Medium
10	Evaluate existing water systems upgrade as needed	Jefferson County/All Municipalities	Public Works Dept.	Flood/ Drought/ Wildfire	A7, C1	1, 2, 6	Structural	Unknown	General Fund, CDBG, USDA, EPA, DNR	Continual	Ongoing	High
11	Investigate methods to reduce non-point source pollution.	Jefferson County	Public Works	Flood	A1	1, 2, 5	Non-Structural	Unknown	USDA, EPA, DNR	2 years	New	Medium
12	Promote increased surface water usage and surface artesian flow for irrigation.	Jefferson County/All Municipalities	Public Works	Drought	C1, C2	2, 3, 4	Structural/ Non-Structural	Unknown	USDA, EPA, DNR, General Funds	2 years and Continual	Ongoing	Medium
13	Enact a program to educate the residents about water conservation issues	Jefferson County/All Municipalities	BOC, City Councils, Public Works	Drought	C1, C2	1, 3	Non-Structural	$2,000.00	USDA, EPA, DNR, General Funds	1year and Continual	Ongoing	High
14	Increase public awareness of watering restrictions and bans.	Jefferson County/All Municipalities	BOC, City Councils, Public Works	Drought	C1, C2	1, 3	Non-Structural	Staff Time	General Funds	1year and Continual	Ongoing	High
15	Develop a public awareness campaign to promote water-saving campaigns (i.e. low-flow water saving devices)	Jefferson County/All Municipalities	BOC, City Councils, Public Works	Drought	C1, C2	1, 3	Non-Structural			1year and Continual	New	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
16	Continue training of all firefighters to include wildland fire training.	Jefferson County/All Municipalities	EMA, Fire Depts.	Wildfire	D1	1, 2	Non-Structural			1year and Continual	Ongoing	High
17	Seek funding for needed firefighting equipment	Jefferson County/All Municipalities	EMA, Fire Depts.	Wildfire	D1	1, 2	Non-Structural	Unknown	General Funds, FEMA	Continual	Ongoing	High
18	Inventory and replace or install more fire hydrants as needed.	Jefferson County/All Municipalities	EMA, Fire Depts., Public Works	Wildfire	D1	1, 2	Structural	Unknown	General Funds, FEMA	1year and Continual	Ongoing	High
19	Seek funding for more fire truckers and tankers for local fire departments.	Jefferson County/All Municipalities	EMA, Fire Depts.	Wildfire	D1	1, 2	Non-Structural	$200,000	General Funds, FEMA	1year and Continual	Ongoing	High
20	Enforce defensible space (30-ft minimum setbacks) between buildings and flammable brush and forestland where possible.	Jefferson County/All Municipalities	Road Dept. and Public Works.	Wildfire	D2, D3	1, 2, 3	Structural	unknown	General Funds, FEMA	Continual	Ongoing	Medium
21	Continue following GFC service of construction and maintenance of firebreaks around forests and structures, along abandoned roadbeds.	Jefferson County/All Municipalities	Road Dept. and Public Works., GFC	Wildfire	D2, D3	1, 2, 3	Non-Structural	Staff Time	General Fund	Continual	Ongoing	High
22	Strictly follow GFC guidelines for control burns and permits.	Jefferson County/All Municipalities	Fire Depts., Road Dept. and Public Works.	Wildfire	D2, D3	1, 2, 3	Non-Structural	unknown	General Funds,	Continual	Ongoing	High
23	Implement the Firewise Community Initiative where appropriate	Jefferson County Commission, and all Municipalities	Fire Depts. City Councils, BOC	Wildfire	D2, D3	1, 2, 3	Non-Structural	$25,000.00	General Funds, GFC	3 years	Ongoing	Medium
24	Improve public awareness of wildfire techniques and awareness of wildfire dangers.	Jefferson County Commission, and all Municipalities	EMA, Fire Depts., GFC	Wildfire	D2, D3	1, 2, 3	Non-Structural	$25,000.00	General Funds	2 years and Continual	Ongoing	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
25	Adopt Building Codes	Avera, Bartow, Stapleton	City Councils,	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 4, 6	Structural/ Non-Structural	Staff Time	General Fund	3 years	New	High
26	Adopt Zoning Regulations	Jefferson County, Avera, Bartow, Stapleton, Wadley	BOC, City Councils, County Planning Dept.	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 4, 6	Structural/ Non-Structural	Staff Time	General Fund	3 years	New	High
27	To the greatest extent possible, identify all owners of inadequately installed manufactured homes offer a financial incentive to retrofit them with an appropriate level of anchoring and support.	Jefferson County/All Municipalities	Building and Code Depts.,	Severe Weather	E1, E4	1, 2, 3	Structural	unknown	General Fund	3 years	New	Medium
28	Equip all county and city recreation parks with adequate early severe weather warning and lightning detection devices.	Jefferson County/All Municipalities	Road Depts. And Public Works	Severe Weather, Lightning	E1, E2. E3	1, 2, 6	Structural	unknown	General Funds, FEMA	2 years	New	High
29	Inspects public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed	Jefferson County/All Municipalities	EMA, Fire Depts. Public Works, Building and Code Depts.,	Severe Weather, Winter Storms	E1, E2. E3	1, 2, 6	Structural	Unknown	General Funds, FEMA	3 years	Ongoing	Medium
30	Enforce building codes for all new buildings and critical facilities.	Jefferson County/All Municipalities	Building and Code Depts.,	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 6	Structural/ Non-Structural	Unknown	General Funds, FEMA	Continual	Ongoing	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
31	Inspect all county and municipal critical facilities for proper grounding.	Jefferson County/All Municipalities	EMA, Fire Depts. Public Works, Building and Code Depts.,	Flood, Severe Weather, Winter Storm	E1, E2. E3	1, 2, 6	Structural/ Non-Structural	Staff Time	General Fund	1 year	New	High
32	Install lightning rods in high value critical facilities.	Jefferson County/All Municipalities	EMA, Fire Depts. Public Works, Building and Code Depts.,	Severe Weather, Lightning	E1, E2. E3	1, 2, 6	Structural	100,000	General Funds, FEMA	2 years	New	High
33	Install surge protectors on critical facilities' electronic equipment in essential county and city facilities.	Jefferson County/All Municipalities	EMA, Fire Depts. Public Works, Building and Code Depts.,	Severe Weather, Lightning, Winter Storm	E2, G1	1, 2, 6	Structural	$10,000	General Funds	3 years	New	High
34	Review current Emergency Response Plan and update when needed.	Jefferson County	EMA, RC	All hazards	G6, G8	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years	Ongoing	High
35	Review current evacuation plans paying particular attention to vulnerable populations and update as needed.	Jefferson County	EMA, RC	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	G5, G8	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years	Ongoing	High
36	Provide boat owners with safety tie down procedures with boat registration.	Jefferson County	EMA, RC	Severe Weather, Winter Storm	F2, E1	1, 2, 3	Non-Structural	2,500	General Funds	1 year and continual	New	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
37	Develop a public awareness program about the installation of lightning grounding systems on critical infrastructure, residential and business properties.	Jefferson County	EMA, RC	Severe Weather, Lightning	E4	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years	New	High
38	Install generators where needed.	Jefferson County/All Municipalities	BOC, City Councils, Fire Depts, EMA, Police, Sheriff, Public Works, Road Depts.	All hazards	G3	1, 2, 3, 6	Structural/ Non-Structural	Unknown	General Funds, FEMA	1 year and continual	Ongoing	High
39	Seek funding to ensure all current and future emergency shelters have back-up generators.	Jefferson County/All Municipalities	BOC, City Councils, Fire Depts, EMA, Police, Sheriff,	All hazards	G7	1, 2, 3, 6	Structural/ Non-Structural	Unknown	General Funds, FEMA	3 years	New	High
40	Educate the public on shelter locations and evacuation routes	Jefferson County/All Municipalities	Fire Depts, EMA, Police, Sheriff,	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	G8, G9	3	Non-Structural	Staff Time	General Funds	1 year and continual	Ongoing	High
41	Develop public education and awareness programs regarding severe weather events to include home safety measures, purchase of weather radio and personal safety measures before, during and after an event.	Jefferson County/All Municipalities	EMA, BOC, City Councils, RC	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	G8, G9	3	Non-Structural	$10,000	General Funds, FEMA	2year and continual	Ongoing	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
42	Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after.	Jefferson County/All Municipalities	EMA, BOC, City Councils, RC	Winter Storm	F1	3	Non-Structural	$25,000	General Funds	2 year and continual	Ongoing	High
43	Review current codes to comply with and enforce the State building code with criteria for design snow load for buildings and structures.	Jefferson County/All Municipalities	Building and Code Enforcement Depts.	Winter Storm	F2	1, 2, 3,	Non-Structural	Staff Time	General Funds	2 years	New	Medium
44	Create a data base to record hazard event information.	Jefferson County/All Municipalities	EMA, BOC, City Councils, RC	All hazards	G10	1, 2, 3,	Non-Structural	Staff Time	General Funds	2 years	Ongoing	Medium
45	Conduct dam breach analysis to identify assets and population at risk in the event of a failure.	Jefferson County, Wadley	EMA, BOC, City Council, RC	Dam Failure	B1, B2	1, 2,	Non-Structural	Unknown	General Funds, DNR	3 years	New	Medium
46	Draft ordinance prohibiting development in dam breach zone.	Jefferson County, Wadley	BOC, City Council, RC	Dam Failure	B2	1, 2, 4	Non-Structural	Staff Time	General Funds	2 years	New	Medium
47	Install dam failure alert systems.	Jefferson County, Wadley	BOC, City Council, Public Works	Dam Failure	G4	1, 2, 6	Structural	Unknown	General Funds, DNR	4 years	New	Medium
48	Inventory existing road equipment and purchase needed equipment to maintain roads before, during and after a hazard event.	Jefferson County/All Municipalities	BOC, City Council, Public Works, Road Depts.	Flood, Severe Weather, Winter Storm	G2	1, 2	Non-Structural	Unknown	General Funds, FEMA	2 years	New	Medium

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
49	Develop coordinated management strategies for deicing, snow plowing, and clearing roads of fallen trees and debris	Jefferson County/All Municipalities	BOC, City Council, EMA, Public Works, Road Depts.	Flood, Severe Weather, Winter Storm	G2	1, 2	Non-Structural	Staff Time	General Funds	2 years	New	High
50	Promote the construction of safe rooms in shelter areas and in public buildings.	Jefferson County/All Municipalities	BOC, City Council, EMA, Fire Depts., Sheriff, Police	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	G3	1, 2, 6	Structural	Unknown	General Funds, FEMA	4 years	New	Medium
51	Update 911 equipment as needed.	Jefferson County	EMA	All hazards	G1, G3	1, 2, 6	Structural	Unknown	General Funds, FEMA	Continual	New	High
52	Request that all new education facilities be designed to serve as public shelters for emergency purposes.	Jefferson County	BOC, BOE	All hazards	G7	1, 2, 6	Non-Structural	Staff Time	General Funds	Continual	New	High
53	Promote and participate in the following American Red Cross Programs • Disaster Resistant Neighborhoods Program • Business and Industry Preparedness Seminar • Community Disaster Education Preparedness presentations	Jefferson County/All Municipalities	BOC, City Council, EMA, Fire Depts., Sheriff, Police	All hazards	G4, G8, G9	1, 2 ,3	Non-Structural	Unknown	General Funds, FEMA	Continual	Ongoing	Medium
54	Continue update of EMA website with information pertaining to Emergency Preparedness.	Jefferson County	EMA	All hazards	G4, G5, G6, G7, G8, G9.	1, 2 ,3	Non-Structural	Staff Time	General Funds	Continual	New	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
55	Work with local cable and radio providers to enhance and broadcast public education on Emergency Preparedness.	Jefferson County	BOC, City Council, EMA, Fire Depts., Sheriff, Police	All hazards	G8, G9	1, 2 ,3	Non-Structural	Staff Time	General Funds	1 year and Continual	New	High
56	Implement GIS technology on fire and emergency management vehicles so data can be readily available in the field so more accurate, timely assessments for future mitigation planning activities.	Jefferson County/All Municipalities	BOC, City Council, EMA, Fire Depts., Sheriff, Police	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	G9, G10	1, 2, 6	Non-Structural	50,000	General Funds, FEMA	1 year and Continual	New	High
57	Purchase a portable sewer transfer pumping unit	Wrens, Wadley, Louisville	City Council	Flood, Severe Weather, Winter Storm	A7, E2, G3	1, 2	Non-Structural	$150,000	General Funds, FEMA	2 years	New	Medium
58	Herman Nelson Warming System AIR HEATER w/TRAILER	Jefferson County	BOC. EMA	Winter Storm	G7	1, 2	Non-Structural	$500,000	General Funds, FEMA	2 years	New	Medium
59	Run HAZUS scenarios once the software is updated and compatible to RC ArcGIS 10.2 and updated estimated losses.	Jefferson County/ All Jurisdictions.	RC	Flood/ Severe Weather	A2, A3, A5, A6, B1	1,4,5	Non-Structural	Staff Time	General Funds	1 year	New	High
60	Apply for funds to three portable generators for lift stations and wells	Wrens	City Council, Public Works	All hazards	G3	1, 2, 3, 6	Structural/ Non-Structural	140,000	General Funds, FEMA	6 months	New	High
61	Continue update of EMA website and Facebook page with information pertaining to Emergency Preparedness.	Jefferson County	EMA	All hazards	G4, G5, G6, G7, G8, G9.	1, 2 ,3	Non-Structural	Staff Time	General Funds	Continual	New	High

Action #	Mitigation Action and Description	Jurisdiction	Responsible Agency/ Dept.	Hazards Addressed	Objective Supported	Goal	Structural/ Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
62	Apply for funds for generators critical facilities such as city hall, police station, fire station, wells	Wadley	City Council, Fire Dept. Public Works	All hazards	G3	1, 2, 3, 6	Structural/ Non-Structural	275,000	General Funds, FEMA	6 months	New	High
63	Apply for funds for generator at Hospital	Jefferson County	BOC, EMA, Jefferson Hospital Engineer	All hazards	G3	1, 2, 3, 6	Structural/ Non-Structural	140,000	General Funds, FEMA	6 months	New	High
64	Apply for three stationary generators for tow lift stations and the Leisure Senior Center for use as a shelter.	Jefferson County	BOC, EMA	All hazards	G3	1, 2, 3, 6	Structural/ Non-Structural	300,000	General Funds, FEMA	6 months	New	High
65	Contract with the Regional Commission to create a Flood Mitigation Assistance Plan.	Jefferson County	RC, BOC, EMA	Flood	A6	1, 2, 4, 5	Non-Structural	Unknown	General Funds	2 years	New	Meduim
66												

A. New Buildings and Infrastructure: All objectives and action steps are applicable to new buildings and infrastructure.

B. Existing Buildings and Infrastructure: All objectives and action steps are applicable to existing buildings and infrastructure except adopt building codes. Enforcing building codes on existing buildings is not always feasible. Buildings maybe retrofitted but cannot always be brought up to stricter regulations.

C. Special Multi-Jurisdictional Strategy and Considerations: During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County.

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personal that are dispatched to the area, etc.

D. Completed and Deleted Action Steps from Original Plan:

Flood

- Determine the elevation of critical facilities in known flood areas and seek funding to relocate if necessary. Completed.
- Update Floodplain Maps. FEMA updated all maps in 2010.
- Review and adopt flood plain ordinances as needed. Completed for those that participate.
- Review set back requirements from top of banks of creeks and from top of banks of major rivers. Completed set back requirements are consistent with the DNR guidelines.
- Review existing comprehensive, development and land use plans to address flood prone areas. This was completed during the 2004-2024 Comprehensive Plan Update.
- Install measuring devices in creeks, ponds, etc. to provide a warning when water levels become dangerously high. All have monitors.
- Identify property owners who are located in areas continually subject to flooding and relocate or mitigate. There are no repetitive flood properties.
- Cap wells not in use and increase wellhead waterproofing. Deleted deals with private property. Added back as an education component.
- Ensure well head elevations are above known flooding levels. Handled by Health Dept.

Drought

- Identify and inventory all vulnerable agricultural properties to include livestock and develops a protective action plan.
- Study the range of federal support programs available to assist Jefferson County's agriculture community.
- Water Use Ordinances was removed from the plan. All water departments have adopted GA EPD guidelines.
- Seek funding for wells that have gone dry and been removed. Funding does not exist for this activity as a grant only a loan and must be applied for by private citizens.

Wildfire

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED

Severe Weather

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED
- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations. Building Codes are in compliance.
- Provides NOAA weather radios to elderly and handicap populations. Promoting Code Red.

Winter Weather

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED
- Inspect power lines to determine if trees need to be trimmed or cut down. This is performed by the electric companies. This action step was deleted.

E. Unchanged and/or Continual Action Steps: The flowing mitigation steps remain in the plan. Based on the STAPLEE Criteria these unchanged action steps were found to be relevant in limiting the damage to people and property from a natural hazard. All action steps have been reformatted to meet the action step criteria established by GEMA and FEMA after the original plan was approved. The new table format from GEMA Plan Update Guidance Template 2012 has been used to organize action steps. STAPLEE worksheet can be found in Appendix D for each action step.

Flood:

- Continue to assess storm water run-off.
- Seek funding to construct more storm water retention facilities, storm drain improvements and channel improvements to protect existing and new developments.
- Seek funding to increase size of retention basins and run off canals.
- Recommend that run-off and water retention ditches be cleared.
- Adopt ordinances to control building and development in known flood prone areas.

- Seek funding to acquire flood prone properties and convert to low impact uses such as recreation areas.
- Promote the preservation of areas in and around watercourses.
- Add greenspace to known flood prone areas.
- Investigate methods to reduce non-point source pollution.
- Seek funding for communication towers and voice repeater systems.

Drought

- Evaluate existing water systems and upgrade as needed.
  - Wrens extend water system 3.5 miles.
  - Louisville completed a $1.7 million upgrade the water treatment plant, added a new well and rehabbed the water tank at the High School.
- Increase public awareness of watering restrictions.
  - All cities post water restrictions.
- Educate citizens on water conservation.
- Promote increased surface water usage for irrigation.
- Promote usage of surface artesian flow for irrigation.
- Educate citizens on water conservation issues.

Wildfire

- Seek funding to install more fire hydrants.
  - Wrens installed 19 new hydrants.
  - Louisville installed 5 new hydrants.
  - Wadley added two new hydrants.
- Review previous firefighter training and implements a schedule for the ongoing training of all firefighters to include wildland fire training.
  - All paid firefighters have had 240 hours of annual training.
  - All volunteer firefighters have completed annual fire training requirements.
- Seek funding for needed firefighting equipment.
- Inventory and install more fire hydrants as needed.
- Upgraded water lines to meet FEMA recommendations for firefighting and install fire hydrants.
- Seek funding for more fire tankers (2000 to 3000 gallons) for local fire departments.
- Seek funding for communication towers and voice repeater systems.
- Increase public awareness of wildfire dangers by publishing articles in the local newspaper and providing bulletins to local churches and the schools.
- Continue hazardous fuel reduction by prescribed burning, mechanical or chemical treatment carried out and promoted by GFC guidelines.
- Continue GFC service of construction of firebreaks around forests and structures.
- Maintain fuel breaks along abandoned road beds.
- Recommend a defensible space (30-ft minimum setbacks) between buildings and strictly follow GFC guidelines for control burns and permits.
- Educate public during periods of drought; ask them to hold off on outside burning.

- Increase public awareness of wildfire dangers around the home and community, such as lighted matches, cigarettes, trash, and the process for obtaining burn permits by publishing articles in the local newspaper and providing bulletins to local schools.
- Participate in the Firewise Community Initiative.
- Continue GFC service of construction of firebreaks around forests and structures.
- Maintain fire breaks along abandoned road beds.

Severe Weather

- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.
- Inspect public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed.
- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Review current evacuation plans paying particular attention to vulnerable populations and update as needed (moved to all hazards).
- Review and current Emergency Response Plan and update when needed (moved to all hazards).
- Install generators where needed (moved to all hazards).
- Install generators on all new critical facilities (moved to all hazards).
- Seek funding to ensure all current and future emergency shelters have back-up generators (moved to all hazards).
- Educate the public on shelter locations and evacuation routes (moved to all hazards).
- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Request that all new education facilities be designed to serve as public shelters for emergency purposes (moved to all hazards).
- Develop public education and awareness programs regarding severe weather events to include home safety measures, purchase of weather radio and personal safety measures before, during and after severe event weather.
    - The EMA has set up a Facebook with educational information
- Promote and participate in the following American Red Cross Programs
    i. Disaster Resistant Neighborhoods Program (educating communities)
    ii. Business and Industry Preparedness Seminar (educating businesses on business continuity planning)
    iii. Community Disaster Education Preparedness presentations (educating adults, children and families)

Winter Weather

- Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after the winter storm event.
- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Road maintenance equipment.

- Inventory and assess generator needs at critical facilities and install generators where needed.
- Install generators where needed (moved to all hazards)

CHAPTER IV. PLAN INTEGRATION AND MAINTENANCE

The table below provides a brief description of each section in this chapter and a summary of the changes since 2009.

Chapter I. Section	Updates to Section
I. Implementation Action Plan	Revised to follow New GEMA planning template
II. Evaluation, Monitoring, Updating Note whether the original method and schedule worked	Revised to follow New GEMA planning template
III. Plan update and maintenance	Regulated update and maintenance schedule and public involvement

SECTION I. Implementation Action Plan

A. Administrative Actions: Jefferson County Emergency Management Agency was responsible for overseeing the original planning process and the plan update. Facilitation of the planning process was conducted by the Central Savannah River Area Regional Commission. The Jefferson County Board of Commissioners has authorized the submission of this plan to both GEMA and FEMA for their respective approvals. The Jefferson County Board of Commissioners and the City Councils of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens have formally adopted this plan after approval from GEMA and FEMA.

B. Authority and Responsibility: Upkeep and maintenance of the plan shall be the responsibility of the EMA Director, as determined during the planning process. It shall be the responsibility of the EMA Director to ensure that this plan is utilized as a guide for initiating the identified mitigation measures within the community. The Jefferson County Board of Commissioners and the Mayors of all incorporated jurisdictions will be responsible for assigning appropriate staff members to implement the action steps identified in this plan for their jurisdictions. The EMA Director, or his designee, shall be authorized to call the committee to review and update this plan periodically (at least annually) throughout the useful life of the plan, not to exceed five years.

During the plan update process, the EMA Director and committee members shall identify projects that have been successfully undertaken in initiating mitigation measures within the community. These projects shall be noted within the planning document to indicate their completion. Additionally, the committee called together by the EMA Director shall discuss and identify any additional mitigation projects that are necessary in the community.

C. Prioritization: The mitigation goals, objectives and related action items were initially compiled from the input of the committee, as well as from others in the community. The committee prioritized the mitigation actions based on what would be perceived as most beneficial to the community, and the action steps have been listed in this plan as the committee prioritized them. Several criteria were established to assist committee members in the prioritization of these suggested mitigation actions. Criteria included perceived cost

benefit or cost effectiveness, availability of potential funding sources, overall feasibility, measurable milestones, multiple objectives, and both public and political support for the proposed actions.

1. **Methodology for prioritization:** To assist with the prioritization of mitigation actions, the STAPLEE worksheet and criteria recommended by FEMA was used. STAPLEE is a tool used to assess the costs and benefits and overall feasibility of mitigation actions. STAPLEE stands for the following:
    i. **Social:** Will the action be acceptable to the community? Could it have an unfair effect on a particular segment of the population?
    ii. **Technical:** Is the action technically feasible? Are there secondary impacts? Does it offer a long-term solution?
    iii. **Administrative:** Are there adequate staffing, funding and maintenance capabilities to implement the project?
    iv. **Political:** Will there be adequate political and public support for the project?
    v. **Legal:** Does your jurisdiction have the legal authority to implement the action?
    vi. **Economic:** Is the action cost-beneficial? Is there funding available: Will the action contribute to the local economy?
    vii. **Environmental:** Will there be negative environmental consequences from the action? Does it comply with environmental regulations? Is it consistent with community environmental goals?

    The committee was asked to review the STAPLEE score sheet and list of mitigation actions and assign a High, Medium or Low score to each item to help determine the item's priority. Each action item was discussed and a consensus reached by the group on the importance of each item.

2. **Use of cost benefit refer to Worksheet #4:** Through the STAPLEE prioritization process, several projects emerged as being a greater priority than others. Some of the projects involved expending considerable amounts of funds to initiate the required actions. Other projects allowed the community to pursue completion of the project using potential grant funding. Still others required no significant financial commitment by the community.

    The determination of the cost benefit of a project was based upon the anticipated cost in relation to the perceived benefit of the action taken. A proposed action with a high price tag, but minimal benefit to the community, was considered to have a low cost benefit. Conversely, if minimal expenditures were required and the entire community would benefit, this received a favorable cost benefit rating. All proposed mitigation actions were evaluated to determine the favorability of the benefit in relation to the cost associated with completing the project. Determining the economic feasibility of mitigating hazards can provide decision makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

3. **Use of other calculations:** Estimation of potential damages and costs in the event of a natural hazard achieves two ends: (1) it enables the identification of critical economic targets for mitigation measures and (2) to enhance the ability to prioritize post-disaster response in aiding the community to recover.

4. **Use of other review structure**: All goals were discussed in detail to determine what was considered a priority for the EMA personnel.

D. Incorporation of Local PDM Plan into other plans/planning measures: During the 2009-2014 partial update to the Joint Jefferson County Comprehensive Plan the 2009 plan was utilized it identified STWP goals with regards to mitigation. The partial comprehensive plan update the following actions were listed in the STWP:

- Build new Fire Station
- Make necessary storm water improvements
- Purchase new Public Safety and Public Works equipment
- Water system repair and upgrades
- Water tank renovation
- Fire hydrant installation and renovation
- Develop and adopt uniform county-wide floodplain ordinance
- Upgrade 911 system incorporating CAD and provide training
- Purchase new fire truck
- Flood, drainage and road improvements
- Update and enforce environmental protection ordinances

Jefferson County and all municipalities will begin an update to their STWP in June 2016. The 2014 plan will be reviewed to determine if any of the mitigation activities need to be added to the STWP. The planning agency responsible for updating the joint comprehensive plan will be provided with a copy of the update to aid in incorporating it in Jefferson County's major planning document in 2017. In addition, relevant sections of the plan should be included in the next revision of the Jefferson County Local Emergency Operations Plan.

SECTION II. EVALUATION, MONITORING AND UPDATING

The original method for evaluation of the plan was unsuccessful. While the plan was discussed at EMA meetings, little attention was given to the monitoring and evaluation of the plan. Changes have been made to ensure a more successful and meaningful use of this plan.

A. Method: The Plan is intended to be a 'living' document that informs stakeholders about hazard mitigation projects and plans undertaken by the county and their jurisdictions. In accordance with the requirements set forth in the Disaster Mitigation Act of 2000, Jefferson County is required to review the PDM Plan annually and revise the plan every five years. The revision process will be consistent with the FEMA planning requirements as stipulated in the 44 CFR 201.6.

B. Criteria to be used to monitor and evaluate the plan annually or after any natural disaster event.

a. Each hazard will be reviewed. Any new information pertaining to new and/or previous events will be added to the plan.
b. Any new critical facilities will be added to the plan.
c. Critical facilities information will be updated as needed.
d. All mitigation goals, objectives and action steps will be reviewed for relevance and completion status. All mitigation goals, objectives and action steps that have been completed or are no longer relevant will be documented.
e. New mitigation activities will be added if necessary.
f. Public participation will be monitored and documented.

C. Responsibility: At the direction of the EMA Director, the committee shall be reconvened for the revision process which will include a schedule, timeline, and a list of the agencies or organizations participating in the plan revision. Jefferson County and all incorporated jurisdictions have designated the following participants of the committee to guide plan maintenance and update activities to ensure that the information in the plan is current. The update committee will also be responsible for disseminating information to stakeholders within their respective jurisdictions.

Jurisdiction	Hazard Mitigation Update Committee	Review
	Point-of-Contact	Schedule
Jefferson County	Emergency Management Director	Annually
Avera	City Official	Annually
Bartow	City Official	Annually
Louisville	City Administrator	Annually
Stapleton	City Official	Annually
Wadley	City Official	Annually
Wrens	City Administrator	Annually

D. Timeframe: The committee has set the first Thursday of every October for the annual review of the plan update and within two months after any natural disaster event. A public notice will be submitted to the legal organ of each jurisdiction and the notice will be published at all government and community buildings.

SECTION III. PLAN UPDATE AND MAINTENANCE

A. Public involvement: Jefferson County is committed to having active public participation during reviews and updates of the PDM Plan. Public participation will follow the guidelines set forth in 44 CFR 201.6. Future public involvement of the community will be more stringent. The original method was not as successful as anticipated in ensuring community involvement. With this in mind, two weeks before the annual April review meeting, a notice will be published in the legal organ of Jefferson County. Flyers will be placed at all government and community gathering places to ensure that citizens of the county are made aware of the annual review process. The new EMA website will also provide ongoing information about the plan and its implementation.

B. Timeframe -- At the direction of the EMA Director, the committee will convene in order to accomplish the revisions the first Thursday of every October. The EMA Director will ensure the revised plan is presented to the Jefferson County Board of Commissioners and its jurisdictions for formal adoption. In addition, all holders of the County plan will be notified of affected changes. No later than the conclusion of the five-year period following initial approval of the update plan, the EMA Director shall submit the update PDM Plan to the Georgia Emergency Management Agency and the Federal Emergency Management Agency for their review and coordination.

CHAPTER V. Conclusion

SECTION I. Summary

Through the update process of this plan, Jefferson County has developed a more thorough hazard history, an inventory of critical facilities, and an updated contact list for emergency contacts at critical facilities. Natural hazards have been identified countywide. Goals, objectives and mitigation actions have been compiled and prioritized that would reduce the risk of lives and property as a result of the identified hazards. The committee has been able to work together effectively and efficiently to produce this document and establish a greater awareness of our risks and our mitigation strategies.

As a result of the update PDM planning process, Jefferson county officials have obtained more complete and accurate information and knowledge regarding the County's disaster history, the presence of natural hazards, and the likelihood of each of these hazards occurring within the County, and the potential impacts and challenges these hazards present to the community.

All meetings were open to the public and advertised in *The Jefferson Reporter,* providing Jefferson County citizens with the opportunity to comment on and offer suggestions concerning disaster mitigation actions within the community.

The committee found that it is difficult to predict the geographic threat, and therefore the resulting impact of some natural disasters as compared to others. Tornados and related severe weather strike randomly, usually affecting a small, localized area. On the other hand, natural disasters such as winter ice storms and drought can blanket the entire county, affecting all businesses, public facilities, and residents.

Recognizing this challenge, the committee identified both general and specific measures to aid in the mitigation of several natural hazards most likely to impact Jefferson County. These measures include, but are not limited to, the protection of critical facilities and infrastructure, progressive governmental policies, and the proactive use of codes and regulations. It is worth noting that local government policies can often be the single most important and cost efficient component of PDM.

The mission of the Jefferson County Pre-Disaster Hazard Mitigation Planning Committee is to

"*Make the citizens, businesses, communities and local governments of Jefferson County less vulnerable to the effects of natural hazards through the effective administration of hazard mitigation grant programs, hazard risk assessments, wise floodplain management and a coordinated approach to mitigation policy through state, regional and local planning activities."*

The committee feels that this plan, when implemented, will help to make all of Jefferson County a safer place to live and work for all of its citizens.

SECTION II – REFERENCES

Numerous sources were utilized to ensure the most complete planning document could be assembled. In an effort to ensure that all data sources consulted are cited, references are listed in the following format: 1) Publications, 2) Web Sites, 3) Other Sources.

Publications:

FEMA Pre-Disaster Mitigation *How-to Guides #1, 2, 3, 7* (FEMA)
GEMA Supplements to FEMA Pre-Disaster Mitigation How-to Guides (GEMA)
The Jefferson Reporter
The Augusta Chronicle
Summary of Floods in the United States During 1990 and 1991
http://pubs.er.usgs.gov/publication/wsp2474
FLOODS IN GEORGIA. FREQUENCY AND MAGNITUDE. By. R. W. Carter.
Http://pubs.usgs.gov/circ/1951/0100/report.pdf

Georgia Archives University System of Georgia
http://cdm.sos.state.ga.us:2011/cdm/search/searchterm/FLOOD/mode/all/order/subjec/ad/desc

Web Sites:

FEMA www.fema.gov
GEMA www.gema.state.ga.us
Georgia Department of Community Affairs http://www.dca.state.ga.us/
Georgia Forestry Commission http://weather.gfc.state.ga.us
National Climatic Data Center www.ncdc.noaa.gov
SHELDUS™ | Spatial Hazard Events and Losses Database for the United States
http://webra.cas.sc.edu/hvri/products/sheldus.aspx
National Inventory of Dams http://crunch.tec.army.mil/nid/webpages/nid.cfm
http://www.placenames.com
New Georgia Encyclopedia http://www.georgiaencyclopedia.org/nge/Home.jsp
Georgia Archives University System of Georgia
http://cdm.sos.state.ga.us:2011/cdm/search/searchterm/FLOOD/mode/all/order/subjec/ad/desc
United States Census Bureau http://www.census.gov/
USDA, NASS, 2012 CENSUS OF AGRICULTURE
http://www.nass.usda.gov/Census_of_Agriculture/index.asp
http://www.sercc.com/ The Southeast Regional Climate Center (SERCC)
http://www.tornadohistoryproject.com/tornado/Georgia Tornado History Project
http://www.lightningsafety.noaa.gov/stats/97-11Flash_Density_miles.png
http://water.weather.gov/ahps/region.php?state=ga

Other Sources:

American Red Cross
CSRA Regional Commission
Georgia Department of Natural Resources
Georgia Forestry Commission
Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley and Wrens
Jefferson County Board of Education
Jefferson County Hospital
Jefferson County Tax Assessor

APPENDICES

Appendix A – Hazard Identification, Risk Assessment and Vulnerability (HRV)

I. Hazard A - Flood
   a. Description
   b. Data – GEMA Critical Facility Inventory Report
   c. Maps

II. Hazard B– Dam Failure
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

III. Hazard C - Drought
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

IV. Hazard D - Wildfire
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

V. Hazard E – Severe Weather, Including Tornados, Tropical Storms, and Thunder Storms
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

VI. Hazard F – Winter Storm
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

VII. All Hazards --
   a. Description
   b. Data– GEMA Critical Facility Inventory Report
   c. Maps

Appendix B – Growth and Development Trends / Community Information

I. Local Comp Plan Executive Summary
II. Statistics/tables from Local Comp Plan
III. Community Information

Appendix C –Planning documents

I. Executive Summary Local Emergency Operations
II. Executive Summary CSRA Regional Commission Regional Plan

Appendix D – Worksheets used in planning process

I. Completed GEMA/local worksheets
II. Blank GEMA/local worksheets
III. Other misc. worksheets or planning process documents

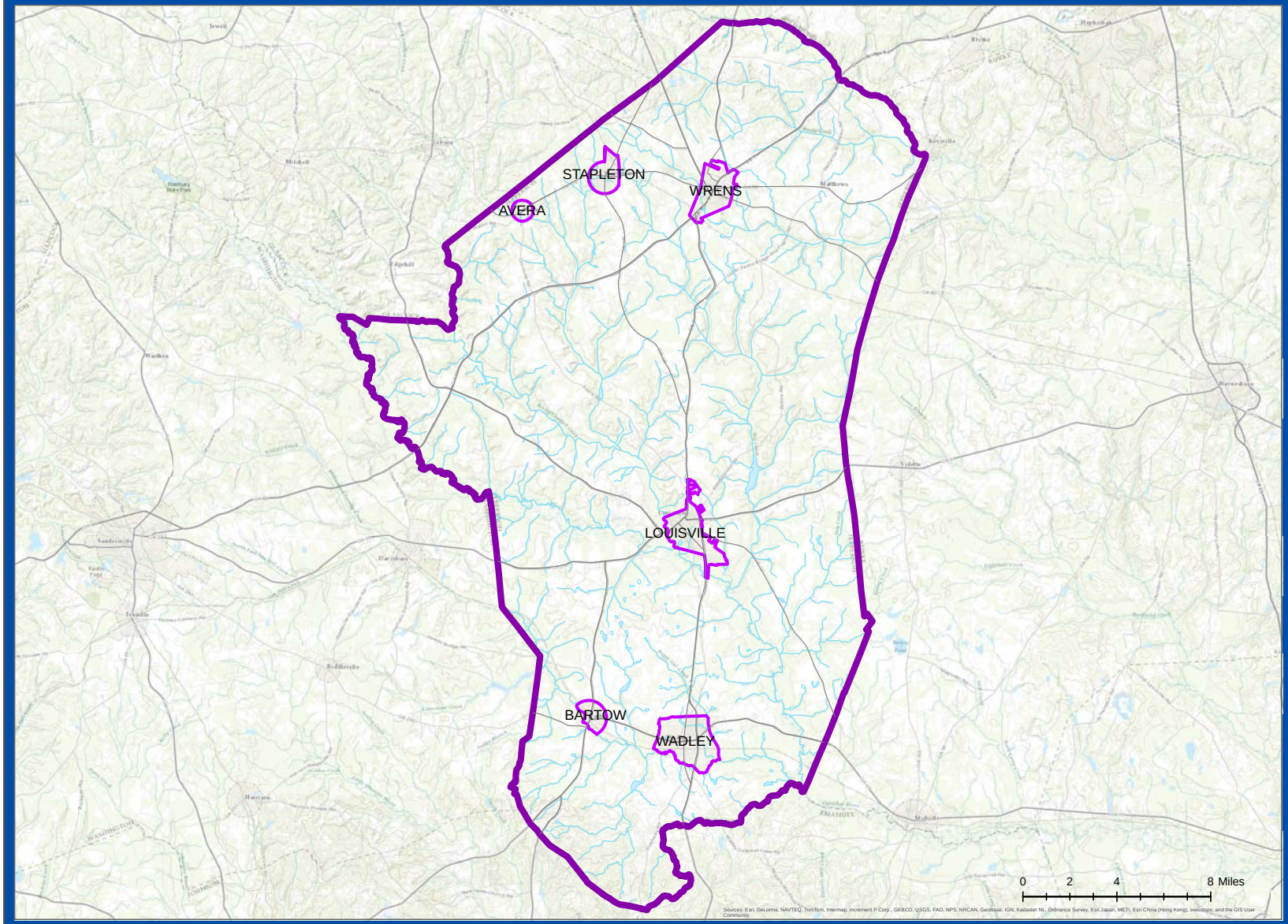
Appendix E – Copies of Required Planning Documentation

I. Public notice
II. Meeting Agendas / Meeting Minutes
III. Sign-in sheets
IV. Local proclamations (copy of all resolution)
V. GEMA/FEMA correspondence

APPENDIX A

HAZARD IDENTIFICATION, RISK ASSESSMENT AND VULNERABILTY

Jefferson County Base Map



Legend

- Jefferson County
- City Limits
- Highways
- Streams

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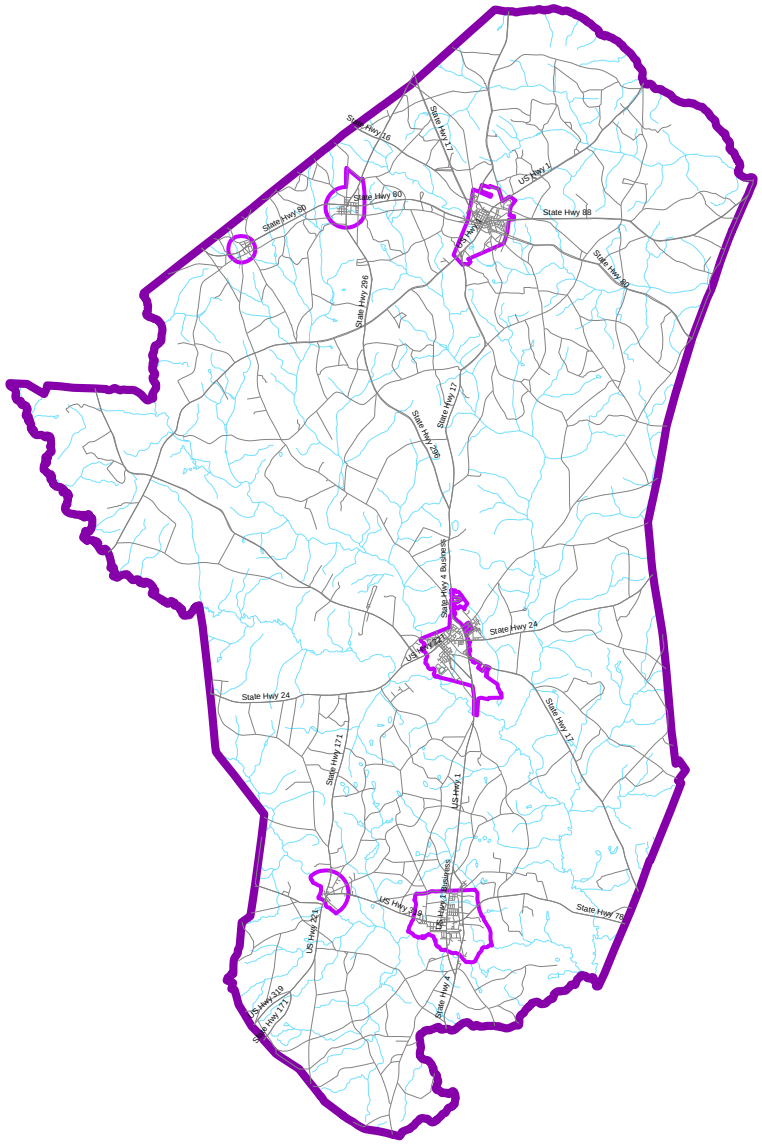
Central Savannah River Area
Regional Commission
GIS Department
3023 River Watch Parkway, Suite A
Augusta, GA 30907-2016
www.csrarc.ga.gov

Jefferson County Road Map



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Legend

- Jefferson County
- City Limits
- Highways
- Roads
- Streams

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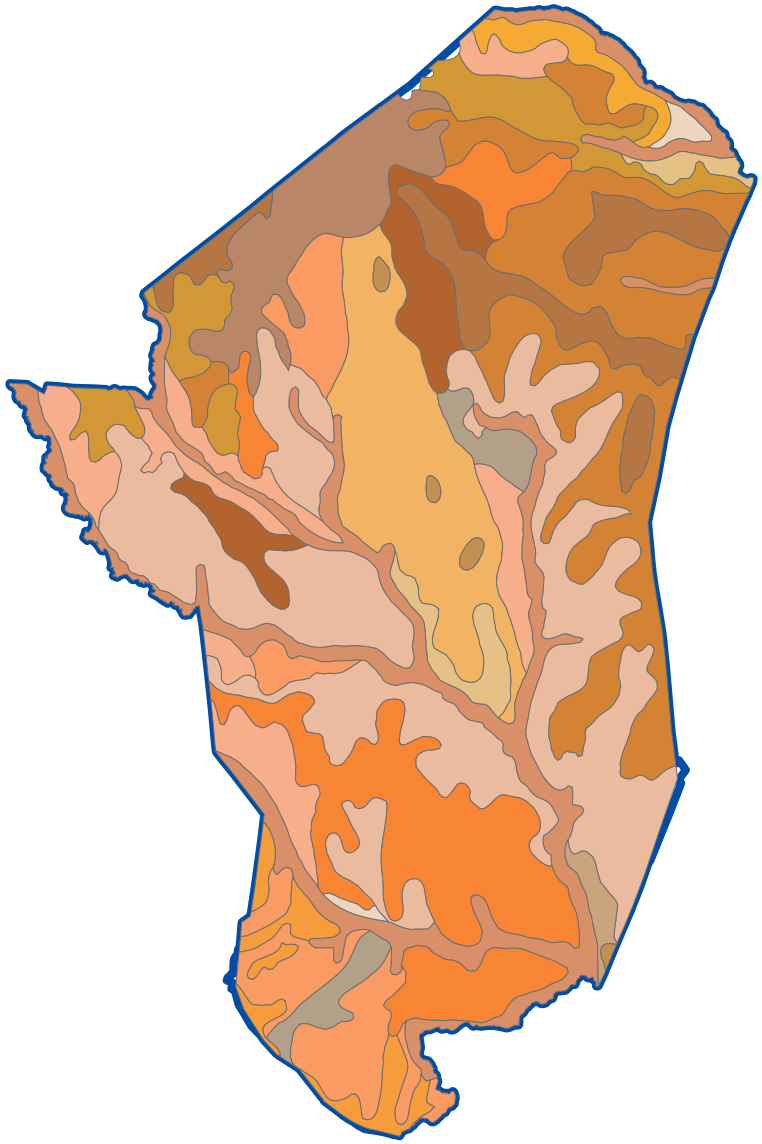
Central Savannah River Area
Regional Commission
GIS Department
3023 River Watch Parkway, Suite A
Augusta, GA 30907-2016
www.csrarc.ga.gov

Jefferson County Soil Map



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Legend

Jefferson County

Soils

- COWARTS-CUTHBERT-SAWYER
- CUTHBERT-SAWYER-CARNEGIE
- EUSTIS-LAKELAND-LUCY
- FACEVILLE-ORANGEBURG-GREENVILLE
- FACEVILLE-TIFTON-ORANGEBURG
- GRADY
- GREENVILLE-FACEVILLE
- GREENVILLE-FACEVILLE-ORANGEBURG
- IZAGORA-DEBRUCE
- KERSHAW-LAKELAND-EUSTIS
- KERSHAW-PLUMMER
- LAKELAND-FUQUAY-LUCY
- NORFOLK-FUQUAY-TIFTON
- NORFOLK-ORANGEBURG
- NORFOLK-TIFTON-FUQUAY
- ORANGEBURG-LUCY-FACEVILLE
- SWAMP-ALLUVIAL LAND,WET-RAINS
- TIFTON-NORFOLK-FACEVILLE

Central Savannah River Area
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FLOOD

Flood plains are relatively flat lands that border streams and rivers that are normally dry, but are covered with water during floods. The severity of a flood is usually measured in terms of depth of flooding. Flooding occurs when the volume of water exceeds the ability of a water body (stream, river, or lake) to contain it within its normal banks. Floodplains serve three major purposes: Natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled in order to construct a building, then valuable water storage areas and recharge areas are lost. This causes unnecessary flooding in previously dry areas and can damage buildings or other structures.

The susceptibility of a stream to flooding is dependent upon several different variables. Among these are topography, ground saturation, rainfall intensity and duration, soil types, drainage, drainage patterns of streams, and vegetative cover. A large amount of rainfall over a short time period can result in flash flood conditions. A small amount of rain can also result in floods in locations where the soil is saturated from a previous wet period or if the rain is concentrated in an area of impermeable surfaces such as large parking lots, paved roadways, etc. Topography and ground cover are contributing factors for floods in that water runoff is greater in areas with steep slopes and little or no vegetation.

Severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and 3 lakes which makes the potential for flooding significant. The committee examined historical data from the NCDC, past newspaper articles and conducted interviews during its research on the effects of past flooding events. In the last 85 years there have been 10 reported flooding events where six occurred countywide and two in Wrens. There has been a total of approximately $568,000 in property and crop damages.

The magnitude of a major flood event could have approximately 70% of the county experiencing some damage from flooding. Based on tax data, parcel and flood maps all or a portion of 208 known structures/properties valued at approximately $14 million and a population of 349 located in known floodplains.

BGN_DATE	END_DATE	EVTYPE	FATALITIES	INJURIES	PROPDMG	REMARKS
9/30/1929	**10/3/1929**	**Flooding**	0	0	0.00k	**A result of a hurricane that came ashore at Pensscola Florida**
10/11/1990	10/12/1990	Flooding	3	0	2000.00k	Flooding There was a 3-day rainfall of 19.89 inches in Louisville
10/13/1990	10/15/1990	Flooding	0	0	50.00k	Flood
3/1/1991	3/1/1991	Flooding	0	0	5.00k	Flash Flood
10/5/1995		Flash Flood	0	0	0.00k	Tropical Storm Tammy caused heavy winds and minor flooding throughout the county
7/10/2005		Flash Flood	0	0	0.00k	As a result of Hurricane Dennis widespread flooding throughout the county
5/6/2009	5/6/2009	Flooding	0	0	1.00k	Flood
7/13/2013		**Flooding**	0	0	0.00k	The Jefferson County emergency manager reported washed out roads near Avera. Almost two inches of rainfall in a 3 hour period on already wet soils quickly overwhelmed the drainage systems.

Reporting for Flood Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Avera city	City Hall	Avera City Hall												1000	$312,500	2014	$200,000	2,014			1	1
Avera city	Water System	Avera Water Tank												100	$325,000	2013						1
Avera city	Fire Station	Avera Fire Station												4250	$100,000	2013	$200,000	2,013				1
Totals for Avera city, Hazard Score = 1														5,350	$737,500		$400,000		$0	$0	1	
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #4												100	$60,500	2013	$0					1
Totals for Bartow town, Hazard Score = 1														100	$60,500		$0		$0	$0	0	
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #5												100	$90,200	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Treatment Pond												10307	$50,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Holding Pond												13509	$46,400	2013						0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Effluent Pump Station												100	$63,700	2013	$0					0
Bartow town	Other	Bartow Community Center & Auditorium												11232	$1,342,200	2013	$250,000	2,013			1	0
Bartow town	Other	Bartow Fire Dept & Communications Bldg												64	$17,100	2013	$60,000	2,013				0
Bartow town	Other	Bartow Museum												2450	$826,847	2013		2,013			1	0
Bartow town	City Hall	Bartow City Hall												1920	$209,300	2013	$53,500	2,013			3	0
Bartow town	Fire Station	Bartow Fire Dept and Emergency Shelter												7500	$330,630	2013	$38,500	2,013			1	0
Bartow town	Water System	Bartow Water Tower												100	$393,000	2013	$0					0
Bartow town	Water System	Bartow Water Well												275	$111,800	2013	$0					0
Bartow town	Water System	Bartow Water Well #2												275	$119,700	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow wastewater Lift Station #1												100	$70,300	2013	$0					0

Reporting for Flood Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #2												100	$71,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #3												100	$69,000	2013	$0					0
Totals for Bartow town, Hazard Score = 0														48,132	$3,811,977		$402,000		$0	$0	6	
Jefferson County	Wastewater Treatment Plant	Hillcrest Station												100	$45,700	2013						1
Jefferson County	Wastewater Treatment Plant	US # 1 Bypass Lift Station												100	$47,500	2013						1
Jefferson County	Wastewater Treatment Plant	Matthews Station												100	$47,500	2013						1
Jefferson County	Other	JC Fire TowerShop/Supply Building												4072	$241,236	2013	$9,800	2,013			2	1
Jefferson County	Other	JC Recreation Dept												1867	$1,300,621	2013	$29,600	2,013				1
Jefferson County	Middle School	Louisville Middle School												81642	$23,500,000	2013	$940,000	2,013			354	1
Jefferson County	Emergency Services	Lions Club Evac. Center												1000	$12,000	2013						1
Jefferson County	Landfill	Jefferson County Landfill (New)												15000	$1,062,166	2013	$363,200	2,013			6	1
Jefferson County	High School, Public	Jefferson County High School												179142	$55,000,000	2013	$2,200,000	2,013			937	1
Jefferson County	Other	Jefferson County Bus Shop												4920	$750,000	2013	$140,000	2,013			5	1
Jefferson County	Public Vocational Technical School	Sandersville Tech												10000	$1,930,505	2013					75	1
Jefferson County	Other	Jefferson County Health Dept												6341	$841,815	2013	$191,700	2,013			20	1
Jefferson County	C&D	JEFFERSON CO-US 1 (AVERA RD) (SL)												10000	$1,500,000	2013						1
Jefferson County	County Correctional Institution	Jefferson Co. Correction Facility												42446	$5,261,231	2013	$833,800	2,013			200	1
Jefferson County	Other	Ogeechee Service Center												10650	$900,000	2013		2,013			50	1

Reporting for Flood Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Other	Jefferson Co. Law Enforcement Center												39892	$8,041,785	2013	$1,139,700	2,013			225	1
Jefferson County	Emergency Services	Jefferson County Armory Transit EMA												14040	$2,380,171	2013	$724,500	2,013			10	1
Totals for Jefferson County, Hazard Score = 1														421,312	$102,862,230		$6,572,300		$0	$0	1,884	
Jefferson County	Other	Jefferson County Senior Center												4924	$586,170	2013	$86,000	2,013			40	0
Jefferson County	Emergency Services	1st Baptist Church Evac Center												45075	$3,500,000	2013					5	0
Jefferson County	Hospital, Admissions Entrance	Jefferson Hospital												76000	$57,000,000	2013						0
Jefferson County	Other	Hardeman Building (Swann)												8278	$250,000	2013	$17,000	2,013			1	0
Jefferson County	County Jail	Old County Jail/IT/Purchasing												7742	$500,000	2013	$28,000	2,013			1	0
Jefferson County	Other	Jefferson County Chamber of Commerce/Murphy House												3281	$361,433	2013	$122,700	2,013			8	0
Jefferson County	Library	Jefferson County Library												5000	$66,085	2013	$848,000	2,013			10	0
Jefferson County	Courthouse	Jefferson County Courthouse												6065	$5,147,708	2013	$125,000	2,013				0
Jefferson County	Courthouse	Jefferson County Magistrate and Juvenile Court												22000	$24,001,242	2013					20	0
Jefferson County	Elementary School	Carver Elementary												6600	$12,750,000	2013	$510,000	2,013			292	0
Jefferson County	Elementary School	Louisville Academy Elementary												25047	$15,250,000	2013	$610,000	2,013			568	0
Jefferson County	Other	Wrens Elementary												78216	$20,500,000	2013	$820,000	2,013			637	0
Jefferson County	Other	Jefferson County Commissioners Office/Long House												3080	$339,300	2013	$110,300	2,013			30	0
Jefferson County	Middle School	Wrens Middle School												59902	$17,000,000	2013	$680,000	2,013			315	0
Jefferson County	Wastewater Treatment Plant	McBride Lift Station												100	$48,750	2013						0
Jefferson County	Other	JC Radio Tower												100	$27,885	2013	$8,000	2,013				0

Reporting for Flood Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Other	JC Building Department												1000	$51,090	2013	$17,500	2,013				0
Totals for Jefferson County, Hazard Score = 0														352,410	$157,379,663		$3,982,500		$0	$0	1,927	
Louisville city	Wastewater Treatment Plant	Louisville Tech Lift Station												50	$125,000	2014			$125,000	$1,000		1
Louisville city	Wastewater Treatment Plant	Louisville Lift Station at HS												50	$150,000	2014			$150,000	$1,000		1
Louisville city	Water System	Booster pump station												100	$175,000	2013						1
Louisville city	Water System	Louisville Water Tower												100	$712,500	2014						1
Louisville city	Water System	Louisville City WaterTower												100	$950,000	2014						1
Louisville city	Airport	Louisville City Airport												3200	$543,665	2013						1
Totals for Louisville city, Hazard Score = 1														3,600	$2,656,165		$0		$275,000	$2,000	0	
Louisville city	City Hall	Louisville OLD City Hall												10000	$500,000	2006						0
Louisville city	Water System	Louisville Water Works												2400	$4,425,000	2014						0
Louisville city	Other	OCI Nursing Home												45062	$5,000,000	2013					225	0
Louisville city	Water System	City of Louisville Water Tank												100	$500,000	2006						0
Louisville city	Other	Market House												600	$100,000	2013						0
Louisville city	Other	Physicians Health Group Louisville												9560	$2,400,000	2014	$500,000	2,014			20	0
Louisville city	Other	NCA Northside Dialysis Center												7207	$1,261,225	2014					10	0
Louisville city	City Hall	Louisvill City Hall												7200	$550,000	2013	$350,000	2,013			10	0
Louisville city	Fire Station	Louisville Fire Station												7200	$750,000	2014	$850,000	2,014			4	0
Totals for Louisville city, Hazard Score = 0														89,329	$15,486,225		$1,700,000		$0	$0	269	
Stapleton city	Water System	Stapleton Water Tank #2												100	$500,000	2012			$200,000			0
Stapleton city	Fire Station	Stapleton Fire house & Emergency Shelter												6000	$394,800	2012	$700,000	2,012	$100,000			0
Stapleton city	Water System	Stapleton Water Tank #1												100	$500,000	2012			$200,000			0

Reporting for Flood Ha ard by Jurisdiction
Grouped by Ha ard Score

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Stapleton city	City Hall	Stapleton City Hall & Emergency Shelter												3000	$383,700	2012	$30,000	2,012	$150,000		2	0
Totals for Stapleton city, Hazard Score = 0														9,200	$1,778,500		$730,000		$650,000	$0	2	
Wadley city	City Hall	Wadley City Hall												3645	$1,500,000	2014	$250,000	2,014			5	0
Wadley city	Other	Physicans Health Group Wadley												2318	$405,650	2013	$250,000	2,013			10	0
Wadley city	Water System	Wadley Well House												100	$600,000	2013						0
Wadley city	Adult Edu. Center	Wadley Community Complex												6000	$700,000	2014						0
Wadley city	Library	Wadley Public Library												3114	$510,000	2013	$538,200	2,013			5	0
Wadley city	Water System	Wadley Elevated Water Tank												100	$650,000	2013						0
Wadley city	Water System	Wadley Water Tower #2												100	$500,000	2013						0
Wadley city	Other	Glendale Nursing Home												26500	$1,610,863	2014	$750,000	2,014			120	0
Wadley city	Other	Wadley Gym												1200	$400,000	2014						0
Totals for Wadley city, Hazard Score = 0														43,077	$6,876,513		$1,788,200		$0	$0	140	
Wrens city	Wastewater Treatment Plant	West Walker St Lift Station												100	$300,000	2014						3
Wrens city	Wastewater Treatment Plant	Wrens Sewage Treatment Plant												1400	$3,250,000	2014	$125,000					3
Totals for Wrens city, Hazard Score = 3														1,500	$3,550,000		$125,000		$0	$0	0	
Wrens city	Water System	Wrens Water Tank												250	$687,500	2014						1
Wrens city	Wastewater Treatment Plant	Highway 88 Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Stephens St Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Waynesboro Highway Lift Station												100	$400,000	2014						1
Wrens city	Water System	Wrens Water Pumping Station												800	$125,000	2014	$25,000					1
Wrens city	Other	Southern Tap #2												50	$750,000	2012						1
Wrens city	Other	KA-MIN #1												10	$250,000	2014						1

Reporting for Flood Ha ard by Jurisdiction
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Wrens city	Other	Border Regulator Station												100	$100,000	2012						1
Wrens city	Other	Calcine Meter Set												100	$225,000	2012						1
Wrens city	Other	Southern Tap #1												50	$750,000	2014						1
Wrens city	Water System	King Mill Well (Well E)												50	$750,000	2014						1
Wrens city	Other	Ka-Min #2												1955	$250,000	2014						1
Wrens city	Other	IMERYS Meter Set												10	$300,000	2014						1
Totals for Wrens city, Hazard Score = 1														3,675	$5,287,500		$25,000		$0	$0	0	
Wrens city	Wastewater Treatment Plant	Bushy Creek Lift Station												100	$400,000	2014						0
Wrens city	Water System	Water Booster Station												1000	$500,000	2012						0
Wrens city	Other	Wrens Medical Center												400	$875,000	2014	$200,000				20	0
Wrens city	Library	Wrens Old Library Building												3000	$625,000	2013	$549,200	2,013				0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												800	$75,000	2014	$25,000					0
Wrens city	Other	Wrens Community Center												3400	$500,000	2014	$50,000				20	0
Wrens city	City Hall	Wrens City Hall												7500	$1,125,000	2013	$150,000				10	0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												144	$300,000	2014	$50,000					0
Wrens city	Water System	Wrens Water Tank												150	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												64	$75,000	2014	$25,000					0
Wrens city	Other	Physicians Health Group Wrens												5802	$1,015,350	2013	$500,000	2,013			20	0
Totals for Wrens city, Hazard Score = 0														22,760	$7,365,350		$1,549,200		$0	$0	70	
Grand Totals														1,000,445	$307,852,123		$17,274,200		$925,000	$2,000	4,299	

- Pre-Disaster Mitigation
- Fiscal Year: 2009
- Report created: Aug 24, 2014
- For more information call GEMA Pre-Disaster Mitigation at 1-800-TRY-GEMA

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wrens city	Wastewater Treatment Plant	Wrens Sewage Treatment Plant												1400	$3,250,000	2014	$125,000					3
Wrens city	Wastewater Treatment Plant	West Walker St Lift Station												100	$300,000	2014						3
Totals for Jefferson County, Hazard Score = 3														1,500	$3,550,000		$125,000		$0	$0	0	
Avera city	Water System	Avera Water Tank												100	$325,000	2013						1
Avera city	Fire Station	Avera Fire Station												4250	$100,000	2013	$200,000	2,013				1
Wrens city	Other	Ka-Min #2												1955	$250,000	2014						1
Wrens city	Other	IMERYS Meter Set												10	$300,000	2014						1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #4												100	$60,500	2013	$0					1
Louisville city	Wastewater Treatment Plant	Louisville Tech Lift Station												50	$125,000	2014			$125,000	$1,000		1
Louisville city	Wastewater Treatment Plant	Louisville Lift Station at HS												50	$150,000	2014			$150,000	$1,000		1
Jefferson County	Wastewater Treatment Plant	Hillcrest Station												100	$45,700	2013						1
Jefferson County	Wastewater Treatment Plant	US # 1 Bypass Lift Station												100	$47,500	2013						1
Jefferson County	Wastewater Treatment Plant	Matthews Station												100	$47,500	2013						1
Louisville city	Water System	Booster pump station												100	$175,000	2013						1
Wrens city	Water System	King Mill Well (Well E)												50	$750,000	2014						1
Jefferson County	Other	JC Fire TowerShop/Supply Building												4072	$241,236	2013	$9,800	2,013			2	1
Jefferson County	Other	JC Recreation Dept												1867	$1,300,621	2013	$29,600	2,013				1
Wrens city	Other	Southern Tap #2												50	$750,000	2012						1
Wrens city	Water System	Wrens Water Tank												250	$687,500	2014						1
Jefferson County	C&D	JEFFERSON CO-US 1 (AVERA RD) (SL)												10000	$1,500,000	2013						1

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Avera city	City Hall	Avera City Hall												1000	$312,500	2014	$200,000	2,014			1	1
Wrens city	Water System	Wrens Water Pumping Station												800	$125,000	2014	$25,000					1
Jefferson County	County Correctional Institution	Jefferson Co. Correction Facility												42446	$5,261,231	2013	$833,800	2,013			200	1
Jefferson County	Other	Ogeechee Service Center												10650	$900,000	2013		2,013			50	1
Jefferson County	Other	Jefferson Co. Law Enforcement Center												39892	$8,041,785	2013	$1,139,700	2,013			225	1
Jefferson County	Emergency Services	Lions Club Evac. Center												1000	$12,000	2013						1
Jefferson County	Emergency Services	Jefferson County Armory Transit EMA												14040	$2,380,171	2013	$724,500	2,013			10	1
Louisville city	Water System	Louisville City WaterTower												100	$950,000	2014						1
Louisville city	Airport	Louisville City Airport												3200	$543,665	2013						1
Jefferson County	Landfill	Jefferson County Landfill (New)												15000	$1,062,166	2013	$363,200	2,013			6	1
Jefferson County	High School, Public	Jefferson County High School												179142	$55,000,000	2013	$2,200,000	2,013			937	1
Jefferson County	Other	Jefferson County Bus Shop												4920	$750,000	2013	$140,000	2,013			5	1
Jefferson County	Public Vocational Technical School	Sandersville Tech												10000	$1,930,505	2013					75	1
Jefferson County	Other	Jefferson County Health Dept												6341	$841,815	2013	$191,700	2,013			20	1
Louisville city	Water System	Louisville Water Tower												100	$712,500	2014						1
Jefferson County	Middle School	Louisville Middle School												81642	$23,500,000	2013	$940,000	2,013			354	1
Wrens city	Other	KA-MIN #1												10	$250,000	2014						1
Wrens city	Other	Border Regulator Station												100	$100,000	2012						1
Wrens city	Other	Calcine Meter Set												100	$225,000	2012						1
Wrens city	Other	Southern Tap #1												50	$750,000	2014						1

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wrens city	Wastewater Treatment Plant	Highway 88 Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Stephens St Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Waynesboro Highway Lift Station												100	$400,000	2014						1
Totals for Jefferson County, Hazard Score = 1														434,037	$111,603,895		$6,997,300		$275,000	$2,000	1,885	
Bartow town	City Hall	Bartow City Hall												1920	$209,300	2013	$53,500	2,013			3	0
Bartow town	Fire Station	Bartow Fire Dept and Emergency Shelter												7500	$330,630	2013	$38,500	2,013			1	0
Bartow town	Water System	Bartow Water Tower												100	$393,000	2013	$0					0
Bartow town	Water System	Bartow Water Well												275	$111,800	2013	$0					0
Bartow town	Water System	Bartow Water Well #2												275	$119,700	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow wastewater Lift Station #1												100	$70,300	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #2												100	$71,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #3												100	$69,000	2013	$0					0
Wrens city	Wastewater Treatment Plant	Bushy Creek Lift Station												100	$400,000	2014						0
Jefferson County	Middle School	Wrens Middle School												59902	$17,000,000	2013	$680,000	2,013			315	0
Louisville city	Water System	City of Louisville Water Tank												100	$500,000	2006						0
Louisville city	Other	Market House												600	$100,000	2013						0
Wrens city	Other	Wrens Medical Center												400	$875,000	2014	$200,000				20	0
Wadley city	Water System	Wadley Well House												100	$600,000	2013						0
Wadley city	Adult Edu. Center	Wadley Community Complex												6000	$700,000	2014						0

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wadley city	Library	Wadley Public Library												3114	$510,000	2013	$538,200	2,013			5	0
Wadley city	Water System	Wadley Elevated Water Tank												100	$650,000	2013						0
Wadley city	Water System	Wadley Water Tower #2												100	$500,000	2013						0
Jefferson County	Elementary School	Carver Elementary												6600	$12,750,000	2013	$510,000	2,013			292	0
Jefferson County	Elementary School	Louisville Academy Elementary												25047	$15,250,000	2013	$610,000	2,013			568	0
Jefferson County	Other	Wrens Elementary												78216	$20,500,000	2013	$820,000	2,013			637	0
Louisville city	City Hall	Louisville OLD City Hall												10000	$500,000	2006						0
Louisville city	Water System	Louisville Water Works												2400	$4,425,000	2014						0
Jefferson County	Other	Jefferson County Senior Center												4924	$586,170	2013	$86,000	2,013			40	0
Jefferson County	Other	Jefferson County Commissioners Office/Long House												3080	$339,300	2013	$110,300	2,013			30	0
Jefferson County	Emergency Services	1st Baptist Church Evac Center												45075	$3,500,000	2013					5	0
Stapleton city	Water System	Stapleton Water Tank #2												100	$500,000	2012			$200,000			0
Stapleton city	Fire Station	Stapleton Fire house & Emergency Shelter												6000	$394,800	2012	$700,000	2,012	$100,000			0
Stapleton city	Water System	Stapleton Water Tank #1												100	$500,000	2012			$200,000			0
Wadley city	Other	Physicans Health Group Wadley												2318	$405,650	2013	$250,000	2,013			10	0
Wrens city	Other	Physicians Health Group Wrens												5802	$1,015,350	2013	$500,000	2,013			20	0
Jefferson County	Hospital, Admissions Entrance	Jefferson Hospital												76000	$57,000,000	2013						0
Jefferson County	Other	Hardeman Building (Swann)												8278	$250,000	2013	$17,000	2,013			1	0
Jefferson County	County Jail	Old County Jail/IT/Purchasing												7742	$500,000	2013	$28,000	2,013			1	0

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Other	Jefferson County Chamber of Commerce/Murphy House												3281	$361,433	2013	$122,700	2,013			8	0
Jefferson County	Library	Jefferson County Library												5000	$66,085	2013	$848,000	2,013			10	0
Louisville city	Other	OCI Nursing Home												45062	$5,000,000	2013					225	0
Stapleton city	City Hall	Stapleton City Hall & Emergency Shelter												3000	$383,700	2012	$30,000	2,012	$150,000		2	0
Wrens city	Other	Wrens Community Center												3400	$500,000	2014	$50,000				20	0
Wrens city	City Hall	Wrens City Hall												7500	$1,125,000	2013	$150,000				10	0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												144	$300,000	2014	$50,000					0
Wrens city	Water System	Wrens Water Tank												150	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												64	$75,000	2014	$25,000					0
Jefferson County	Courthouse	Jefferson County Courthouse												6065	$5,147,708	2013	$125,000	2,013				0
Jefferson County	Courthouse	Jefferson County Magistrate and Juvenile Court												22000	$24,001,242	2013					20	0
Wadley city	City Hall	Wadley City Hall												3645	$1,500,000	2014	$250,000	2,014			5	0
Wrens city	Library	Wrens Old Library Building												3000	$625,000	2013	$549,200	2,013				0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												800	$75,000	2014	$25,000					0
Jefferson County	Wastewater Treatment Plant	McBride Lift Station												100	$48,750	2013						0
Louisville city	Other	Physicians Health Group Louisville												9560	$2,400,000	2014	$500,000	2,014			20	0
Louisville city	Other	NCA Northside Dialysis Center												7207	$1,261,225	2014					10	0
Jefferson County	Other	JC Radio Tower												100	$27,885	2013	$8,000	2,013				0
Jefferson County	Other	JC Building Department												1000	$51,090	2013	$17,500	2,013				0

Reporting for Flood Ha ard Countywide
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #5												100	$90,200	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Treatment Pond												10307	$50,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Holding Pond												13509	$46,400	2013						0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Effluent Pump Station												100	$63,700	2013	$0					0
Bartow town	Other	Bartow Community Center & Auditorium												11232	$1,342,200	2013	$250,000	2,013			1	0
Bartow town	Other	Bartow Fire Dept & Communications Bldg												64	$17,100	2013	$60,000	2,013				0
Bartow town	Other	Bartow Museum												2450	$826,847	2013		2,013			1	0
Wadley city	Other	Wadley Gym												1200	$400,000	2014						0
Louisville city	City Hall	Louisvill City Hall												7200	$550,000	2013	$350,000	2,013			10	0
Louisville city	Fire Station	Louisville Fire Station												7200	$750,000	2014	$850,000	2,014			4	0
Wadley city	Other	Glendale Nursing Home												26500	$1,610,863	2014	$750,000	2,014			120	0
Wrens city	Water System	Water Booster Station												1000	$500,000	2012						0
Totals for Jefferson County, Hazard Score = 0														564,908	$192,698,228		$10,151,900		$650,000	$0	2,414	
Grand Totals														1,000,445	$307,852,123		$17,274,200		$925,000	$2,000	4,299	

- Pre-Disaster Mitigation
- Fiscal Year: 2009
- Report created: Aug 24, 2014
- For more information call GEMA Pre-Disaster Mitigation at 1-800-TRY-GEMA

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Jefferson County All Jurisdictions
Hazard: Flood

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	25,744	87	0.338%	339,986,035	1,167,819	0.343%	16,930	191	1%
Commercial	3,107	0	0.000%	128,821,310	0	0.000%	16,930	0	0%
Industrial	369	3	0.813%	228,903,453	976,076	0.426%	1,865	114	6%
Agricultural/Forestry	6,789	114	1.679%	495,536,008	8,353,352	1.686%	622	43	7%
Religious/Non-profit	680	0	0.000%	28,022,263	0	0.000%	16,930	0	0%
Government	587	0	0.000%	48,191,470	0	0.000%	278	0	0%
Education	38	0	0.000%	10,745,091	0	0.000%	3,071	0	0%
Utilities	49	4	8.163%	117,891,820	3,689,294	3.129%	30	1	3%
Total	37,363	208	0.557%	1,398,097,448	14,186,540	1.015%	16,930	349	

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?	Y	
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: Unincorporated Jefferson County
Hazard: Flood

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	14,580	15	0.103%	194,400,125	200,000	0.103%	9,219	48	1%
Commercial	911	0	0.000%	41,068,853	0	0.000%	9,219	0	0%
Industrial	165	0	0.000%	171,488,863	0	0.000%	781	0	0%
Agricultural/Forestry	6,663	87	1.306%	488,564,273	6,379,272	1.306%	586	27	5%
Religious/ Non-profit	373	0	0.000%	13,881,963	0	0.000%	9,219	0	0%
Government	117	0	0.000%	18,480,838	0	0.000%	79	0	0%
Education	22	0	0.000%	9,945,283	0	0.000%	1,259	0	0%
Utilities	19	0	0.000%	102,098,505	0	0.000%	12	0	0%
Total	22,850	102	0.446%	1,039,928,700	6,579,272	0.633%	9,219	75	

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?	Y	
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: Avera
Hazard: Flood

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	648	0	0.000%	5,033,888	0	0.000%	246	0	0%
Commercial	30	0	0.000%	79,148	0	0.000%	246	0	0%
Industrial	0	0	0.000%	0	0	0.000%	0	0	0%
Agricultural/Forestry	16	0	0.000%	485,968	0	0.000%	4	0	0%
Religious/Non-profit	22	0	0.000%	458,000	0	0.000%	246	0	0%
Government	26	0	0.000%	198,958	0	0.000%	7	0	0%
Education	0	0	0.000%	0	0	0.000%	0	0	0%
Utilities	3	0	0.000%	377,345	0	0.000%	2	0	0%
Total	745	0	0.000%	6,633,305	0	0.000%	246	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?	Y	
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: Louisville
Hazard: Flood

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.

Flood	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	3,318	0	0.000%	46,372,040	0	0.000%	2,493	0	0%
Commercial	902	0	0.000%	38,884,098	0	0.000%	2,493	0	0%
Industrial	24	0	0.000%	1,299,218	0	0.000%	318	0	0%
Agricultural/Forestry	23	8	34.783%	675,083	234,811	34.783%	8	0	0%
Religious/Non-profit	97	0	0.000%	6,659,340	0	0.000%	2,493	0	0%
Government	181	0	0.000%	20,256,798	0	0.000%	100	0	0%
Education	3	0	0.000%	55,940	0	0.000%	568	0	0%
Utilities	3	1	33.333%	3,894,490	1,298,163	33.333%	6	0	0%
Total	4,551	9	0.198%	118,097,005	1,532,975	1.298%	2,493	0	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?	Y	
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: Bartow
Hazard: Flood

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.

Flood	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	533	3	0.563%	6,397,115	36,006	0.563%	286	8	3%
Commercial	94	0	0.000%	1,210,733	0	0.000%	286	0	0%
Industrial	0	0	0.000%	0	0	0.000%	0	0	0%
Agricultural/Forestry	4	2	50.000%	1,977,710	988,855	50.000%	0	0	0%
Religious/Non-profit	15	0	0.000%	324,838	0	0.000%	286	0	0%
Government	27	0	0.000%	565,448	0	0.000%	7	0	0%
Education	0	0	0.000%	0	0	0.000%	0	0	0%
Utilities	4	0	0.000%	1,977,710	0	0.000%	2	0	0%
Total	677	5	0.739%	12,453,553	1,024,861	8.229%	286	8	

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?	Y	
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: Stapleton
Hazard: Flood

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.

Flood	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	812	15	1.847%	8,880,363	164,046	1.847%	438	27	6%
Commercial	75	0	0.000%	873,823	0	0.000%	438	0	0%
Industrial	4	0	0.000%	19,825	0	0.000%	0	0	0%
Agricultural/Forestry	6	1	16.667%	1,013,588	168,931	16.667%	4	4	100%
Religious/ Non-profit	19	0	0.000%	423,808	0	0.000%	438	0	0%
Government	32	0	0.000%	678,190	0	0.000%	12	0	0%
Education	9	0	0.000%	180,330	0	0.000%	0	0	0%
Utilities	6	0	0.000%	1,013,588	0	0.000%	2	0	0%
Total	963	16	1.661%	13,083,513	332,977	2.545%	438	31	

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?	Y	
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: Wadley
Hazard: Flood

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.

Flood	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	2,852	15	0.526%	33,301,175	175,146	0.526%	2,061	15	1%
Commercial	364	0	0.000%	13,931,848	0	0.000%	2,061	0	0%
Industrial	104	2	1.923%	36,872,950	709,095	1.923%	454	2	0%
Agricultural/Forestry	50	12	24.000%	1,783,253	427,981	24.000%	12	12	100%
Religious/ Non-profit	54	0	0.000%	1,726,628	0	0.000%	2,061	0	0%
Government	102	0	0.000%	3,002,377	0	0.000%	36	0	0%
Education	2	0	0.000%	305,201	0	0.000%	292	0	0%
Utilities	10	1	10.000%	4,684,903	468,490	10.000%	3	1	33%
Total	3,538	30	0.848%	95,608,333	1,780,712	1.863%	2,061	30	

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?	Y	
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: Wrens
Hazard: Flood

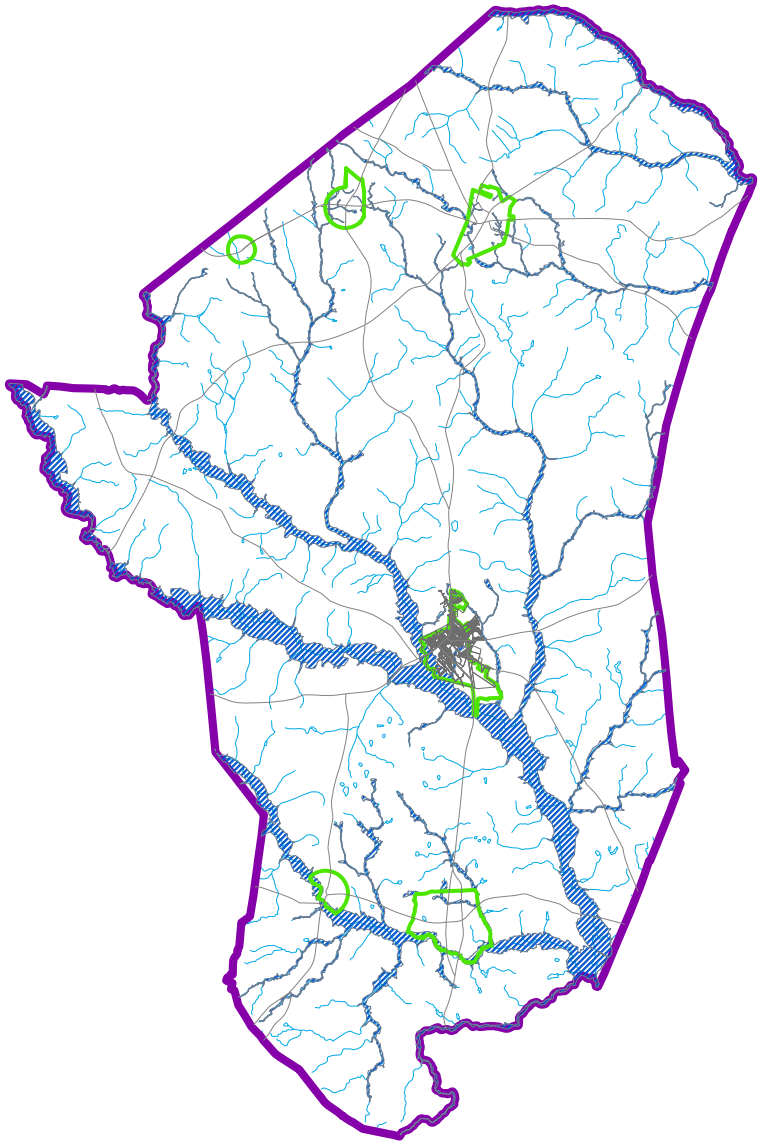
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Flood	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	3,001	39	1.300%	45,601,330	592,620	1.300%	2,187	93	4%
Commercial	731	0	0.000%	32,772,810	0	0.000%	2,187	0	0%
Industrial	72	1	1.389%	19,222,598	266,981	1.389%	312	112	36%
Agricultural/Forestry	27	4	14.815%	1,036,135	153,501	14.815%	8	0	0%
Religious/ Non-profit	100	0	0.000%	4,547,688	0	0.000%	2,187	0	0%
Government	102	0	0.000%	5,008,863	0	0.000%	37	0	0%
Education	2	0	0.000%	258,338	0	0.000%	952	0	0%
Utilities	4	2	50.000%	3,845,280	1,922,640	50.000%	3	0	0%
Total	4,039	46	1.139%	112,293,040	2,935,742	2.614%	2,187	205	

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?	Y	
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

Jefferson County FEMA 100 Year Flood one



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Legend

- Jefferson County
- City Limits
- Flood Zone
- Highways
- Streams

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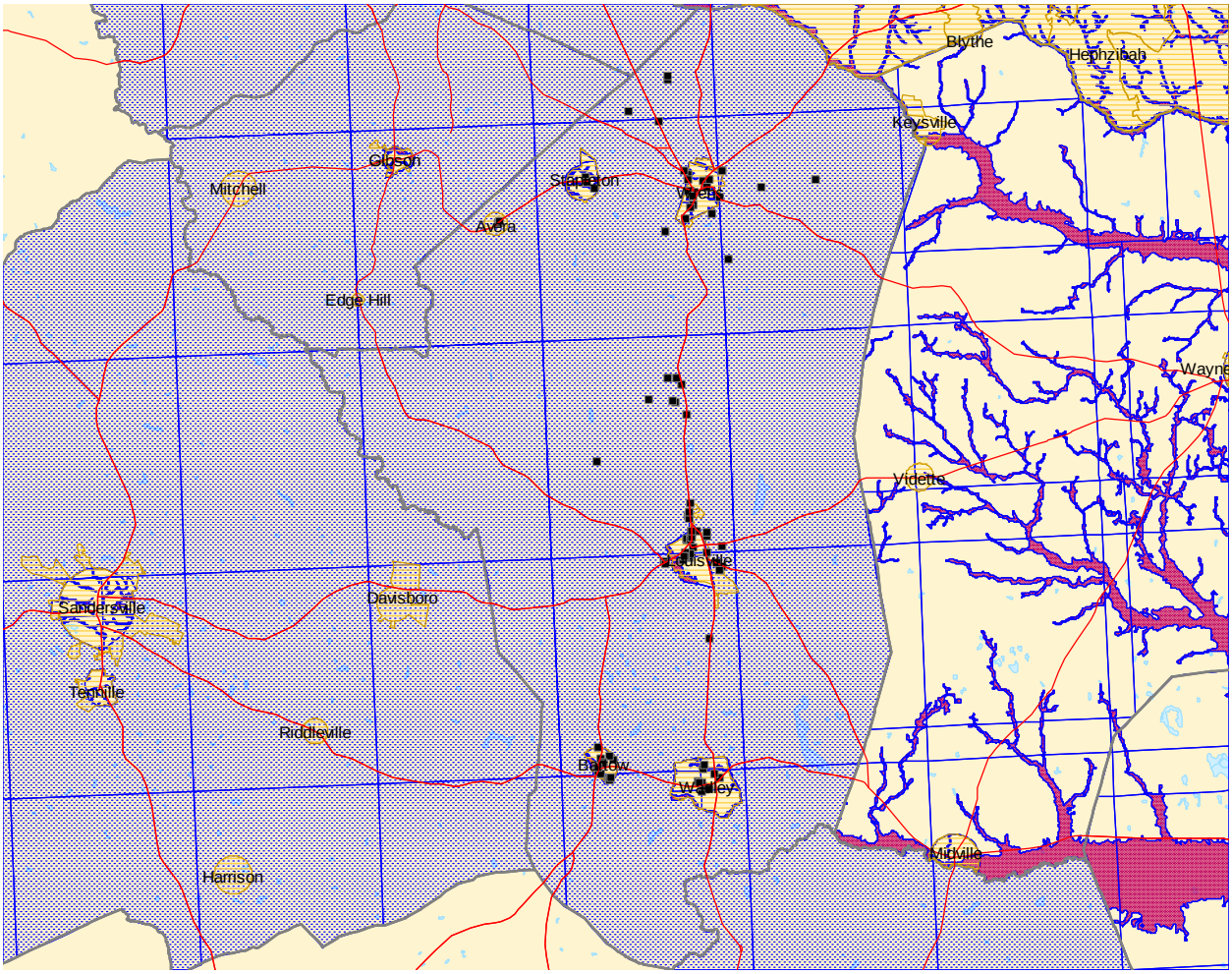
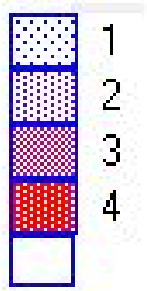


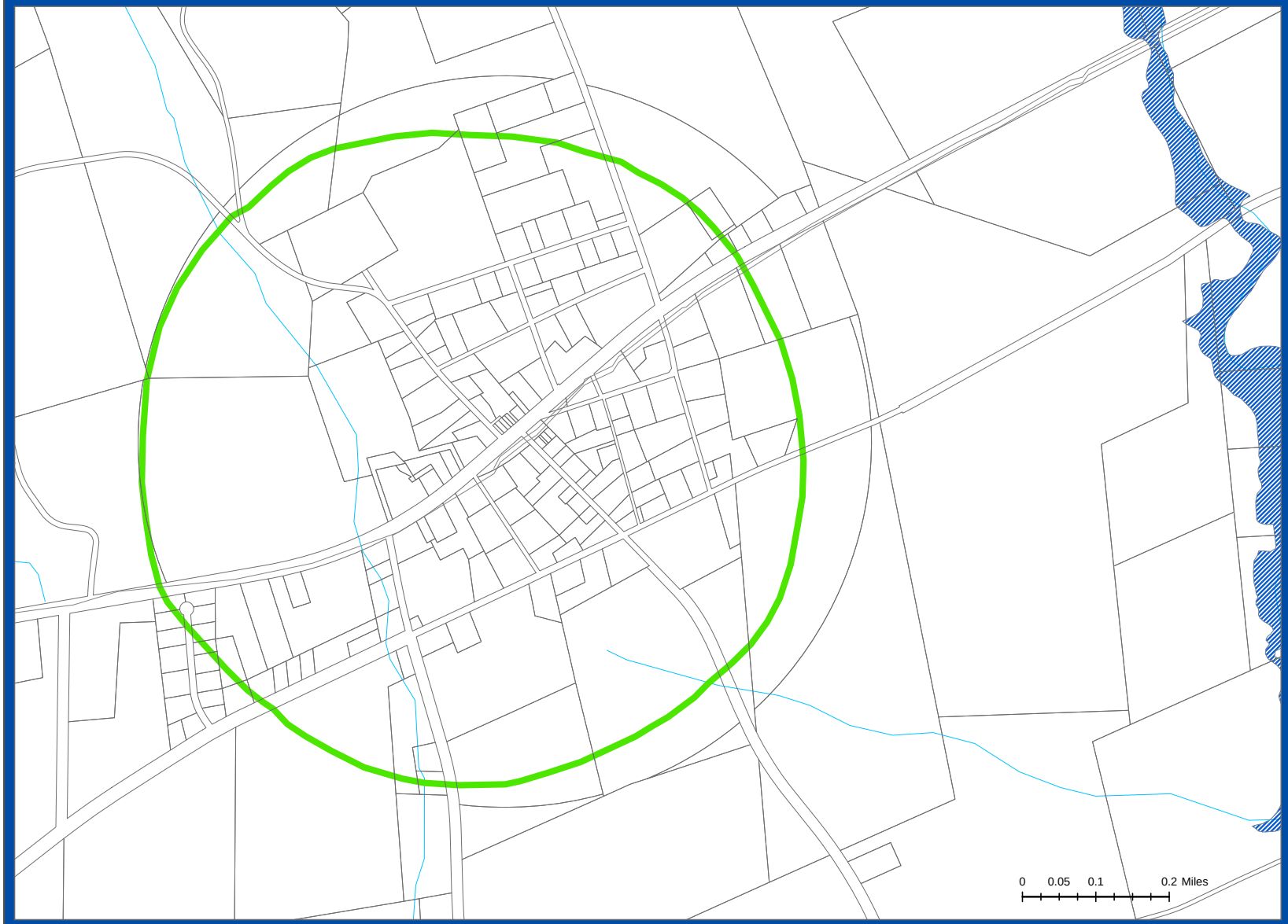
Jefferson County Flood Plains Georgia Mitigation Information System

Map Color Code from GMIS



Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Avera FEMA 100 Year Flood one



Legend

- Jefferson County
- City Limits
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Avera FEMA 100 Year Flood one

Legend

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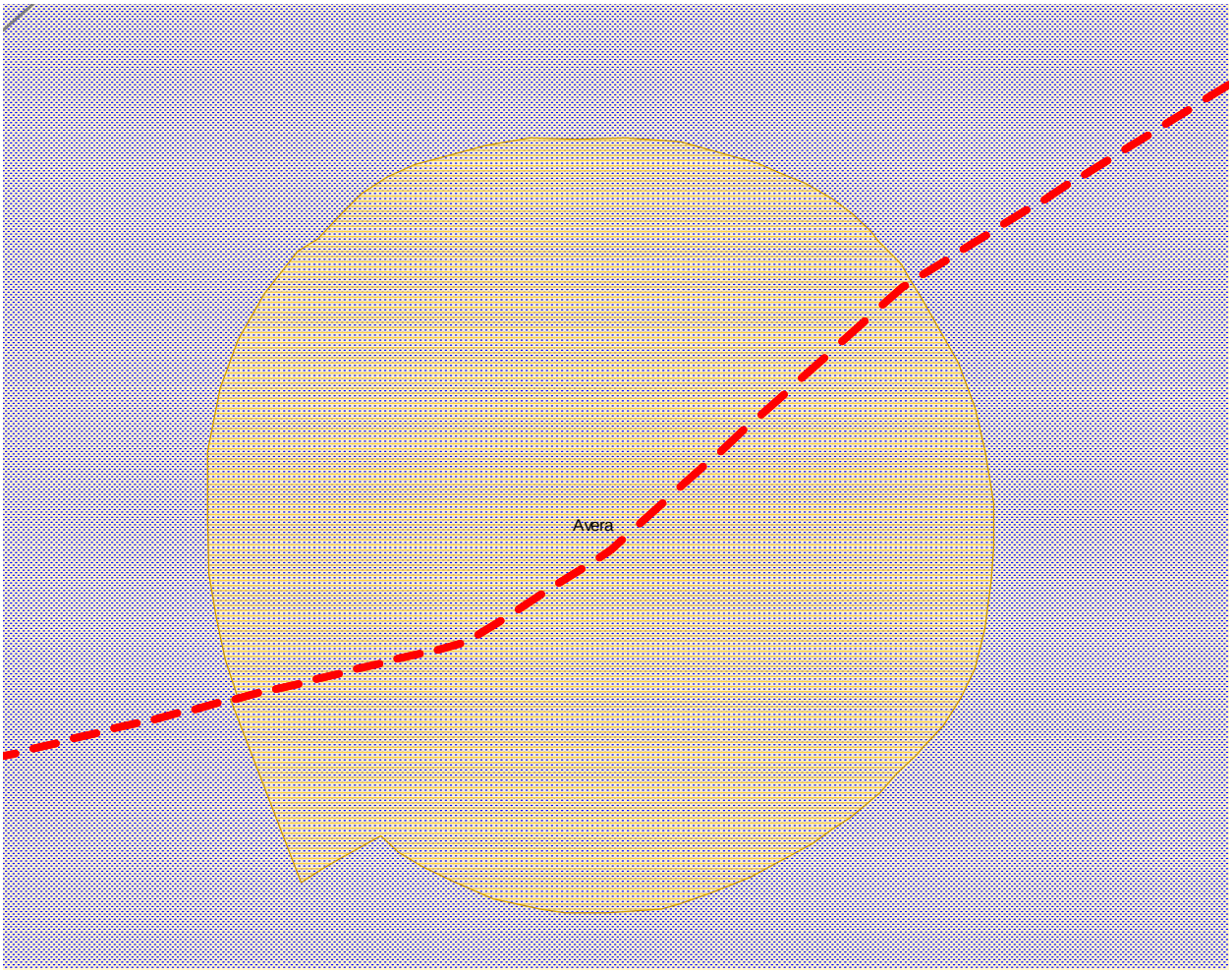

Avera Flood Plains Georgia Mitigation Information System

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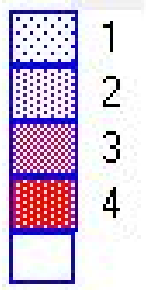

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Bartow FEMA 100 Year Flood one

Legend

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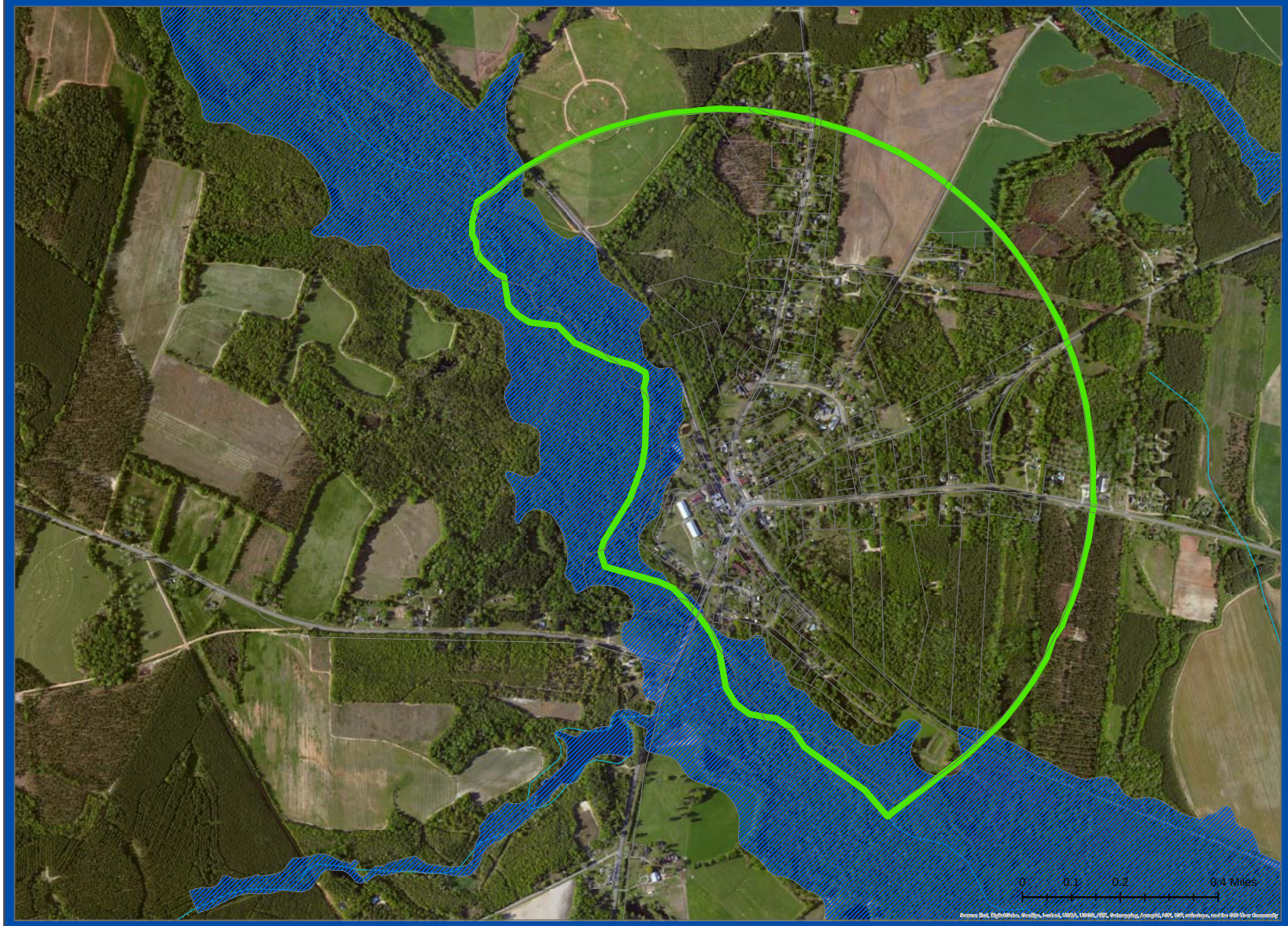
Bartow FEMA 100 Year Flood one



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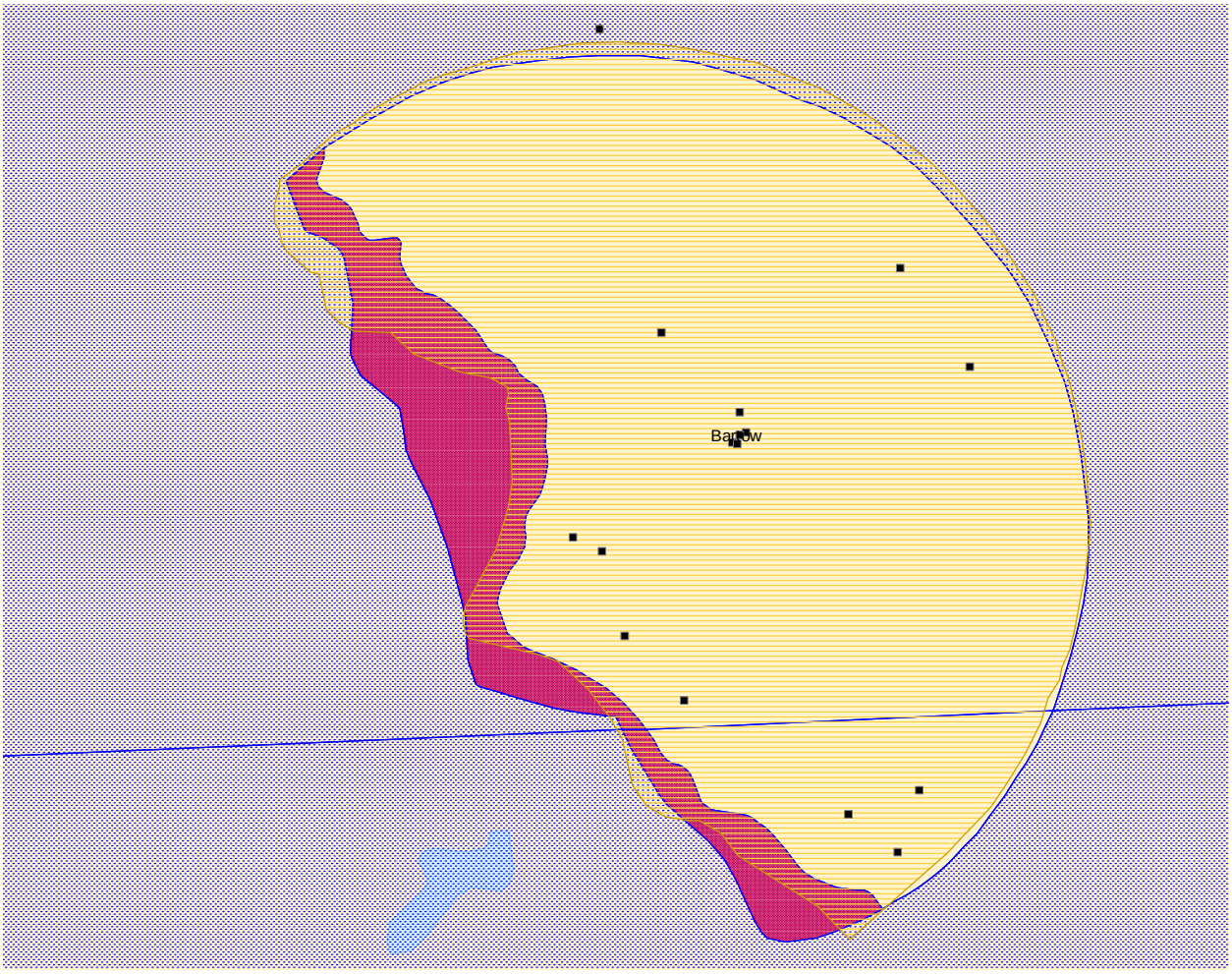

Bartow Flood Plains Georgia Mitigation Information System

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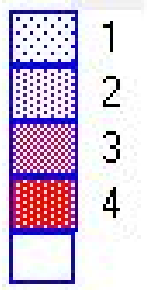

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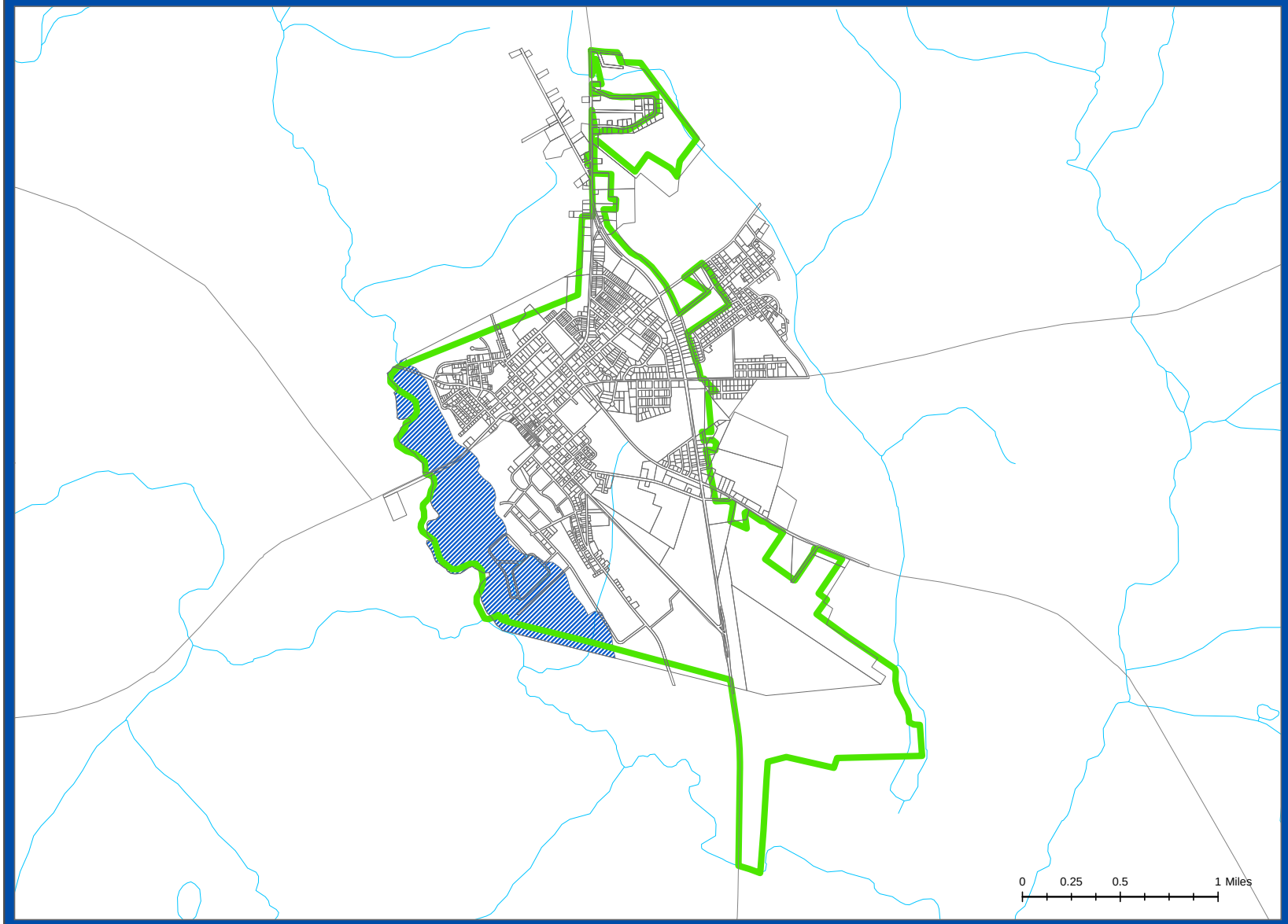
Louisville FEMA 100 Year Flood one



Legend

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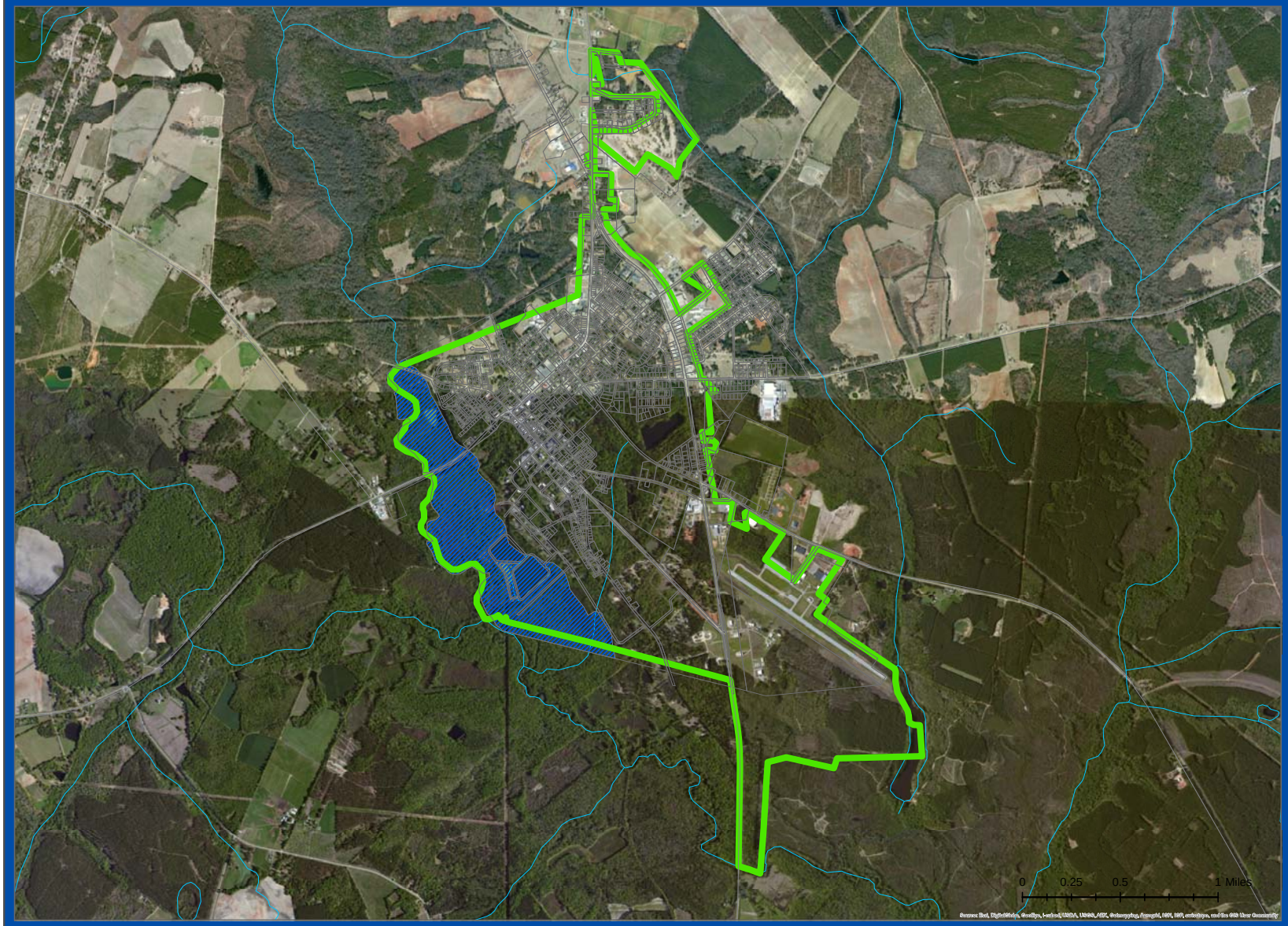

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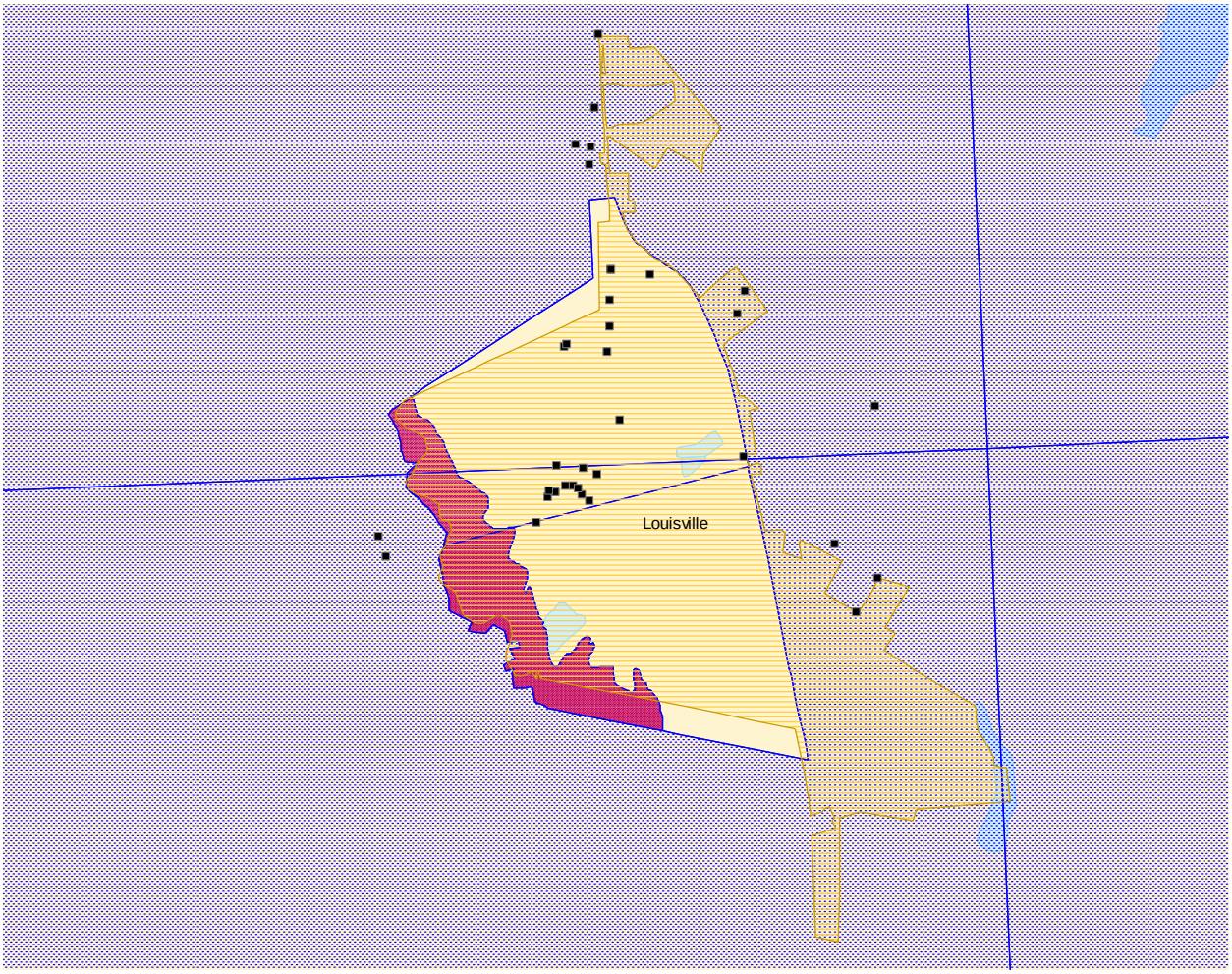
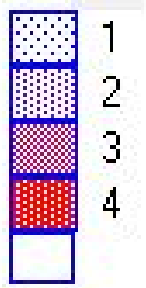


Louisville Flood Plains Georgia Mitigation Information System

Map Color Code from GMIS



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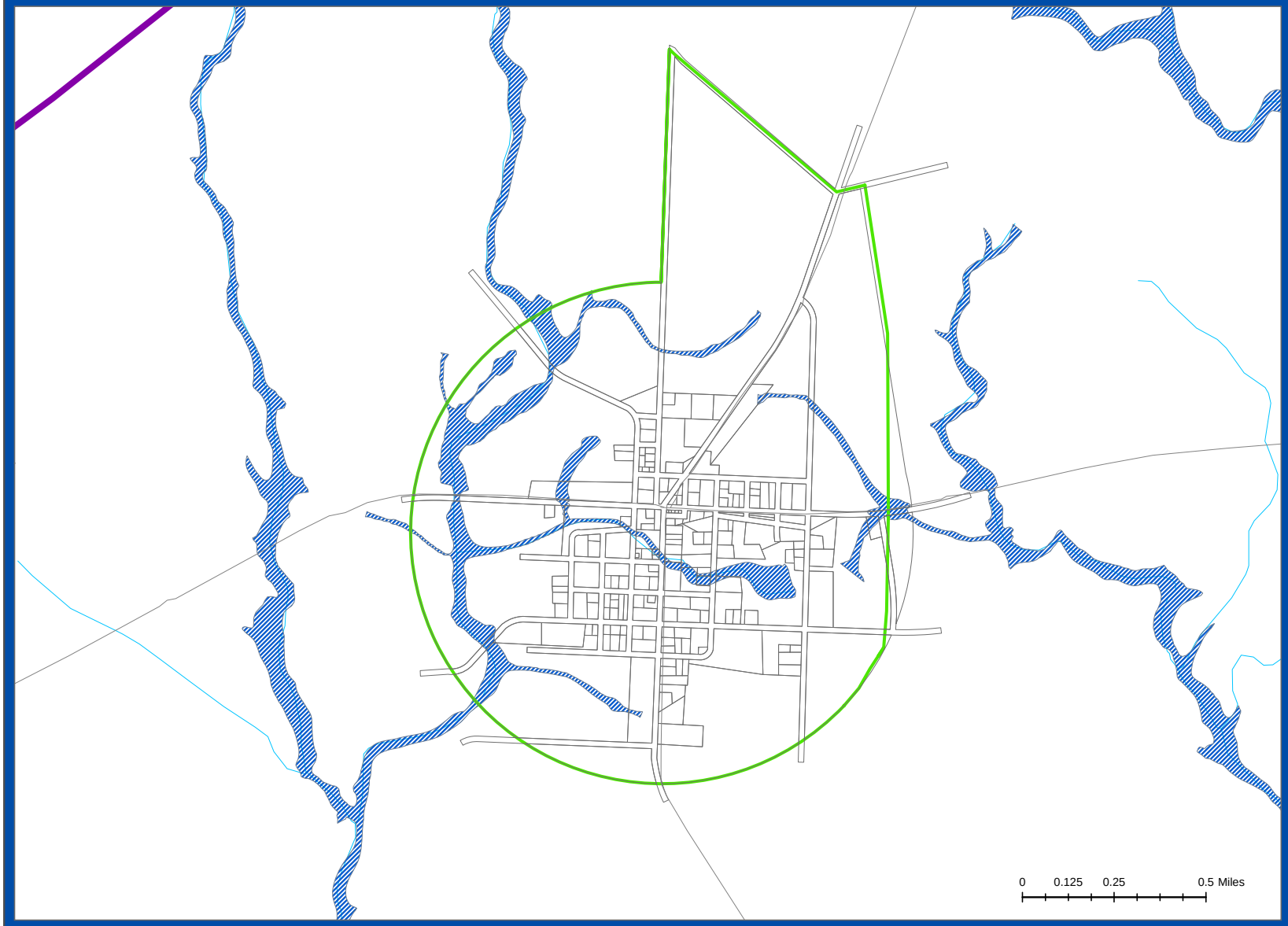
Stapleton FEMA 100 Year Flood one



Legend

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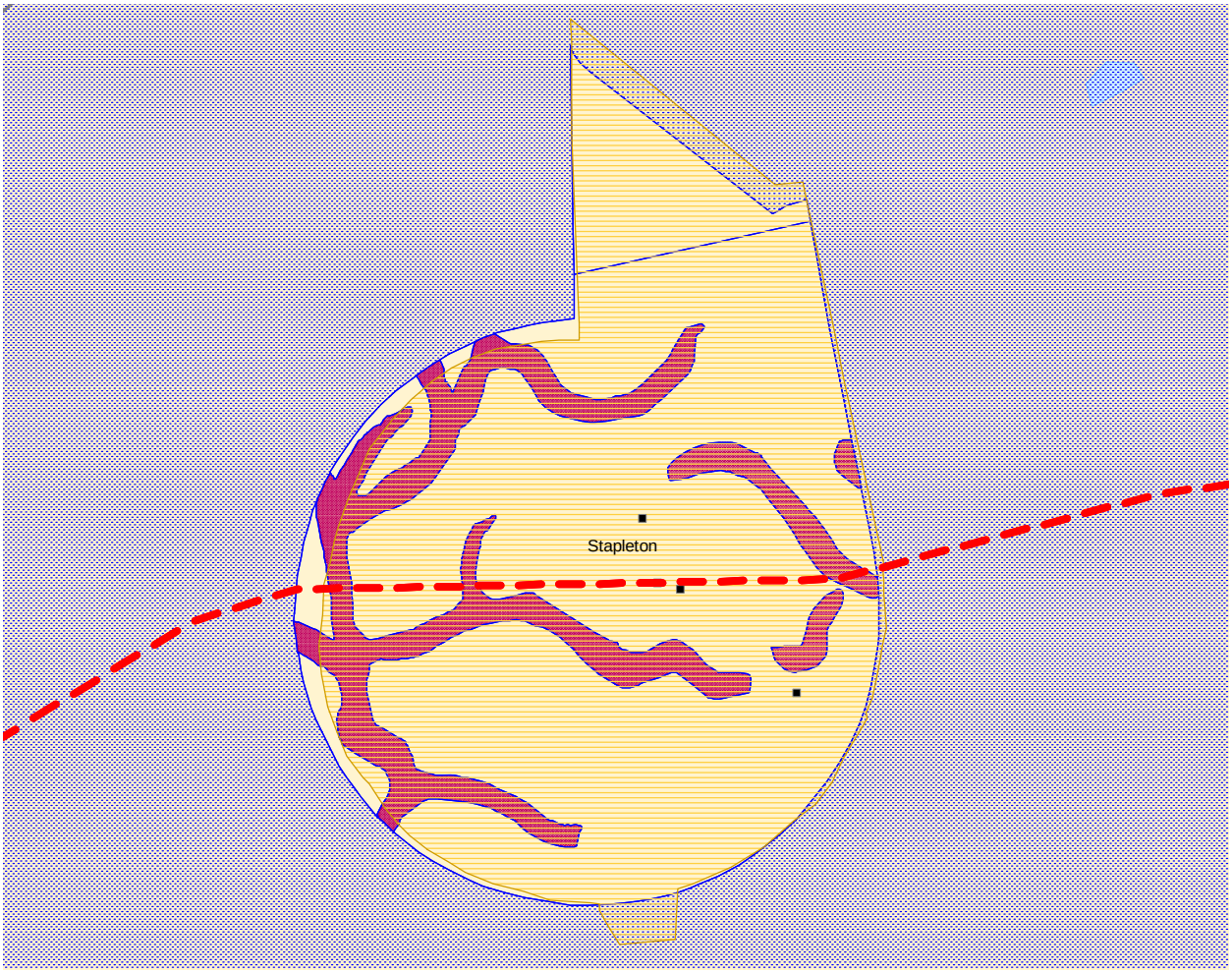

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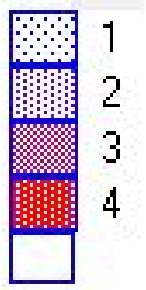
Map Color Code from GMIS



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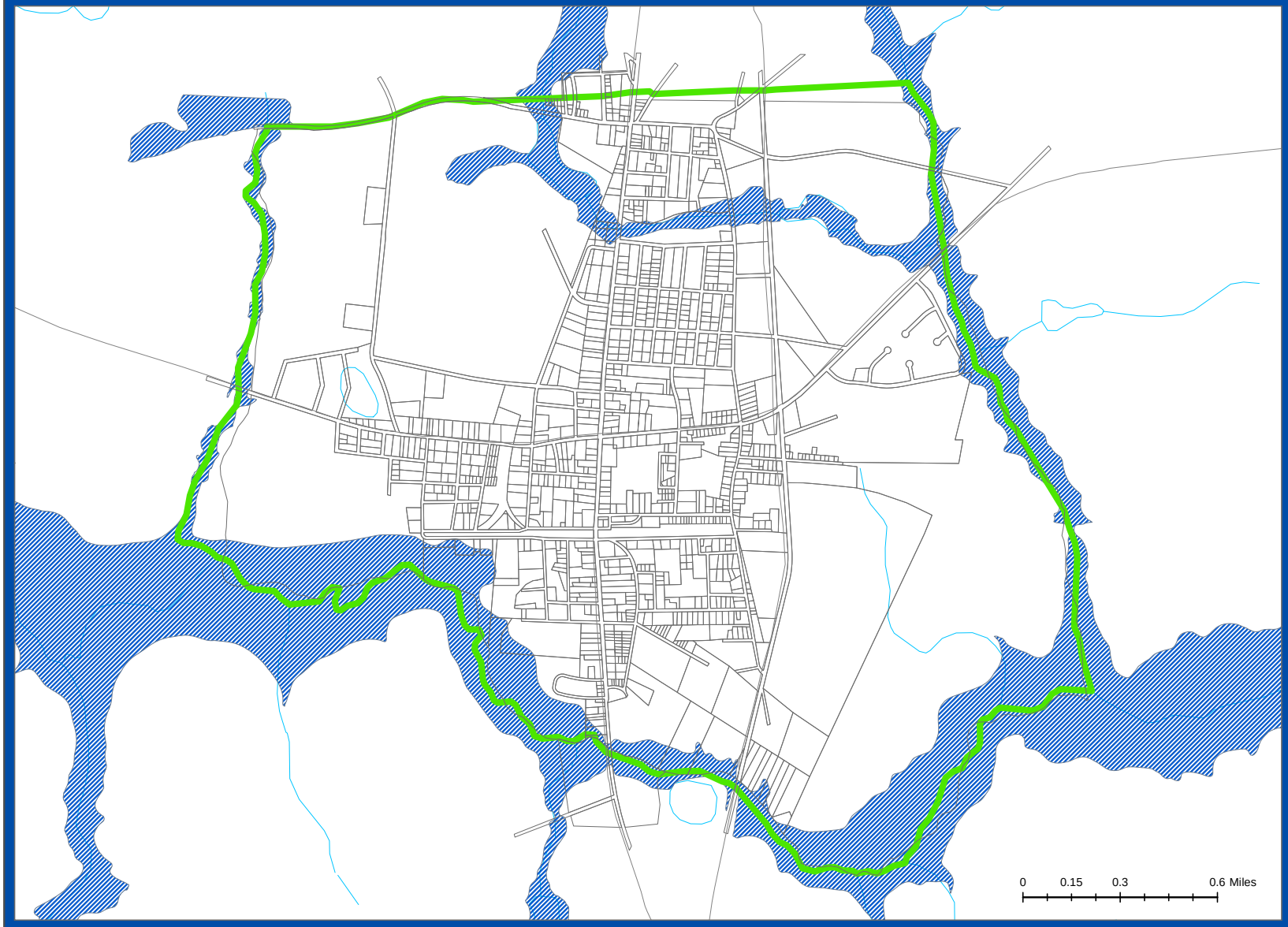
Wadley FEMA 100 Year Flood one



Legend

- Jefferson County
- City Limits
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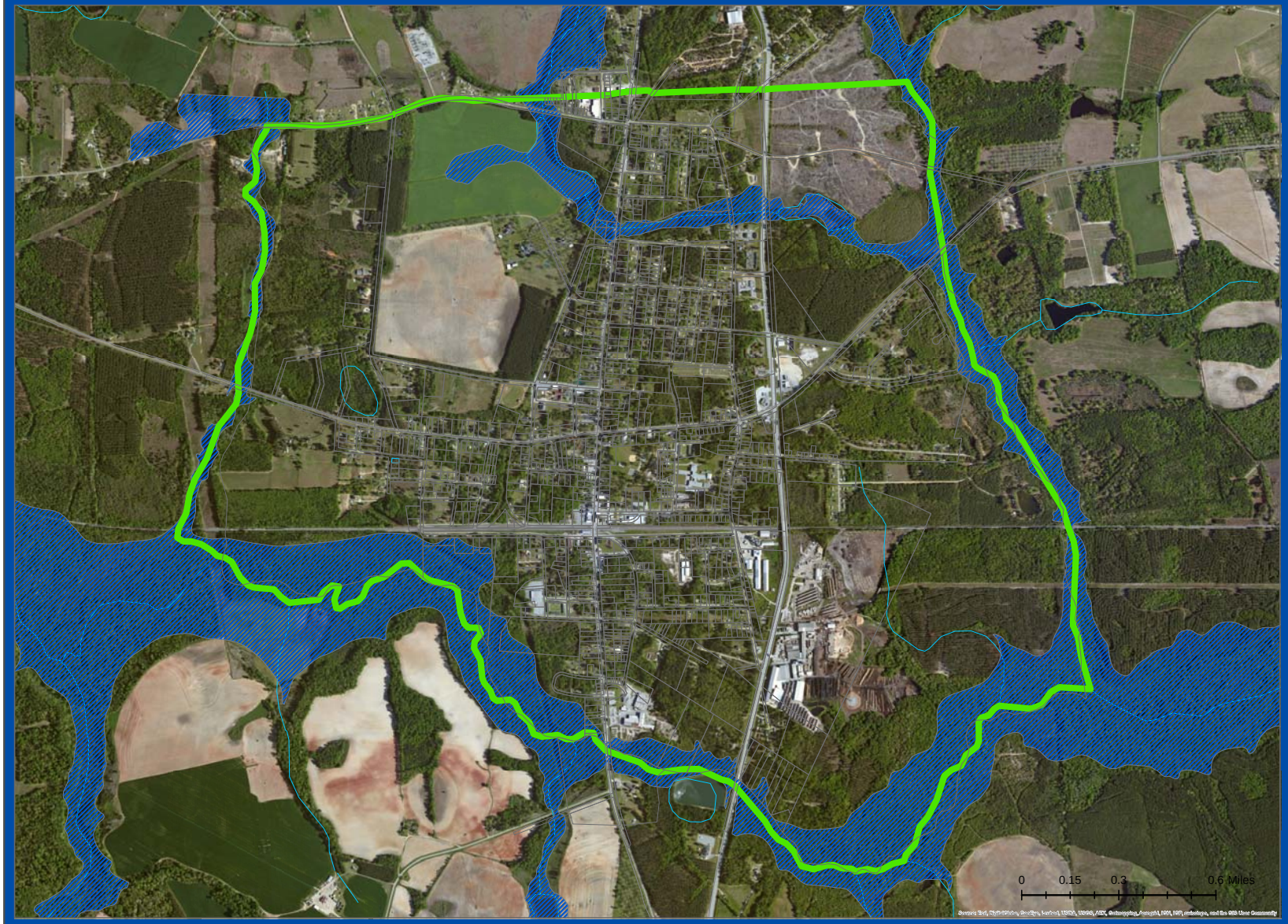
Wadley FEMA 100 Year Flood one



Legend

- Jefferson County
- City Limits
- FEMA Flood Zone
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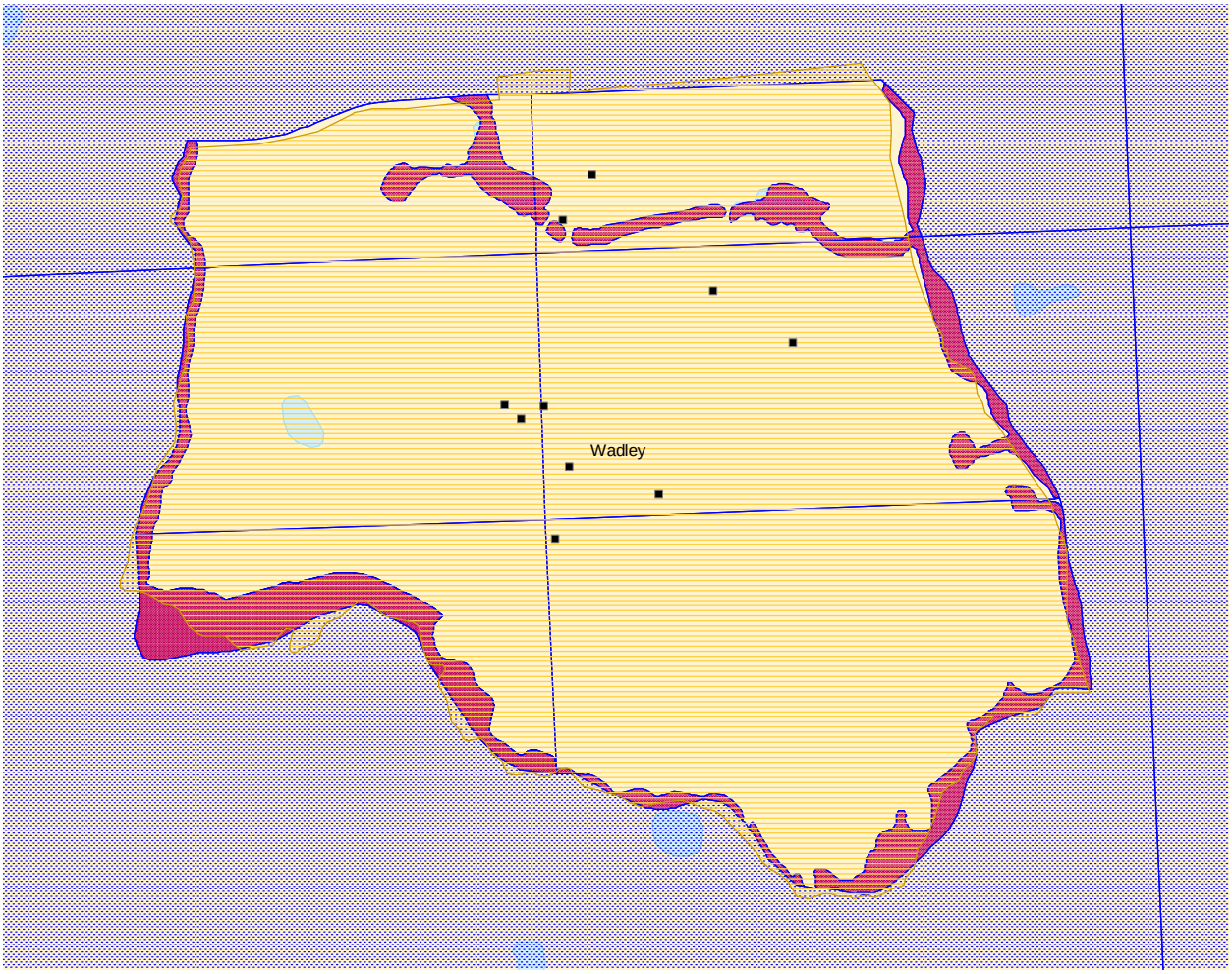
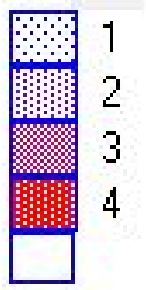


Wadley Flood Plains Georgia Mitigation Information System

Map Color Code from GMIS



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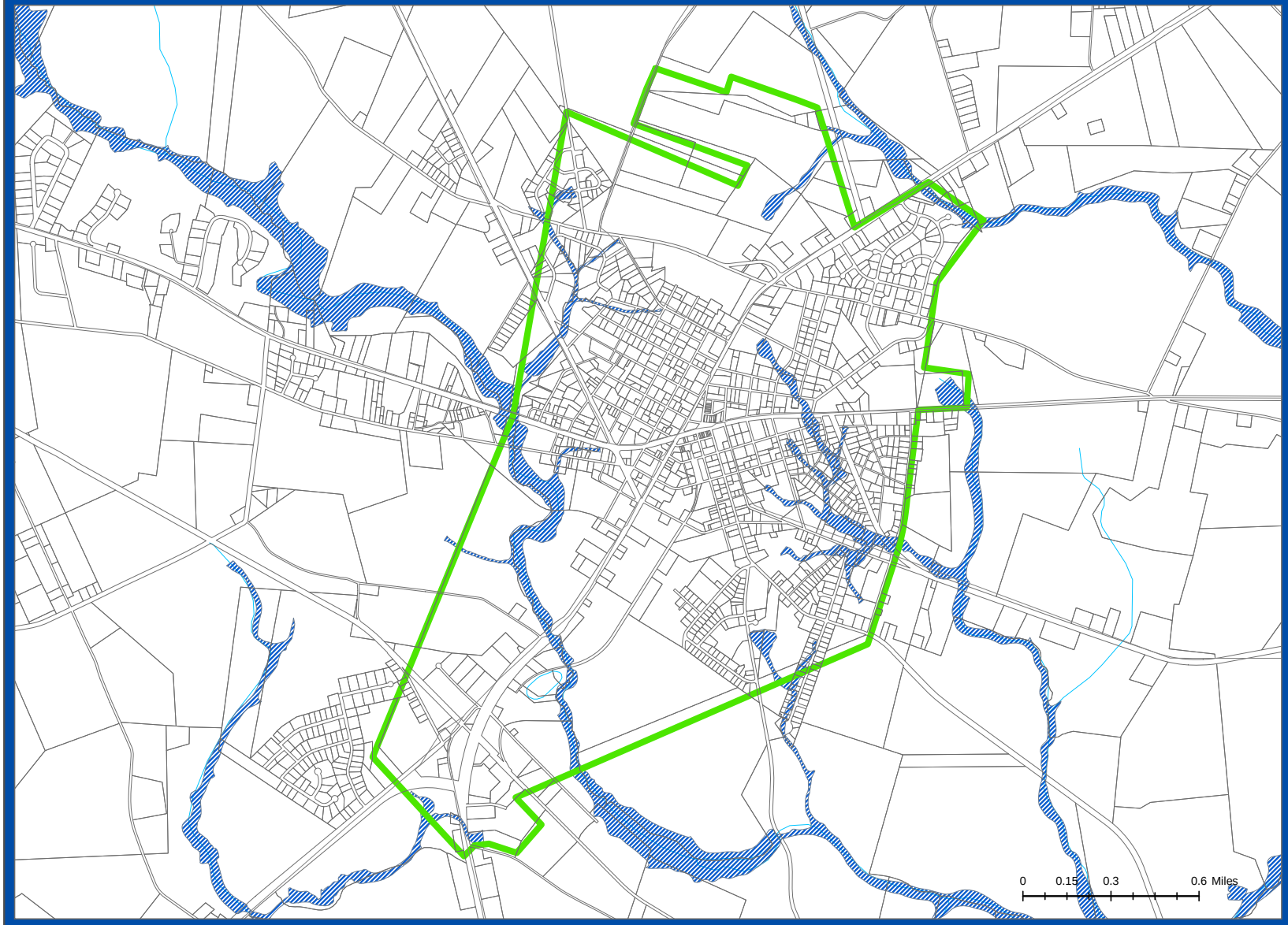
Wrens FEMA 100 Year Flood one



Legend

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Wrens FEMA 100 Year Flood one

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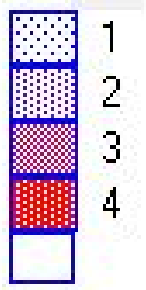
Wrens Flood Plains Georgia Mitigation Information System

Map Color Code from GMIS



Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Dam Failures

Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve the total collapse of a dam, that is not always the case. Damaged spillways, overtopping of a dam or other problems may result in a hazardous situation. Dam failures may be caused by structural deficiencies in the dam itself. Dam failures may also come from other factors including but not limited to debris blocking spillways, flooding, earthquakes, improper operation and vandalism. Dam failures are potentially the worst flood events. When a dam fails, a large quantity of water is suddenly released downstream, destroying anything in its path and posing a threat to life and property.

Dams are classified into three categories:

- High Hazard – Dams where failure or disoperation will probably cause loss of human life.
- Significant Hazard – Dams where failure or disoperation will probably not result in loss of life, but can cause economic loss, environmental damage, and disruption of lifeline facilities or other concerns.
- Low Hazard – Dams where failure or disoperation will probably not result in loss of life and cause only low economic and/or environmental loss.

A review of the 2013 National Inventory of Dams shows that Jefferson County has 41 dams with 40 classified as low hazard and 1 classified as high hazard. A high hazard classification is based upon the finding that a probable loss of life would occur in the event of a dam failure. If the 1 high hazard dam fails there is the potential for loss of life and property and economic losses. The remaining 40 dams are low hazard were potential losses are limited to minimal property damage.

The potential losses due to dam failure flooding are unknown and cannot be estimated at this time. The GMIS report has critical facilities replacement at more than $307 million with a population of 4,299. The County has population of 16,930 and 37,363 structures/properties valued at slightly less than $1.4 billion at risk of potential loss. (*See Appendix A Section II and Appendix D).*

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Wrens
Hazard: Dam Failure

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	3,001	3,001	100.000%	45,601,330	45,601,330	100.000%	2,187	2,187	100%
Commercial	731	731	100.000%	32,772,810	32,772,810	100.000%	2,187	2,187	100%
Industrial	72	72	100.000%	19,222,598	19,222,598	100.000%	312	312	100%
Agricultural/Forestry	27	27	100.000%	1,036,135	1,036,135	100.000%	8	8	100%
Religious/ Non-profit	100	100	100.000%	4,547,688	4,547,688	100.000%	2,187	2,187	100%
Government	102	102	100.000%	5,008,863	5,008,862	100.000%	37	37	100%
Education	2	2	100.000%	258,338	258,338	100.000%	952	952	100%
Utilities	4	4	100.000%	3,845,280	3,845,280	100.000%	3	3	100%
Total	4,039	4,039	100.000%	112,293,040	112,293,039	100.000%	2,187	2,187	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Wadley
Hazard: Dam Failure

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	2,852	2,852	100.000%	33,301,175	33,301,175	100.000%	2,061	2,061	100%
Commercial	364	364	100.000%	13,931,848	13,931,848	100.000%	2,061	2,061	100%
Industrial	104	104	100.000%	36,872,950	36,872,950	100.000%	454	454	100%
Agricultural/Forestry	50	50	100.000%	1,783,253	1,783,253	100.000%	12	12	100%
Religious/ Non-profit	54	54	100.000%	1,726,628	1,726,628	100.000%	2,061	2,061	100%
Government	102	102	100.000%	3,002,377	3,002,377	100.000%	36	36	100%
Education	2	2	100.000%	305,201	305,201	100.000%	292	292	100%
Utilities	10	10	100.000%	4,684,903	4,684,903	100.000%	3	3	100%
Total	3,538	3,538	100.000%	95,608,333	95,608,333	100.000%	2,061	2,061	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Unincorporated Jefferson County
Hazard: Dam Failure

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	14,580	14,580	100.000%	194,400,125	194,400,125	100.000%	9,219	9,219	100%
Commercial	911	911	100.000%	41,068,853	41,068,853	100.000%	9,219	9,219	100%
Industrial	165	165	100.000%	171,488,863	171,488,863	100.000%	781	781	100%
Agricultural/Forestry	6,663	6,663	100.000%	488,564,273	488,564,273	100.000%	586	586	100%
Religious/ Non-profit	373	373	100.000%	13,881,963	13,881,963	100.000%	9,219	9,219	100%
Government	117	117	100.000%	18,480,838	18,480,838	100.000%	79	79	100%
Education	22	22	100.000%	9,945,283	9,945,283	100.000%	1,259	1,259	100%
Utilities	19	19	100.000%	102,098,505	102,098,505	100.000%	12	12	100%
Total	22,850	22,850	100.000%	1,039,928,700	1,039,928,700	100.000%	9,219	9,219	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Stapleton
Hazard: Dam Failure

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	812	812	100.000%	8,880,363	8,880,363	100.000%	438	438	100%
Commercial	75	75	100.000%	873,823	873,823	100.000%	438	438	100%
Industrial	4	4	100.000%	19,825	19,825	100.000%	0	0	100%
Agricultural/Forestry	6	6	100.000%	1,013,588	1,013,588	100.000%	4	4	100%
Religious/ Non-profit	19	19	100.000%	423,808	423,808	100.000%	438	438	100%
Government	32	32	100.000%	678,190	678,190	100.000%	12	12	100%
Education	9	9	100.000%	180,330	180,330	100.000%	0	0	100%
Utilities	6	6	100.000%	1,013,588	1,013,588	100.000%	2	2	100%
Total	963	963	100.000%	13,083,513	13,083,513	100.000%	438	438	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Louisville
Hazard: Dam Failure

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	3,318	3,318	100.000%	46,372,040	46,372,040	100.000%	2,493	2,493	100%
Commercial	902	902	100.000%	38,884,098	38,884,098	100.000%	2,493	2,493	100%
Industrial	24	24	100.000%	1,299,218	1,299,218	100.000%	318	318	100%
Agricultural/Forestry	23	23	100.000%	675,083	675,083	100.000%	8	8	100%
Religious/Non-profit	97	97	100.000%	6,659,340	6,659,340	100.000%	2,493	2,493	100%
Government	181	181	100.000%	20,256,798	20,256,798	100.000%	100	100	100%
Education	3	3	100.000%	55,940	55,940	100.000%	568	568	100%
Utilities	3	3	100.000%	3,894,490	3,894,490	100.000%	6	6	100%
Total	4,551	4,551	100.000%	118,097,005	118,097,005	100.000%	2,493	2,493	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Jefferson County All Jurisdictions
Hazard: Dam Failure

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	25,744	25,744	100.000%	339,986,035	339,986,035	100.000%	16,930	16,930	100%
Commercial	3,107	3,107	100.000%	128,821,310	128,821,310	100.000%	16,930	16,930	100%
Industrial	369	369	100.000%	228,903,453	228,903,453	100.000%	1,865	1,865	100%
Agricultural/Forestry	6,789	6,789	100.000%	495,536,008	495,536,008	100.000%	622	622	100%
Religious/Non-profit	680	680	100.000%	28,022,263	28,022,263	100.000%	16,930	16,930	100%
Government	587	587	100.000%	48,191,470	48,191,469	100.000%	278	278	100%
Education	38	38	100.000%	10,745,091	10,745,091	100.000%	3,071	3,071	100%
Utilities	49	49	100.000%	117,891,820	117,891,820	100.000%	30	30	100%
Total	37,363	37,363	100.000%	1,398,097,448	1,398,097,447	100.000%	16,930	16,930	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Bartow
Hazard: Dam Failure

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	533	533	100.000%	6,397,115	6,397,115	100.000%	286	286	100%
Commercial	94	94	100.000%	1,210,733	1,210,733	100.000%	286	286	100%
Industrial	0	0	100.000%	-	-	100.000%	0	0	100%
Agricultural/Forestry	4	4	100.000%	1,977,710	1,977,710	100.000%	0	0	100%
Religious/Non-profit	15	15	100.000%	324,838	324,838	100.000%	286	286	100%
Government	27	27	100.000%	565,448	565,448	100.000%	7	7	100%
Education	0	0	100.000%	-	-	100.000%	0	0	100%
Utilities	4	4	100.000%	1,977,710	1,977,710	100.000%	2	2	100%
Total	677	677	100.000%	12,453,553	12,453,553	100.000%	286	286	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Avera
Hazard: Dam Failure

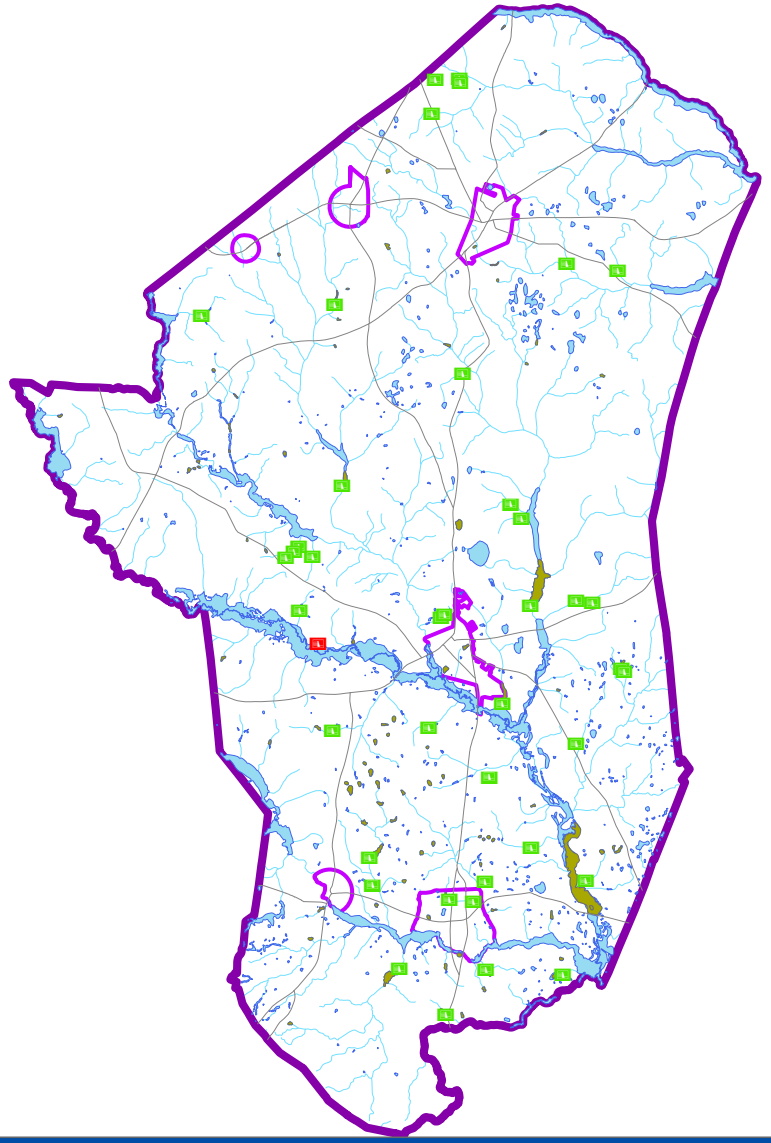
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	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	648	648	100.000%	5,033,888	5,033,888	100.000%	246	246	100%
Commercial	30	30	100.000%	79,148	79,148	100.000%	246	246	100%
Industrial	0	0	100.000%	0	0	100.000%	0	0	100%
Agricultural/Forestry	16	16	100.000%	485,968	485,968	100.000%	4	4	100%
Religious/Non-profit	22	22	100.000%	458,000	458,000	100.000%	246	246	100%
Government	26	26	100.000%	198,958	198,958	100.000%	7	7	100%
Education	0	0	100.000%	0	0	100.000%	0	0	100%
Utilities	3	3	100.000%	377,345	377,345	100.000%	2	2	100%
Total	745	745	100.000%	6,633,305	6,633,305	100.000%	246	246	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?	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?		N
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	Y	

Jefferson County Dam Map



0 2 4 8 Miles

Legend

- High Hazard Dam
- Low Hazard Dam
- Highways
- ponds
- Lakes
- City Limits
- Jefferson County
- Streams

N
W E
S

Central Savannah River Area
Regional Commission
GIS Department
3023 River Watch Parkway, Suite A
Augusta, GA 30907-2016
www.csrarc.ga.gov

RecordID	Dam_name	Other_dam_name	River	Owner_type	Year_completed	Hazard
7932	HENDERSON LAKE DAM	HENDERSON LAKE	UNKNOWN	P	1957	L
7933	EVANS LAKE DAM	EVANS LAKE DAM	UNKNOWN	P	1961	L
7934	STAPLETON MILLPOND DAM	ADAMS FISH POND	DUHART CREEK	P	19	L
7935	PILCHER LAKE DAM	MCDONALDS LAKE	JORDAN BRANCH	P	197	L
9738	WOMMACK LAKE DAM		UNKNOWN	P	1962	L
9739	MCNEELY - HANNAH LAKE DAM	MCNEELY LAKE DAM	UNKNOWN	P	1956	L
9740	WEEKS LAKE DAM	RHENEY - WEEKS	UNKNOWN	P	1964	L
9741	LOST LAKE DAM	KELLY LAKE DAM	MANSON BRANCH	P	1966	L
9742	DAVIS LAKE DAM (LOWER)		UNKNOWN	P	1958	L
9743	CUNNINGHAM CORNER IRRIGATION POND DAM	EASTERLIN LAKE DAM	UNKNOWN	P	1955	L
10038	HADDEN POND DAM		CLEAR CREEK	P	196	L
10039	NEWBERRY IRRIGATION POND DAM # 1	NEWBERRYS POND DAM	UNKNOWN	P	1978	L
10040	BATTLE LAKE DAM		UNKNOWN	P	196	L
10041	SMITH POND DAM	SMITH POND DAM	WILLIAMSON SWAMP		1954	L
10042	COBB IRRIGATION POND DAM		UNKNOWN	P	1976	L
10043	BRETT POND DAM	THOMAS LAKE DAM	UNKNOWN	P	1979	L
10044	PENNINGTON IRRIGATION LAKE DAM		UNKNOWN	P	1976	L
10045	HANCOCK POND DAM		UNKNOWN	P	195	L
10046	SMITH FARMS IRRIGATION POND DAM	SMITH LAKE DAM	BAKER BRANCH	P	1977	L
10047	ADAMS LAKE DAM		UNKNOWN	P	1968	L
10243	LAKE RABUN DAM	HUBER LAKE DAM	K SSITH BRANCH	P	1975	L
10244	LAKE MARION DAM	DAVIS LAKE DAM	SAVANNAH BRACNH	P	1946	H
10245	RACHELS MILLPOND DAM		MILL CREEK	P	1945	L
10342	UNION CAMP LAKE DAM (UPPER)		UNKNOWN	P		L
11146	GAMBREL IRRIGATION POND DAM		UNKNOWN	P	196	L
11176	UNION CAMP LAKE DAM (LOWER)		UNKNOWN	P		L
11177	DAVIS LAKE DAM (UPPER)		UNKNOWN	P		L
11178	MCDONALDS LAKE DAM		UNKNOWN	P		L

11179	CLARKS MILLPOND DAM		DUHART CREEK	P		L
11180	KELLY S POND DAM		BIG CREEK	P	191	L
11182	HUBER WRENS PLANT WASTEWATER POND DAM		UNKNOWN	P	1962	L
11183	ROCKY COMFORT, INC. IRRIGATION DAM	GARDNER LAKE DAM	UNKNOWN	P	1979	L
11184	SMITH POND DAM		COAT CREEK	P	1954	L
11185	REDFIELD FARMS, INC. IRRIGATION POND DAM		SMITH BRANCH	P	1977	L
11186	GEORGIA KAOLIN REJECT POND DAM	YARA ENGINEERING REJECT POND DAM	RAYBURN BRANCH	P	1981	L
11187	RADCLIFFE FARM LAKE DAM # 03		UNKNOWN	P	1985	L
11188	REDFIELD FARMS, INC. NEW IRRIGATION POND DAM		UNKNOWN	P	1984	L
11189	NEWBERRY IRRIGATION POND DAM # 2		UNKNOWN	P	1981	L
11190	PENNINGTON TAILINGS POND		UNKNOWN	P	1991	L
11191	RADCLIFFE FARMS LAKE DAM # 02		UNKNOWN	P	1985	L
11192	RADCLIFFE FARMS LAKE DAM # 01		UNKNOWN	P	1985	L

Drought

Drought is not spatially defined and has the potential to affect the entire planning area equally. Of the approximate 339,991 acres in the county, 302,033 (88.9%) are dedicated to agricultural and forestry uses. According to the USDA 2012 Census of Agriculture, Jefferson County has 14,847 acres of agricultural land and 17,523 head of livestock. Agricultural losses due to drought have been the primary losses. No critical facilities have sustained any damage or functional downtime due to dry weather conditions.

Losses due to drought conditions are primarily agricultural. No critical facilities have sustained any damage or functional downtime due to dry weather conditions. The last drought event in Jefferson County began in January 2012 and ended in October 2012.

There have been 25 drought events in the county in the last 64 years with estimated crop losses at $9.7 million. According to the farm subsidies database there has been a total of more than $8.8 million dollars in disaster assistance from 1995-2012 ***Historical data is only for the county as a whole.*** A severe, prolonged drought would mainly affect the 88.9% of the county that makes up the timber and agriculture business. This could result in loss of crops, livestock and create the conditions for a major wildfire event. Based on a 20-year hazard cycle history there is a 120% chance of an annual drought event. The chance for an annual drought event is the same for the county as well as all jurisdictions

In summary, for Jefferson County as a whole, there are a total of 6,789 agricultural/forestry properties in Jefferson County valued at more than $495 million with a population of 622 and includes 17,523 head of livestock that are at the greatest risk due to a drought event. There is a population of 16,930 and approximately 37,363 structures/properties in the county with a value just slightly more than $1.3 billion which could be affected if wildfires break out as a result of drought conditions.

BGN_DATE	END_DATE	EVTYPE	PROPDMGEXP	CROPDMG	REMARKS
7/1/1986	7/31/1986	Drought - Heat		314465.41	Heat, Drought
9/1/1997	9/22/1997	Drought		277777.78	DROUGHT
5/1/1999					
8/1/1999					
2/1/2000		Drought		0	**Rainfall amounts for the month of February were well below normal for most of north and central Georgia. The driest area was across the central portion of the state from Columbus through Macon into the Louisville, Greensboro and Watkinsville areas. Most cooperative observer sites in this area reported less than an inch of rain. The airport at Macon recorded only .37 inches, while Columbus recorded 1.20 inches of rainfall for the month. This was the driest February ever recorded at both locations. Other spotty areas with less than an inch of rain for the month were in the east and south Atlanta metro area, and also in Gilmer county. Most of the rest of north and central Georgia received less than 2 inches of rain for the month, which was less than half the normal.**
4/1/2000		Drought		0	Although rainfall amounts in March slowed the deficit across north and central Georgia, April saw a return to the below normal rainfall pattern that had persisted for the better part of 2 years. The Center for Climate Prediction and the U.S. Agriculture Department both indicated a severe drought for nearly all of Georgia except the extreme northern portion. Rainfall amounts in April averaged less than an inch in central Georgia, less than 2 inches in west central Georgia and between 1.7 and 2.6 inches for much of north Georgia except the northwestern counties. Overall rainfall amounts for the past year are on the order of 12 to 15 inches below normal. Long-term precipitation anomalies since May 1998 show Georgia experiencing the 2nd driest such period statewide with over 20.5 inches below normal.
5/1/2000		Drought		0	The dry conditions, that had persisted for most of a 2 year period, continued through May over north and central Georgia. Rainfall amounts in central Georgia were only about 25 percent of normal, while 50 to 75 percent of normal amounts fell across the north. In Macon, the airport recorded only .30 inch of rain for the entire month, establishing this May as the driest May on record. The previous driest May was in 1936 when only .32 inch of rain fell. In Columbus, only .78 inch of rain was recorded for the month. Across north Georgia, rainfall amounts were around 2 inches, which was still between 2.5 and 3 inches below normal. Rainfall deficits for the year through May for most of north and central Georgia were between 7 and 10 inches. The Center for Climate Prediction and the U.S. Department of Agriculture classified most of central Georgia as being in an extreme drought for May. They classified most of the north as being in a severe drought, except for the northernmost counties which were placed in first stage drought conditions. In Georgia, corn and soybean crops were rated 43 percent poor to very poor, while cotton was rated at 37 percent poor to very poor. Dollar amounts were not available at this stage of the drought, but crops across the state would be in serious trouble without some relief from the dry conditions.

6/1/2000	6/30/2000	Drought		3161855.67	Extremely dry conditions continued across north and central Georgia through the month of June. These same dry conditions had persisted for most of the last 2 years. All rainfall was from spotty convective activity, with no widespread general rains occurring during the month. Most of the convection was concentrated across the southeast parts of WFO Peachtree City's County Warning Area. The west central and north central portions received only 25 to 50 percent of normal rainfall with northwest and east central portions faring slightly better with 50 to 75 percent of normal. At the major airports in north and central Georgia, Atlanta reported 1.11 inches, Athens 1.98 inches, Macon 2.86 inches, and Columbus only 0.51 inches of rain for the month of June. These amounts were 2.45 inches, 1.95 inches, 0.72 inches, and 3.56 inches below normal, respectively. Yearly rainfall totals for most cooperative observer stations in north and central Georgia were between 10 and 15 inches below normal. The 2 year deficit exceeded 20 inches across much of the same area. The center for Climate Prediction and the U.S. Department of Agriculture classified most of central Georgia in an exceptional drought and most of north Georgia in an extreme drought state. The northern most counties were upgraded from a first stage drought to a severe drought status. Water supplies continued to dwindle in most areas. Streamflows were at or below the lowest 10th percentile of the historical distribution for June at 90 percent of Georgia's observing sites. Twenty-nine percent of Georgia's cotton crop was rated in a poor to very poor condition. University of Georgia cumulative crop damage estimates for the whole state were placed at $689 million dollars, plus another $50 million dollars in increased irrigation costs, for a total estimate of $739 million in losses statewide. Of that total, over $309 million was estimated for the counties in the Peachtree City CWA. Of those counties, Sumter county suffered the most with over $20 million, and Dooly county had almost $16.5 million in losses.
6/1/2000		Drought		6,000,500	
7/1/2000		Drought		0	Drought conditions continued during July over most of WFO Peachtree City's County Warning Area. Rainfall amounts were higher in July than in June. However climatological normals also increased during July, so there was still a substantial shortfall from the monthly normal precipitation. Total rainfall for the month was generally in the 2 to 3 inch range, however spotty areas received between 4 and 6 inches, while other areas received an inch or less for the month. The net effect was too little, too late for farmers across North and Central Georgia. As of the end of July, the U.S. Department of Agriculture placed all of the CWA in the range of severe to exceptional drought. The area with the largest departure from normal precipitation during July was a swath from west central Georgia across the state, generally along and south of a line from Atlanta to Athens, and north of a line from Columbus to Macon to Augusta. No new crop damage or loss estimates were available, but the previous estimates in June seem to represent the entire 2000 growing season. That estimate placed the total for Peachtree City's county warning area at $306.7 million. An increase in precipitation toward the latter part of the month, and forecasts for the continued weakening of La Nina. brought hope that drought conditions that had lasted for over 2 years were beginning to ease. The latest 90 day forecasts called for near normal precipitation over the southeastern U.S.

10/1/2000		Drought		0	After a couple of months of relief from the prolonged dry conditions of the past 2 to 3 years, very dry conditions returned to north and central Georgia during October. A strong cold front moved through the state on the 6'th, preceded by a line of thunderstorms. For most locations, this represented the only rain day during the month. Following the cold front, an unseasonably large and cold dome of high pressure settled over the state. A stagnant pattern in the upper-levels of the atmosphere set up thereafter which allowed the strong surface high to remain over the area for an extended period of time, essentially blocking off any significant Gulf moisture for the remainder of the month. By the end of the month, many locations were nearing records for the longest consecutive number of days without measurable rainfall. Measurable rain fell on only one day at many locations throughout the region, with monthly rainfall less than one inch at most reporting stations. Rainfall deficits exceeding 3 inches were common across most of north Georgia, with rainfall deficits around 2 inches common in the central portion of the state. Of the four major reporting stations in north Georgia, monthly rainfall totals of only 0.23 inch were observed at Athens, 0.87 at Atlanta, 0.62 at Columbus, and 1.08 at Macon, with deficits of 3.05 inches, 2.18 inches, 1.60 inches, and 1.10 inches respectively.
10/1/2001		Drought		0	A very dry weather pattern, which actually began in mid-August, continued into October. The synoptic pattern was dominated by northwest flow aloft and a series of large Canadian high pressure systems which brought repeated spells of cool, dry weather to Georgia during the month. October was the driest month of the year at all reporting stations and the driest month observed at most locations since October 2000, near the all time record driest for Macon. Less than 1 inch of rainfall was recorded at all of the major airport reporting locations in north and central Georgia with 0.87 inches at Atlanta, 0.82 inches at Columbus, 0.42 inches at Athens, and 0.12 inches at Macon. Normal rainfall values for the month of October are 3.05 inches for Atlanta, 2.22 inches for Columbus, 3.28 inches for Athens, and 2.18 inches for Macon. While all stations have in the past had at least one October with no measurable rainfall, 2001 ranked as the 2nd driest October at Macon since 1931 and the 11th driest at Athens since 1931. What little rain that fell, in all cases less than 1 inch, occurred along and ahead of three fairly strong cold fronts, one passing through the state the 5th and 6th, another on the 13th and 14th, and a third on the 25th. In most cases, rainfall amounts were less than 0.10 inch on these days. Long consecutive stretches of days with no measurable rain were observed, especially during the latter half of the month. Athens and Macon both recorded 17 consecutive days (15th - 31st) with no measurable rainfall. The abnormally dry October, combined with below normal rainfall at most locations in September and October, brought rainfall deficits in excess of 5.00 inches for the year at many locations. By October 31st, the rainfall deficit for Atlanta had exceeded 7.00 inches and in Columbus had exceeded 8.00 inches. This is the 4th consecutive year that rainfall amounts were well below normal for the year at the end of October. However, overall deficits averaged 6 to 8 inches less than at this same time in 2000.

11/1/2001		Drought		0	Very dry conditions, which actually began during the late summer, continued and intensified during November. Many reporting stations in North and Central Georgia received less than 1 inch of rain during November for the second consecutive month. Rainfall during the month was confined to only two principal events, one on the 23rd and a second on the 25th, with most of this rainfall confined to the northwest corner and an area along and south of a line from Columbus to Macon. The area from Atlanta to Athens remained particularly dry during the month. Atlanta recorded its eighth driest November since 1930 with only 0.93 inch of rain falling during the month. This brought the 2-month total for October and November for Atlanta to only 1.8 inches, creating a deficit of 5.11 inches for the 61-day period and an annual deficit in excess of 10 inches for the year. There were 28 consecutive days in Atlanta between October 26th and November 22nd on which no measurable rain fell. Athens was even drier during the month, recording only 0.65 of an inch of rain, with a 2-month total of only 1.07 inch. This value represents a deficit of 5.87 inches for the 60-day period (October and November) and an annual deficit around 8.0 inches.
12/1/2001		Drought		0	Very dry weather continued throughout December across all of north and central Georgia. December marked the 5th consecutive month of below normal rainfall for many locations, and the third consecutive month of much below normal rainfall for most of north and central Georgia. Significant rain fell on only 4 days at most locations across north and central Georgia, with daily amounts on these days averaging 0.50 inch or less. Monthly rainfall amounts for December were generally less than 2 inches. Specifically, rainfall amounts at the major reporting sites included 2.22 inches at Atlanta, 1.81 inches at Columbus, 1.58 inches at Macon, and 1.48 inches for Athens. October through December rainfall ranked among some of the lowest in history. Three month totals included 4.63 inches at Columbus, 4.18 inches at Macon, 4.02 inches at Atlanta, and 2.55 inches for Athens. The 3-month total of 2.55 inches recorded in Athens was the lowest amount of rainfall ever observed during these three months since 1931. For Atlanta, Macon, and Columbus, the October through December period ranked as the 2nd, 5th, and 3rd driest since 1931. Annual rainfall amounts for 2001 were below normal at many stations for the 4th consecutive year. Annual deficits averaged between 10 and 15 inches.
4/1/2002		Drought		0	A summerlike weather pattern dominated north Georgia much of the month, resulting in several days of above normal temperatures and a lack of organized precipitation producing systems. Most major weather systems were shunted to the northwest of Georgia during the month, resulting in below normal rainfall at most reporting stations. The rainfall deficits were most noticeable across the northern part of the state with Atlanta recording only 1.83 inches of rain during the month, 1.79 inches below normal, and Athens recording only 1.65 inches of rain during the month, which was 1.70 inches below normal. These rainfall deficits continued to add to the overall rainfall deficit which had been prevalent across north and central Georgia since mid-summer 1998.

8/1/2002		Drought		0	Very dry conditions persisted across much of north and central Georgia during the month. Rainfall totals of less than one inch were observed at several reporting stations. Athens received only 0.14 inch of rain during the month making it the 2nd driest August on record. Atlanta was close with only 0.77 inch of rain, marking it as the 3rd driest August on record. Other locations in north and central Georgia receiving less than one inch of rain for the month included Fairmont with 0.01 inch, Byron with 0.09 inch, Mareitta with 0.26 inch, Peachtree City with 0.35 inch, Atlanta Bolton with 0.51 inch, Experiment (Griffin) with 0.53 inch, Woodbury with 0.59 inch, Gainesville with 0.63 inch, Mullberry Grove with 0.69 inch, Franklin with 0.70 inch, Douglasville with 0.73 inch, Barnesville with 0.79 inch, Mableton with 0.83 inch, Resaca with 0.94 inch, and Fulton County Airport with 0.98 inch. These rainfall amounts average between two and three inches below normal for the month of August. The minimal rainfall amounts simply aggravate the long term drought conditions that had persisted across north and central Georgia since 1998. Annual rainfall deficits were in excess of 10 inches at many locations. The June through August period was ranked for the state as a whole as the driest June through August period in history. Despite these facts, however, as typical for summer in the southeast, some locations received copious amounts of rainfall from isolated thunderstorms, especially in the extreme southeast portion of Middle Georgia and the northwest corner of the state. Lyons received an impressive 9.81 inches of rain during the month, while Cartersville recorded 5.09 inches and Summerville with 6.50 inches. There were several other locations, mainly in the far north part of the state, with rainfall in excess of four inches. Much of this rainfall at these locations was received during a single thunderstorm.
1/1/2003		Drought		0	A large Polar vortex, anchored over the Hudson Bay region of Canada and the northeastern United States, dominated the eastern United States nearly the entire month. As a result, a cold, dry northwest flow prevailed into the southeastern United States throughout the month. Gulf moisture was virtually shut off from weather systems as disturbances moved down into the area from the Northern Plains and Ohio Valley. This pattern resulted in very little precipitation during the first 28 days of the month. During the last three days of the month, a stronger southern jet stream brought rain back into the area. Many locations in north and central Georgia were having their driest January in history prior to the 29th, when 1.00 to 2.00 inches of rain fell across much of the area. For the first 28 days of the month, many areas had not even received 0.50 inch of rain or liquid equivalent of snow. Nonetheless, the lack of rain during the first 28 days left most areas with a substantial rainfall deficit for the month, including Macon with a deficit of 3.55 inches, Atlanta with a deficit of 3.03 inches, Athens with a deficit of 2.95 inches, and Columbus with a deficit of 2.66 inches. January is normally a rainy month for north and central Georgia with normal rainfall amounts in the 4.00 to 5.00 inch range.

3/1/2004		Drought		0	North and Central Georgia endured one of the driest March's on record. With only near to slightly below normal rainfall during January and February, by the end of March, most of the area was classified in a mild drought. Most areas of the state only received around one inch of rain during the entire month. Climatologically, March is the wettest month of the year across most of the area. Columbus recorded their driest March ever since records began in the late 1800s with only 0.56 inch of rain. This is 5.19 inches below normal for the month. The other major reporting sites all reported similar stories. Atlanta received only 1.04 inches of rain, which is 4.34 inches below normal for the month and the third driest March since records began in the late 1800s. Athens recorded only 1.05 inches of rain, which is 3.94 inches below normal for the month and the second driest March on record. For Macon, only 0.43 inches of rain fell during the month, also marking it as the second driest March on record and leaving that site 4.47 inches below normal for the month. In addition, with the exception of Macon, the January through March 2004 period ranked as being in the top driest 10 for this period since records began.
5/1/2007		Drought		0	Drought conditions continued to worsen across the entire state during May. Rainfall deficits across many counties of north and central Georgia continued to grow as well as the number of counties classified in severe and extreme drought conditions. By the end of May 2007, 74 Georgia counties were classified as being in extreme drought, 79 in severe drought, and six in moderate drought. Counties within the Peachtree City, Georgia forecast area classified as being in extreme drought include Bartow, Carroll, Catoosa, Chattooga, Cherokee, Clayton, Cobb, Coweta, Dade, DeKalb, Douglas, Fannin, Fayette, Floyd, Fulton, Gilmer, Gordon, Haralson, Harris, Heard, Meriwether, Murray, Paulding, Pickens, Polk, Towns, Troup, Union, Walker and Whitfield. Drought conditions in all remaining counties within the Peachtree City, Georgia forecast area were classified as severe. Rainfall deficits as of May 31, 2007 for some of the major north and central Georgia cities were:Record to near-record low stream flows were reported by the end of May across the state, including the Coosawattee River near Ellijay, the Oostanaula at Resaca and Rome, the Middle Oconee near Athens, Oconee at Milledgeville and Dublin, and the Ocmulgee near Jackson and at Lumber City. Groundwater levels were dropping statewide. Many wells are approaching their average yearly low water level, normally reached in late summer or early fall. Much of the state remained under level-2 outdoor water restrictions, with total bans on outdoor watering in some west central Georgia counties.

9/1/2007		Drought		0	Drought conditions continued to worsen through the summer months across north and central Georgia. Many areas of the state were nearing historical drought conditions by the end of the summer. By the end of September, rainfall deficits of 15 to 20 inches across north and west Georgia were common, with many of these areas only having received 30 to 40 percent of normal rainfall. Many lakes were nearing all time record low levels and above ground water supplies were being significantly impacted in many of the larger cities, especially Atlanta.By the end of the summer, crop losses for the state as a whole were estimated at $787.2 million. Approximately 44% or $344 million of this occurred within the Peachtree City, Georgia Weather Forecast Office (WFO) County Warning Area (CWA). Crop losses were greatest for hay and pasture, cotton, peanuts, and corn. The balance was a result of losses to the pecan, tobacco, fruit, and soybean crops. Total economic output impact of the drought for the state was estimated to be $1.3 billion. It is also interesting to note that there were over 14,000 agricultural jobs impacted by the drought conditions.
10/1/2007		Drought		0	Drought conditions persisted and actually worsened during September and October. October, climatologically the driest month of the year anyway, fell even short of normal values at most locations in north and central Georgia. Rainfall deficits of 15 to 20 inches were common in the north and rainfall deficits of 6 to 12 inches were common in central areas. Most areas of the state had only received 30 to 40 percent of normal annual rainfall by the end of October. Many lakes and rivers across north and central Georgia were nearing all time record low levels and above ground water supplies were being significantly impacted in many of the larger cities, especially Atlanta. A number of stream gage locations on creeks and river in north and central Georgia had established new record low water levels during October, including the major river basins of the Coosa, Chattahoochee, upper Oconee, upper Ocmulgee and Flint. Significant water conservation measures were being implemented in many cities across north and central Georgia.
11/1/2007		Drought		0	Drought conditions continued to worsen across north and central Georgia during November. Rainfall deficits continued to grow, with many locations across the north and central part of the state reporting rainfall deficits of 15 to 20 inches. With the exception of the Columbus area and the far northern part of the state, most of north and central Georgia received only about 50 percent of their normal rainfall during the month. Many lake and river levels across north and central Georgia continued near all time record low levels. Above ground water supplies were severely taxed. Lake Lanier in northeast Georgia, the main water source for metropolitan Atlanta reached a new record low level of 1052.63 feet on November 20th. This was the lowest reading recorded since December 24th of 1981, when a level of 1052.66 feet was observed. Lake Allatoona in northwest Georgia and West Point Lake in west central Georgia were also nearing record levels, but fell several feet short of record values. Significant water restrictions remained in place across many counties in north Georgia. Only a minor recovery from the record low stream gage levels recorded on creeks and rivers in north and central Georgia during October was noted, mainly as a result of reduced evaporation rates attending the late fall period.

12/1/2007		Drought		0	Drought conditions persisted and actually continued to worsen during December. This was especially true during the first half of the month when unseasonably warm, dry weather prevailed across the region thanks to a large upper-level ridge of high pressure. Rainfall deficits continued to grow during this time and lake levels fell to record or near record low levels. Lake Lanier in northeast Georgia and the main water supply for the Atlanta metropolitan area, dropped to its lowest level in history on December 28, 2007 with a reading of 1050.75 feet. New records were set nearly every day after November 20th, when the previous record low-level of 1052.63 feet was reached. Lake Allatoona in northwest Georgia and West Point Lake in west central Georgia were also near record low levels, but never reached previously established record low levels. While rivers and streams remained near record low levels as well, lower evaporation rates and slightly better overall rainfall allowed minor rises at many locations. Significant water conservation measures were being implemented in many cities across north and central Georgia.
4/15/2011		Drought		0	
9/1/2011		Drought		0	Jefferson County declared Primary Natural Disaster Area from summer months of excessive heat and drought, which essentially began April 15, 2011. Crop loss was deemed at the 30 percent or greater level.

Week	U.S. Drought Monitor Rating	Drought? (Read Only)	Extent Calculators (Read Only)				
			D0	D1	D2	D3	D4
January, 2000	1	1		1			
February, 2000	1	1		1			
March, 2000	1	1		1			
April, 2000	1	1		1			
May, 2000	1	1		1			
June, 2000	3	1				1	
July, 2000	4	1					1
August, 2000	3	1				1	
September, 2000	3	1				1	
October, 2000	1	1		1			
November, 2000	1	1		1			
December, 2000	2	1			1		
January, 2001	1	1		1			
February, 2001	1	1		1			
March, 2001	1	1		1			
April, 2001	1	1		1			
May, 2001	1	1		1			
June, 2001	2	1			1		
July, 2001	1	1		1			
August, 2001	0		1				
September, 2001							
October, 2001	1	1		1			
November, 2001	2	1			1		
December, 2001	2	1			1		
January, 2002	2	1			1		
February, 2002	3	1				1	
March, 2002	3	1				1	
April, 2002	2	1			1		
May, 2002	3	1				1	
June, 2002	3	1				1	
July, 2002	3	1				1	
August, 2002	3	1				1	
September, 2002	4	1					1
October, 2002	2	1			1		
November, 2002	2	1			1		
December, 2002	1	1		1			
January, 2003	0		1				
February, 2003	0		1				
March, 2003	0		1				
April, 2003							
May, 2003							
June, 2003							

Week	U.S. Drought Monitor Rating	Drought? (Read Only)	Extent Calculators (Read Only)				
			D0	D1	D2	D3	D4
July, 2003							
August, 2003							
September, 2003							
October, 2003							
November, 2003							
December, 2003							
January, 2004							
February, 2004							
March, 2004							
April, 2004	0		1				
May, 2004	1	1		1			
June, 2004	2	1			1		
July, 2004	0		1				
August, 2004	0		1				
September, 2004							
October, 2004							
November, 2004							
December, 2004							
January, 2005							
February, 2005							
March, 2005							
April, 2005							
May, 2005							
June, 2005							
July, 2005							
August, 2005							
September, 2005							
October, 2005							
November, 2005							
December, 2005							
January, 2006							
February, 2006							
March, 2006			1				
April, 2006	0		1				
May, 2006	0		1				
June, 2006	0		1				
July, 2006	0		1				
August, 2006	1	1		1			
September, 2006	1	1		1			
October, 2006	1	1		1			
November, 2006	1	1		1			
December, 2006							

Week	U.S. Drought Monitor Rating	Drought? (Read Only)	Extent Calculators (Read Only)				
			D0	D1	D2	D3	D4
January, 2007	1	1		1			
February, 2007							
March, 2007							
April, 2007	0		1				
May, 2007	1	1		1			
June, 2007	1	1		1			
July, 2007	0		1				
August, 2007	1	1		1			
September, 2007	1	1		1			
October, 2007	0		1				
November, 2007	1	1		1			
December, 2007	2	1			1		
January, 2008	2	1			1		
February, 2008	2	1			1		
March, 2008	1	1		1			
April, 2008	0		1				
May, 2008	0		1				
June, 2008	0		1				
July, 2008	2	1			1		
August, 2008	2	1			1		
September, 2008	2	1			1		
October, 2008	3	1				1	
November, 2008	2	1			1		
December, 2008	1	1		1			
January, 2009							
February, 2009							
March, 2009	1	1		1			
April, 2009							
May, 2009							
June, 2009							
July, 2009	0		1				
August, 2009	0		1				
September, 2009	0		1				
October, 2009							
November, 2009							
December, 2009							
January, 2010							
February, 2010							
March, 2010							
April, 2010							
May, 2010							
June, 2010							

Week	U.S. Drought Monitor Rating	Drought? (Read Only)	Extent Calculators (Read Only)				
			D0	D1	D2	D3	D4
July, 2010							
August, 2010							
September, 2010							
October, 2010	0		1				
November, 2010	0		1				
December, 2010	1	1		1			
January, 2011	1	1		1			
February, 2011	1	1		1			
March, 2011	0		1				
April, 2011	1	1		1			
May, 2011	1	1		1			
June, 2011	2	1			1		
July, 2011	3	1				1	
August, 2011	3	1				1	
September, 2011	3	1				1	
October, 2011	3	1				1	
November, 2011	3	1				1	
December, 2011	2	1			1		
January, 2012	3	1				1	
February, 2012	3	1				1	
March, 2012	3	1				1	
April, 2012	3	1				1	
May, 2012	4	1					1
June, 2012	3	1				1	
July, 2012	3	1				1	
August, 2012	3	1				1	
September, 2012	2	1			1		
October, 2012	3	1				1	
November, 2012	2	1			1		
December, 2012	3	1				1	
January, 2013	3	1				1	
February, 2013	3	1				1	
March, 2013	2	1			1		
April, 2013	0		1				
May, 2013							
June, 2013							
July, 2013							
August, 2013							
September, 2013							
October, 2013							
November, 2013	0		1				
December, 2013	0		1				

Week	U.S. Drought Monitor Rating	Drought? (Read Only)	Extent Calculators (Read Only)				
			D0	D1	D2	D3	D4
January, 2014							
February, 2014							
March, 2014							
April, 2014							
May, 2014							
June, 2014							
July, 2014							
August, 2014							
September, 2014							
October, 2014							
November, 2014							
December, 2014							
Totals by D rating			**27**	**34**	**21**	**26**	**3**
Number months in drought status		**84**					

Key:

"U.S. Drought Monitor rating" column: (Number correspondes to the rating used by the U.S. Drought Monitoring Service)

No Number = not rated
0 = D0 - Abnormally Dry
1 = D1 - Moderate Drought
2 = D2 - Severe Drought
3 = D3 - Extreme Drought
4 = D4 - Exceptional Drought

"Drought?" and "Extent Calculators" Columns: (Automatically filled in)

0 = Not considered to be in a drought by US Drought Monitor (D0 or no rating)
1 = Considered to be in a drought by US Drought Monitor (D1 or greater)

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Jefferson County All Jurisdictions
Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	25,744	25,744	100.000%	339,986,035	339,986,035	100.000%	16,930	16,930	100%
Commercial	3,107	3,107	100.000%	128,821,310	128,821,310	100.000%	16,930	16,930	100%
Industrial	369	369	100.000%	228,903,453	228,903,453	100.000%	1,865	1,865	100%
Agricultural/Forestry	6,789	6,789	100.000%	495,536,008	495,536,008	100.000%	622	622	100%
Religious/Non-profit	680	680	100.000%	28,022,263	28,022,263	100.000%	16,930	16,930	100%
Government	587	587	100.000%	48,191,470	48,191,469	100.000%	278	278	100%
Education	38	38	100.000%	10,745,091	10,745,091	100.000%	3,071	3,071	100%
Utilities	49	49	100.000%	117,891,820	117,891,820	100.000%	30	30	100%
Total	37,363	37,363	100.000%	1,398,097,448	1,398,097,447	100.000%	16,930	16,930	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Unincorporated Jefferson County
Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	14,580	14,580	100.000%	194,400,125	194,400,125	100.000%	9,219	9,219	100%
Commercial	911	911	100.000%	41,068,853	41,068,853	100.000%	9,219	9,219	100%
Industrial	165	165	100.000%	171,488,863	171,488,863	100.000%	781	781	100%
Agricultural/Forestry	6,663	6,663	100.000%	488,564,273	488,564,273	100.000%	586	586	100%
Religious/ Non-profit	373	373	100.000%	13,881,963	13,881,963	100.000%	9,219	9,219	100%
Government	117	117	100.000%	18,480,838	18,480,838	100.000%	79	79	100%
Education	22	22	100.000%	9,945,283	9,945,283	100.000%	1,259	1,259	100%
Utilities	19	19	100.000%	102,098,505	102,098,505	100.000%	12	12	100%
Total	22,850	22,850	100.000%	1,039,928,700	1,039,928,700	100.000%	9,219	9,219	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Avera

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	648	648	100.000%	5,033,888	5,033,888	100.000%	246	246	100%
Commercial	30	30	100.000%	79,148	79,148	100.000%	246	246	100%
Industrial	0	0	100.000%	0	0	100.000%	0	0	100%
Agricultural/Forestry	16	16	100.000%	485,968	485,968	100.000%	4	4	100%
Religious/Non-profit	22	22	100.000%	458,000	458,000	100.000%	246	246	100%
Government	26	26	100.000%	198,958	198,958	100.000%	7	7	100%
Education	0	0	100.000%	0	0	100.000%	0	0	100%
Utilities	3	3	100.000%	377,345	377,345	100.000%	2	2	100%
Total	745	745	100.000%	6,633,305	6,633,305	100.000%	246	246	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Bartow

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	533	533	100.000%	6,397,115	6,397,115	100.000%	286	286	100%
Commercial	94	94	100.000%	1,210,733	1,210,733	100.000%	286	286	100%
Industrial	0	0	100.000%	-	-	100.000%	0	0	100%
Agricultural/Forestry	4	4	100.000%	1,977,710	1,977,710	100.000%	0	0	100%
Religious/Non-profit	15	15	100.000%	324,838	324,838	100.000%	286	286	100%
Government	27	27	100.000%	565,448	565,448	100.000%	7	7	100%
Education	0	0	100.000%	-	-	100.000%	0	0	100%
Utilities	4	4	100.000%	1,977,710	1,977,710	100.000%	2	2	100%
Total	677	677	100.000%	12,453,553	12,453,553	100.000%	286	286	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Louisville

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	3,318	3,318	100.000%	46,372,040	46,372,040	100.000%	2,493	2,493	100%
Commercial	902	902	100.000%	38,884,098	38,884,098	100.000%	2,493	2,493	100%
Industrial	24	24	100.000%	1,299,218	1,299,218	100.000%	318	318	100%
Agricultural/Forestry	23	23	100.000%	675,083	675,083	100.000%	8	8	100%
Religious/Non-profit	97	97	100.000%	6,659,340	6,659,340	100.000%	2,493	2,493	100%
Government	181	181	100.000%	20,256,798	20,256,798	100.000%	100	100	100%
Education	3	3	100.000%	55,940	55,940	100.000%	568	568	100%
Utilities	3	3	100.000%	3,894,490	3,894,490	100.000%	6	6	100%
Total	4,551	4,551	100.000%	118,097,005	118,097,005	100.000%	2,493	2,493	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Stapleton

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	812	812	100.000%	8,880,363	8,880,363	100.000%	438	438	100%
Commercial	75	75	100.000%	873,823	873,823	100.000%	438	438	100%
Industrial	4	4	100.000%	19,825	19,825	100.000%	0	0	100%
Agricultural/Forestry	6	6	100.000%	1,013,588	1,013,588	100.000%	4	4	100%
Religious/ Non-profit	19	19	100.000%	423,808	423,808	100.000%	438	438	100%
Government	32	32	100.000%	678,190	678,190	100.000%	12	12	100%
Education	9	9	100.000%	180,330	180,330	100.000%	0	0	100%
Utilities	6	6	100.000%	1,013,588	1,013,588	100.000%	2	2	100%
Total	963	963	100.000%	13,083,513	13,083,513	100.000%	438	438	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Wadley

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	2,852	2,852	100.000%	33,301,175	33,301,175	100.000%	2,061	2,061	100%
Commercial	364	364	100.000%	13,931,848	13,931,848	100.000%	2,061	2,061	100%
Industrial	104	104	100.000%	36,872,950	36,872,950	100.000%	454	454	100%
Agricultural/Forestry	50	50	100.000%	1,783,253	1,783,253	100.000%	12	12	100%
Religious/ Non-profit	54	54	100.000%	1,726,628	1,726,628	100.000%	2,061	2,061	100%
Government	102	102	100.000%	3,002,377	3,002,377	100.000%	36	36	100%
Education	2	2	100.000%	305,201	305,201	100.000%	292	292	100%
Utilities	10	10	100.000%	4,684,903	4,684,903	100.000%	3	3	100%
Total	3,538	3,538	100.000%	95,608,333	95,608,333	100.000%	2,061	2,061	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?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
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: Wrens

Hazard: Drought, Wildfire, Severe Weather, Winter Storm

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	3,001	3,001	100.000%	45,601,330	45,601,330	100.000%	2,187	2,187	100%
Commercial	731	731	100.000%	32,772,810	32,772,810	100.000%	2,187	2,187	100%
Industrial	72	72	100.000%	19,222,598	19,222,598	100.000%	312	312	100%
Agricultural/Forestry	27	27	100.000%	1,036,135	1,036,135	100.000%	8	8	100%
Religious/ Non-profit	100	100	100.000%	4,547,688	4,547,688	100.000%	2,187	2,187	100%
Government	102	102	100.000%	5,008,863	5,008,862	100.000%	37	37	100%
Education	2	2	100.000%	258,338	258,338	100.000%	952	952	100%
Utilities	4	4	100.000%	3,845,280	3,845,280	100.000%	3	3	100%
Total	4,039	4,039	100.000%	112,293,040	112,293,039	100.000%	2,187	2,187	100%

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

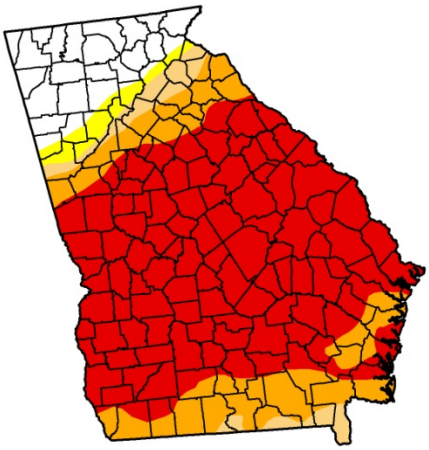
	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine 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

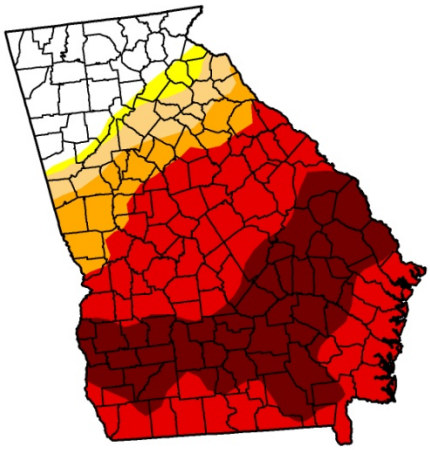
Drought Severity

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

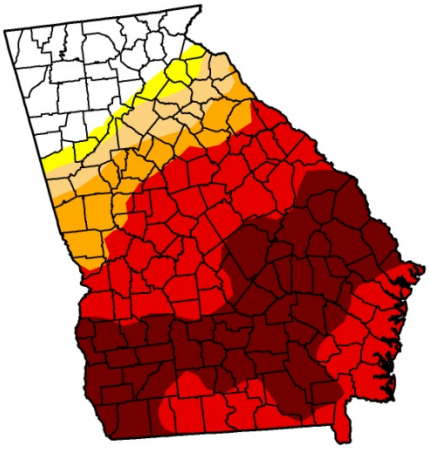
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
January 8, 2013	2.36	97.64	87.21	63.68	36.61	10.25
January 1, 2013	1.63	98.37	89.49	64.87	36.96	10.25
December 25, 2012	0.69	99.31	90.61	68.55	37.41	13.53
December 18, 2012	3.24	96.76	88.18	69.78	38.48	13.53
December 11, 2012	3.24	96.76	88.18	69.31	38.48	13.53
December 4, 2012	3.25	96.75	88.10	68.41	37.90	13.53
November 27, 2012	3.92	96.08	86.93	64.73	34.15	13.53
November 20, 2012	6.93	93.07	71.79	53.10	31.81	13.53
November 13, 2012	9.02	90.98	59.92	49.22	27.24	13.53
November 6, 2012	11.09	88.91	55.17	42.56	26.70	13.98
October 30, 2012	19.23	80.77	53.00	40.78	23.25	10.03
October 23, 2012	39.60	60.40	47.11	40.12	23.25	10.03
October 16, 2012	40.73	59.27	46.56	39.53	22.69	9.93
October 9, 2012	44.69	55.31	45.58	37.07	21.78	9.03
October 2, 2012	42.42	57.58	47.77	38.67	21.78	9.03
September 25, 2012	37.30	62.70	52.44	42.66	34.04	17.18
September 18, 2012	37.30	62.70	52.44	42.66	33.74	16.14
September 11, 2012	37.30	62.70	52.44	42.66	33.74	16.88
September 4, 2012	38.07	61.93	52.44	42.66	33.74	16.88
August 28, 2012	37.76	62.24	52.85	44.03	34.36	16.88
August 21, 2012	31.03	68.97	57.36	45.36	37.67	16.98
August 14, 2012	30.90	69.10	57.36	45.36	37.67	16.98
August 7, 2012	21.82	78.18	66.64	54.41	40.24	24.23
July 31, 2012	18.57	81.43	71.38	56.47	40.95	24.57
July 24, 2012	18.45	81.55	71.38	56.47	40.95	23.43
July 17, 2012	17.09	82.91	71.46	55.40	37.90	21.19
July 10, 2012	12.29	87.71	75.71	59.14	38.44	21.73
July 3, 2012	13.82	86.18	74.86	59.14	37.24	19.98
June 26, 2012	13.91	86.09	67.20	54.97	31.72	19.98
June 19, 2012	15.67	84.33	70.19	56.76	26.75	13.82
June 12, 2012	11.48	88.52	78.80	65.41	26.37	13.21
June 5, 2012	10.49	89.51	82.65	68.45	49.97	26.43
May 29, 2012	7.54	92.46	83.61	75.12	58.37	26.92

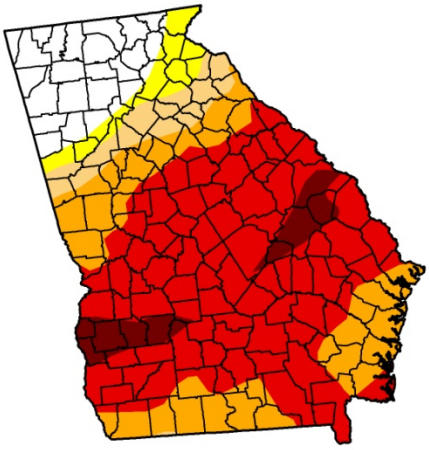
May 22, 2012	7.54	92.46	86.05	79.30	67.95	28.31
May 15, 2012	7.54	92.46	86.05	80.85	69.35	28.44
May 8, 2012	3.51	96.49	88.24	83.05	70.89	25.81
May 1, 2012	3.50	96.50	88.56	84.28	70.94	25.85
April 24, 2012	7.11	92.89	84.28	79.01	66.35	20.15
April 17, 2012	4.39	95.61	84.94	79.01	66.35	20.15
April 10, 2012	4.52	95.48	84.22	77.66	63.07	11.32
April 3, 2012	8.30	91.70	83.12	77.59	57.19	5.61
March 27, 2012	8.30	91.70	83.12	77.59	57.16	5.57
March 20, 2012	9.28	90.72	83.12	77.59	57.16	5.57
March 13, 2012	12.49	87.51	83.12	77.48	57.16	5.57
March 6, 2012	12.49	87.51	83.12	77.48	57.16	5.57
February 28, 2012	12.49	87.51	83.12	77.55	69.01	30.35
February 21, 2012	12.83	87.17	83.12	77.55	69.01	30.35
February 14, 2012	13.88	86.12	83.12	77.55	69.01	34.06
February 7, 2012	14.41	85.59	83.07	77.55	68.97	29.54
January 31, 2012	14.41	85.59	83.07	77.34	67.38	16.52
January 24, 2012	14.41	85.59	83.07	77.34	67.38	4.34
January 17, 2012	12.21	87.79	85.28	82.55	74.99	4.48
January 10, 2012	12.07	87.93	85.36	81.00	63.92	0.00
January 3, 2012	12.07	87.93	85.36	81.00	63.92	0.00



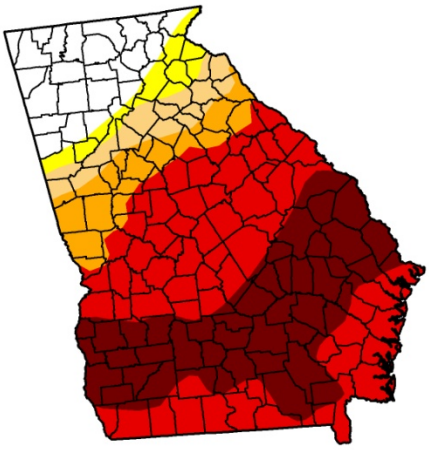


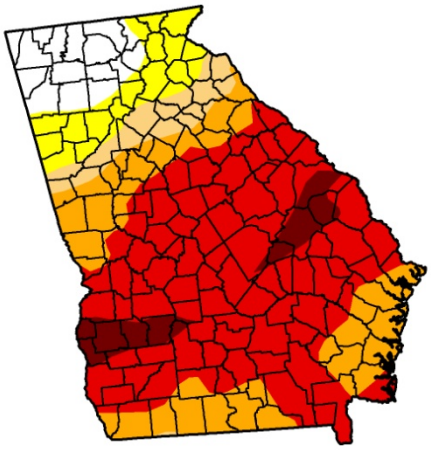
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
January 3, 2012	12.07	87.93	85.36	81.00	63.92	0.00
February 7, 2012	14.41	85.59	83.07	77.55	68.97	29.54



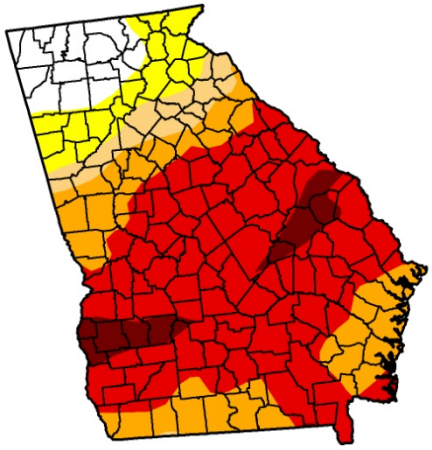


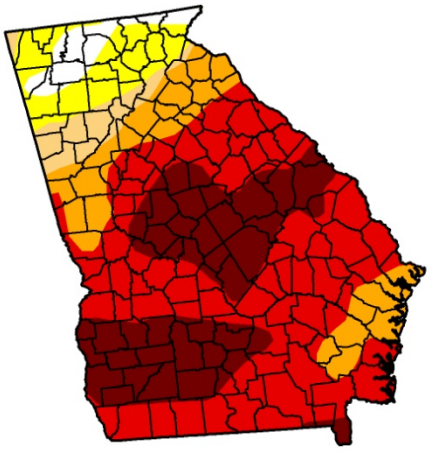
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
February 14, 2012	13.88	86.12	83.12	77.55	69.01	34.06
March 13, 2012	12.49	87.51	83.12	77.48	57.16	5.57



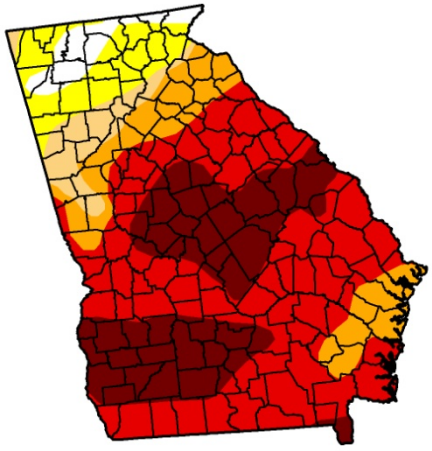


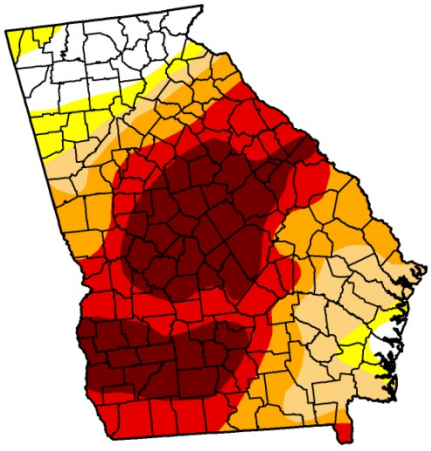
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
February 21, 2012	12.83	87.17	83.12	77.55	69.01	30.35
March 27, 2012	8.30	91.70	83.12	77.59	57.16	5.57



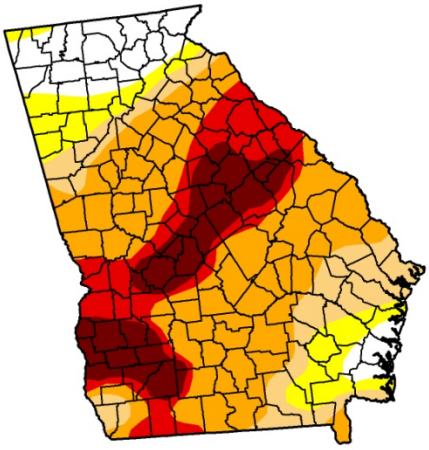


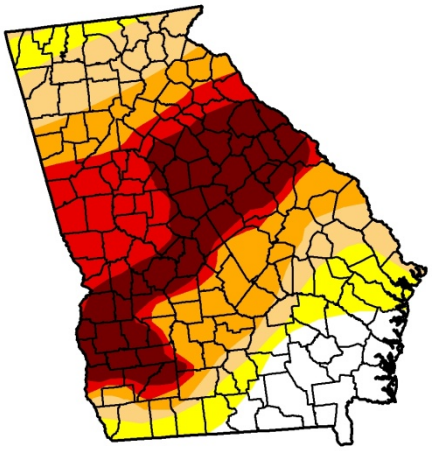
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
April 3, 2012	8.30	91.70	83.12	77.59	57.19	5.61
May 1, 2012	3.50	96.50	88.56	84.28	70.94	25.85



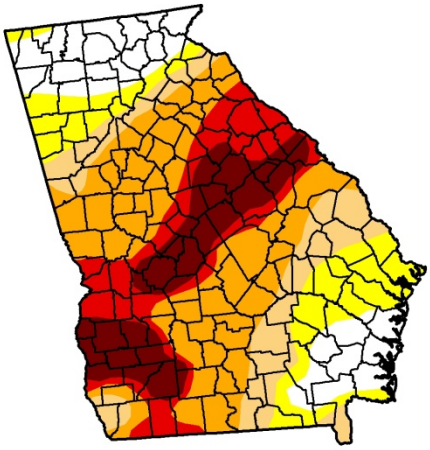


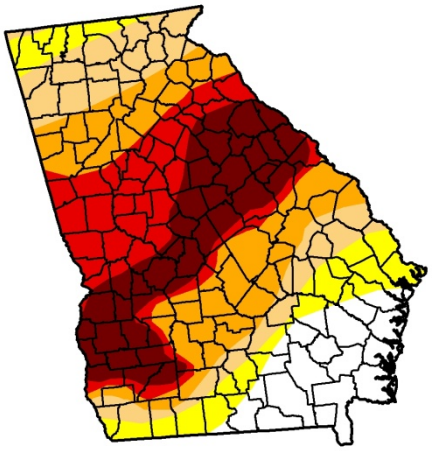
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
May 8, 2012	3.51	96.49	88.24	83.05	70.89	25.81
June 5, 2012	10.49	89.51	82.65	68.45	49.97	26.43



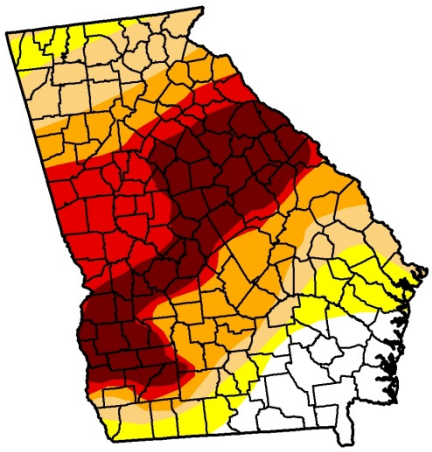


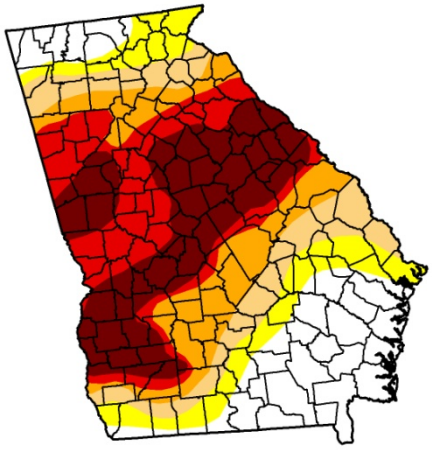
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
June 12, 2012	11.48	88.52	78.80	65.41	26.37	13.21
July 10, 2012	12.29	87.71	75.71	59.14	38.44	21.73



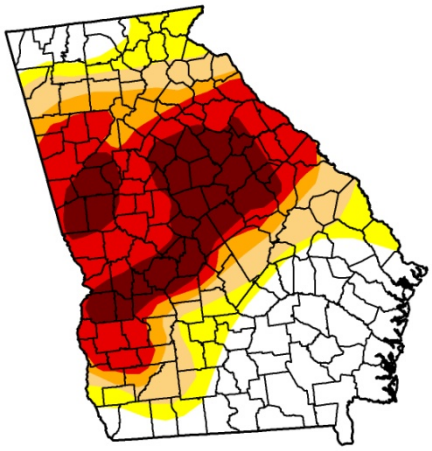


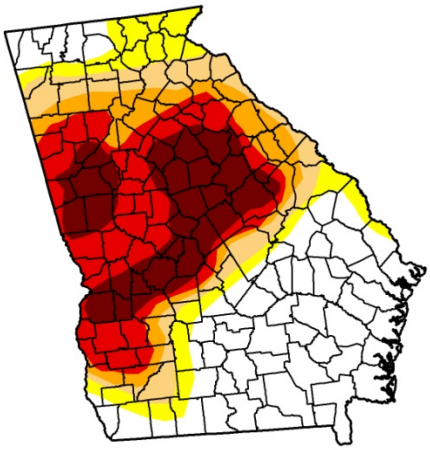
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
June 19, 2012	15.67	84.33	70.19	56.76	26.75	13.82
July 3, 2012	13.82	86.18	74.86	59.14	37.24	19.98



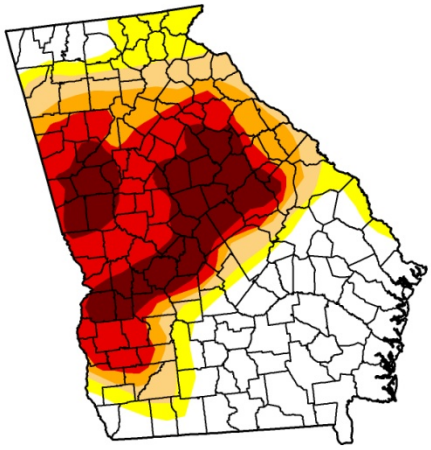


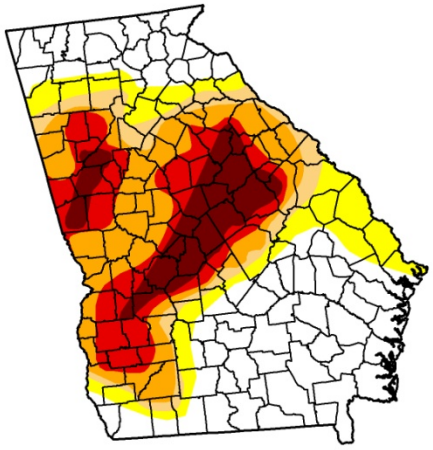
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
July 10, 2012	12.29	87.71	75.71	59.14	38.44	21.73
August 7, 2012	21.82	78.18	66.64	54.41	40.24	24.23



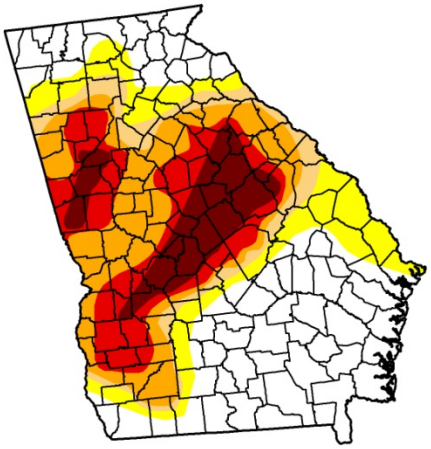


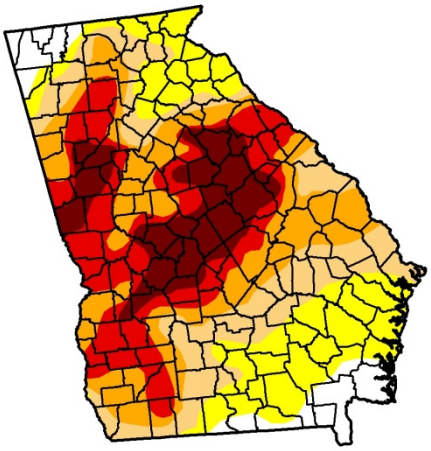
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
August 14, 2012	30.90	69.10	57.36	45.36	37.67	16.98
September 11, 2012	37.30	62.70	52.44	42.66	33.74	16.88



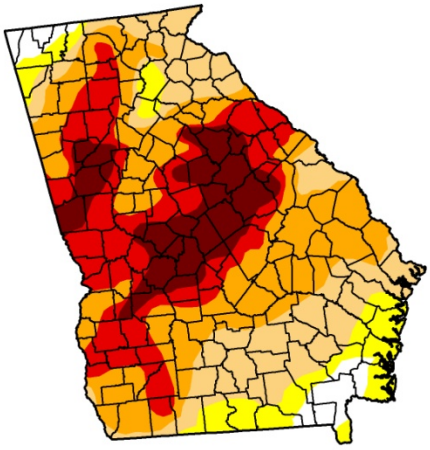


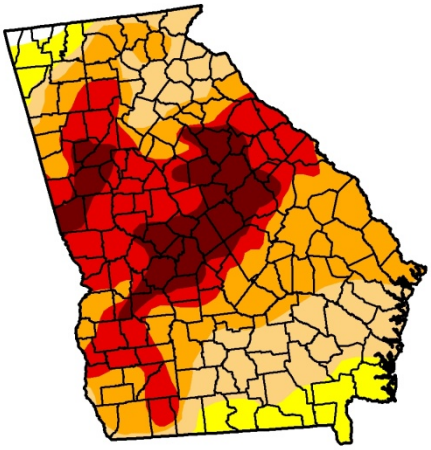
Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
September 18, 2012	37.30	62.70	52.44	42.66	33.74	16.14
October 16, 2012	40.73	59.27	46.56	39.53	22.69	9.93





Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
October 23, 2012	39.60	60.40	47.11	40.12	23.25	10.03
November 20, 2012	6.93	93.07	71.79	53.10	31.81	13.53

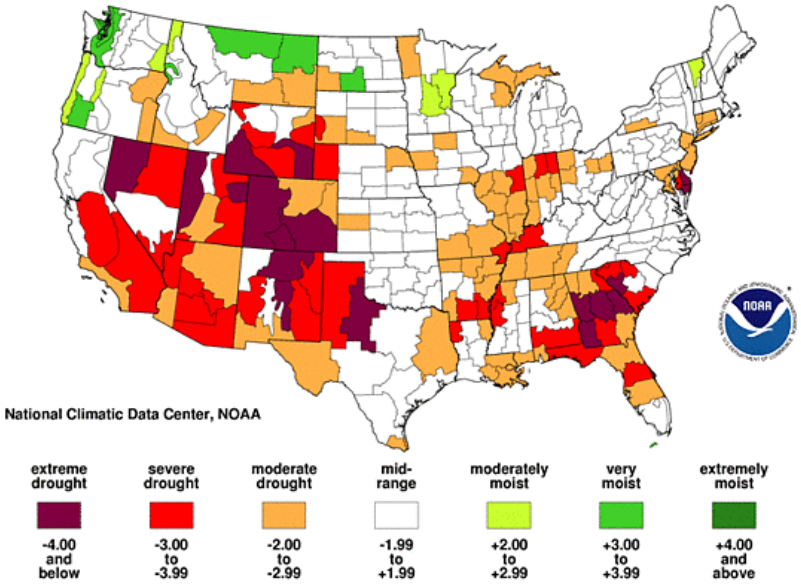




Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
November 27, 2012	3.92	96.08	86.93	64.73	34.15	13.53
December 25, 2012	0.69	99.31	90.61	68.55	37.41	13.53

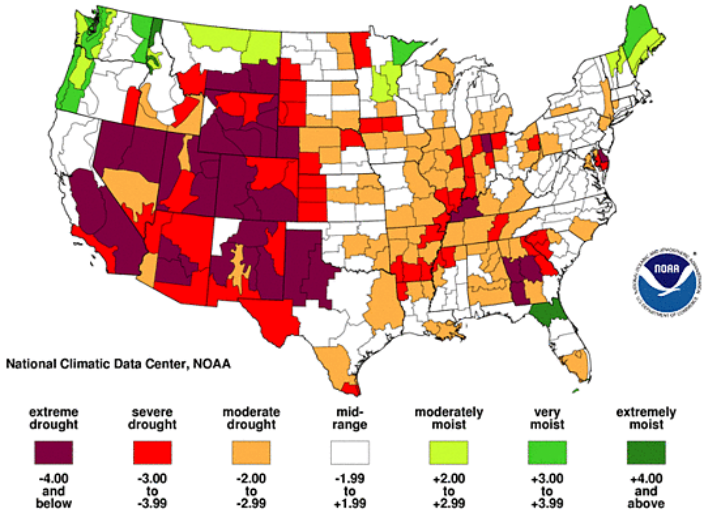
Palmer Drought Index
Long-Term (Meteorological) Conditions

May 2012



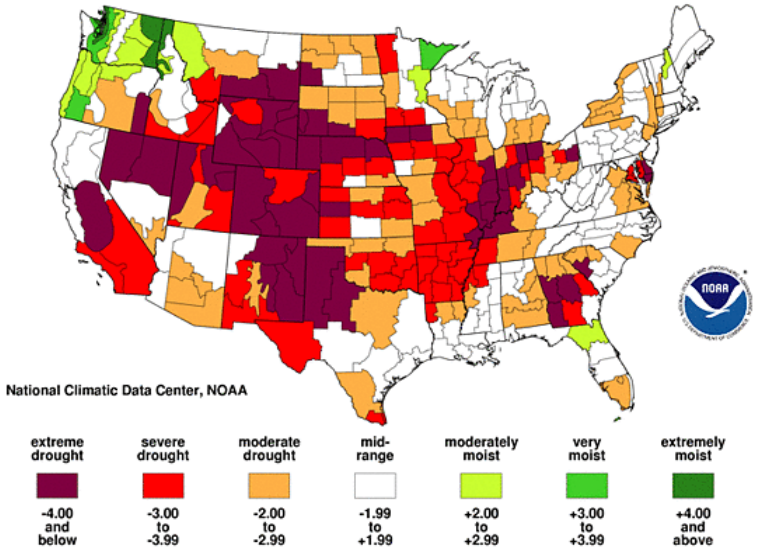
Palmer Drought Index
Long-Term (Meteorological) Conditions

June 2012



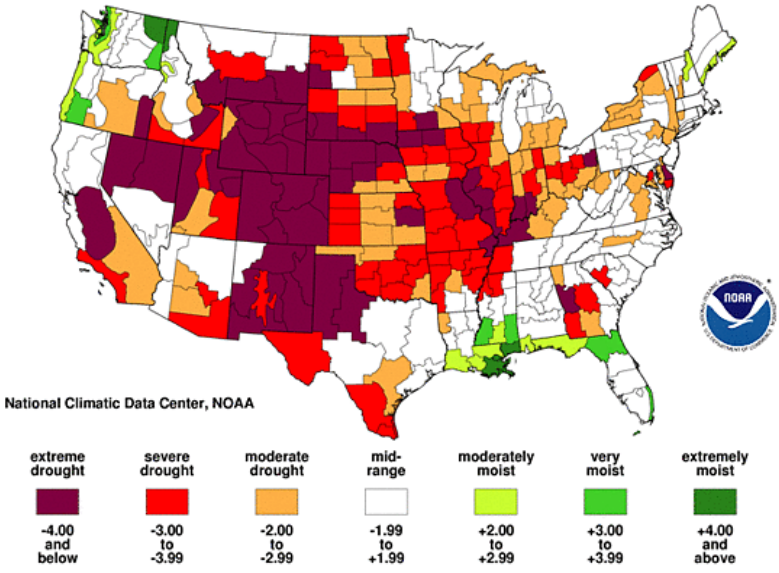
Palmer Drought Index
Long-Term (Meteorological) Conditions

July 2012



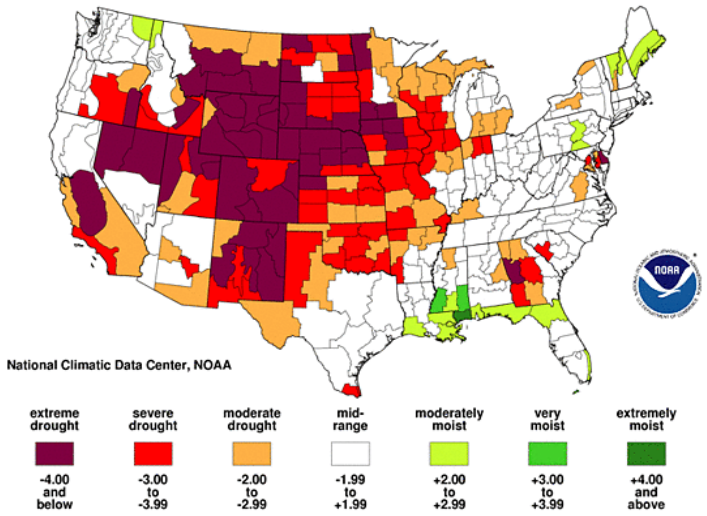
Palmer Drought Index
Long-Term (Meteorological) Conditions

August 2012



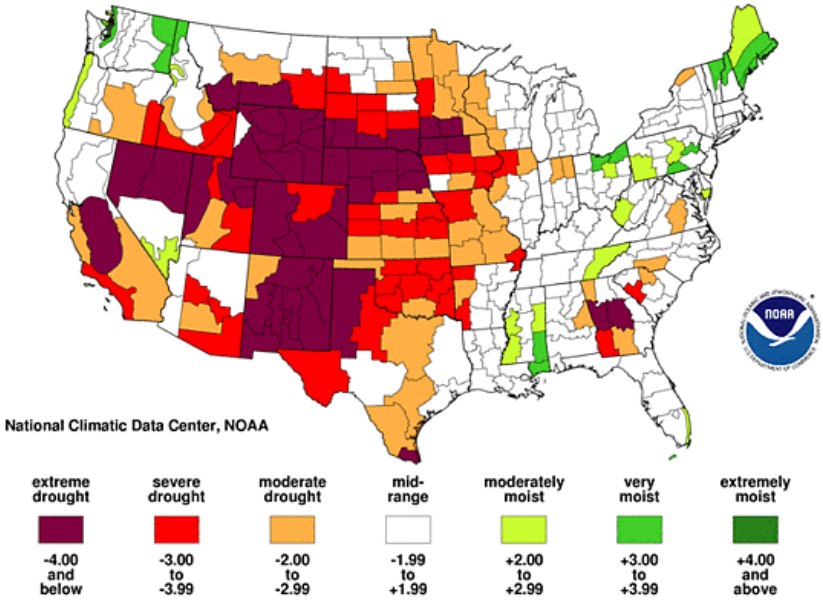
Palmer Drought Index
Long-Term (Meteorological) Conditions

September 2012



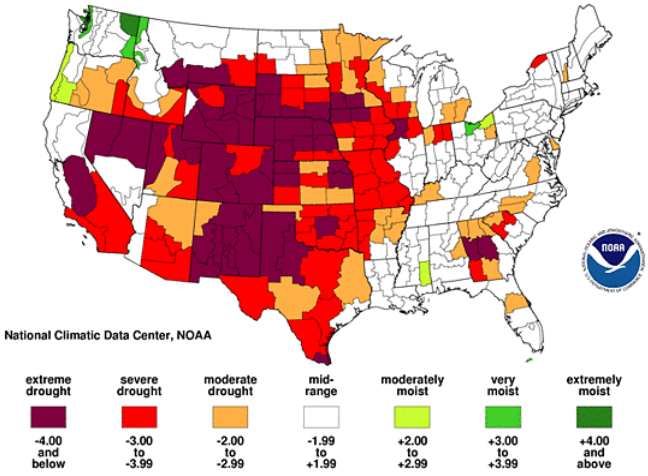
Palmer Drought Index
Long-Term (Meteorological) Conditions

October 2012



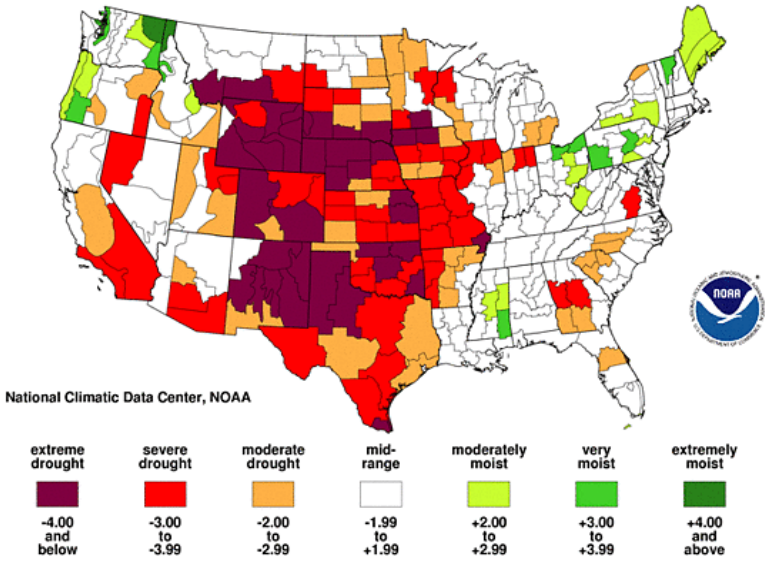
Palmer Drought Index
Long-Term (Meteorological) Conditions

November 2012



Palmer Drought Index
Long-Term (Meteorological) Conditions

December 2012



Wildfire

Jefferson County is comprised of 339,991 acres in the county. There are 302,033 (88.9%) acres dedicated to agricultural and forestry uses. Given the right weather conditions and variables, wildfire, due to natural causes, creates a potential threat to the lives of residents and property in the planning area. The NCDC has never reported a significant wildfire event in Jefferson County.

The committee reviewed historical data from the Georgia Forestry Commission, which is not found in the NCDC database, to research wildfire events in Jefferson County. The GFC provides wildfire data on man-made and natural wildfire occurrences for the county as a whole and not for individual jurisdictions. This plan will address only natural disasters. According to Georgia Forestry data, from 1957 to 2013, there have been 2,814 fire events burning a total of 15,997 acres for an average extent of 5.68 acres. Of these 2,814 fire events 168 were a result of lightning strikes that burned 1,505 acres. Based on best available data 168 wildfire events as a result of lightning occurred in the unincorporated areas of the county. While data was collected looking at 57 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle there is a 455% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4.5 wildfires as a result of lightning annually.

The GMIS has 33 critical facilities with a hazard score of two (low probability) and 34 with a hazard score of one (very low probability). These 77 critical facilities with a wildfire hazard score greater than zero have an estimated potential loss of more than $192 million. The loss for all critical facilities is $307,852,123. According to FEMA Worksheet #3a there are 37,363 structures/properties with a population of 16,930 with a value of slightly more than $1.3 billion worth of assets countywide. If a wildfire started, it is not likely that all of these structures/properties would be affected.

	Total	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1957	41	0	1	6	8	23	0	0	0	3
1958	44	1	3	12	10	10	5	0	0	3
1959	35	0	1	3	5	18	2	0	0	6
1960	55	1	2	4	12	28	1	0	0	7
1961	60	0	3	8	11	32	1	1	0	4
1962	49	5	3	0	16	24	1	0	0	0
1963	47	0	4	0	18	22	0	3	0	0
1964	40	0	5	0	14	20	1	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	76	0	2	0	17	28	27	2	0	0
1967	54	0	6	0	14	18	15	1	0	0
1968	53	1	5	0	7	30	7	3	0	0
1969	51	2	4	0	14	23	3	5	0	0
1970	39	4	3	1	4	24	1	2	0	0
1971	29	0	1	0	3	18	3	4	0	0
1972	45	2	2	0	10	24	5	2	0	0
1973	53	1	2	0	10	26	12	2	0	0
1974	59	1	5	0	7	32	8	6	0	0
1975	45	1	5	0	5	22	8	1	2	1
1976	61	3	11	0	3	37	5	0	2	0
1977	51	5	10	0	9	21	1	0	1	4
1978	54	2	9	0	6	31	3	0	0	3
1979	43	0	3	1	10	22	7	0	0	0
1980	46	2	4	1	9	27	1	0	0	2
1981	61	1	6	0	5	33	8	0	2	6
1982	24	0	4	0	5	11	1	0	0	3
1983	57	3	29	1	3	17	1	0	0	3
1984	43	0	9	0	9	22	0	0	0	3
1985	58	2	2	0	13	30	2	4	1	4
1986	44	10	5	1	7	12	0	0	2	7
1987	55	8	2	0	13	22	1	1	0	8
1988	39	2	0	0	4	25	1	0	3	4
1989	24	0	0	0	6	14	1	0	1	2
1990	51	4	1	0	9	19	2	0	3	13

	Total	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1991	35	0	1	0	2	22	5	3	0	2
1992	20	1	0	0	0	11	4	0	0	4
1993	62	15	6	0	4	25	1	0	3	8
1994	33	1	2	0	5	18	4	0	1	2
1995	39	5	0	0	6	20	0	0	2	6
1996	44	3	4	0	7	26	1	0	0	3
1997	40	1	4	0	3	23	4	0	0	5
1998	34	4	4	0	6	17	2	0	0	1
1999	69	3	3	1	13	28	15	0	1	5
2000	34	5	6	0	2	12	1	0	1	7
2001	39	2	5	0	5	20	0	0	2	5
2002	56	14	4	1	3	15	3	0	1	15
2003	13	1	1	0	0	9	0	0	0	2
2004	69	2	13	0	1	41	1	0	3	8
2005	72	3	26	0	0	28	0	1	2	12
2006	101	5	23	2	4	47	1	1	6	12
2007	92	7	19	2	0	38	9	1	3	13
2008	74	6	18	0	2	38	0	0	3	7
2009	41	4	6	0	0	26	1	0	1	3
2010	60	4	10	3	0	28	1	0	5	9
2011	112	13	17	2	2	42	0	1	13	22
2012	48	8	5	0	0	20	0	2	3	10
2013	41	0	5	1	0	26	1	2	1	5
2014	0	0	0	0	0	0	0	0	0	0
	2773	168								

	Total	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
CY 1957	413.41	0	11	67.1	194.21	130.3	0.00	0	0.00	10.8
1958	533.80	10.14	97.12	115.81	56.83	143.84	81.72	0.00	0.00	28.34
1959	443.74	0.00	5.00	131.61	21.89	179.95	3.79	0.00	0.00	101.50
1960	543.54	19.04	0.92	41.78	100.20	236.32	0.67	0.00	0.00	144.61
1961	420.30	0.00	20.77	38.62	59.80	290.24	0.81	1.89	0.00	8.17
1962	412.22	16.59	12.05	0.00	78.88	268.38	36.32	0.00	0.00	0.00
1963	201.70	0.00	13.48	0.00	67.97	107.82	0.00	12.43	0.00	0.00
1964	218.27	0.00	39.95	0.00	95.85	57.64	24.83	0.00	0.00	0.00
1965	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1966	747.03	0.00	1.24	0.00	159.08	117.98	461.23	7.50	0.00	0.00
1967	315.77	0.00	12.33	0.00	60.80	161.70	48.16	32.78	0.00	0.00
1968	262.85	7.91	11.26	0.00	27.02	126.85	82.25	7.56	0.00	0.00
1969	259.42	1.38	28.18	0.00	62.50	126.13	16.24	24.99	0.00	0.00
1970	139.94	28.19	12.45	9.27	15.67	70.51	1.47	2.38	0.00	0.00
1971	102.15	0.00	0.94	0.00	13.31	59.94	25.69	2.27	0.00	0.00
1972	140.04	4.66	2.92	0.00	41.36	56.16	32.56	2.38	0.00	0.00
1973	237.89	4.76	1.35	0.00	83.68	131.67	12.87	3.56	0.00	0.00
1974	222.75	8.21	13.63	0.00	48.98	125.09	20.92	5.92	0.00	0.00
1975	130.91	33.32	11.87	0.00	11.83	45.55	22.13	4.51	0.14	1.56
1976	205.18	9.48	21.72	0.00	9.67	143.90	19.90	0.00	0.51	0.00
1977	232.25	63.11	69.93	0.00	34.14	45.11	2.31	0.00	11.22	6.43
1978	217.14	2.34	20.38	0.00	8.18	172.47	2.26	0.00	0.00	11.51
1979	161.73	0.00	1.78	0.07	20.91	129.41	9.56	0.00	0.00	0.00
1980	392.81	3.42	5.27	0.13	39.39	336.93	5.22	0.00	0.00	2.45
1981	210.83	5.16	5.09	0.00	8.04	145.57	15.88	0.00	2.02	29.07
1982	92.61	0.00	44.51	0.00	11.66	17.11	2.71	0.00	0.00	16.62
1983	183.74	15.41	35.04	0.93	1.52	123.79	1.35	0.00	0.00	5.70
1984	183.64	0.00	55.92	0.00	19.51	32.20	0.00	0.00	0.00	76.01
1985	346.92	62.60	4.35	0.00	69.15	105.26	11.64	64.19	1.12	28.61

	Total	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1986	161.64	47.07	9.58	0.84	31.27	48.48	0.00	0.00	7.88	16.52
1987	158.35	36.48	9.40	0.00	50.46	36.05	0.26	0.45	0.00	25.25
1988	177.73	23.70	0.00	0.00	9.32	129.83	2.94	0.00	5.30	6.64
1989	99.14	0.00	0.00	0.00	39.55	55.30	0.00	0.00	0.45	3.84
1990	186.05	37.45	0.12	0.00	36.95	47.92	0.83	0.00	5.58	57.20
1991	295.07	0.00	0.79	0.00	12.65	114.22	82.22	1.77	0.00	83.42
1992	182.20	1.74	0.00	0.00	0.00	29.98	143.91	0.00	0.00	6.57
1993	372.05	196.21	12.26	0.00	5.76	147.60	0.00	0.00	1.81	8.41
1994	143.15	47.05	36.19	0.00	13.49	43.24	0.34	0.00	2.08	0.76
1995	109.18	21.86	0.00	0.00	26.32	37.78	0.00	0.00	6.13	17.09
1996	173.59	0.79	8.18	0.00	16.76	69.27	1.89	0.00	0.00	76.70
1997	202.84	0.66	20.62	0.00	32.79	100.43	20.09	0.00	0.00	28.25
1998	181.56	33.69	10.30	0.00	12.58	119.54	4.64	0.00	0.00	0.81
1999	241.71	35.06	2.05	0.00	74.80	105.67	18.94	0.00	1.50	3.69
1987	158.35	36.48	9.40	0.00	50.46	36.05	0.26	0.45	0.00	25.25
1988	177.73	23.70	0.00	0.00	9.32	129.83	2.94	0.00	5.30	6.64
1989	99.14	0.00	0.00	0.00	38.43	55.30	1.12	0.00	0.45	3.84
1990	186.05	37.45	0.12	0.00	36.95	47.92	25.28	0.00	5.58	32.75
1991	295.07	0.00	0.79	0.00	12.65	114.22	82.22	1.77	0.00	83.42
1992	182.20	1.74	0.00	0.00	0.00	29.98	143.91	0.00	0.00	6.57
1993	372.05	196.21	12.26	0.00	5.76	147.60	0.03	0.00	1.81	8.38
1994	143.15	47.05	36.19	0.00	12.48	43.24	1.59	0.00	1.84	0.76
1995	109.18	21.86	0.00	0.00	26.32	37.78	0.00	0.00	6.13	17.09
1996	173.59	0.79	8.18	0.00	16.76	69.27	1.89	0.00	0.00	76.70
1997	202.84	0.66	20.62	0.00	32.79	100.43	20.09	0.00	0.00	28.25
1998	181.56	33.69	10.30	0.00	12.58	119.54	4.64	0.00	0.00	0.81
1999	326.61	61.10	4.96	0.60	78.48	126.41	47.12	0.00	0.68	7.26
2000	262.55	24.48	108.05	0.00	3.31	93.52	0.10	0.00	0.56	32.53
2001	221.93	64.91	38.52	0.00	3.77	100.06	0.00	0.00	4.70	9.97
2002	333.93	55.29	22.82	11.22	10.18	79.59	5.32	0.00	0.11	149.40
2003	37.01	3.10	2.41	0.00	0.00	29.09	0.00	0.00	0.00	2.41

	Total	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
2004	245.47	19.13	35.05	0.00	1.40	182.92	0.15	0.00	3.72	3.10
2005	171.89	0.67	42.59	0.00	0.00	86.36	0.00	9.30	2.36	30.61
2006	233.34	4.20	98.00	1.56	5.88	93.72	0.01	0.22	0.90	28.85
2007	223.88	19.86	42.55	2.91	0.00	60.81	40.12	0.37	1.67	55.59
2008	234.22	7.66	30.94	0.00	3.33	178.97	0.00	0.00	0.97	12.35
2009	137.13	0.74	9.16	0.00	0.00	123.47	0.52	0.00	0.03	3.21
2010	165.06	9.01	6.26	20.58	0.00	122.42	0.20	0.00	1.50	5.09
2011	266.61	34.18	96.63	0.52	0.02	106.03	0.00	1.90	4.77	22.56
2012	99.05	23.06	2.17	0.00	0.00	45.34	0.00	4.13	0.58	23.77
2013	100.80	0.00	7.65	0.01	0.00	69.44	0.79	7.64	2.30	12.97
	15997.23	1504.50								

Reporting for Wildfire Ha ard Countywide
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Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Courthouse	Jefferson County Courthouse												6065	$5,147,708	2013	$125,000	2,013				2
Jefferson County	Courthouse	Jefferson County Magistrate and Juvenile Court												22000	$24,001,242	2013					20	2
Wadley city	City Hall	Wadley City Hall												3645	$1,500,000	2014	$250,000	2,014			5	2
Wrens city	Other	Wrens Community Center												3400	$500,000	2014	$50,000				20	2
Wrens city	City Hall	Wrens City Hall												7500	$1,125,000	2013	$150,000				10	2
Wrens city	Library	Wrens Old Library Building												3000	$625,000	2013	$549,200	2,013				2
Jefferson County	Other	Hardeman Building (Swann)												8278	$250,000	2013	$17,000	2,013			1	2
Jefferson County	County Jail	Old County Jail/IT/Purchasing												7742	$500,000	2013	$28,000	2,013			1	2
Jefferson County	Other	Jefferson County Chamber of Commerce/Murphy House												3281	$361,433	2013	$122,700	2,013			8	2
Jefferson County	Library	Jefferson County Library												5000	$66,085	2013	$848,000	2,013			10	2
Jefferson County	Emergency Services	Lions Club Evac. Center												1000	$12,000	2013						2
Jefferson County	Other	Jefferson County Commissioners Office/Long House												3080	$339,300	2013	$110,300	2,013			30	2
Jefferson County	Emergency Services	Jefferson County Armory Transit EMA												14040	$2,380,171	2013	$724,500	2,013			10	2
Jefferson County	Other	Jefferson County Senior Center												4924	$586,170	2013	$86,000	2,013			40	2
Wadley city	Other	Physicans Health Group Wadley												2318	$405,650	2013	$250,000	2,013			10	2
Wrens city	Other	Physicians Health Group Wrens												5802	$1,015,350	2013	$500,000	2,013			20	2
Louisville city	City Hall	Louisville OLD City Hall												10000	$500,000	2006						2
Louisville city	Water System	Louisville Water Works												2400	$4,425,000	2014						2
Louisville city	Water System	City of Louisville Water Tank												100	$500,000	2006						2
Louisville city	Other	Market House												600	$100,000	2013						2
Jefferson County	Elementary School	Carver Elementary												6600	$12,750,000	2013	$510,000	2,013			292	2

Reporting for Wildfire Ha ard Countywide
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Jefferson County	Elementary School	Louisville Academy Elementary												25047	$15,250,000	2013	$610,000	2,013			568	2
Jefferson County	Middle School	Wrens Middle School												59902	$17,000,000	2013	$680,000	2,013			315	2
Wrens city	Other	Wrens Medical Center												400	$875,000	2014	$200,000				20	2
Wadley city	Adult Edu. Center	Wadley Community Complex												6000	$700,000	2014						2
Wadley city	Library	Wadley Public Library												3114	$510,000	2013	$538,200	2,013			5	2
Wadley city	Water System	Wadley Elevated Water Tank												100	$650,000	2013						2
Wadley city	Other	Glendale Nursing Home												26500	$1,610,863	2014	$750,000	2,014			120	2
Wadley city	Other	Wadley Gym												1200	$400,000	2014						2
Louisville city	City Hall	Louisvill City Hall												7200	$550,000	2013	$350,000	2,013			10	2
Louisville city	Fire Station	Louisville Fire Station												7200	$750,000	2014	$850,000	2,014			4	2
Jefferson County	Other	JC Radio Tower												100	$27,885	2013	$8,000	2,013				2
Jefferson County	Other	JC Building Department												1000	$51,090	2013	$17,500	2,013				2
Totals for Jefferson County, Hazard Score = 2														258,538	$95,464,947		$8,324,400		$0	$0	1,519	
Jefferson County	Other	JC Recreation Dept												1867	$1,300,621	2013	$29,600	2,013				1
Jefferson County	Wastewater Treatment Plant	McBride Lift Station												100	$48,750	2013						1
Jefferson County	Wastewater Treatment Plant	Hillcrest Station												100	$45,700	2013						1
Jefferson County	Wastewater Treatment Plant	US # 1 Bypass Lift Station												100	$47,500	2013						1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Effluent Pump Station												100	$63,700	2013	$0					1
Bartow town	Other	Bartow Community Center & Auditorium												11232	$1,342,200	2013	$250,000	2,013			1	1

Reporting for Wildfire Ha ard Countywide
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Bartow town	Other	Bartow Fire Dept & Communications Bldg												64	$17,100	2013	$60,000	2,013				1
Bartow town	Other	Bartow Museum												2450	$826,847	2013		2,013			1	1
Wrens city	Other	Ka-Min #2												1955	$250,000	2014						1
Avera city	Water System	Avera Water Tank												100	$325,000	2013						1
Avera city	Fire Station	Avera Fire Station												4250	$100,000	2013	$200,000	2,013				1
Wrens city	Water System	Water Booster Station												1000	$500,000	2012						1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #4												100	$60,500	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #5												100	$90,200	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Treatment Pond												10307	$50,400	2013	$0					1
Wrens city	Other	KA-MIN #1												10	$250,000	2014						1
Wrens city	Wastewater Treatment Plant	Stephens St Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Waynesboro Highway Lift Station												100	$400,000	2014						1
Bartow town	City Hall	Bartow City Hall												1920	$209,300	2013	$53,500	2,013			3	1
Bartow town	Fire Station	Bartow Fire Dept and Emergency Shelter												7500	$330,630	2013	$38,500	2,013			1	1
Bartow town	Water System	Bartow Water Tower												100	$393,000	2013	$0					1
Bartow town	Water System	Bartow Water Well												275	$111,800	2013	$0					1
Bartow town	Water System	Bartow Water Well #2												275	$119,700	2013	$0					1
Jefferson County	Middle School	Louisville Middle School												81642	$23,500,000	2013	$940,000	2,013			354	1
Jefferson County	High School, Public	Jefferson County High School												179142	$55,000,000	2013	$2,200,000	2,013			937	1
Jefferson County	Other	Jefferson County Bus Shop												4920	$750,000	2013	$140,000	2,013			5	1

Reporting for Wildfire Ha ard Countywide
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Jefferson County	Public Vocational Technical School	Sandersville Tech												10000	$1,930,505	2013					75	1
Louisville city	Water System	Louisville Water Tower												100	$712,500	2014						1
Louisville city	Water System	Louisville City WaterTower												100	$950,000	2014						1
Louisville city	Airport	Louisville City Airport												3200	$543,665	2013						1
Louisville city	Other	OCI Nursing Home												45062	$5,000,000	2013					225	1
Wrens city	Water System	Wrens Water Tank												150	$625,000	2014						1
Wrens city	Water System	Wrens Water Pumping Station												64	$75,000	2014	$25,000					1
Avera city	City Hall	Avera City Hall												1000	$312,500	2014	$200,000	2,014			1	1
Totals for Jefferson County, Hazard Score = 1														369,485	$96,632,118		$4,136,600		$0	$0	1,603	
Stapleton city	City Hall	Stapleton City Hall & Emergency Shelter												3000	$383,700	2012	$30,000	2,012	$150,000		2	0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												144	$300,000	2014	$50,000					0
Wrens city	Wastewater Treatment Plant	Wrens Sewage Treatment Plant												1400	$3,250,000	2014	$125,000					0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												800	$75,000	2014	$25,000					0
Wrens city	Water System	Wrens Water Tank												250	$687,500	2014						0
Wrens city	Water System	Wrens Water Pumping Station												800	$125,000	2014	$25,000					0
Stapleton city	Water System	Stapleton Water Tank #2												100	$500,000	2012			$200,000			0
Stapleton city	Fire Station	Stapleton Fire house & Emergency Shelter												6000	$394,800	2012	$700,000	2,012	$100,000			0
Stapleton city	Water System	Stapleton Water Tank #1												100	$500,000	2012			$200,000			0

Reporting for Wildfire Ha ard Countywide
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Jefferson County	County Correctional Institution	Jefferson Co. Correction Facility												42446	$5,261,231	2013	$833,800	2,013			200	0
Jefferson County	Other	Ogeechee Service Center												10650	$900,000	2013		2,013			50	0
Jefferson County	Other	Jefferson Co. Law Enforcement Center												39892	$8,041,785	2013	$1,139,700	2,013			225	0
Jefferson County	Emergency Services	1st Baptist Church Evac Center												45075	$3,500,000	2013					5	0
Jefferson County	Hospital, Admissions Entrance	Jefferson Hospital												76000	$57,000,000	2013						0
Jefferson County	Other	Jefferson County Health Dept												6341	$841,815	2013	$191,700	2,013			20	0
Jefferson County	Other	Wrens Elementary												78216	$20,500,000	2013	$820,000	2,013			637	0
Jefferson County	Landfill	Jefferson County Landfill (New)												15000	$1,062,166	2013	$363,200	2,013			6	0
Jefferson County	C&D	JEFFERSON CO-US 1 (AVERA RD) (SL)												10000	$1,500,000	2013						0
Wadley city	Water System	Wadley Well House												100	$600,000	2013						0
Wadley city	Water System	Wadley Water Tower #2												100	$500,000	2013						0
Bartow town	Wastewater Treatment Plant	Bartow wastewater Lift Station #1												100	$70,300	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #2												100	$71,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #3												100	$69,000	2013	$0					0
Wrens city	Other	Border Regulator Station												100	$100,000	2012						0
Wrens city	Other	Calcine Meter Set												100	$225,000	2012						0
Wrens city	Other	Southern Tap #1												50	$750,000	2014						0
Wrens city	Wastewater Treatment Plant	Bushy Creek Lift Station												100	$400,000	2014						0
Wrens city	Other	Southern Tap #2												50	$750,000	2012						0

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Wrens city	Wastewater Treatment Plant	West Walker St Lift Station												100	$300,000	2014						0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Holding Pond												13509	$46,400	2013						0
Wrens city	Wastewater Treatment Plant	Highway 88 Lift Station												100	$350,000	2014						0
Wrens city	Other	IMERYS Meter Set												10	$300,000	2014						0
Louisville city	Wastewater Treatment Plant	Louisville Tech Lift Station												50	$125,000	2014			$125,000	$1,000		0
Louisville city	Wastewater Treatment Plant	Louisville Lift Station at HS												50	$150,000	2014			$150,000	$1,000		0
Louisville city	Other	Physicians Health Group Louisville												9560	$2,400,000	2014	$500,000	2,014			20	0
Louisville city	Other	NCA Northside Dialysis Center												7207	$1,261,225	2014					10	0
Jefferson County	Wastewater Treatment Plant	Matthews Station												100	$47,500	2013						0
Louisville city	Water System	Booster pump station												100	$175,000	2013						0
Wrens city	Water System	King Mill Well (Well E)												50	$750,000	2014						0
Jefferson County	Other	JC Fire TowerShop/Supply Building												4072	$241,236	2013	$9,800	2,013			2	0
Totals for Jefferson County, Hazard Score = 0														372,422	$115,755,058		$4,813,200		$925,000	$2,000	1,177	
Grand Totals														1,000,445	$307,852,123		$17,274,200		$925,000	$2,000	4,299	

- Pre-Disaster Mitigation
- Fiscal Year: 2009
- Report created: Aug 24, 2014
- For more information call GEMA Pre-Disaster Mitigation at 1-800-TRY-GEMA

Reporting for Wildfire Ha ard by Jurisdiction
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Avera city	City Hall	Avera City Hall												1000	$312,500	2014	$200,000	2,014			1	1
Avera city	Water System	Avera Water Tank												100	$325,000	2013						1
Avera city	Fire Station	Avera Fire Station												4250	$100,000	2013	$200,000	2,013				1
Totals for Avera city, Hazard Score = 1														5,350	$737,500		$400,000		$0	$0	1	
Bartow town	City Hall	Bartow City Hall												1920	$209,300	2013	$53,500	2,013			3	1
Bartow town	Fire Station	Bartow Fire Dept and Emergency Shelter												7500	$330,630	2013	$38,500	2,013			1	1
Bartow town	Water System	Bartow Water Tower												100	$393,000	2013	$0					1
Bartow town	Water System	Bartow Water Well												275	$111,800	2013	$0					1
Bartow town	Water System	Bartow Water Well #2												275	$119,700	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #4												100	$60,500	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #5												100	$90,200	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Treatment Pond												10307	$50,400	2013	$0					1
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Effluent Pump Station												100	$63,700	2013	$0					1
Bartow town	Other	Bartow Community Center & Auditorium												11232	$1,342,200	2013	$250,000	2,013			1	1
Bartow town	Other	Bartow Fire Dept & Communications Bldg												64	$17,100	2013	$60,000	2,013				1
Bartow town	Other	Bartow Museum												2450	$826,847	2013		2,013			1	1
Totals for Bartow town, Hazard Score = 1														34,423	$3,615,377		$402,000		$0	$0	6	
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Holding Pond												13509	$46,400	2013						0
Bartow town	Wastewater Treatment Plant	Bartow wastewater Lift Station #1												100	$70,300	2013	$0					0

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Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #2												100	$71,400	2013	$0					0
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #3												100	$69,000	2013	$0					0
Totals for Bartow town, Hazard Score = 0														13,809	$257,100		$0		$0	$0	0	
Jefferson County	Elementary School	Carver Elementary												6600	$12,750,000	2013	$510,000	2,013			292	2
Jefferson County	Elementary School	Louisville Academy Elementary												25047	$15,250,000	2013	$610,000	2,013			568	2
Jefferson County	Middle School	Wrens Middle School												59902	$17,000,000	2013	$680,000	2,013			315	2
Jefferson County	Courthouse	Jefferson County Courthouse												6065	$5,147,708	2013	$125,000	2,013				2
Jefferson County	Courthouse	Jefferson County Magistrate and Juvenile Court												22000	$24,001,242	2013					20	2
Jefferson County	Other	Hardeman Building (Swann)												8278	$250,000	2013	$17,000	2,013			1	2
Jefferson County	County Jail	Old County Jail/IT/Purchasing												7742	$500,000	2013	$28,000	2,013			1	2
Jefferson County	Other	Jefferson County Chamber of Commerce/Murphy House												3281	$361,433	2013	$122,700	2,013			8	2
Jefferson County	Library	Jefferson County Library												5000	$66,085	2013	$848,000	2,013			10	2
Jefferson County	Emergency Services	Lions Club Evac. Center												1000	$12,000	2013						2
Jefferson County	Other	Jefferson County Commissioners Office/Long House												3080	$339,300	2013	$110,300	2,013			30	2
Jefferson County	Emergency Services	Jefferson County Armory Transit EMA												14040	$2,380,171	2013	$724,500	2,013			10	2
Jefferson County	Other	Jefferson County Senior Center												4924	$586,170	2013	$86,000	2,013			40	2
Jefferson County	Other	JC Radio Tower												100	$27,885	2013	$8,000	2,013				2
Jefferson County	Other	JC Building Department												1000	$51,090	2013	$17,500	2,013				2
Totals for Jefferson County, Hazard Score = 2														168,059	$78,723,084		$3,887,000		$0	$0	1,295	

Reporting for Wildfire Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Other	JC Recreation Dept												1867	$1,300,621	2013	$29,600	2,013				1
Jefferson County	Wastewater Treatment Plant	McBride Lift Station												100	$48,750	2013						1
Jefferson County	Wastewater Treatment Plant	Hillcrest Station												100	$45,700	2013						1
Jefferson County	Wastewater Treatment Plant	US # 1 Bypass Lift Station												100	$47,500	2013						1
Jefferson County	High School, Public	Jefferson County High School												179142	$55,000,000	2013	$2,200,000	2,013			937	1
Jefferson County	Other	Jefferson County Bus Shop												4920	$750,000	2013	$140,000	2,013			5	1
Jefferson County	Public Vocational Technical School	Sandersville Tech												10000	$1,930,505	2013					75	1
Jefferson County	Middle School	Louisville Middle School												81642	$23,500,000	2013	$940,000	2,013			354	1
Totals for Jefferson County, Hazard Score = 1														277,871	$82,623,076		$3,309,600		$0	$0	1,371	
Jefferson County	Landfill	Jefferson County Landfill (New)												15000	$1,062,166	2013	$363,200	2,013			6	0
Jefferson County	Other	Jefferson County Health Dept												6341	$841,815	2013	$191,700	2,013			20	0
Jefferson County	Other	Wrens Elementary												78216	$20,500,000	2013	$820,000	2,013			637	0
Jefferson County	C&D	JEFFERSON CO-US 1 (AVERA RD) (SL)												10000	$1,500,000	2013						0
Jefferson County	Hospital, Admissions Entrance	Jefferson Hospital												76000	$57,000,000	2013						0
Jefferson County	County Correctional Institution	Jefferson Co. Correction Facility												42446	$5,261,231	2013	$833,800	2,013			200	0
Jefferson County	Other	Ogeechee Service Center												10650	$900,000	2013		2,013			50	0
Jefferson County	Other	Jefferson Co. Law Enforcement Center												39892	$8,041,785	2013	$1,139,700	2,013			225	0
Jefferson County	Emergency Services	1st Baptist Church Evac Center												45075	$3,500,000	2013					5	0

Reporting for Wildfire Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Wastewater Treatment Plant	Matthews Station												100	$47,500	2013						0
Jefferson County	Other	JC Fire TowerShop/Supply Building												4072	$241,236	2013	$9,800	2,013			2	0
Totals for Jefferson County, Hazard Score = 0														327,792	$98,895,733		$3,358,200		$0	$0	1,145	
Louisville city	City Hall	Louisvill City Hall												7200	$550,000	2013	$350,000	2,013			10	2
Louisville city	Fire Station	Louisville Fire Station												7200	$750,000	2014	$850,000	2,014			4	2
Louisville city	City Hall	Louisville OLD City Hall												10000	$500,000	2006						2
Louisville city	Water System	Louisville Water Works												2400	$4,425,000	2014						2
Louisville city	Water System	City of Louisville Water Tank												100	$500,000	2006						2
Louisville city	Other	Market House												600	$100,000	2013						2
Totals for Louisville city, Hazard Score = 2														27,500	$6,825,000		$1,200,000		$0	$0	14	
Louisville city	Water System	Louisville Water Tower												100	$712,500	2014						1
Louisville city	Water System	Louisville City WaterTower												100	$950,000	2014						1
Louisville city	Airport	Louisville City Airport												3200	$543,665	2013						1
Louisville city	Other	OCI Nursing Home												45062	$5,000,000	2013					225	1
Totals for Louisville city, Hazard Score = 1														48,462	$7,206,165		$0		$0	$0	225	
Louisville city	Wastewater Treatment Plant	Louisville Tech Lift Station												50	$125,000	2014			$125,000	$1,000		0
Louisville city	Wastewater Treatment Plant	Louisville Lift Station at HS												50	$150,000	2014			$150,000	$1,000		0
Louisville city	Other	Physicians Health Group Louisville												9560	$2,400,000	2014	$500,000	2,014			20	0
Louisville city	Other	NCA Northside Dialysis Center												7207	$1,261,225	2014					10	0
Louisville city	Water System	Booster pump station												100	$175,000	2013						0
Totals for Louisville city, Hazard Score = 0														16,967	$4,111,225		$500,000		$275,000	$2,000	30	
Stapleton city	Water System	Stapleton Water Tank #2												100	$500,000	2012			$200,000			0

Reporting for Wildfire Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Stapleton city	Fire Station	Stapleton Fire house & Emergency Shelter												6000	$394,800	2012	$700,000	2,012	$100,000			0
Stapleton city	Water System	Stapleton Water Tank #1												100	$500,000	2012			$200,000			0
Stapleton city	City Hall	Stapleton City Hall & Emergency Shelter												3000	$383,700	2012	$30,000	2,012	$150,000		2	0
Totals for Stapleton city, Hazard Score = 0														9,200	$1,778,500		$730,000		$650,000	$0	2	
Wadley city	Other	Physicans Health Group Wadley												2318	$405,650	2013	$250,000	2,013			10	2
Wadley city	City Hall	Wadley City Hall												3645	$1,500,000	2014	$250,000	2,014			5	2
Wadley city	Other	Glendale Nursing Home												26500	$1,610,863	2014	$750,000	2,014			120	2
Wadley city	Adult Edu. Center	Wadley Community Complex												6000	$700,000	2014						2
Wadley city	Library	Wadley Public Library												3114	$510,000	2013	$538,200	2,013			5	2
Wadley city	Water System	Wadley Elevated Water Tank												100	$650,000	2013						2
Wadley city	Other	Wadley Gym												1200	$400,000	2014						2
Totals for Wadley city, Hazard Score = 2														42,877	$5,776,513		$1,788,200		$0	$0	140	
Wadley city	Water System	Wadley Well House												100	$600,000	2013						0
Wadley city	Water System	Wadley Water Tower #2												100	$500,000	2013						0
Totals for Wadley city, Hazard Score = 0														200	$1,100,000		$0		$0	$0	0	
Wrens city	Other	Wrens Medical Center												400	$875,000	2014	$200,000				20	2
Wrens city	Library	Wrens Old Library Building												3000	$625,000	2013	$549,200	2,013				2
Wrens city	Other	Physicians Health Group Wrens												5802	$1,015,350	2013	$500,000	2,013			20	2
Wrens city	Other	Wrens Community Center												3400	$500,000	2014	$50,000				20	2
Wrens city	City Hall	Wrens City Hall												7500	$1,125,000	2013	$150,000				10	2
Totals for Wrens city, Hazard Score = 2														20,102	$4,140,350		$1,449,200		$0	$0	70	
Wrens city	Water System	Wrens Water Tank												150	$625,000	2014						1
Wrens city	Water System	Wrens Water Pumping Station												64	$75,000	2014	$25,000					1
Wrens city	Other	KA-MIN #1												10	$250,000	2014						1

Reporting for Wildfire Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wrens city	Water System	Water Booster Station												1000	$500,000	2012						1
Wrens city	Wastewater Treatment Plant	Stephens St Lift Station												100	$350,000	2014						1
Wrens city	Wastewater Treatment Plant	Waynesboro Highway Lift Station												100	$400,000	2014						1
Wrens city	Other	Ka-Min #2												1955	$250,000	2014						1
Totals for Wrens city, Hazard Score = 1														3,379	$2,450,000		$25,000		$0	$0	0	
Wrens city	Other	IMERYS Meter Set												10	$300,000	2014						0
Wrens city	Water System	King Mill Well (Well E)												50	$750,000	2014						0
Wrens city	Wastewater Treatment Plant	Highway 88 Lift Station												100	$350,000	2014						0
Wrens city	Other	Border Regulator Station												100	$100,000	2012						0
Wrens city	Other	Calcine Meter Set												100	$225,000	2012						0
Wrens city	Other	Southern Tap #1												50	$750,000	2014						0
Wrens city	Wastewater Treatment Plant	Bushy Creek Lift Station												100	$400,000	2014						0
Wrens city	Other	Southern Tap #2												50	$750,000	2012						0
Wrens city	Wastewater Treatment Plant	West Walker St Lift Station												100	$300,000	2014						0
Wrens city	Wastewater Treatment Plant	Wrens Sewage Treatment Plant												1400	$3,250,000	2014	$125,000					0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												800	$75,000	2014	$25,000					0
Wrens city	Water System	Wrens Water Tank												250	$687,500	2014						0
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						0
Wrens city	Water System	Wrens Water Pumping Station												144	$300,000	2014	$50,000					0
Wrens city	Water System	Wrens Water Pumping Station												800	$125,000	2014	$25,000					0
Totals for Wrens city, Hazard Score = 0														4,454	$9,612,500		$225,000		$0	$0	0	

Reporting for Wildfire Ha ard by Jurisdiction
Grouped by Ha ard Score

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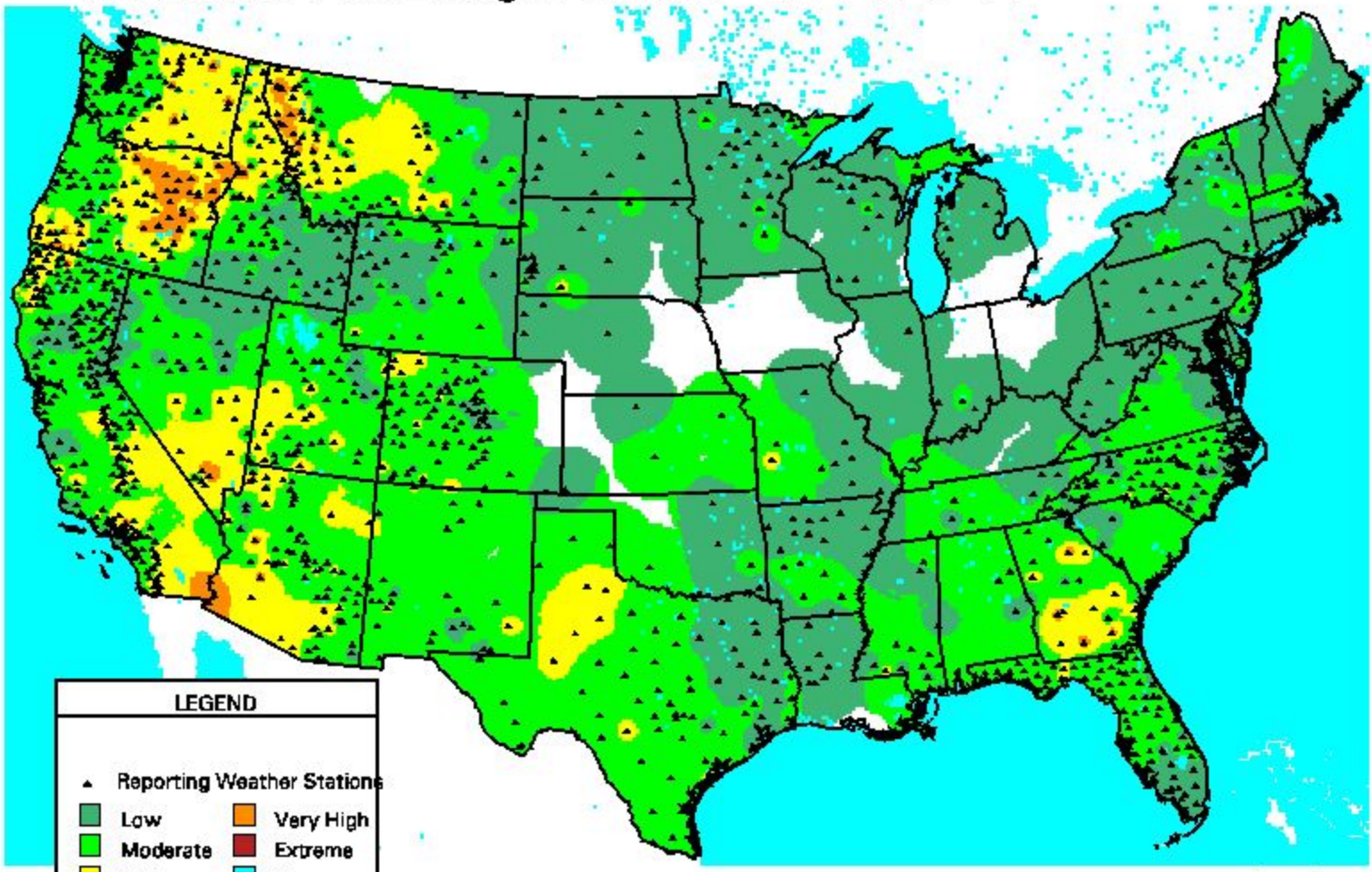
Grand Totals														1,000,445	$307,852,123		$17,274,200		$925,000	$2,000	4,299	

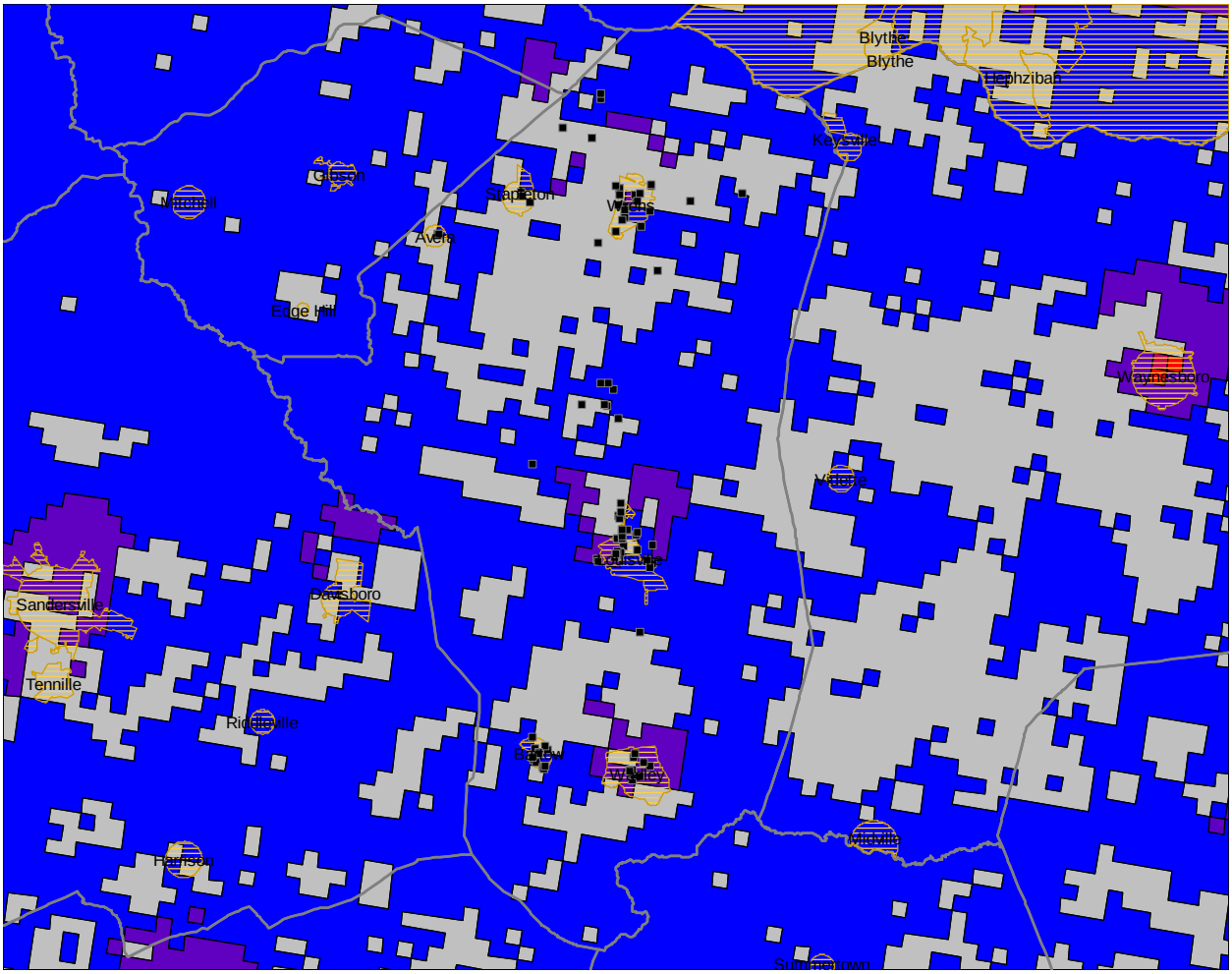
- Pre-Disaster Mitigation
- Fiscal Year: 2009
- Report created: Aug 24, 2014
- For more information call GEMA Pre-Disaster Mitigation at 1-800-TRY-GEMA

Observed Fire Danger Class: 06-AUG-14



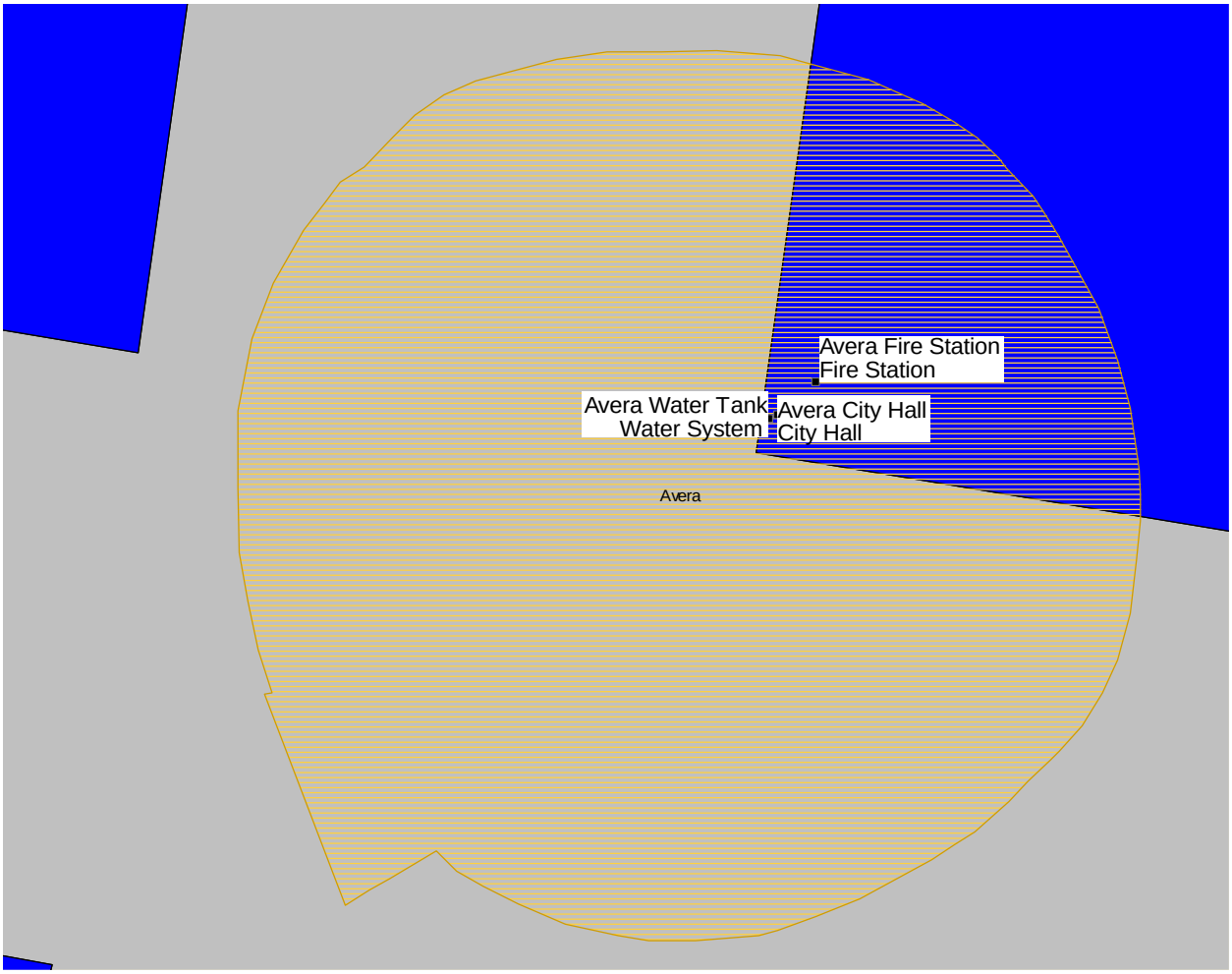
(Inv. Dist.^{2} Interp.)

WFAS-MAPS Graphics FIRE BEHAVIOR RESEARCH MISSOULA, MT



Jefferson County Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

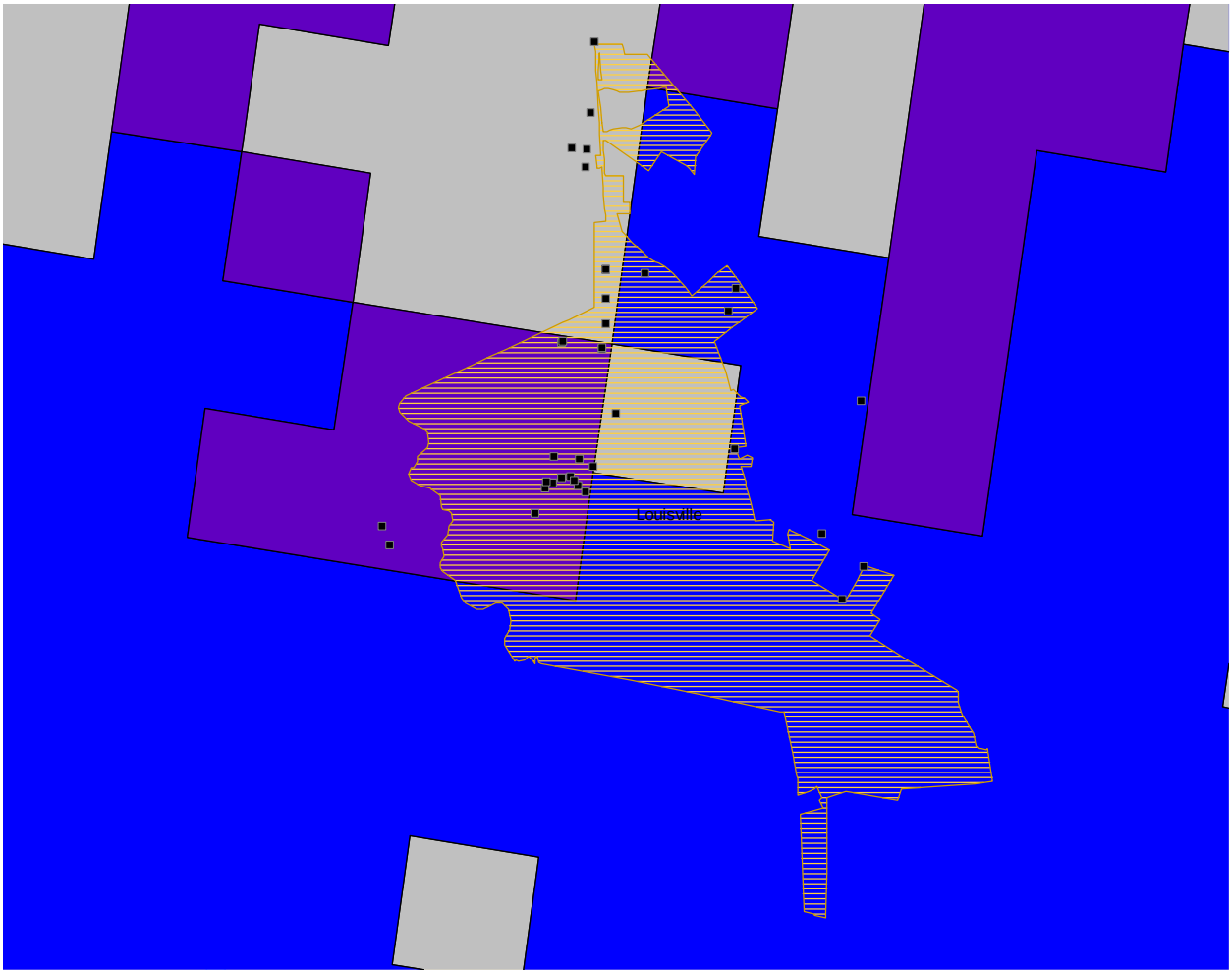


Avera Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

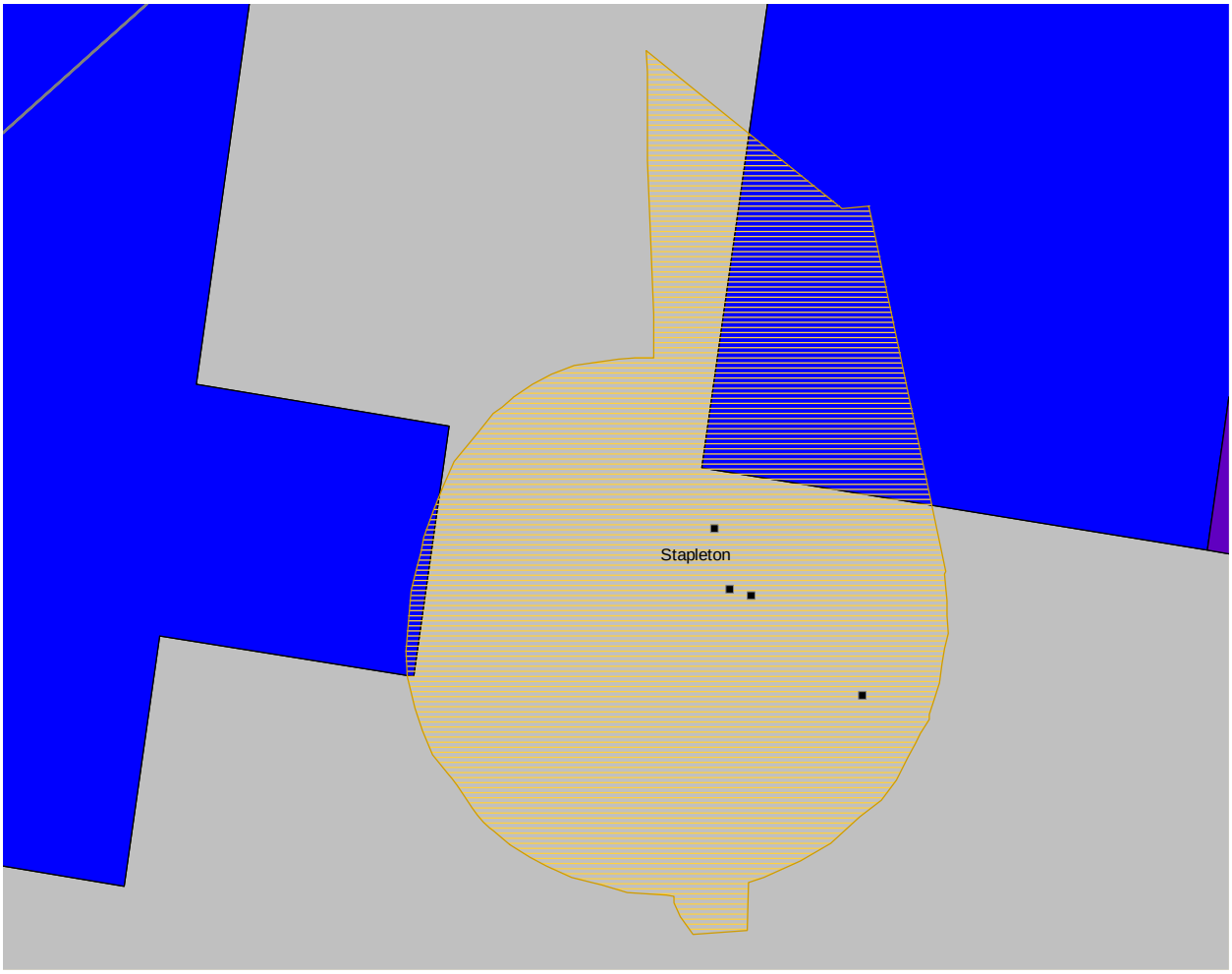
Bartow Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



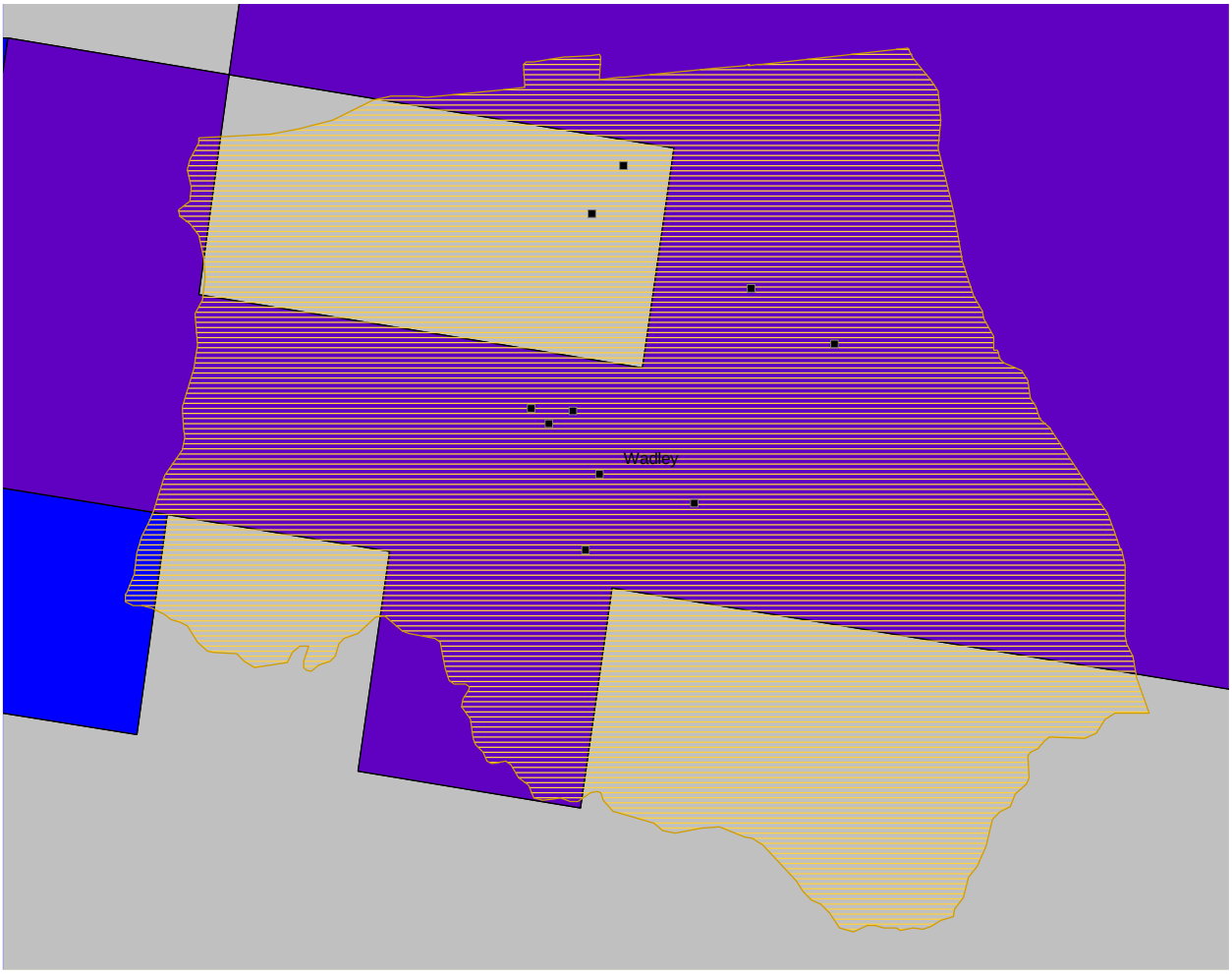
Louisville Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



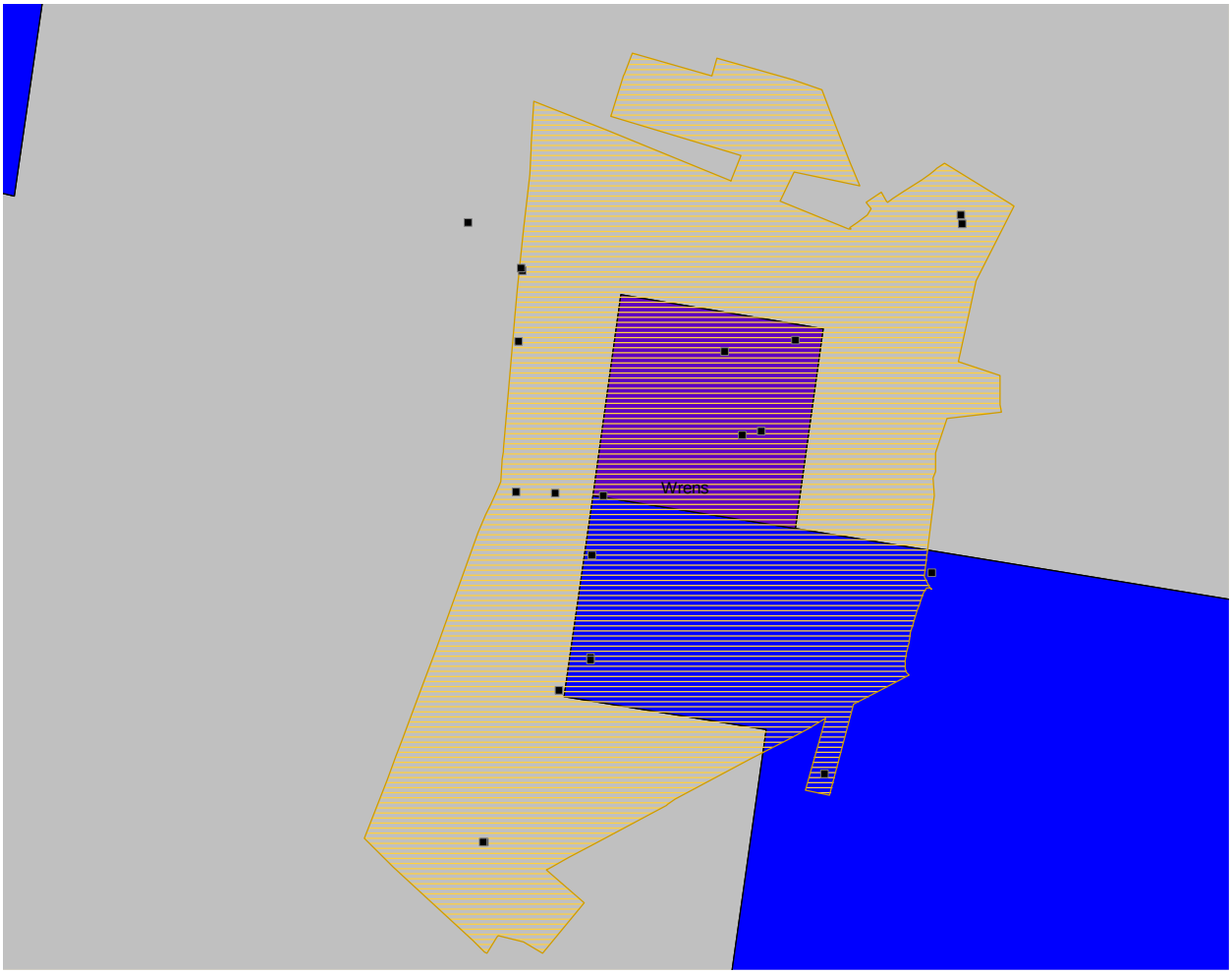
Stapleton Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



Wadley Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



Wrens Wildfire Hazard Map from Georgia Mitigation Information System.

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

Severe Weather

The Jefferson County Pre-Disaster Hazard Mitigation Committee reviewed historical data from the county's own weather database, the National Climatic Data Center, newspapers and citizen interviews in researching the past effects of severe weather in Jefferson County. The month of February marks the beginning of the severe weather season in the South, which can last until the month of August. Five types of severe weather were identified by the mitigation team: (1) tornados, (2) tropical storms, (3) thunderstorm winds, (4) lightning, and (5) hail.

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm or the result of a hurricane and is produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris. Tornados are among the most unpredictable and destructive of weather phenomena and can strike at any time of the year if the essential conditions are present. The positions of the subtropical and polar jet streams often are conducive to the formation of storms in the Gulf region.

The second type of severe weather is tropical storms. Tropical Storms are an organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots). In this area they generally occur as a result of a hurricane or tropical system that has come inland.

The third severe weather event, thunderstorm winds, can cause death and injury, power outages, property damage, and can disrupt telephone service, severely affect radio communications and surface/air transportation which may seriously impair the emergency management capabilities of the affected jurisdictions.

Thunderstorm winds are winds that arise from convection (with or without lightning), with speeds of at least 50 knots (58 mph), or winds of any speed producing a fatality, injury, or damage. Severe thunderstorms develop powerful updrafts and downdrafts. An updraft of warm, moist air helps to fuel a towering cumulonimbus cloud reaching tens of thousands of feet into the atmosphere. A downdraft of relatively cool, dense air develops as precipitation begins to fall through the cloud. Winds in the downdraft can reach in excess of 100 miles per hour. When the downdraft reaches the ground it spreads out forming a gust front: the strong wind that kicks up just before the storm hits. As the thunderstorm moves through the area, the full force of the downdraft in a severe thunderstorm can be felt as horizontal, straight-line winds with speeds well over 50 miles per hour. Straight-line winds are often responsible for most of the damage associated with a severe thunderstorm. Damaging straight-line winds occur over a range of scales. At one extreme, a severe single-cell thunderstorm may cause localized damage from a microburst, a severe downdraft extending not more than about two miles across. In contrast, a powerful thunderstorm complex that develops as a squall line can produce damaging winds that carve a path as much as 100 miles wide and 500 miles long.

The fourth severe weather event is lightning. Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. Rising and descending air within a thunderstorm separates these positive and negative charges. Water and ice particles also

affect charge distribution. A cloud-to-ground lightning strike begins as an invisible channel of electrically charged air moving from the cloud toward the ground. When one channel nears an object on the ground, a powerful surge of electricity from the ground moves upward to the clouds and produces the visible lightning strike. Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.

The final severe weather event is hail. Hailstones are created when strong rising currents of air called updrafts carry water droplets high into the upper reaches of thunderstorms where they freeze. These frozen water droplets fall back toward the earth in downdrafts. In their descent, these frozen droplets bump into and coalesce with unfrozen water droplets and are then carried back up high within the storm where they refreeze into larger frozen drops. This cycle may repeat itself several times until the frozen water droplets become so large and heavy that the updraft can no longer support their weight. Eventually, the frozen water droplets fall back to earth as hailstones.

Hail can also be a destructive aspect of severe thunderstorms. Hail causes more monetary loss than any other type of thunderstorm-spawned severe weather in the United States, annually producing about one billion dollars in crop damage. Storms that produce hailstones only the size of a dime can produce dents in the tops of vehicles, damage roofs, break windows and cause significant injury or even death.

Based on historic data, there have been 13 reported tornados in the planning area: 13 in the unincorporated areas of the county, one in Avera, Bartow, Louisville, Stapleton, and Wadley and two in Wrens. The highest magnitude reported was an F3. Reported property damages for all 13 events totaled more than $9.4 million in property and crop damages with 31 injuries reported. Tornados tend to strike in somewhat random fashion, making the task of calculating a recurrence interval extremely difficult.

There have been 18 tropical storms reported in Jefferson County by the NCDC and SHELDUS with property and crop damages of approximately $155,994. Damages as a result of the storms were due to power outages, downed trees and flash flooding. The tropical storms affected the entire planning area.

Thunderstorms are much more prevalent in Jefferson County and during the spring and summer months there are numerous storms that often carry strong winds. There have been 85 events recorded in the last 64 years with over $6.5 million in property and crop damages reported with seven injuries and one death.

During the spring and summer months the county experiences numerous storms that can often produce lightning. There have been 19 reported lightning events to the NCDC and SHELDUS over 64 years with slightly more than $290,000 in property and crop damages with three injury. There have been 168 lightning strikes recorded in the same time frame that resulted in wildfires. When these datasets are combined there has been 187 lightning strikes recorded.

In the last 64 years there have been 53 hail events reported to the NCDC and SHELDUS databases with slightly less than $1 million in property and crop damages.

The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. All 109 critical facilities have a wind hazard score of two with a replacement cost of more than $307 million. To summarize, there are approximately 37,363 structures/properties in the county totaling slightly more than $1.3 billon with a population of 16,930.

BGN_DATE	END_DATE	COUNTY	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS	
7/22/1970	7/22/1970	Jefferson		F0		0	0	0	Tornado	
7/19/1971	7/19/1971	Jefferson		F1	0	0	25.00k	0.00K	Tornado	Trees were uprooted and twisted off. One residences was picked up and moved about 15 feet.
1/13/1972	1/13/1972	Jefferson		F3	0	21	2500.00k	0.00K	Tornado	
3/18/1981	3/18/1981	Jefferson		F1	0	1	25.00k	0.00K	Tornado	Snapped off pine trees and demolished a restaurant Three homes were damaged/
7/25/1981	7/25/1981	Jefferson		F1	0	0	250.00k	0.00K	Tornado (F1)	
12/4/1983	12/4/1983	Jefferson			0	2	5.00k	0.00K	Tornado (F0)	
10/1/1989	10/1/1989	Jefferson		F1	0	2	25.0k	0.00K	Tornado (F1)	Dipped down at Bartow and almost completely destroyed a house. The winds lifted the roof and uprooted numberous large trees around the house
3/7/1996	3/7/1996	Jefferson	Wrens	F1	0	5	1000.00k	0.00K	Tornado (F1)	A tornado destroyed 2 brick homes and 7 mobile homes. 15 other homes were heavily damaged and 10 others had minor damage. The path and duration of the tornado was estimated. There were intermittent touchdowns.
6/15/1996	6/15/1996	Jefferson	Bartow	F0	0	0	10.00k	0.00K	Tornado (F0)	A possible tornado touched down briefly on Baldee Road between Bartow and Louisville. It damaged a cattle barn and power poles. A tree was downed and there was debris over the road. The length and width are estimated.
7/1/2003	7/1/2003	Jefferson		F1			0	0	Tornado (F1)	Several residents in the area reported seeing a tornado that was approximately 10 to 15 feet wide and traveled about 60 to 75 feet above the ground. One resident about four miles west of Louisville reported seeing two tornadoes.

BGN_DATE	END_DATE	COUNTY	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
3/15/2008	3/15/2008	Jefferson	Wrens	EF2	0	0	500.00k	0.00K	Tornado (EF2)

A damage survey conducted by the National Weather Service Forecast office in Peachtree City, Georgia confirmed that an EF2 tornado touched down in northern Jefferson county. The tornado touched down approximately one mile northwest of Wrens and traveled east a little less than nine miles across northeastern Jefferson county and the town of Matthews, before crossing into Burke county just south of the town of Keysville. The tornado continued on the ground an additional eight to nine miles into Burke county before finally lifting near the Applewood County Club in Burke county. The total tornado path length was 19 miles. The maximum path width was one-quarter mile and maximum sustained winds were estimated at 120 mph. The most significant damage occurred in Matthews, where several mobile homes were destroyed. Two businesses in Wrens were destroyed and several others sustained damage. A church and an elementary school, and several homes in Wrens also suffered at least minor damage from wind and numerous downed trees. ficant roof damage. No serious injuries or fatalities were reported from this tornado.

BGN_DATE	END_DATE	COUNTY	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS	
5/11/2008	5/11/2008	Jefferson	Grange	EF0	0	0	5.000M	0.00K	Tornado (EF0)	A damage survey conducted by the National Weather Service Forecast Office in Peachtree City, Georgia confirmed that the EF0 tornado that originally touched down in north central Washington county, just northeast of Sandersville, continued on a long 33 mile track across eastern Washington, central Jefferson, and into far western Burke county before lifting one mile south of Vidette. The tornado entered Jefferson county approximately 10 miles west-northwest of Louisville and skirted across the northern part of Louisville, then continued eastward, exiting the county about seven miles east-northeast of Louisville. A little over 17 miles of the tornado path occurred within Jefferson county. The maximum path width of the tornado was estimated to be 440 yards or around 1/2 mile. Homes on the northern side of Louisville sustained considerable damage from the tornado, including both mobile homes and single/multiple-family homes. All together, 55 mobile homes were affected, two of which were destroyed and 50 had major damage. Approximately 185 single-family homes suffered damage. Of these, 70 were destroyed and 115 sustained major damage. In addition 13 businesses, six government facilities, and two non-profit organization building structures were damaged. Of the six government facilities, two of them were county schools. Hundreds of trees and power lines were also downed along the path of the tornado. At least 5600 residents of the area were left without power following the storm.

BGN_DATE	END_DATE	COUNTY	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS	
4/10/2009	4/10/2009	Jefferson	Stapleton	EF1	0	0	100.00k	0.00K	Tornado (EF1)	A damage survey conducted by the National Weather Service Forecast Office in Peachtree City, Georgia confirmed that the EF1 tornado that initially touched down in extreme eastern Glascock county continued into far northern Jefferson county along a five mile-long path before lifting approximately three miles northeast of Stapleton. The tornado was determined to have a maximum path width of 200 yards with maximum winds estimated at 110 mph. The majority of the damage associated with this tornado occurred in Jefferson county. Significant damage was observed to the Heartsgrove Baptist Church at the intersection of Georgia Highways 80 and 296, just across from the Glascock county line. Part of the roof, brick siding, and the chimney were removed from the structure. Several granite headstones in the adjacent cemetery were tipped over. Many trees were down along the path of the tornado, especially along a 3/4 mile-long path east of the damaged church.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
8/28/1964	8/30/1964	Hurricane/Tropical Storm	0	1136.36	113.64	Hurricane Cleo
9/9/1964	9/12/1964	Hurricane/Tropical Storm	0	147058.82	1470.59	HURRICANE DORA
6/8/1966	6/9/1966	Hurricane/Tropical Storm	0	1470.59	1470.59	HURRICANE ALMA
6/6/1968	6/7/1968	Hurricane/Tropical Storm	0	147.06	0	Tropical Storm Abby
6/19/1972	6/20/1972	Hurricane/Tropical Storm	0	0	314.46	HURRICANE AGNES
10/5/1995	10/5/1995	Hurricane/Tropical Storm	0			Hurrican Opal
9/14/2002		Tropical Storm	0	0.00K	0.00K	Tropical Storm Hanna moved inland near Mobile, Alabama around 5 pm EDT Saturday, September 14, 2002. The remnants of Hanna then moved northeast across central Alabama during the day Saturday and then across north Georgia Saturday evening into Sunday morning. The center of the remnants of Hanna passed near Carrollton, Georgia around 2 AM EDT Sunday morning, then exited the state near Clayton, Georgia Sunday morning, September 15th, around 10 am EDT. Hanna moved across north and central Georgia during the mid and late afternoon Saturday. Wind gusts of 45 to 50 mph and very heavy tropical thunderstorms accompanied the feeder band. Numerous trees and power lines were blown down as the feeder band moved rapidly northeast through the afternoon. Many residents of north Georgia were left without power for at least a few hours. In the Atlanta metropolitan area alone, 48,000 residents were left without power. There were also scattered areas of urban and street flooding as up to 2 inches or more of rain fell in association with the feeder band in a one to two hour period. The heaviest rain fell across the counties north of a line from Atlanta to Athens. Additional rain fell across the region Saturday night and Sunday morning, but was considerably less intense, confined mainly to central Georgia, and was not accompanied with damaging winds. Three day rainfall totals in association with Hanna were in excess of 3 inches across much of northeast, east central, and the southern portions of middle Georgia. Athens reported 3.54 inches on September 14th alone, with a 3-day total of 5.03 inches. The average rainfall amount for north Georgia stations for the month was in excess of 7 inches, and was nearly 5 inches for middle Georgia. These rainfall amounts are approximately 3.5 and 1.5 inches above normal, respectively.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
7/1/2003		Tropical Storm	0	0.00K	0.00K	Tropical Depression Bill, which was earlier Tropical Storm Bill, tracked across north and central Georgia during the day bringing heavy rain, flooding, wind damage, and even an isolated tornado to the region. The storm, which formed in the Gulf of Mexico Sunday morning, June 29th, moved inland between New Orleans, Louisiana and Mobile, Alabama on Monday June 30th, then tracked northeast to near Tuscaloosa, Alabama by the morning of July 30th, then turned east-northeast and accelerated. The depression moved between Birmingham, Alabama and Atlanta, Georgia during the afternoon of July 1st, exiting northeast Georgia after midnight on July 2nd. Twenty-four rainfall totals of four to six inches were common on July 1st across much of north and portions of central Georgia, roughly north of a line from Columbus to Athens. Rainfall amounts were generally in the 1 to 2 inch range south of this line. There were numerous reports of flooding, especially in the Atlanta metropolitan area, and a number of roads were rendered impassable and closed. The ground across north and central Georgia was saturated from a number of weeks of above normal rainfall and the tropical storm rainfall just exacerbated the situation. As the center of circulation associated with the tropical depression tracked across north Georgia, a brief F1 tornado spinup occurred in Morgan county southwest of Madison in east central Georgia. There were also other isolated wind damage reports in areas east and southeast of Atlanta from Stockbridge to Madison to Athens.
9/6/2004		Tropical Storm	0	0.00K	0.00K	Hurricane Frances, at one point a category four hurricane (on the Saffir-Simpson scale) with sustained winds of 145 mph, reached the east coast of Florida just north of West Palm Beach, Florida early on September 5th. The storm weakened to a Tropical Storm as it continued west-northwest across the Central Florida Peninsula reemerging over the northwest Gulf of Mexico early on September 6th. The storm then took on more of a northwestward movement, making landfall later on the 6th near Saint Marks Florida along the Florida Panhandle Gulf Coast. Continuing north-northwestward from this point, Tropical Storm Frances entered far southwest Georgia near Bainbridge late in the evening on the 6th. The storm continued moving north-northwest through far western Georgia on the 7th to near Atlanta around midnight on the 7th, then to near Chattanooga, Tennessee early on the 8th. By far the most significant problem with Frances for Georgia was strong, sustained winds of 35 to 40 mph with gusts in excess of 50 mph. Most of the high winds were concentrated in a large east-west oriented rain band that moved north across Georgia during the evening of the 6th and the early morning hours of the 7th. It was during this period of time that significant damage occurred across many Central, East Central, and North Central Georgia counties. The strongest winds and most significant damage occurred in the areas east and south of a line from Americus, to Atlanta, to Athens. Many of the counties within this area suffered extensive wind damage. Dozens to hundreds of trees were blown down, also bringing down dozens to hundreds of power lines. Nearly 300,000 people were left without power during the storm, several thousand for several days. Dozens of homes suffered major damage throughout Central and North Central Georgia, with dozens more sustaining minor damage. The most significant damage took place in an area bounded by Macon, Atlanta, Greensboro, Dublin, Americus, and back to Macon. Damages in the millions were observed in several of these counties, including several large pecan orchards which were virtually destroyed. Estimated total damage with Frances $14.9 million to property and $26.5 million to crops (mostly pecan, but some peanut and cotton). Forty-one counties in the Peachtree City forecast area received a disaster declaration from the Federal Emergency Management Agency.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
9/16/2004		Tropical Storm	0	0.00K	0.00K	Hurricane Ivan, a classic long-lived Cape Verde hurricane and at three times within its life cycle a category five hurricane, developed from a tropical wave which moved off the African coast on August 31st. The system became a tropical depression on September 2nd, and tropical storm on September 3rd, and a hurricane early on September 5th. Later that same day, it became a major hurricane. Ivan moved westward for several days and passed over the southern Windward islands, then moved west-northwest through the southern Caribbean passing just north of Venezuela and the Netherlands Antilles. The hurricane reached category five strength on September 9th as it neared Jamaica. The hurricane weakened to a category four storm as it passed near Jamaica. The storm maintained its category four strength as it turned slightly west of north until the 11th when it briefly strengthed once again to a category five storm. The storm passed near Grand Cayman and the west tip of Cuba from September 11th to the 12th as mostly a category four hurricane. The storm then turned to the northwest and moved through the Yucatan Channel. It briefly regained category five strength one more time as it moved through the Gulf, but weakened to a category three hurricane by the time it struck the U.S. Gulf Coast near Gulf Shores, Alabama around 2 am September 16th. From here, the weakening hurricane moved nearly due north to near Birmingham by the evening of the 16th. By this time it had weakened to a tropical storm. The storm then turned northeast across northwest Georgia during the early morning hours of the 17th as it weakened to a tropical depression. Ivan brought tornadoes, high winds, and significant to record flooding to north and central Georgia. The track of Ivan across central and northeast Alabama also put much of central and eastern Georgia in the favorable quadrant for strong spiral feeder bands and tornadoes. Six tornadoes were confirmed with Ivan causing an estimated $3.4 million dollars in damages. These tornadoes consisted of two F1 tornadoes, one each in Madison and Wilkes county in northeast Georgia, with one F0 tornado reported in Cherokee, Madison, Spalding, and Upson counties. Numerous reports of funnel clouds and other tornado sightings were reported, but no other tornado touchdowns were confirmed. Flooding was extensive and widespread across the west central, north central, and northwest parts of the state. Average rainfall of 5-8 inches was reported in much of the area northwest of a Columbus, to Athens line, with some areas from Atlanta northwest to Trenton reporting in excess of 10 inches of rain. This rain fell just a little over a week from the 3-5 inches of rain which occurred from Tropical Storm Frances. Catastrophic and historical flooding occurred in the Atlanta area, where the excessive rainfall forced many creeks and rivers to record levels. Dozens of homes and businesses in Fulton, Cobb, DeKalb, and Cherokee counties were submerged in flood waters, some for several days thereafter. Extensive flooding was also reported further north and west, especially in Dade and Gilmer counties, where homes and vehicles were washed away by flood waters. Damage estimates from flooding in the Peachtree City forecast area were $40.9 million dollars. Overall, sustained high winds with Ivan affected less of north and central Georgia than was observed with Frances, just 10 days prior. However, with Ivan the problem was more with wind gusts than it was with sustained winds, such as were observed with Frances. Wind gusts of 50-60 mph were common with one main southeast-northwest oriented spiral rain band that swept across the area during the mid and late afternoon. This left

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
9/26/2004		Tropical Storm	0	0.00K	0.00K	Hurricane Jeanne was the third major southeast U.S. land falling hurricane to affect Georgia within a three week period, following just 10 days after Hurricane Ivan, which followed just 10 days after Hurricane Frances. Jeanne caused the least damage to north and central Georgia counties of the three tropical systems to affect the state during the month of September. High winds were limited mainly to the southeast portions of middle Georgia and flooding rains were limited to the Atlanta area and south middle Georgia counties. No tornadoes were observed with Jeanne as the favorable tornado-producing spiral feeder bands remained well east over the Carolinas and western Atlantic. Hurricane Jeanne developed on September 13th from a tropical wave over the Leeward Islands. Jeanne moved slowly across the Virgin Islands and Puerto Rico on the 15th, then slowly over the Dominican Republic and Haiti the 16th and 17th. Most of this time, the storm maintained only strong tropical storm strength. Jeanne then took a northward turn on the 18th and moved across the southeastern Bahamas as a tropical storm. From this point, Jeanne meandered through a slow clockwise loop from the 20th through 23rd, when the loop was finally completed. During this time the storm strengthened to a category two hurricane. Jeanne then began a slow westward track on the 23rd and strengthened to a category three hurricane. The storm then made landfall on the 25th, just north of West Palm Beach, Florida, at almost the exact same location as Hurricane Frances had done 20 days prior. Jeanne weakened to a tropical storm as it turned north-northwest across central Florida on the 26th and then weakened into a tropical depression as it moved into southern Georgia early on the 27th. The storm tracked from near Valdosta during the early morning hours of the 27th, reaching Macon around sunset on the 27th, then accelerating into northeast Georgia near Athens by midnight and out of the state early on the 28th. High winds of 35 to 40 mph with some higher gusts were confined mainly to the central and southeast portions of middle Georgia, roughly southeast of a line from Macon to Sandersville. Rainfall of 4-6 inches was also common in much of middle Georgia, but flooding problems observed in these areas were minor. However, during the evening, a deformation zone developed on the northwest side of the center of circulation around Jeanne over the Atlanta metropolitan area. This unfortunately brought excessive rainfall of 4 to 8 inches to some of the same areas that received in excess of 10 inches of rain just 10 days prior with Ivan. Once again major to record flooding was observed along several creeks on the north side of Atlanta and subsequently the Chattahoochee River. Many homes that were in the stages of cleanup from Ivan, were severely impacted once again with major flooding. Overall damages from flooding and high winds were estimated at $5,000,000.
6/12/2005		Tropical Storm	0	0.00K	0.00K	Tropical Storm Arlene, which formed on June 8th near the northeast coast of Honduras, became a tropical storm on the 9th southwest of Grand Cayman. Arlene moved slowly northward and steadily intensified as it crossed western Cuba. The storm continued northward over the eastern Gulf of Mexico where it reached its peak intensity with a wind speed of 70 mph. The storm made landfall near Pensacola, Florida with 60 mph on the 10th. The storm moved slowly northward through central and western Alabama on the 11th and 12th. Damage to Georgia from the storm was minimal. While rain occurred in many areas, only one flash flooding event was reported in association with Arlene, namely in Towns county on the 12th.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
7/10/2005		Hurricane (Typhoon)	0	0.00K	0.00K	Hurricane Dennis, which began as a tropical depression near the southern Windward Islands on July 4th quickly gained strength as it tracked west-northwest across the Caribbean. It became a tropical storm on the 5th and a hurricane on the 6th as it moved near the southern end of Haiti. Hurricane Dennis made its first landfall near central Cuba as a category 4 storm on the Saffir-Simpson scale. The storm emerged into the Gulf of Mexico off the western end of Cuba on July 9th as a category 1 storm, then tracked northwest toward the Gulf Coast. Hurricane Dennis made its U.S. landfall near Pensacola, Florida around 3 pm on July 10th, then tracked north-northwest across western Alabama into northeast Mississippi and western Tennessee on July 11th. The effects of Dennis with respect to flooding were far reaching, especially on the east and north side of the storm. The first outer spiral band affected north and central Georgia during the afternoon and evening of July 9th. Numerous thunderstorms, some with very heavy rain tracked east to west across central and north Georgia. Rainfall amounts of two to four inches were reported on the south and west side of Atlanta. Flash flooding was reported in Carroll county where rainfall exceeded four inches in spots. Several roads were washed out. After a break in the rainfall overnight, widespread rain began to spread into the area from the south late in the morning on the 10th and overspread the entire region by late afternoon. Rainfall during the afternoon and early evening was mostly light to moderate with rainfall amounts prior to 8 pm were generally in the one to two inch range. However, as the evening progressed, the rain became increasingly concentrated in a south-to-north oriented 50-mile wide feeder band. The tropical feeder band set up from near Americus to Chatsworth and persisted over the same areas for a period of 12 to 15 hours. Torrential rainfall amounts fell in areas affected by the feeder band as very heavy tropical showers repeatedly tracked over the same areas. Rainfall amounts of six to eight inches were common within the feeder band, with 10-12 inch rainfall amounts reported across the southern and western portions of the Atlanta metropolitan area. Widespread flash flooding and flooding were reported, especially in Coweta, Douglas, Fayette, Fulton, and Cobb counties. Hundreds of roads were washed out and hundreds of homes experienced some degree of flooding, some major. Several rescues were required, particularly in Douglas and Cobb counties.Wind was also a problem, but with the center of the storm tracking some 200 miles to the west of the area, sustained winds were mostly in the 20-25 mph range, with some gusts observed to near 40 mph. A number of counties in west Georgia reported downed trees and power lines, with widespread power outages reported across the region.Overall damage caused by Hurricane Dennis to north and central Georgia was approximately $12,000,000, most of which was the result of flash flooding or flooding. However, nearly $250,000 was attributed to strong winds. One death occurred as a result of strong winds during Hurricane Dennis.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
8/29/2005		Hurricane (Typhoon)	0	0.00K	0.00K	Hurricane Katrina, a horrific category 4 hurricane with winds of 140 mph made landfall just east of New Orleans around 8 am August 29th, continued north-northeast as a hurricane across eastern Mississippi during the day on the 29th, then moved into western and middle Tennessee by early morning on August 30th. While this storm will be most remembered for the extensive devastation that was done to southeast Louisiana, particularly New Orleans, and eastward along the Mississippi Gulf Coast, Katrina was a very large and powerful storm with far reaching effects to the east. By mid-afternoon on August 29th, strong spiral bands of showers and thunderstorms made their way into west Georgia. These spiral bands gradually propagated eastward through the state during the evening and overnight hours. Between 4 pm EDT and 1 am EDT, a total of 16 confirmed tornadoes touched down in north and central Georgia. The first tornado struck northern Heard county at 424 pm EDT, while the last tornado struck the town of Helen in the northeast Georgia mountains shortly after midnight at 1230 am EDT. All together there were three F2 tornadoes, three F1 tornadoes, and ten F0 tornadoes within north and central Georgia. These tornadoes resulted in one fatality and six injuries. Dozens of homes and businesses were destroyed with property damage estimated at $12,860,000. The poultry industry was particularly hard hit, especially in west Georgia, where the tornadoes in Heard and Carroll counties destroyed over 300,000 chickens in nearly a dozen chicken houses. Strong thunderstorms with damaging winds were also reported in several counties that did not experience any tornadoes. Overall damage associated with Katrina in north and central Georgia was approximately $14,000,000.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
10/5/2005		Tropical Storm	0	0.00K	0.00K	Hurricane Ivan, a classic long-lived Cape Verde hurricane and at three times within its life cycle a category five hurricane, developed from a tropical wave which moved off the African coast on August 31st. The system became a tropical depression on September 2nd, and tropical storm on September 3rd, and a hurricane early on September 5th. Later that same day, it became a major hurricane. Ivan moved westward for several days and passed over the southern Windward islands, then moved west-northwest through the southern Caribbean passing just north of Venezuela and the Netherlands Antilles. By this time it had weakened to a tropical storm. The storm then turned northeast across northwest Georgia during the early morning hours of the 17th as it weakened to a tropical depression. Ivan brought tornadoes, high winds, and significant to record flooding to north and central Georgia. The track of Ivan across central and northeast Alabama also put much of central and eastern Georgia in the favorable quadrant for strong spiral feeder bands and tornadoes. Six tornadoes were confirmed with Ivan causing an estimated $3.4 million dollars in damages. These tornadoes consisted of two F1 tornadoes, one each in Madison and Wilkes county in northeast Georgia, with one F0 tornado reported in Cherokee, Madison, Spalding, and Upson counties. Numerous reports of funnel clouds and other tornado sightings were reported, but no other tornado touchdowns were confirmed. Flooding was extensive and widespread across the west central, north central, and northwest parts of the state. Average rainfall of 5-8 inches was reported in much of the area northwest of a Columbus, to Athens line, with some areas from Atlanta northwest to Trenton reporting in excess of 10 inches of rain. This rain fell just a little over a week from the 3-5 inches of rain which occurred from Tropical Storm Frances. Catastrophic and historical flooding occurred in the Atlanta area, where the excessive rainfall forced many creeks and rivers to record levels. Dozens of homes and businesses in Fulton, Cobb, DeKalb, and Cherokee counties were submerged in flood waters, some for several days thereafter. Extensive flooding was also reported further north and west, especially in Dade and Gilmer counties, where homes and vehicles were washed away by flood waters. Damage estimates from flooding in the Peachtree City forecast area were $40.9 million dollars. Overall, sustained high winds with Ivan affected less of north and central Georgia than was observed with Frances, just 10 days prior. However, with Ivan the problem was more with wind gusts than it was with sustained winds, such as were observed with Frances. Wind gusts of 50-60 mph were common with one main southeast-northwest oriented spiral rain band that swept across the area during the mid and late afternoon. This left many counties in north and central Georgia with downed trees, power lines, damages to homes, businesses, and vehicles, as well as widespread power outages. Strong winds continued well into the 18th across the north causing even more trees and some power lines to fall. Damages estimates from high winds were $14.3 million dollars. Another $5.0 million in damages was caused by river flooding in Cobb county which continued for several days after Ivan exited the area. Twenty-three counties in the Peachtree City, Georgia forecast area of north and central Georgia were given a disaster declaration by the Federal Emergency Management Agency.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
11/10/2009		Tropical Storm	0	0.00K	0.00K	Hurricane IdaOn November 2nd, a small section of the Intertropical Convergence Zone developed convection north of Panama. A small surface low formed the next day offshore Costa Rica, as the system drifted northwest. By the 4th, the circulation developed a well-defined circulation and enough convective organization to be considered a tropical depression. The system developed into a tropical storm, named Ida, later that day. Continuing its northwest movement, Ida strengthened into a weak hurricane before moving ashore Nicaragua on the 5th. Weakened back into a tropical depression, Ida turned to the north moving through eastern Nicaragua and Honduras. When its center re-emerged into the northwest Caribbean sea, Ida strengthened back into a tropical storm on the 6th and eventually peaked as a category two hurricane in the northwest Caribbean sea. Vertical wind shear from a mid to upper level low to its southwest led to weakening, and Ida weaked to a tropical storm on the 9th, and became an extratropical cyclone as it moved ashore far southern Alabama later that day.

BGN_DATE	END_DATE	EVTYPE	INJURIES	PROPDMG	CROPDMG	REMARKS
9/4/2011		Tropical Storm	0	0.00K	0.00K	Hurricane Jeanne was the third major southeast U.S. land falling hurricane to affect Georgia within a three week period, following just 10 days after Hurricane Ivan, which followed just 10 days after Hurricane Frances. Jeanne caused the least damage to north and central Georgia counties of the three tropical systems to affect the state during the month of September. High winds were limited mainly to the southeast portions of middle Georgia and flooding rains were limited to the Atlanta area and south middle Georgia counties. No tornadoes were observed with Jeanne as the favorable tornado-producing spiral feeder bands remained well east over the Carolinas and western Atlantic. Hurricane Jeanne developed on September 13th from a tropical wave over the Leeward Islands. Jeanne moved slowly across the Virgin Islands and Puerto Rico on the 15th, then slowly over the Dominican Republic and Haiti the 16th and 17th. Most of this time, the storm maintained only strong tropical storm strength. Jeanne then took a northward turn on the 18th and moved across the southeastern Bahamas as a tropical storm. From this point, Jeanne meandered through a slow clockwise loop from the 20th through 23rd, when the loop was finally completed. During this time the storm strengthened to a category two hurricane. Jeanne then began a slow westward track on the 23rd and strengthened to a category three hurricane. The storm then made landfall on the 25th, just north of West Palm Beach, Florida, at almost the exact same location as Hurricane Frances had done 20 days prior. Jeanne weakened to a tropical storm as it turned north-northwest across central Florida on the 26th and then weakened into a tropical depression as it moved into southern Georgia early on the 27th. The storm tracked from near Valdosta during the early morning hours of the 27th, reaching Macon around sunset on the 27th, then accelerating into northeast Georgia near Athens by midnight and out of the state early on the 28th. High winds of 35 to 40 mph with some higher gusts were confined mainly to the central and southeast portions of middle Georgia, roughly southeast of a line from Macon to Sandersville. Rainfall of 4-6 inches was also common in much of middle Georgia, but flooding problems observed in these areas were minor. However, during the evening, a deformation zone developed on the northwest side of the center of circulation around Jeanne over the Atlanta metropolitan area. This unfortunately brought excessive rainfall of 4 to 8 inches to some of the same areas that received in excess of 10 inches of rain just 10 days prior with Ivan. Once again major to record flooding was observed along several creeks on the north side of Atlanta and subsequently the Chattahoochee River. Many homes that were in the stages of cleanup from Ivan, were severely impacted once again with major flooding. Overall damages from flooding and high winds were estimated at $5,000,000.
9/14/1999						as a result of Hurrican Floyd

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
3/8/1961		Thunderstorm	Jefferson		0	0			
4/2/1964	4/8/1964	Severe Storm/Thunder Storm	Jefferson		0	0	5.26k	0.52k	Heavy Rains
5/2/1964	5/3/1964	Severe Storm/Thunder Storm	Jefferson		0	0	3.14k	3.14k	RAINS
8/8/1965	8/8/1965	Severe Storm/Thunder Storm	Jefferson		2	0	0	0	Thunderstorm
9/28/1965	9/30/1965	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	0.31k	0.00k	RAIN AND WIND
2/13/1966	2/13/1966	Severe Storm/Thunder Storm - Wind	Jefferson		0	0.06	3.14k	0.31k	WIND AND RAIN
3/1/1966	3/5/1966	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	3.14k	0.31k	RAIN AND WIND
5/16/1966	5/28/1966	Severe Storm/Thunder Storm	Jefferson		0	0	1.47k	1.47k	RAINS
7/4/1966	7/4/1966	Severe Storm/Thunder Storm	Jefferson		0	0	0	0	
5/18/1969	5/19/1969	Severe Storm/Thunder Storm	Jefferson		0	0	1.47k	0	HEAVY RAINS
10/31/1969	11/1/1969	Severe Storm/Thunder Storm	Jefferson		0	0.06	1.47k	0	HEAVY RAINS
3/1/1971	3/4/1971	Severe Storm/Thunder Storm	Jefferson		0	0	3.14k	0.031k	HEAVY RAINS
6/14/1971	6/14/1971	Severe Storm/Thunder Storm	Jefferson		0	0	0.31k	0	SEVERE THUNDERSTORM
6/15/1971	6/15/1971	Severe Storm/Thunder Storm	Jefferson		0	0	0.208k	0	Thunderstorms
6/28/1972	6/28/1972	Severe Storm/Thunder Storm	Jefferson		0	0	0.31k	0	THUNDERSTORMS
2/1/1973	2/2/1973	Severe Storm/Thunder Storm	Jefferson		0	0	3.14k	0	HEAVY RAINS
3/21/1974	3/21/1974	Severe Storm/Thunder Storm - Wind	Jefferson		0.03	0.31	31.44k	0	THUNDERSTORM & WIND
5/15/1975	5/16/1975	Severe Storm/Thunder Storm	Jefferson		0	0	1.04k	0.10k	Thunderstorms
6/6/1977	6/6/1977	Severe Storm/Thunder Storm	Jefferson		0	0.04	6.66k	0.06k	Severe thunderstorms
4/13/1979	4/13/1979	Severe Storm/Thunder Storm - Wind	Jefferson		0				
2/16/1982	2/16/1982	Severe Storm/Thunder Storm - Wind	Jefferson		0				
4/23/1983	4/23/1983	Severe Storm/Thunder Storm - Wind	Jefferson		0				
7/29/1986	7/29/1986	Severe Storm/Thunder Storm - Wind	Jefferson		0				High winds moderate damage to rooftops, downed trees, and powerlines
7/24/1987	7/24/1987	Severe Storm/Thunder Storm - Wind	Jefferson		0				High winds with little damage
6/26/1988	6/26/1988	Severe Storm/Thunder Storm - Wind	Jefferson		0	1	5.00k	0	Thunderstorm Wind
2/28/1989	2/28/1989	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	5.00k	0	Thunderstorm winds reports of trees down in South and North Jefferson County
4/28/1990	4/28/1990	Severe Storm/Thunder Storm - Wind	Jefferson		0	2	0	0	Thunderstorm Wind
8/21/1990	8/21/1990	Severe Storm/Thunder Storm - Wind	Jefferson	56 kts.	0	0	0.50k	0	Thunderstorm Wind
10/11/1990	10/12/1990	Severe Storm/Thunder Storm	Jefferson		0	0	0	5000.00k	Heavy Rainfall
3/1/1991	3/1/1991	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	5.00k	0	Powerlines down along Hwy 221
7/1/1992	7/1/1992	Thunderstorm Wind	Jefferson		0	0			Winds toppled trees in Jefferson County

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
7/3/1992	7/3/1992	Thunderstorm Wind	Jefferson						Winds in excess of 48 mph trees down and roof damage.
6/10/1993	6/10/1993	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	50.00k	0	Thunderstorm Winds
7/16/1995	7/16/1995	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	1.00k	0	Thunderstorm winds knocked down trees and powerlines across northern portions of Jefferson County between Wrens and Louisville.
7/24/1995	7/24/1995	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	20.00k	0	Thunderstorm winds blew trees down on house.
1/2/1996	1/2/1996	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	60.00k	0	Thunderstorm winds destroyed 4 mobile homes and 2 RVs in Meadowland Estates outside of Wrens on Highway 1.
6/26/1996	6/26/1996	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	1.00k	0	Thunderstorm winds knocked a telephone pole down on MLK Drive.
4/22/1997	4/22/1997	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2.00k	0	Several trees were downed by thunderstorm winds in the northern and southern portions of the county.
6/18/1997	6/18/1997	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2.00k	0	Thunderstorm winds knocked down trees and tree limbs along Georgia Highway 17.
7/16/1997	7/16/1997	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2.00k	0	Several trees were knocked down on Old Cornith Road by thunderstorm winds.
7/27/1997	7/27/1997	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	1.50k	0	Thunderstorm winds knocked down several trees southeast of Wadley
4/17/1998	4/17/1998	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2.00k	0	Several trees were blown down and there were power outages near Wadley.

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
6/9/1998	6/9/1998	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	5.00k	0	Jefferson county 911 reported trees and power lines down at 3 different locations between Wrens and Louisville.
8/18/1998	8/18/1998	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	1.00k	0	Louisville 911 reported 3 trees down on highway 296 north of Louisville. Widespread power outages were also reported.
6/29/1999	6/29/1999	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	1.00k	0	The Wrens police department reported trees down and power outages.
8/19/1999	8/19/1999	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	5.00k	0	Jefferson county 911 reported trees and power lines down. A newspaper reported the wind blew over a gas pump at a convenience store in Wrens. Some roofing was also ripped away at an auto parts store about a mile to the south.
6/22/2000	6/22/2000	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	5.00k	0	The Jefferson County Emergency Management Coordinator reported trees down on power lines all across the county. In addition, a tree was reported down and blocking Georgia Highway 102 between Avera and Stapleton in the north part of the county.
8/1/2000	8/1/2000	Severe Storm/Thunder Storm - Wind	Wadley		0	0	3.00k	0	The Jefferson county 911 center reported that trees were knocked down on Moxley-Bartow Road.
1/19/2001	1/19/2001	Severe Storm/Thunder Storm - Wind	Louisville		0	0	2.00k	0	The Jefferson county 911 center reported that trees were blown down.
6/3/2001	6/3/2001	Severe Storm/Thunder Storm - Wind	Wadley		0	0	2.00k	0	The Jefferson County 911 center reported that trees were down.
8/24/2001		Thunderstorm Wind	Avera	56 kts. E	0	0	0.00K	0.00K	The Avera Post Office estimated wind gusts at 65 mph.

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
7/21/2002		Thunderstorm Wind	Wadley		0	0	0.00K	0.00K	The Wadley Fire and Police Department reported that one tree was down.
7/31/2002	7/31/2002	Severe Storm/Thunder Storm - Wind	Stapleton	50 kts.	0	0	1.00k	0	The Jefferson county 911 center reported that some trees were down from Jefferson to Wrens.
2/22/2003	2/22/2003	Severe Storm/Thunder Storm - Wind	Louisville	50 kts.	0	0	3.00k	0	The Jefferson county 911 center reported that power lines were down.
3/22/2003	3/22/2003	Severe Storm/Thunder Storm - Wind	Jefferson	50 kts.	0	0	3.00k	0	
5/2/2003	5/2/2003	Severe Storm/Thunder Storm - Wind	Louisville	50 kts.	0	0	2.00k	0	The Jefferson county 911 center reported that some trees were down.
5/17/2003		Thunderstorm Wind	Wadley	50 kts. EG	0	0	0.00K	0.00K	The Jefferson county 911 center reported that a number of trees had been blown down.
7/1/2003	7/1/2003	Severe Storm/Thunder Storm - Wind	Louisville	50 kts.	0	0	30.00k	0	The News and Farmer-Jefferson Reporter of Louisville reported that thunderstorm winds, associated with the remnants of Tropical Storm Bill, caused considerable damage to a home west of Louisville on Grange Road. A portion of the roof over the garage collapsed. The house also sustained other minor damage. A number of trees were blown down or split in half across the street and even up to one-third of a mile away.

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
9/6/2004		Thunderstorm Wind	Jefferson				75.0k		The News and Farmer Jefferson Reporter reported that numerous trees and power lines were blown down throughout the county. At least 30 roads in the county were blocked. In addition, WPEH radio in Louisville reported that 5.15 inches of rain fell.
9/27/2004		Thunderstorm Wind	Jefferson				.5k		The Jefferson County 911 Center reported that a couple of trees were blown down in the county.
10/3/2004	10/3/2004	Severe Storm/Thunder Storm - Wind	Wrens	61 kts.	0	0	30.00k	0	A large tree was blown down in the Hidden Lakes Subdivision. An adjacent car sustained minor damage.
4/2/2005	4/2/2005	Severe Storm/Thunder Storm - Wind	Jefferson	0	0	2	2.5k		The Jefferson County 911 Center reported that a couple of power lines were blown down.
8/22/2005	8/22/2005	Severe Storm/Thunder Storm - Wind	Louisville	36 kts.	0	0	1.00k	0	The Jefferson County 911 Center reported that a couple of power lines were blown down.
1/2/2006	1/2/2006	Severe Storm/Thunder Storm - Wind	Wadley	) kts. EG	0	0	2.00k	0	The Georgia State Patrol reported that several trees were down on U.S. Highway 1 just south of Wadley.
7/2/2006	7/2/2006	Severe Storm/Thunder Storm - Wind	Jefferson						Trees toppled power lines downed due to a band of thunderstorms
7/1/2007	7/1/2007	Severe Storm/Thunder Storm - Wind	Stapleton		0	0	2.00k	0	Thunderstorm Wind (39EG)
8/17/2007	8/17/2007	Severe Storm/Thunder Storm - Wind	Jefferson	52 kts. EG	0	0	10.0k	0	Thunderstorm Wind (52EG)
5/11/2008	5/11/2008	Severe Storm/Thunder Storm - Wind	Almira		0	0	500.00k	0	Thunderstorm Wind (56EG)
5/20/2008	5/20/2008	Severe Storm/Thunder Storm - Wind	Louisville		0	0	10.00k	0	Thunderstorm Wind (52EG)
6/11/2008	6/11/2008	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	3.00k	0	Thunderstorm Wind (52EG)
7/5/2008	7/5/2008	Severe Storm/Thunder Storm - Wind	Wrens		0	0	0.50k	0	Thunderstorm wind (37EG)
5/6/2009		Flood	Bartow		0	0	1.00K	0.00K	
6/20/2010	6/20/2010	Severe Storm/Thunder Storm - Wind	Louisville		0	0	5.00k	0	

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
6/15/2011	6/15/2011	Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2.00k	0	
8/9/2011		Thunderstorm Wind	Wadley	50 kts. EG	0	0	3.00K	0.00K	
8/9/2011	8/9/2011	Severe Storm/Thunder Storm - Wind	Wrens		0	0	3.00k	0	
11/16/2011		Thunderstorm Wind	Stapleton	50 kts. EG	0	0	7.00K	0.00K	
5/31/2012	5/31/2012	Severe Storm/Thunder Storm - Wind	Louisville	5 kts. EG	0	0	0.50k	0	
6/10/2012	6/10/2012	Severe Storm/Thunder Storm - Wind	Louisville	0 kts. EG	0	0	0.50k	0	
6/10/2012	6/10/2012	Severe Storm/Thunder Storm - Wind	Wadley	5 kts. EG	0	0	0.25k	0	
7/3/2012	7/3/2012	Severe Storm/Thunder Storm - Wind	Louisville	0 kts. EG	0	0	0.75k	0	
8/14/2012	8/14/2012	Severe Storm/Thunder Storm - Wind	Bartow	0 kts. EG	0	0	2.00k	0	
9/2/2012	9/2/2012	Severe Storm/Thunder Storm - Wind	Avera	0 kts. EG	0	0	1.50k	0	
7/17/2013		Thunderstorm Wind	Louisville						The Jefferson County 911 Center reported numerous trees and power lines down across the county.
1/11/2014		Thunderstorm Wind	Wrens						The Jefferson County Emergency Manager reported a tree down in Wrens.

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
8/6/2011	8/6/2011	Lightning	Magnolia	0	0	500	0	
8/10/2003	8/10/2003	Lightning	Louisville	0	0	25000	0	center reported that lightning struck a house and
8/20/1999	8/20/1999	Lightning	Wrens	0	0	10000	0	Lightning caused a fire that spread throughout the attic of a home on North Main Street. There was damage to the roof and its support
7/23/1997	7/23/1997	Lightning	Zebina	0	0	200000	0	Lightning was responsible for at least three house fires in Jefferson County. The
8/1/1973	8/1/1973	Lightning	Jefferson	0	0	50000	0	ELECTRICAL
3/18/1970	3/22/1970	Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	314.47	0	HEAVY RAINS, WIND AND LIGHTNING
6/29/1969	6/29/1969	Lightning - Wind	Jefferson	0	0	1020.41	0	Wind and lightning
7/22/1967	7/22/1967	Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	420.17	0	Wind, rain, and lightning
3/15/1964	3/15/1964	Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0.03	0	1470.59	0	WIND, RAIN, ELECRICAL
6/14/1963	6/14/1963	Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	138.89	138.89	Wind, rain and electrical
8/7/1962	8/8/1962	Lightning - Wind	Jefferson	0	0.01	427.35	0	Wind and lightning
6/2/1968	6/2/1968	Hail - Lightning - Wind	Jefferson	0	0	314.47	0	Wind, hail, and lightning
11/21/1965	11/22/1965	Hail - Lightning - Wind	Jefferson	0	0	31.45	0	electrical, wind and hail
5/16/1962	5/16/1962	Hail - Lightning - Wind	Jefferson	0	0.02	43.1	43.1	WIND, HAIL, ELECTRICAL
5/25/1960	5/26/1960	Hail - Lightning - Wind	Jefferson	0	0	31.45	31.45	WIND, HAIL, ELECTRICAL
4/23/1971	4/23/1971	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	314.47	314.47	WIND, RAIN, HAIL, AND LIGHTNING
7/9/1967	7/9/1967	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	31.45	314.47	Wind, rain, hail, and lightning
5/27/1963	5/27/1963	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	66.67	6.67	Rain, wind, hail and electrical
7/17/1962	7/17/1962	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson	0	0	31.45	31.45	Wind, hail, rain, and lightning

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
6/3/1959		Hail	**Jefferson**						**1.50 inch**
2/10/1960	2/10/1960	Hail - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	31.45	0	WIND, RAIN, HAIL
3/30/1960	3/30/1960	Hail - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	31.45	0	WIND, HAIL, RAIN
5/25/1960	5/26/1960	Hail - Lightning - Wind	Jefferson		0	0	31.45	31.45	WIND, HAIL, ELECTRICAL
5/25/1961	5/25/1961	Hail - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	7.69	76.92	Hail, wind and rain
6/11/1961	6/11/1961	Hail - Wind	Jefferson		0	0	147.06	14.71	Wind and hail
5/16/1962	5/16/1962	Hail - Lightning - Wind	Jefferson		0	0.02	43.1	43.1	WIND, HAIL, ELECTRICAL
5/28/1962	5/28/1962	Hail - Wind	Jefferson		0	0	111.11	11.11	WIND AND HAIL
7/17/1962	7/17/1962	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	31.45	31.45	Wind, hail, rain, and lightning
7/24/1962	7/24/1962	Hail - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	51.02	5.1	Wind, hail, and rain
5/27/1963	5/27/1963	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	66.67	6.67	Rain, wind, hail and electrical
7/11/1963	7/11/1963	Hail - Wind	Jefferson		0	0	14.71	14.71	Hail and wind
5/21/1964	5/21/1964	Hail - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	2380.95	238.1	WIND, RAIN, AND HAIL
4/12/1965	4/12/1965	Hail - Severe Storm/Thunder Storm	Jefferson		0	0	45.05	45.05	Hail and rain
11/21/1965	11/22/1965	Hail - Lightning - Wind	Jefferson		0	0	31.45	0	electrical, wind and hail
7/9/1967	7/9/1967	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	31.45	314.47	Wind, rain, hail, and lightning
6/2/1968	6/2/1968	Hail - Lightning - Wind	Jefferson		0	0	314.47	0	Wind, hail, and lightning
4/18/1969		Hail	Jefferson						.75 inch
4/23/1971	4/23/1971	Hail - Lightning - Severe Storm/Thunder Storm - Wind	Jefferson		0	0	314.47	314.47	WIND, RAIN, HAIL, AND LIGHTNING
5/8/1971	5/8/1971	Hail	Jefferson		0	0	0	25000	Hail
4/14/1984	4/14/1984	Hail	Jefferson		0	0	0	50000	Hail
6/10/1993	6/10/1993	Hail	Jefferson		0	0	0	50000	Hail
4/26/1996		Hail	Louisville	1.75 in.					Jefferson County 911 reported golfball size hail near Clarksmill Road.
4/3/1998		Hail	Bartow	1.00 in.					
4/17/1998		Hail	Louisville	0.75 in.					
4/22/1998		Hail	Louisville	1.00 in.					Jefferson county 911 reported quarter size hail between Louisville and Wrens.
4/24/1999		Hail	Louisville	1.75 in.					The public reported hail a little larger than golf ball size, strong winds, and power out in Louisville.

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
8/24/2001		Hail	Avera	0.75 in.	0	0	0	0	The Avera Post Office reported dime size hail.
5/3/2002		Hail	Louisville	1.00 in.	0	0	0	0	The Jefferson county 911 center reported dime to quarter size hail.
7/6/2002		Hail	Wrens	1.75 in.	0	0	0	0	The Wrens police department reported golf ball size hail.
7/21/2002			Wadley				3392.8	125981	129373.93
3/19/2003		Hail	Louisville	0.75 in.	0	0	0	0	The Jefferson county 911 center and the public both reported penny size hail.
4/7/2003		Hail	Wrens	1.00 in.	0	0	0	0	The Wrens Police Department reported quarter-sized hail.
5/2/2003		Hail	Louisville	0.75 in.	0	0	0	0	The Jefferson county 911 center reported penny-sized hail.
5/11/2003		Hail	Louisville	1.00 in.	0	0	0	0	The public reported nickel to quarter-sized hail halfway between Louisville and Wrens.
6/12/2004		Hail	Stellaville	1.75 in.	0	0	0	0	The Jefferson County 911 center reported golf ball-sized hail in the Stellaville area.
4/13/2005		Hail	Louisville	1.00 in.	0	0	0	0	The Jefferson County 911 Center reported quarter-sized hail.
12/28/2005	12/28/2005	Hail	Louisville		0	0	5000	0	The Columbia, SC Weather Forecast Office relayed a report from a storm spotter of golf ball-sized hail.
12/28/2005		Hail	Louisville	1.75 in.	0	0	5000	0	The public reported penny-sized hail.
5/14/2006		Hail	Louisville	0.75 in.	0	0	0	0	The Jefferson County Emergency Management Director reported penny-sized hail.
5/14/2006		Hail	Louisville	0.75 in.	0	0	0	0	The public observed penny-sized hail.
7/28/2006		Hail	Bartow	0.75 in.	0	0	0	0	
3/15/2008	3/15/2008	Hail	Jefferson		0	0	300000	0	Hail (2.75)

BGN_DATE	END_DATE	EVTYPE	BGN_LOCATI	MAG	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
3/15/2008		Hail	Stapleton	2.75 in.	0	0	300000	0	
7/22/2008		Hail	Louisville	0.75 in.	0	0	0	0	
7/28/2008	7/28/2008	Hail	Jefferson	1.75 in.	0	0	80000	0	Hail (1.75)
7/28/2008		Hail	Wrens	1.75 in.	0	0	80000	0	
8/4/2008		Hail	Wadley	0.75 in.	0	0	0	0	
6/20/2010		Hail	Louisville	1.00 in.	0	0	0	0	
9/25/2011		Hail	Wrens	0.88 in.	0	0	0	0	
9/27/2011	9/27/2011	Hail	Jefferson		0	0	45000	0	
9/27/2011		Hail	Wadley	1.75 in.	0	0	45000	0	
5/21/2013		Hail	Wrens	0.88 in.	0	0	0	0	The public reported nickel sized hail in Wrens.

Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Avera city	City Hall	Avera City Hall												1000	$312,500	2014	$200,000	2,014			1	2
Avera city	Water System	Avera Water Tank												100	$325,000	2013						2
Avera city	Fire Station	Avera Fire Station												4250	$100,000	2013	$200,000	2,013				2
Totals for Avera city, Hazard Score = 2														5,350	$737,500		$400,000		$0	$0	1	
Bartow town	City Hall	Bartow City Hall												1920	$209,300	2013	$53,500	2,013			3	2
Bartow town	Fire Station	Bartow Fire Dept and Emergency Shelter												7500	$330,630	2013	$38,500	2,013			1	2
Bartow town	Water System	Bartow Water Tower												100	$393,000	2013	$0					2
Bartow town	Water System	Bartow Water Well												275	$111,800	2013	$0					2
Bartow town	Water System	Bartow Water Well #2												275	$119,700	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow wastewater Lift Station #1												100	$70,300	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #2												100	$71,400	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #3												100	$69,000	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #4												100	$60,500	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Lift Station #5												100	$90,200	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Treatment Pond												10307	$50,400	2013	$0					2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Holding Pond												13509	$46,400	2013						2
Bartow town	Wastewater Treatment Plant	Bartow Wastewater Sewage Effluent Pump Station												100	$63,700	2013	$0					2
Bartow town	Other	Bartow Community Center & Auditorium												11232	$1,342,200	2013	$250,000	2,013			1	2

Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Bartow town	Other	Bartow Fire Dept & Communications Bldg												64	$17,100	2013	$60,000	2,013				2
Bartow town	Other	Bartow Museum												2450	$826,847	2013		2,013			1	2
Totals for Bartow town, Hazard Score = 2														48,232	$3,872,477		$402,000		$0	$0	6	
Jefferson County	Hospital, Admissions Entrance	Jefferson Hospital												76000	$57,000,000	2013						2
Jefferson County	Other	Hardeman Building (Swann)												8278	$250,000	2013	$17,000	2,013			1	2
Jefferson County	County Jail	Old County Jail/IT/Purchasing												7742	$500,000	2013	$28,000	2,013			1	2
Jefferson County	Other	Jefferson County Chamber of Commerce/Murphy House												3281	$361,433	2013	$122,700	2,013			8	2
Jefferson County	Library	Jefferson County Library												5000	$66,085	2013	$848,000	2,013			10	2
Jefferson County	C&D	JEFFERSON CO-US 1 (AVERA RD) (SL)												10000	$1,500,000	2013						2
Jefferson County	Courthouse	Jefferson County Courthouse												6065	$5,147,708	2013	$125,000	2,013				2
Jefferson County	Courthouse	Jefferson County Magistrate and Juvenile Court												22000	$24,001,242	2013					20	2
Jefferson County	County Correctional Institution	Jefferson Co. Correction Facility												42446	$5,261,231	2013	$833,800	2,013			200	2
Jefferson County	Other	Ogeechee Service Center												10650	$900,000	2013		2,013			50	2
Jefferson County	Other	Jefferson Co. Law Enforcement Center												39892	$8,041,785	2013	$1,139,700	2,013			225	2
Jefferson County	Emergency Services	1st Baptist Church Evac Center												45075	$3,500,000	2013					5	2
Jefferson County	Emergency Services	Lions Club Evac. Center												1000	$12,000	2013						2
Jefferson County	Other	Jefferson County Commissioners Office/Long House												3080	$339,300	2013	$110,300	2,013			30	2
Jefferson County	Emergency Services	Jefferson County Armory Transit EMA												14040	$2,380,171	2013	$724,500	2,013			10	2
Jefferson County	Other	Jefferson County Senior Center												4924	$586,170	2013	$86,000	2,013			40	2

Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Jefferson County	Landfill	Jefferson County Landfill (New)												15000	$1,062,166	2013	$363,200	2,013			6	2
Jefferson County	Elementary School	Carver Elementary												6600	$12,750,000	2013	$510,000	2,013			292	2
Jefferson County	Elementary School	Louisville Academy Elementary												25047	$15,250,000	2013	$610,000	2,013			568	2
Jefferson County	Other	Wrens Elementary												78216	$20,500,000	2013	$820,000	2,013			637	2
Jefferson County	Middle School	Louisville Middle School												81642	$23,500,000	2013	$940,000	2,013			354	2
Jefferson County	Middle School	Wrens Middle School												59902	$17,000,000	2013	$680,000	2,013			315	2
Jefferson County	High School, Public	Jefferson County High School												179142	$55,000,000	2013	$2,200,000	2,013			937	2
Jefferson County	Other	Jefferson County Bus Shop												4920	$750,000	2013	$140,000	2,013			5	2
Jefferson County	Public Vocational Technical School	Sandersville Tech												10000	$1,930,505	2013					75	2
Jefferson County	Other	Jefferson County Health Dept												6341	$841,815	2013	$191,700	2,013			20	2
Jefferson County	Other	JC Radio Tower												100	$27,885	2013	$8,000	2,013				2
Jefferson County	Other	JC Building Department												1000	$51,090	2013	$17,500	2,013				2
Jefferson County	Other	JC Fire TowerShop/Supply Building												4072	$241,236	2013	$9,800	2,013			2	2
Jefferson County	Other	JC Recreation Dept												1867	$1,300,621	2013	$29,600	2,013				2
Jefferson County	Wastewater Treatment Plant	McBride Lift Station												100	$48,750	2013						2
Jefferson County	Wastewater Treatment Plant	Hillcrest Station												100	$45,700	2013						2
Jefferson County	Wastewater Treatment Plant	US # 1 Bypass Lift Station												100	$47,500	2013						2
Jefferson County	Wastewater Treatment Plant	Matthews Station												100	$47,500	2013						2
Totals for Jefferson County, Hazard Score = 2														773,722	$260,241,893		$10,554,800		$0	$0	3,811	

Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Louisville city	Water System	Booster pump station												100	$175,000	2013						2
Louisville city	City Hall	Louisvill City Hall												7200	$550,000	2013	$350,000	2,013			10	2
Louisville city	Fire Station	Louisville Fire Station												7200	$750,000	2014	$850,000	2,014			4	2
Louisville city	Wastewater Treatment Plant	Louisville Tech Lift Station												50	$125,000	2014			$125,000	$1,000		2
Louisville city	Wastewater Treatment Plant	Louisville Lift Station at HS												50	$150,000	2014			$150,000	$1,000		2
Louisville city	Other	Physicians Health Group Louisville												9560	$2,400,000	2014	$500,000	2,014			20	2
Louisville city	Other	NCA Northside Dialysis Center												7207	$1,261,225	2014					10	2
Louisville city	Water System	Louisville City WaterTower												100	$950,000	2014						2
Louisville city	Airport	Louisville City Airport												3200	$543,665	2013						2
Louisville city	City Hall	Louisville OLD City Hall												10000	$500,000	2006						2
Louisville city	Water System	Louisville Water Works												2400	$4,425,000	2014						2
Louisville city	Water System	Louisville Water Tower												100	$712,500	2014						2
Louisville city	Water System	City of Louisville Water Tank												100	$500,000	2006						2
Louisville city	Other	Market House												600	$100,000	2013						2
Louisville city	Other	OCI Nursing Home												45062	$5,000,000	2013					225	2
Totals for Louisville city, Hazard Score = 2														92,929	$18,142,390		$1,700,000		$275,000	$2,000	269	
Stapleton city	Water System	Stapleton Water Tank #2												100	$500,000	2012			$200,000			2
Stapleton city	Fire Station	Stapleton Fire house & Emergency Shelter												6000	$394,800	2012	$700,000	2,012	$100,000			2
Stapleton city	Water System	Stapleton Water Tank #1												100	$500,000	2012			$200,000			2
Stapleton city	City Hall	Stapleton City Hall & Emergency Shelter												3000	$383,700	2012	$30,000	2,012	$150,000		2	2
Totals for Stapleton city, Hazard Score = 2														9,200	$1,778,500		$730,000		$650,000	$0	2	
Wadley city	Other	Physicans Health Group Wadley												2318	$405,650	2013	$250,000	2,013			10	2

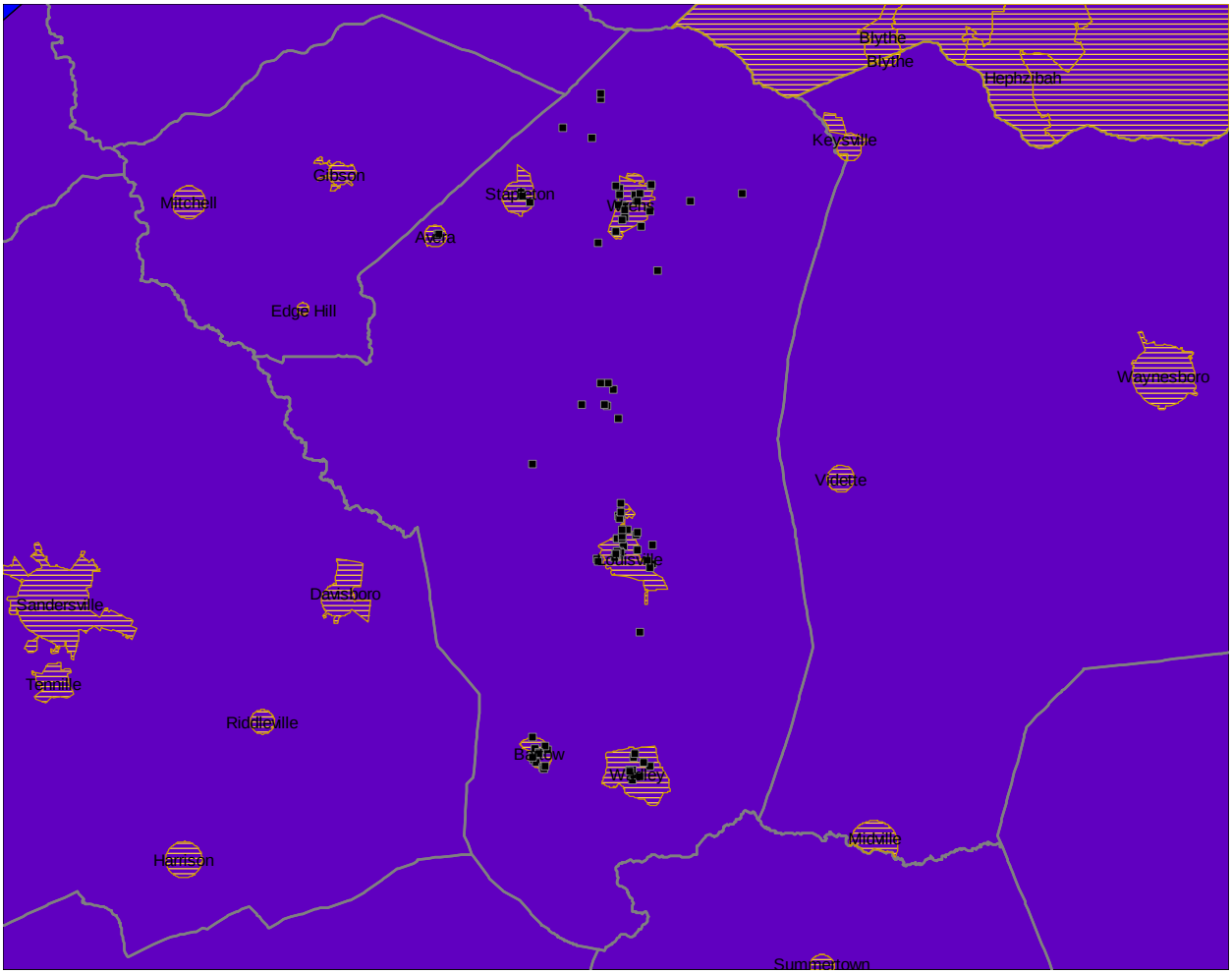
Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wadley city	City Hall	Wadley City Hall												3645	$1,500,000	2014	$250,000	2,014			5	2
Wadley city	Water System	Wadley Well House												100	$600,000	2013						2
Wadley city	Adult Edu. Center	Wadley Community Complex												6000	$700,000	2014						2
Wadley city	Library	Wadley Public Library												3114	$510,000	2013	$538,200	2,013			5	2
Wadley city	Water System	Wadley Elevated Water Tank												100	$650,000	2013						2
Wadley city	Water System	Wadley Water Tower #2												100	$500,000	2013						2
Wadley city	Other	Glendale Nursing Home												26500	$1,610,863	2014	$750,000	2,014			120	2
Wadley city	Other	Wadley Gym												1200	$400,000	2014						2
Totals for Wadley city, Hazard Score = 2														43,077	$6,876,513		$1,788,200		$0	$0	140	
Wrens city	Water System	King Mill Well (Well E)												50	$750,000	2014						2
Wrens city	Other	KA-MIN #1												10	$250,000	2014						2
Wrens city	Other	Border Regulator Station												100	$100,000	2012						2
Wrens city	Other	Calcine Meter Set												100	$225,000	2012						2
Wrens city	Other	Southern Tap #1												50	$750,000	2014						2
Wrens city	Wastewater Treatment Plant	Bushy Creek Lift Station												100	$400,000	2014						2
Wrens city	Other	Southern Tap #2												50	$750,000	2012						2
Wrens city	Wastewater Treatment Plant	West Walker St Lift Station												100	$300,000	2014						2
Wrens city	Water System	Water Booster Station												1000	$500,000	2012						2
Wrens city	Wastewater Treatment Plant	Highway 88 Lift Station												100	$350,000	2014						2
Wrens city	Wastewater Treatment Plant	Stephens St Lift Station												100	$350,000	2014						2
Wrens city	Wastewater Treatment Plant	Waynesboro Highway Lift Station												100	$400,000	2014						2
Wrens city	Other	Ka-Min #2												1955	$250,000	2014						2
Wrens city	Other	IMERYS Meter Set												10	$300,000	2014						2

Reporting for Wind Ha ard by Jurisdiction
Grouped by Ha ard Score

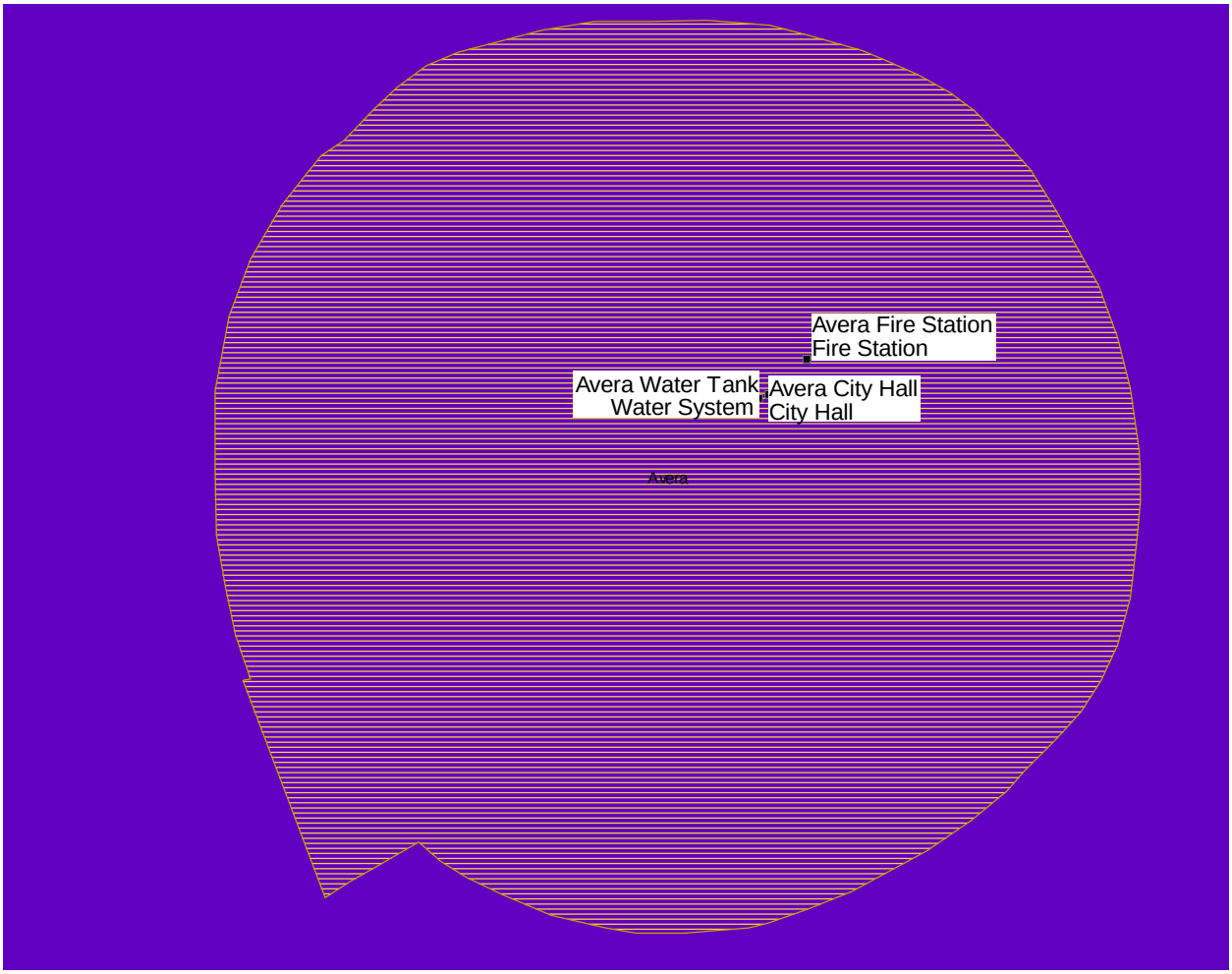
Government Jurisdiction	Type	Name or Structure Description	Essential Facility src img/rpt essfa	Transportation System	Lifeline System src img/rpt lifelin	High Potential Loss	Ha Mat Facility src img/rpt ha m	Important Facility src img/rpt imp2.j	Vulnerable Population	Economic Assets src img/rpt ecoas	Special Considerations	Historic Considerations	Other src img/rpt other	Si e of Bldg. (sq. ft.)	Replace Value ( )	Replace Value Year	Contents Value ( )	Contents Value Year	Functional Value ( )	Displace Cost (per day)	Occupancy	Ha ard Score
Wrens city	Other	Physicians Health Group Wrens												5802	$1,015,350	2013	$500,000	2,013			20	2
Wrens city	Other	Wrens Community Center												3400	$500,000	2014	$50,000				20	2
Wrens city	City Hall	Wrens City Hall												7500	$1,125,000	2013	$150,000				10	2
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						2
Wrens city	Water System	Wrens Water Pumping Station												144	$300,000	2014	$50,000					2
Wrens city	Water System	Wrens Water Tank												150	$625,000	2014						2
Wrens city	Water System	Wrens Water Pumping Station												64	$75,000	2014	$25,000					2
Wrens city	Wastewater Treatment Plant	Wrens Sewage Treatment Plant												1400	$3,250,000	2014	$125,000					2
Wrens city	Water System	Wrens Water Tank												200	$625,000	2014						2
Wrens city	Water System	Wrens Water Pumping Station												800	$75,000	2014	$25,000					2
Wrens city	Water System	Wrens Water Tank												250	$687,500	2014						2
Wrens city	Library	Wrens Old Library Building												3000	$625,000	2013	$549,200	2,013				2
Wrens city	Water System	Wrens Water Pumping Station												800	$125,000	2014	$25,000					2
Wrens city	Other	Wrens Medical Center												400	$875,000	2014	$200,000				20	2
Totals for Wrens city, Hazard Score = 2														27,935	$16,202,850		$1,699,200		$0	$0	70	
Grand Totals														1,000,445	$307,852,123		$17,274,200		$925,000	$2,000	4,299	

- Pre-Disaster Mitigation
- Fiscal Year: 2009
- Report created: Aug 24, 2014
- For more information call GEMA Pre-Disaster Mitigation at 1-800-TRY-GEMA



Jefferson County Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

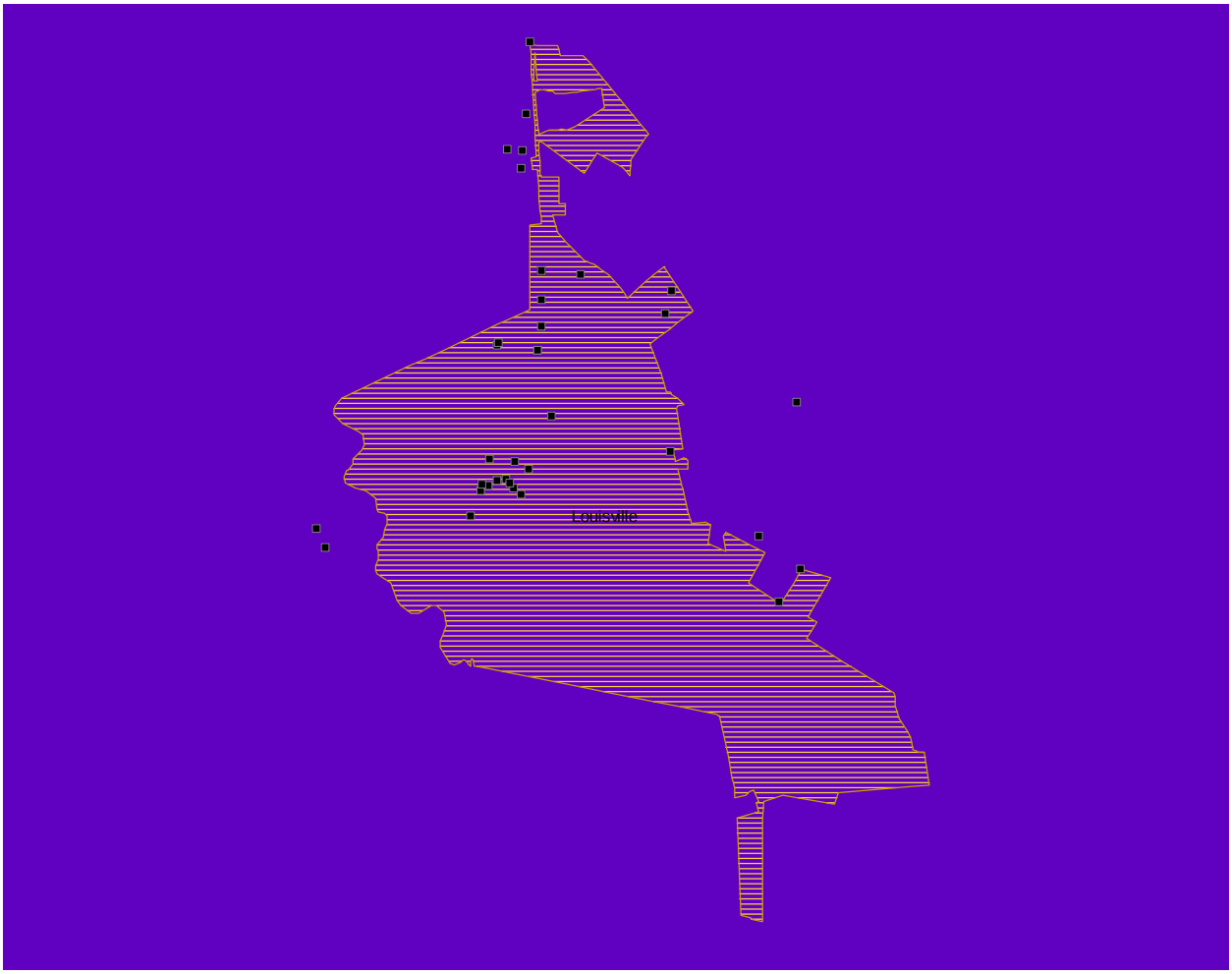


Avera Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

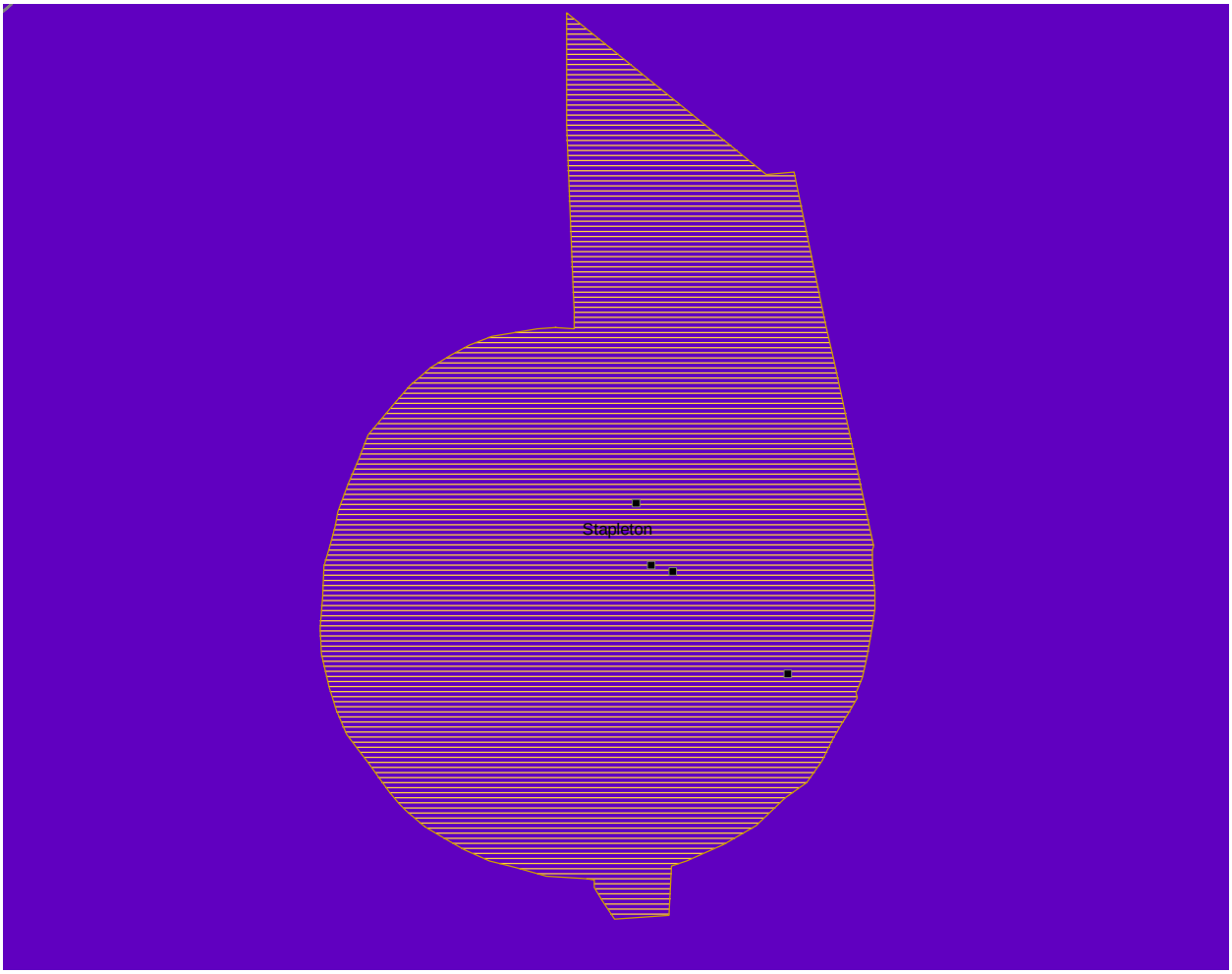
Bartow Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	



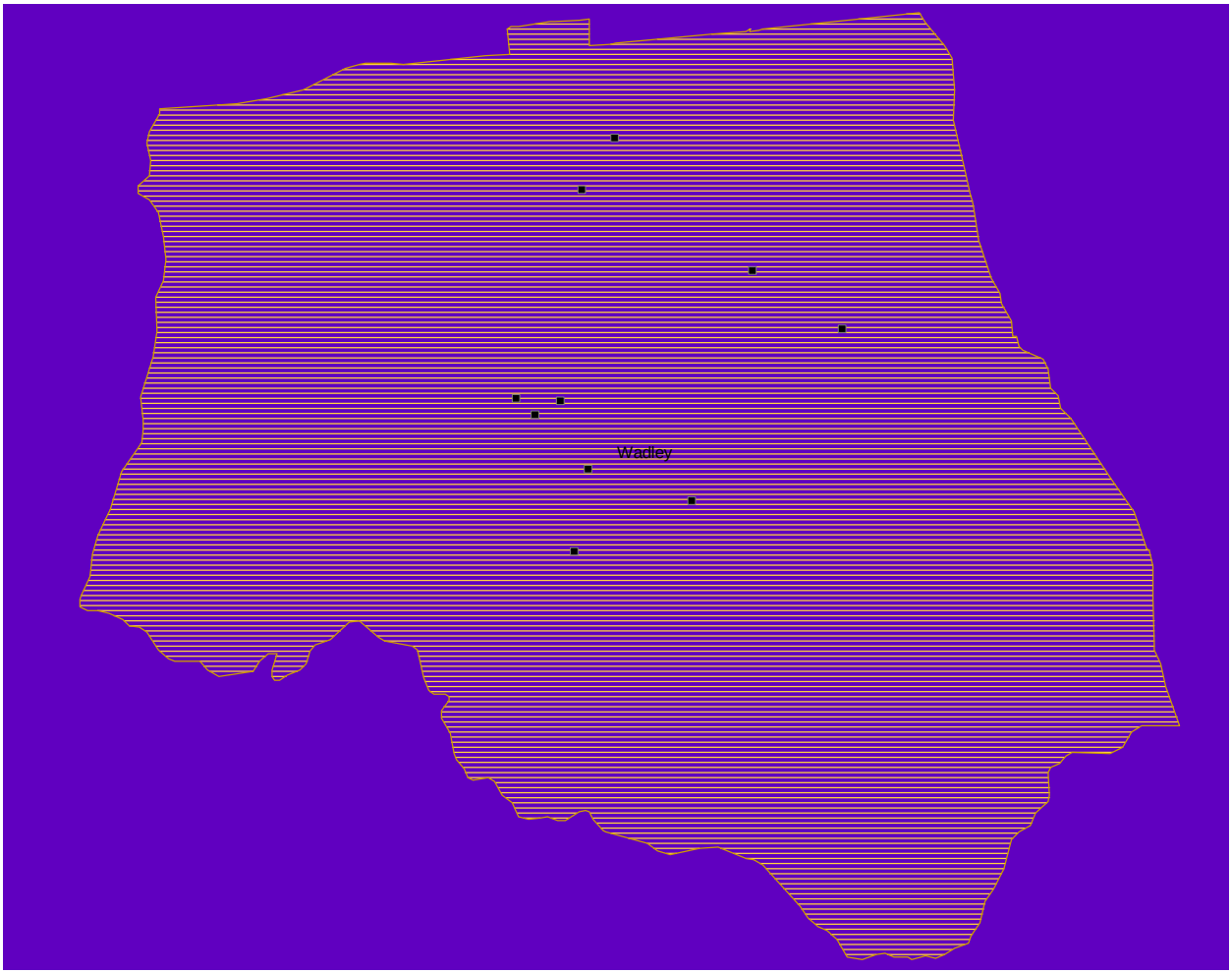
Louisville Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	



Stapleton Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	



Wadley Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

Wrens Wind Hazard Map from Georgia Mitigation Information System.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

Winter Storm

Southeastern snow or ice storms often form when an area of low pressure moves eastward across the northern Gulf of Mexico. To produce a significant winter storm in the south, not only must temperatures be cold enough, but there must also be enough moisture in the atmosphere to produce adequate precipitation. A major winter storm can last for several days and be accompanied by high winds, ice and freezing rain, heavy snowfall, and cold temperatures. These conditions can make driving conditions very dangerous, as well as bring down trees and power lines.

Winter storms are not spatially defined and affect the entire planning equally. The committee researched historical data from the NCDC, SHELDUS, the National Weather Service, as well as information from past newspaper articles relating to winter storms in Jefferson County. There have been 41 winter storm events recorded in the county over the last 122 years with an estimated property damage of $417,089. Although winter storms are infrequent in the south, they have the potential to cause excessive damage to a community and disrupt the lives of residents. Based on the hazard frequency table located in Appendix D there is an 80% chance of an annual winter storm event. The percentage is the same for all jurisdictions.

There have been 41 recorded winter storms. There is an 80% chance of an annual winter storm event. Winter storms can be more accurately predicted than most other natural hazards, making it possible to give advance warning to communities. The National Weather Service issues winter storm warnings and advisories as these storms make their way south. Given the infrequency of these types of storms, southern communities are still not properly equipped to sustain the damage and destruction caused by severe winter storms. To summarize, there are approximately 37,363 structures/properties in the county totaling slightly more than $1.3 billon with a population of 16,930.

BGN_DATE	END_DATE	EVTYPE	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
01/1893		Snow					4 inches
02/1894		Snow					3 inches
1/00/1900		Snow					3 inches
02/00/1901		Snow					8 inches
01/00/1912		Snow					2.5 inches
02/00/1912		Snow					1.5 inches
02/00/1914		Snow					9 inches
12/00/1935		Snow					3.00 inches
01/00/1936		Snow					2 inches
11/00/1950		Snow					.5 inches
02/00/1958		Snow					.5 inches
3/1/1960	3/2/1960	Winter Weather	0	0	69444.44	0	GLAZE, SLEET, SNOW
1/25/1961	1/26/1961	Winter Weather	0	0	314.46	0	GLAZE AND SLEET
3/2/1962	3/3/1962	Winter Weather	0	0	238.1	0	Glaze
12/31/1963	12/31/1963	Winter Weather	0	0	31446.54	0	SNOW AND ICE STORM
1/13/1964	1/13/1964	Winter Weather	0	0	3.14	0	Snow and sleet
1/29/1966	1/31/1966	Winter Weather	0	0	314.47	314.47	SNOW AND COLDWAVE
1/8/1970	1/10/1970	Winter Weather	0	0	314.46	0	COLD WAVE
2/9/1973	2/10/1973	Winter Weather	0	0	40000	0	14.8 in
1/1/1977	1/31/1977	Winter Weather	0	0	31446.54	0	Extreme Cold 2.5 inches
2/17/1979	2/18/1979	Winter Weather	0	0	5208.33	520.83	snow and sleet 2 inches
2/5/1980	2/6/1980	Winter Weather	0	0	549.45	0	Snow 1 inch
1/20/1983	1/21/1983	Winter Weather	0	0	5208.33	0	Winter Storm .30 inhes
12/00/1993		Snow					2.20 inches
1/15/1994	1/15/1994	Winter Weather	0	0	515.46	0	FREEZE
02/00/1996		Snow					1.3 inches

BGN_DATE	END_DATE	EVTYPE	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
1/2/2002	1/2/2002	Winter Weather	0	0	83333.33	0	Most of the precipitation fell as snow, except for the far southeastern counties of central Georgia, where a mixture of sleet, snow, and freezing rain occurred. Schools were closed in many counties for two to three days.
1/2/2002		Winter Storm	0	0	0	0.00K	From early morning through mid-evening on the 2nd about a 12 hour period of wet snow, sleet, and light freezing rain affected these areas. Ice accumulations averaged less than one-quarter inch, but were significant enough, when combined with a wet snow in some areas, to cause large tree limbs, and even some trees (especially pines), to fall on power lines, roads, and even some homes. Several power outages resulted. The hardest hit counties with glaze ice accumulations from freezing rain, freezing drizzle, and snow were Washington, Johnson, Jefferson, Emanuel, and Laurens counties. All together, several hundred trees were damaged or destroyed and thousands of people in these counties lost power during the 2-day storm. Many people did not have any power for 3 days or more. Emergency electrical crews were called out from out-of-state to assist with the cleanup and restoration of power.
2/26/2002		Extreme Cold/Wind Chill	0	0	0	0.00K	

BGN_DATE	END_DATE	EVTYPE	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
3/1/2002		Extreme Cold/Wind Chill	0	0	0	0.00K	
5/18/2002		Cold/Wind Chill	0	0	0	0.00K	
1/11/2003		Extreme Cold/Wind Chill	0	0	0	0.00K	
1/23/2003		Extreme Cold/Wind Chill	0	0	0	0.00K	
1/6/2004		Ice Storm			0		400 cutomers without power
12/26/2004		Ice Storm					3000 cutomers without power trees and limbs down
1/28/2005	1/30/2005	Winter Weather	0	0	97916.66	0	Jefferson: 1/4 inch of glaze ice, < 1.0 inch of sleet - Numerous trees and power lines were down throughout the county. More than 14,000 residents of the county, which includes most of the county, were left without power.
1/28/2005		Winter Storm	0	0	50000	0.00K	
2/12/2010		Heavy Snow	0	0	0	0.00K	The Jefferson County 911 Center reported 2.0 inches of snow.
12/25/2010		Winter Weather	0	0	0	0.00K	The Jefferson County 911 Center reported only trace amounts of snowfall across the county.
1/28/2014							A low pressure system moving up the GA/SC coast produced freezing rain, sleet, and snow over the CSRA closing schools, businesses, and some highways. Snow amounts of 1 to 3 inches were common across the area.

BGN_DATE	END_DATE	EVTYPE	FATALITIES	INJURIES	PROPDMG	CROPDMG	REMARKS
2/12/2014		Ice Storm					A significant winter storm impacted north and portions of central Georgia on Tuesday the 11th and Wednesday the 12th. For areas south of the Atlanta Metropolitan area and into central Georgia, the event began Wednesday morning the 12th. Rain mixed with and changed over to freezing rain through the morning hours, resulting in catastrophic ice accretions of a half to one inch of ice, with localized higher amounts, especially along the Interstate 20 corridor. Thousands of trees were downed and widespread power outages were reported, with some customers without power for days. The event ended as a round of light snow Wednesday evening.

LOUISVILLE 1 E, GEORGIA

Monthly Total Snowfall (Inches)

(095314)

File last updated on May 16,
*** Note *** Provisional Data *** After Year/Month 201205
a = 1 day missing, b = 2 days missing, c = 3 days, ..etc..,
z = 26 or more days missing, A = Accumulations present
Long-term means based on columns; thus, the monthly row may not
sum (or average) to the long-term annual value.
MAXIMUM ALLOWABLE NUMBER OF MISSING DAYS : 5
Individual Months not used for annual or monthly statistics if more than 5 days are missing.
Individual Years not used for annual statistics if any month in that year has more than 5 days missing.

YEAR(S)	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANN
1892-93	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	4.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	4.00
1893-94	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	3.00	0.00 z	0.00 z	0.00 z	0.00 z	3.00
1894-95	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.40	0.00 z	1.50	0.00 z	0.00 z	0.00 z	0.00 z	1.90
1895-96	5.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1896-97	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1897-98	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1898-99	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1899-00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	3.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	3.00
1900-01	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	8.00	0.00 z	0.00 z	0.00 z	0.00 z	8.00
1901-02	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	2.50	0.00 z	0.30	0.00 z	0.00 z	0.00 z	0.00 z	2.80
1902-03	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1903-04	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1904-05	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1905-06	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1906-07	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1907-08	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1908-09	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1909-10	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.30	0.00	0.00 z	0.00	0.00 z	0.00 z	0.30
1910-11	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1911-12	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	2.50	1.50	0.00 z	0.00 z	0.00 z	0.00 z	4.00

1912-13	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1913-14	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	9.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	9.00
1914-15	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1915-16	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1916-17	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1917-18	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1918-19	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1919-20	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1920-21	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1921-22	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1922-23	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1923-24	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1924-25	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1925-26	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1926-27	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1927-28	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1928-29	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1929-30	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1930-31	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1931-32	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1932-33	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1933-34	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1934-35	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	1.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	1.00
1935-36	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	3.00	2.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	5.00
1936-37	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1937-38	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1938-39	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1939-40	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1940-41	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.10 z	0.00 z	0.00 z	0.00 z	0.00
1941-42	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00	0.00	0.00
1942-43	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1943-44	0.00	0.00 z	0.00 z	0.00	0.00 z	1.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	1.00
1944-45	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00	0.00 z	0.00	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1945-46	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1946-47	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1947-48	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
1948-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1949-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1950-51	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.50
1951-52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1952-53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1953-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1954-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00 a	0.00	0.00	0.00	0.00	0.00		0.00
1955-56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 a	0.00	0.00	0.00		0.00
1956-57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1957-58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00		0.50
1958-59	0.00	0.00	0.00	0.00	0.00	0.00 a	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1959-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 z	0.00	0.00	0.00		0.00

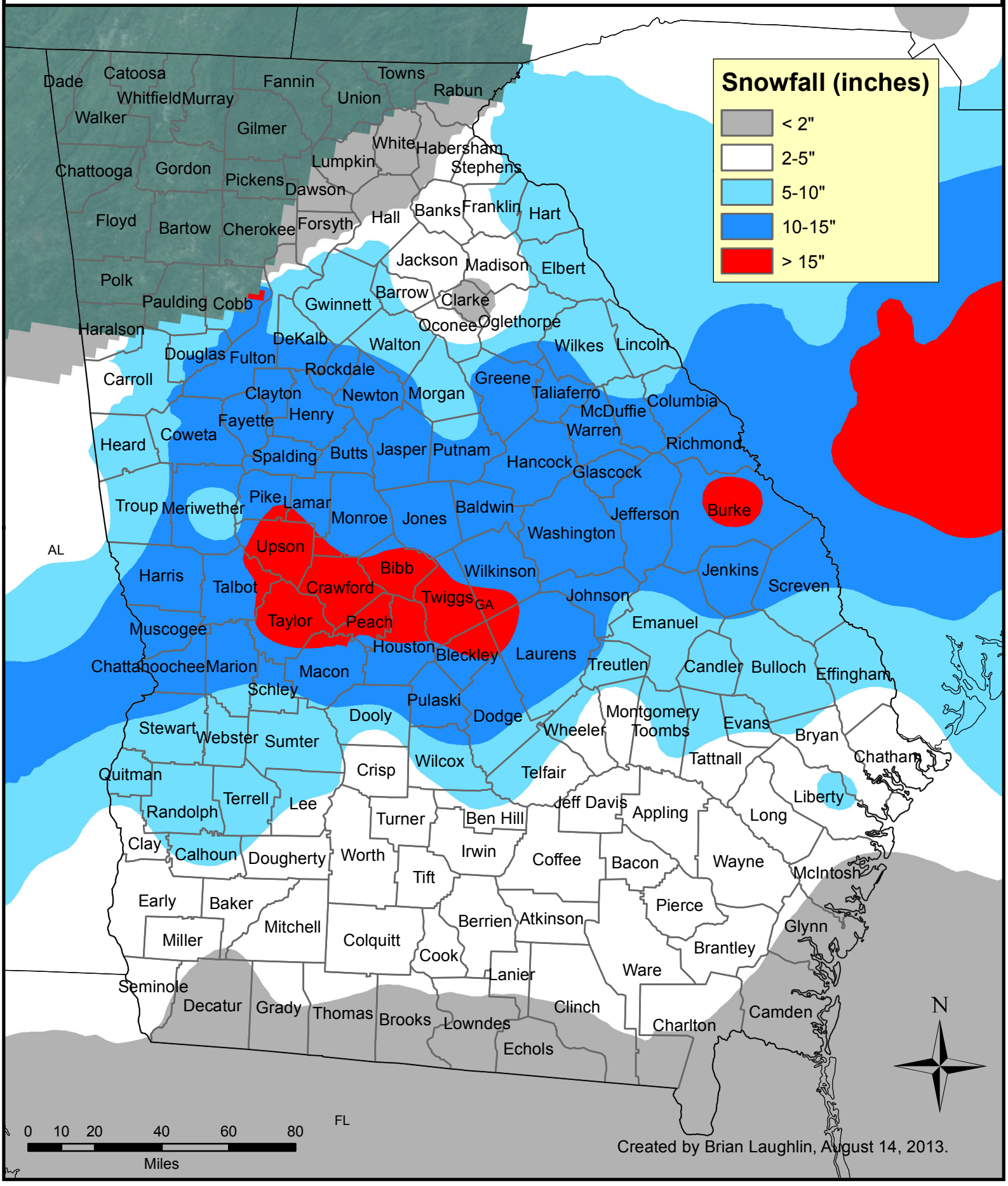
1960-61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	b	0.00	0.00	0.00	0.00	0.00	0.00
1961-62	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1962-63	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1963-64	0.00	0.00	0.00	0.00	0.00	0.00	b	0.00	a	0.00	c	0.00	0.00	0.00	0.00	0.00
1964-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1965-66	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1966-67	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1967-68	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	c	0.00	0.00	0.00	0.00	0.00
1968-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	z	0.00	0.00	0.00	0.00
1969-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1970-71	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1971-72	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	z	0.00	0.00
1972-73	0.00	0.00	0.00	0.00	0.00	0.00	z	0.00		14.80	0.00	0.00	0.00	0.00	14.80
1973-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1974-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1975-76	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1976-77	0.00	0.00	0.00	0.00	0.00	0.00	2.50		0.00	0.00	0.00	0.00	0.00	0.00	2.50
1977-78	0.00	0.00	0.00	0.00	0.00	0.00	0.00		2.00	0.00	0.00	0.00	0.00	0.00	2.00
1978-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00		2.00	0.00	0.00	0.00	0.00	0.00	2.00
1979-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	1.00	0.00	0.00	0.00	0.00	1.00
1980-81	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1981-82	0.00	0.00	0.00	0.00	z	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1982-83	0.00	0.00	0.00	0.00	0.00	0.00	0.30		0.00	0.00	0.00	0.00	0.00	0.00	0.30
1983-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1984-85	0.00	z	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1985-86	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1986-87	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1987-88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988-89	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	a	0.00	0.00	0.00	0.00	0.00
1989-90	0.00	0.00	0.00	0.00	z	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
1990-91	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1991-92	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992-93	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993-94	0.00	0.00	0.00	0.00	0.00	2.20	0.00		0.00	0.00	0.00	0.00	0.00	0.00	2.20
1994-95	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995-96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	1.30	0.00	0.00	0.00	0.00	0.00	1.30
1996-97	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997-98	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998-99	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999-00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001-02	0.00	0.00	0.00	0.00	0.00	0.00	3.10		0.00	0.00	0.00	0.00	0.00	0.00	3.10
2002-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006-07	0.00	0.00	0.00	0.00	0.00	z	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
2007-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00

2008-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	3.00
2010-11	0.00	0.00	0.00	0.00	0.00	0.60	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.60
2011-12	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00 z	0.00
Period of Record Statistics													
MEAN	0.00	0.00	0.00	0.00	0.01	0.14	0.25	0.60	0.02	0.00	0.00	0.00	0.34
S.D.	0.00	0.00	0.00	0.00	0.06	0.54	0.81	2.19	0.13	0.00	0.00	0.00	0.81
SKEW	0.00	0.00	0.00	0.00	7.68	4.21	3.25	4.85	7.68	0.00	0.00	0.00	2.33
MAX	0.00	0.00	0.00	0.00	0.50	3.00	4.00	14.80	1.00	0.00	0.00	0.00	3.10
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO YRS	63	63	63	63	62	70	74	78	62	63	62	63	54

February 9-11, 1973 Winter Storm

RSI = 12.52, Category 4

NOAA

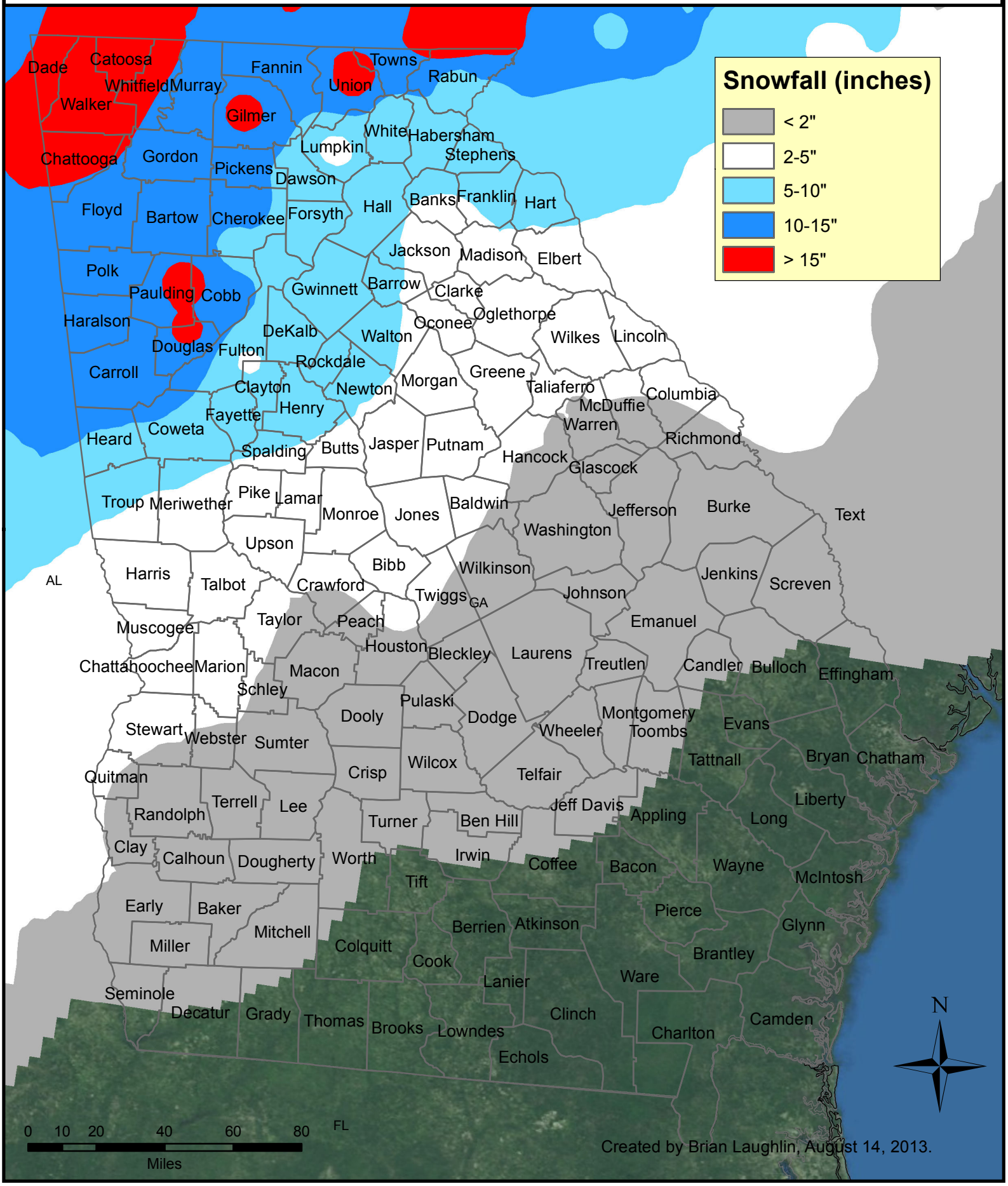


Created by Brian Laughlin, August 14, 2013.

March 12-15, 1993 Winter Storm

RSI = 20.572, Category 5

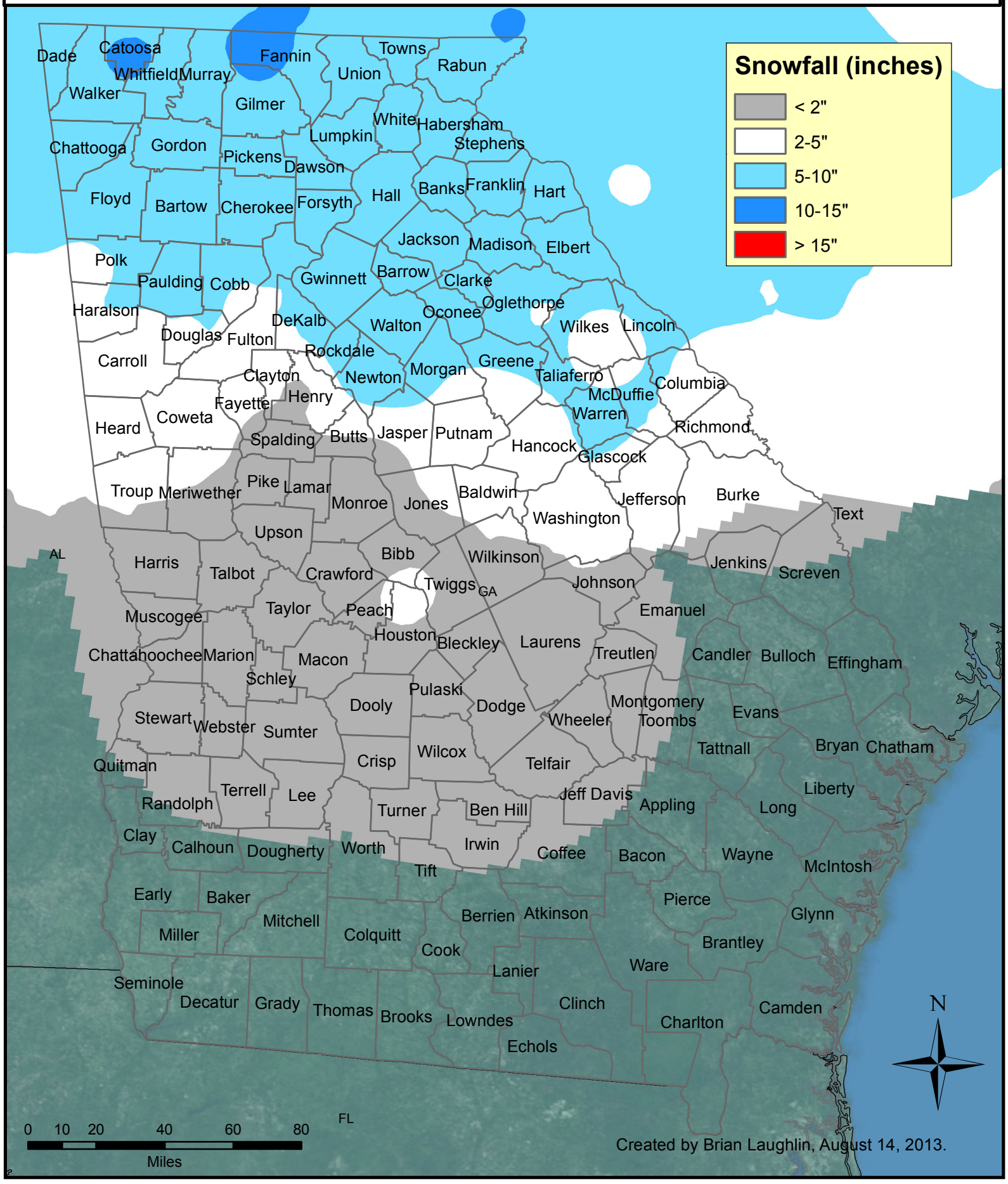
NOAA



January 9-11, 2011 Winter Storm

RSI = 4.158, Category 2

NOAA



APPENDIX B

GROWTH
AND
DEVELOPMENT TRENDS
COMMUNITY INFORMATION

JEFFERSON COUNTY

Joint Comprehensive Plan

2004-2024

Prepared by the Central Savannah River Area Regional Development Center for Jefferson County, Georgia and the cities of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens, Georgia.

INTRODUCTION

Taking a broad look at a community's population growth from the past, to the present and into the future is essential to any comprehensive planning process. This section provides a basis for the Economic Development, Transportation, Community Facilities, Housing and Land Use elements of Jefferson County's 10-year Comprehensive Plan update. The dynamics of Jefferson County's past population trends, present population conditions and future estimates of population growth will lay the groundwork for the community's initiatives for growth in the next ten years. Future population forecasts supply a vital picture for the planning of infrastructure improvements and land development patterns that are consistent with the goals and policies established in the other elements of this Plan.

A combination of data resources, including the United States 2000 Census Bureau, Woods and Poole Economics, Inc., Georgia Department of Labor, and Georgia Department of Education are utilized to create the most accurate portrait of Jefferson County's population dynamics.

The methodology used in population projections greatly affects their outcome. The most simple and least time-consuming method is trend analysis of population change. This method utilized past tendencies to make projections about the future. Cohort component analysis makes estimates based on three (3) main factors affecting population change: birth rate, death rate, and migration. Neither method considers more comprehensive factors affecting population changes.

The Woods & Poole Economics, Inc. method is based on a large computer aggregation that contains historic census data and models population growth on natural increase and migration based on job creation. The model balances projections across the state and the nation so that changes in one region are reflected in another. The planning process requires that one population projection method be consistently used to determine plan requirements. Woods & Poole Economics (2002) projections will be used throughout the comprehensive plan. Where municipal population projections are unavailable, the county growth or decline rate will be used to determine trends.

Setting

Jefferson County is one of 14 counties that comprise the Central Savannah River Area (CSRA). The county is a member of the Central Savannah River Area Regional Development Center (RDC) located in Augusta. Eighty-two (82) percent of the CSRA's population resides in Augusta-Richmond, Columbia and McDuffie Counties. This tri-county metropolis is part of the five county Augusta-Aiken Metropolitan Statistical Area (MSA). Aiken and Edgefield Counties comprise the South Carolina portion of the Augusta-Aiken MSA. The counties surrounding the CSRA's center hub, Augusta, have traditionally been its bedroom communities. Yet, each surrounding county is working diligently to improve their employment base so as not to be economically dependent on Richmond County.

The area outside of the Augusta-Aiken MSA is rural and economically dependent on agriculture and manufacturing. Jefferson, Washington and Johnson Counties as well as the western half of McDuffie County are Kaolin dependant areas. Timber is the prime agricultural commodity in Jefferson County and in the surrounding rural areas. The

manufacturing of kaolin is a focus of the region's industry. These three areas, as well as Burke, Emmanuel, Jenkins, Johnson and Screven Counties, are also impacted by the Floridian Aquifer. The aquifer supplies approximately 50% of Georgia's water supply.

The northern and southern tips of Jefferson County are Enterprise Communities. Based on census tract analysis and a designation by the federal government, the Enterprise Community classification deems these two areas in the county as some of the poorest of the region and thus, warranting special attention. An Enterprise Community receives money from the federal government for the implementation of new and innovative projects to help the area. Other Enterprise Communities in the CSRA include the entire lower half of Warren County, the northeastern portion of Hancock County, the western majority of Taliaferro County and one-third of eastern Burke County.

POPULATION

Jefferson County and the municipalities have undergone slow but gradual population decline over the last two decades (Table P-1). The county has lost 1,137 of its population, representing a 6.1% decline. In percentage terms, Wadley has lost the most population at 14.3% while Wrens' population decline was the lowest at 4.1%. Only Louisville among the municipalities has regained some of the population losses of the 1980s in the 1990s.

Table P-1: Total Population, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	18,403	17,906	17,408	17,337	17,266	17,214	17,234	17,264	17,358	17,448
Avera	248	230	212	215	217	216	217	218	219	220
Bartow	357	338	319	312	304	303	306	308	309	311
Louisville	2,823	2,622	2,421	2,567	2,712	2,704	2,707	2,712	2,726	2,739
Stapleton	388	370	351	335	318	317	318	319	320	321
Wadley	2,438	2,442	2,446	2,267	2,088	2,082	2,085	2,090	2,103	2,116
Wrens	2,415	2,405	2,396	2,355	2,314	2,307	2,310	2,316	2,328	2,330

Source: U.S. Bureau of the Census; Woods & Poole (2002)

Population projections for the county and municipalities highlight very limited population growth through the planning period. Population in Jefferson County and the municipalities is projected to increase 1.2% through 2025 (Table P-2), significantly below the projected rural CSRA growth rate of 10.5% and state (+35.9) and national (+27) averages.

Table P-2: Population Change, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	N/A	-2.7%	-2.8%	0.4%	-0.4%	-0.3%	0.1%	0.2%	0.5%	0.5%
Avera	N/A	-7.2%	-7.8%	1.4%	0.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Bartow	N/A	-5.3%	-5.6%	-15%	-17%	-0.3%	0.1%	0.2%	0.5%	0.5%
Louisville	N/A	-7.1%	-7.6%	6.1%	5.6%	-0.3%	0.1%	0.2%	0.5%	0.5%
Stapleton	N/A	-4.6%	-5.1%	-4.5%	-5%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wadley	N/A	0.1%	0.1%	7.3%	-7.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wrens	N/A	0.4%	0.3%	-1.7%	1.7%	-0.3%	0.1%	0.2%	0.5%	0.5%

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

Households

Household growth change varies from jurisdiction to jurisdiction in Jefferson County and the municipalities. In the unincorporated area, household growth has been continual in the past two decades, increasing 5.8% between 1980 and 2000. Among the municipalities, only Louisville (+1%), Wrens, (+6.3%) and Avera (+7.6%) reported an increase in households since 1980. Household growth in Louisville and Wrens reflects a trend of more single people and couples without children residing in the county's two most populous cities. Household growth in the county and municipalities is projected to increase 1.1% through 2025.

Table P-3: Total Households, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	5,993	6,359	6,130	6,234	6,344	6,410	6,458	6,485	6,469	6,419
Avera	92	92	92	95	99	100	111	111	110	109
Bartow	120	112	104	100	95	96	97	97	96	95
Louisville	985	930	875	935	994	1,004	1,111	1,115	1,112	1,093
Stapleton	146	139	131	120	110	111	112	112	111	110
Wadley	778	808	838	802	765	772	776	779	777	761
Wrens	849	867	888	896	903	1,003	1,110	1,114	1,111	1,092

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC

Average household size has continually declined in Jefferson County and the municipalities in the past two decades (Table P-4). Between 1980 and 2000, average household size declined by 0.36 in the unincorporated area, 0.26 in Louisville, 0.41 in Wadley and 0.21 in Wrens. Since 1990, average household size has decreased by 0.42 in Avera, 0.4 in Bartow, and 0.39 in Stapleton. Average household size throughout the county and municipalities is projected to decline by an average of 0.03 through 2025.

Table P-4: Average Household Size, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	3.01	2.81	2.77	2.72	2.65	2.61	2.59	2.58	2.59	2.62
Avera	N/A	N/A	2.30	2.09	1.88	1.84	1.82	1.81	1.82	1.85
Bartow	N/A	N/A	2.90	2.70	2.50	2.46	2.44	2.43	2.44	2.47
Louisville	2.70	2.70	2.70	2.57	2.44	2.40	2.38	2.37	2.38	2.41
Stapleton	N/A	N/A	2.70	N/A	2.31	2.27	2.25	2.24	2.25	2.28
Wadley	3.02	2.91	2.80	2.70	2.61	2.57	2.55	2.54	2.55	2.58
Wrens	2.85	2.78	2.70	2.67	2.64	2.60	2.58	2.57	2.58	2.61

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

Age

Table P-5 presents historical trends and projections in the age distribution of Jefferson County and municipalities residents. Overall, there are significant differences in the distribution of ages within the county and the municipalities. The unincorporated area as well as Louisville Wadley and Wrens have, on average, 10% more residents in the 0-17 and 18-34 age brackets than the other municipalities. The number of residents in the 45-

64 age bracket has increased in proportion to the decline of younger age groups. There are no significant differences in the distribution of ages among other age groups.

Since 1980, there was been a continual decline of residents in the 0-17 age bracket among all jurisdictions, ranging from a low of 0.1% in Wadley to a high of 15% in Bartow.

Through 2025, residents in the 0-17 and 35-44 age brackets are projected to decline. A decline in the 35-44 age bracket is almost always correlated with a decline in lower age groups since they account for most of the children residents. Senior age groups are projected to increase by 5% through the planning period and will account for most of the relative population growth in the county and municipalities.

Table P-5: Age Distribution

Jefferson Co. Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	33.5%	32%	30.4%	29.4%	28.4%	25.9%	25.7%	26.1%	26.2%	26.1%
18-34 Years Old	25.4%	24.9%	24.5%	23%	21.4%	22.4%	23.1%	23.3%	22.6%	21.6%
35-44 Years Old	9.4%	11.3%	13.3%	14.1%	15%	13.4%	12%	11.4%	11.5%	12.3%
45-64 Years Old	17.9%	17.5%	17%	19.1%	21.3%	24%	25.6%	25.4%	23.9%	22.6%
65+ Years Old	13.6%	14.1%	14.6%	14.1%	13.7%	12.9%	13%	14%	15.8%	17.2%
Avera Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	26.2%	23.4%	20.7%	19.8%	18.9%	16.4%	16.2%	16.6%	16.7%	16.6%
18-34 Years Old	19.7%	20.4%	21.2%	20.1%	19.1%	20.1%	20.8%	21%	20.3%	19.3%
35-44 Years Old	12.5%	10.9%	9.4%	13%	16.6%	15%	13.6%	13%	13.1%	13.9%
45-64 Years Old	16.9%	20%	23.1%	26%	29%	31.7%	33.3%	33.1%	31.6%	30.3%
65+ Years Old	24.6%	25.1%	25.7%	20.4%	15.2%	14.4%	14.5%	15.5%	17.3%	18.7%
Bartow Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	36.9%	30.3%	23.7%	22.8%	21.9%	19.4	19.2	19.6%	19.7%	19.6%
18-34 Years Old	21%	28%	35.1%	28%	21%	22	22.7	22.9%	22.2%	21.2%
35-44 Years Old	8.9%	7.5%	6.2%	11.8%	17.4%	15.8	14.4	13.8%	13.9%	14.7%
45-64 Years Old	17.6%	19.7%	21.9%	26.6%	31.4%	34.1	35.7	35.5%	33%	31.7%
65+ Years Old	15.4%	14.1%	12.8%	14.2%	15.7%	14.9	15	16%	17.8%	19.2%
Louisville Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	27.6%	27.2%	26.9%	25.5%	24.1%	21.6	21.4%	21.8%	21.9%	21.8%
18-34 Years Old	24.7%	25.1%	25.6%	21%	16.5%	17.5	18.2%	18.4%	17.7%	16.7%
35-44 Years Old	7.6%	9.2%	10.9%	13.2%	15.6%	14	12.6%	12%	12.1%	12.9%
45-64 Years Old	21.3%	19.9%	18.6%	18.8%	18.9%	21.6	23.2%	23%	21.5%	20.2%
65+ Years Old	18.7%	18.2%	17.8%	17.6%	17.5%	16.7	16.8%	17.8%	19.6%	21%

Table P-5: Age Distribution Continued										
Stapleton Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	30.4%	28.8%	27.3%	23.2%	19.1%	16.6	16.4%	16.8%	16.9%	16.8%
18-34 Years Old	20.6%	18.8%	17%	17.2%	17.5%	18.5	19.2%	19.4%	18.7%	17.7%
35-44 Years Old	8.5%	11.9%	15.3%	14.2%	13.2%	11.6	10.2%	9.8%	9.9%	10.7%
45-64 Years Old	13.6%	19.6%	25.6%	21.4%	17.2%	19.9	21.5%	21.3%	19.8%	18.5%
65+ Years Old	17.7%	15.9%	14.2%	12.7%	11.3%	10.5	10.6%	11.6%	13.4%	14.8%
Wadley Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	34.2%	33%	31.9%	32.1%	32.1%	29.8%	29.6%	30%	30.1%	30%
18-34 Years Old	25.6%	25%	24.4%	24.6%	24.7%	25.7%	26.4%	26.6%	25.9%	24.9%
35-44 Years Old	7.7%	10.4%	13.1%	12.7%	12.4%	10.8%	9.4%	8.8%	8.9%	9.7%
45-64 Years Old	15.7%	14.9%	14.2%	14.6%	15.1%	17.8%	19.4%	19.4%	17.9%	16.6%
65+ Years Old	16.6%	16.5%	16.2%	16%	15.9%	15.1%	15.2%	16.2%	18%	19.4%
Wrens Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	32.9%	32.7%	32.6%	32.4%	32.2%	29.7%	29.5%	29.4%	29.5%	29.4%
18-34 Years Old	25.9%	25%	23.1%	21.5%	20%	21%	21.7%	21.9%	21.2%	20.2%
35-44 Years Old	10.1%	11.9%	13.8%	13.8%	13.8%	12.2%	10.8%	10.2%	10.3%	10.1%
45-64 Years Old	17.1%	16.5%	15.9%	18.1%	20.4%	23.1%	24.7%	24.5%	23%	21.7%
65+ Years Old	13.9%	14.1%	14.3%	16%	17.8%	17%	17.1%	18.1%	19.9%	21.3%
Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC										

Race

In 2000, the population of Jefferson County was compromised of 42% white, 56.2% black, 1.4% Hispanic, 0.01% Asian or Pacific Islander, and 0.01% Native American (Table P-6). Between 1980 and 2000, the proportional population of all racial groups has remained relatively constant in the unincorporated area but has changed significantly in the municipalities. The change is more evident in Louisville and Wadley where the percentage of black residents has increased approximately 11% and 14% respectively between 1980 and 2000. In Bartow, Stapleton and Wrens, the black population has increased by approximately 8% while in Avera, the black population declined by 8%. There has not been significant change in other population groups in the past two decades.

Table P-6 : Racial Composition										
Jefferson Co. Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	8,296	**45**	7,976	**43.9**	7,656	**43.9**	7,461	**42.6**	7,267	**42**
Black	10,058	**54.6**	9,905	**54.5**	9,753	**55.9**	9,735	**55.6**	9,717	**56.2**
Hispanic	268	**1.4**	264	**1.4**	259	**1.4**	259	**1.4**	259	**1.4**
Native	9	**0.01**	5	**0.01**	1	**0.01**	10	**0.01**	21	**0.01**
Asian & Pacific Islander	20	**0.01**	15	**0.01**	9	**0.01**	18	**0.01**	28	**0.01**

Table P-6 : Racial Composition Continued

Avera Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	199	80.2	195	83.6	189	89.1	190	89.2	192	88.4
Black	49	19.7	36	15.5	23	10.8	23	10.8	23	10.6
Hispanic	4	1.6	2	0.8	0	0	0	0	1	0.4
Native	0	0	0	0	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Bartow Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	188	52.6	164	47.8	140	43.9	115	42.1	90	40.3
Black	169	47.3	175	51	179	56.1	156	57.1	133	59.6
Hispanic	7	2	4	1.1	2	0.6	2	0.8	3	0.6
Native	0	0	0	0	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Louisville Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	1,262	44.7	1,157	44	1,052	43.5	982	38.2	912	33.6
Black	1,553	55	1,461	55.5	1,369	56.5	1,579	61.4	1,788	65.9
Hispanic	20	0.7	10	0.3	0	0	5	0.2	10	0.3
Native	0	0	0	0	0	0	0	0	1	0.1
Asian & Pacific Islander	8	0.3	4	0.1	0	0	3	0.1	6	0.2
Stapleton Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	302	77.8	302	81.4	302	79.1	263	78.9	223	70.1
Black	80	20.6	65	17.5	49	18.5	70	21	91	28.6
Hispanic	3	0.7	1	0.2	0	0	0	0	0	0
Native	6	1.5	3	0.6	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Wadley Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	859	35.3	739	29.8	619	25.3	521	22.9	423	20.2
Black	1,573	64.5	1,701	68.7	1,827	74.6	1,718	75.6	1,610	77.1
Hispanic	57	2.3	32	1.3	7	0.3	30	1.3	52	2.5
Native	1	0.04	0	0	0	0	1	0.01	3	0.1
Asian & Pacific Islander	5	0.2	2	0.01	0	0	0	0	1	0.05
Wrens Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	1,018	42.1	964	39.7	909	37.9	839	35.7	768	33.2
Black	1,380	57.1	1,429	58.9	1,477	61.6	1,493	63.6	1,508	65.1
Hispanic	46	1.9	24	1	2	0.08	10	0.4	18	0.8
Native	2	0.1	2	0.1	1	0.04	1	0.05	2	0.1
Asian & Pacific Islander	7	0.3	8	0.3	9	0.3	5	0.2	4	0.1

Source: U.S. Bureau of the Census

County stands at 58.3%, significantly lower than the CSRA average of 66.4% and the state average of 78.6%. The percentage of population with a Bachelor's degree or more in Jefferson County is 9%, while the CSRA average is 11.95%, and the state average is 24.3%.

Table P-7: Educational Attainment, 1980-2000

	Jefferson Co.	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
1980							
Less than 9th grade	41.3%	N/A	N/A	N/A	N/A	N/A	N/A
9th to 12th grade (no diploma)	22.2%	N/A	N/A	N/A	N/A	N/A	N/A
High school graduate	21.6%	N/A	N/A	N/A	N/A	N/A	N/A
Some college (no degree)	7.9%	N/A	N/A	N/A	N/A	N/A	N/A
Associate degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bachelor's degree	6.8%	N/A	N/A	N/A	N/A	N/A	N/A
Graduate or professional degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1990							
	Jefferson Co.	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Less than 9th grade	27%	24%	28.1%	29.4%	46.6%	39.5%	32.3%
9th to 12th grade (no diploma)	23.3%	31.8%	29.4%	17.5%	35.1%	37.6%	29.1%
High school graduate	30.1%	41.8%	24.1%	43.4%	36.9%	32.5%	39.3%
Some college (no degree)	9.9%	8.5%	16.3%	13.2%	5.4%	9.6%	14.7%
Associate degree	3.4%	7.7%	1.3%	3.9%	1.8%	3.7%	4.2%
Bachelor's degree	4.4%	1.5%	9.1%	9%	6%	4.5%	8.1%
Graduate or professional degree	1.8%	0%	4.5%	4%	0.6%	2.1%	3.8%
2000							
	Jefferson Co.	Avera	Bartow	Louisville	Stapelton	Wadley	Wrens
Less than 9th grade	16.7%	5%	20.6%	15.1%	21.4%	25.6%	17.2%
9th to 12th grade (no diploma)	24.7%	37.9%	28.8%	25.7%	15.9%	28%	23.3%
High school graduate	33.9%	41.7%	18.8%	30.8%	36.8%	27.5%	34.4%
Some college (no degree)	11.8%	6.9%	18.8%	11%	14.1%	8.7%	12.5%
Associate degree	3.6%	3.8%	1.7%	2%	2.4%	5.1%	3.7%
Bachelor's degree	6.2%	4.4%	3.5%	10%	2.4%	3.5%	4.6%
Graduate or professional degree	2.8%	0%	7.6%	5.1%	6.7%	1.5%	4%

Source: U.S. Bureau of the Census
N/A: Not Available

The number of Jefferson County high school graduates attending Georgia public colleges and technical schools has varied since 1995 (Table P-8). With the exception of 1997 and 1998, public college attendance has averaged between 18% and 20%. Public college attendance is significantly below neighboring Burke and Washington Counties and the state average.

Similarly, public technical college attendance has varied since 1985. On average, Jefferson County high school graduates attend public technical colleges at a rate of twice the state average. The county's public technical college attendance is on par with neighboring Burke and Washington Counties.

Table P-8: Post-Secondary Education Attendance							
	Georgia Public Colleges						
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	18.3%	19.9%	14.3%	15.6%	20.9%	N/A	N/A
Burke County	24.4%	25.2%	26.3%	21.8%	22.5%	N/A	N/A
Washington County	15.2%	29.1%	30.2%	27.9%	27.6%	N/A	N/A
Georgia	35%	30%	30.2%	38.8%	37.5%	37.3%	36.1%
	Georgia Public Technical Colleges						
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	11.7%	10.9%	11.8%	15.1%	10.2%	16%	N/A
Burke County	8.1%	13.8%	7.3%	12.2%	14.7%	22.7%	N/A
Washington County	2.7%	21.8%	34.6%	13.3%	9.7%	16%	N/A
Georgia	5.4%	6.2%	7.1%	6.5%	6.4%	7.4%	8.8%
Source: Georgia Department of Education N/A: Not Available							

Test Scores and Dropout Rates

High School graduation test scores decreased continually in Jefferson County from 1995 to 2001, mirroring a statewide trend of declining test scores (Table P-9). Overall, test scores are 29% lower in Jefferson County than the state average and approximately 20% below neighboring Burke and Washington Counties. In 1995, the peak test attainment year in county, Jefferson test scores were close to the state average and significantly above neighboring jurisdictions.

Table P-9: Test Scores and Dropout Rates							
High School Test Scores							
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	76%	55%	47%	34%	36%	39%	36%
Burke County	70%	62%	63%	58%	63%	54%	55%
Washington County	65%	53%	51%	48%	54%	56%	56%
Georgia	82%	76%	67%	68%	66%	68%	65%
High School Drop Out Rate							
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	7.9%	8.6%	8.4%	7%	6.3%	5.4%	4.6%
Burke County	12.2%	10.7%	8.8%	9%	11.3%	8.9%	9.9%
Washington County	16.7%	11.8%	12%	11%	9.4%	7.6%	7.7%
Georgia	9.2%	8.6%	7.3%	6.5%	6.5%	6.5%	6.4%
Source: Georgia Department of Education							

The high school dropout rate in Jefferson County declined from 7.9% in 1995 to 4.6% in 2001 and is currently below the state average (6.4) and significantly below neighboring Burke (9.9%) and Washington (7.7%) Counties (Table P-9).

manufacturing of kaolin is a focus of the region's industry. These three areas, as well as Burke, Emmanuel, Jenkins, Johnson and Screven Counties, are also impacted by the Floridian Aquifer. The aquifer supplies approximately 50% of Georgia's water supply.

The northern and southern tips of Jefferson County are Enterprise Communities. Based on census tract analysis and a designation by the federal government, the Enterprise Community classification deems these two areas in the county as some of the poorest of the region and thus, warranting special attention. An Enterprise Community receives money from the federal government for the implementation of new and innovative projects to help the area. Other Enterprise Communities in the CSRA include the entire lower half of Warren County, the northeastern portion of Hancock County, the western majority of Taliaferro County and one-third of eastern Burke County.

POPULATION

Jefferson County and the municipalities have undergone slow but gradual population decline over the last two decades (Table P-1). The county has lost 1,137 of its population, representing a 6.1% decline. In percentage terms, Wadley has lost the most population at 14.3% while Wrens' population decline was the lowest at 4.1%. Only Louisville among the municipalities has regained some of the population losses of the 1980s in the 1990s.

Table P-1: Total Population, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	18,403	17,906	17,408	17,337	17,266	17,214	17,234	17,264	17,358	17,448
Avera	248	230	212	215	217	216	217	218	219	220
Bartow	357	338	319	312	304	303	306	308	309	311
Louisville	2,823	2,622	2,421	2,567	2,712	2,704	2,707	2,712	2,726	2,739
Stapleton	388	370	351	335	318	317	318	319	320	321
Wadley	2,438	2,442	2,446	2,267	2,088	2,082	2,085	2,090	2,103	2,116
Wrens	2,415	2,405	2,396	2,355	2,314	2,307	2,310	2,316	2,328	2,330

Source: U.S. Bureau of the Census; Woods & Poole (2002)

Population projections for the county and municipalities highlight very limited population growth through the planning period. Population in Jefferson County and the municipalities is projected to increase 1.2% through 2025 (Table P-2), significantly below the projected rural CSRA growth rate of 10.5% and state (+35.9) and national (+27) averages.

Table P-2: Population Change, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	N/A	-2.7%	-2.8%	0.4%	-0.4%	-0.3%	0.1%	0.2%	0.5%	0.5%
Avera	N/A	-7.2%	-7.8%	1.4%	0.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Bartow	N/A	-5.3%	-5.6%	-15%	-17%	-0.3%	0.1%	0.2%	0.5%	0.5%
Louisville	N/A	-7.1%	-7.6%	6.1%	5.6%	-0.3%	0.1%	0.2%	0.5%	0.5%
Stapleton	N/A	-4.6%	-5.1%	-4.5%	-5%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wadley	N/A	0.1%	0.1%	7.3%	-7.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wrens	N/A	0.4%	0.3%	-1.7%	1.7%	-0.3%	0.1%	0.2%	0.5%	0.5%

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

Households

Household growth change varies from jurisdiction to jurisdiction in Jefferson County and the municipalities. In the unincorporated area, household growth has been continual in the past two decades, increasing 5.8% between 1980 and 2000. Among the municipalities, only Louisville (+1%), Wrens, (+6.3%) and Avera (+7.6%) reported an increase in households since 1980. Household growth in Louisville and Wrens reflects a trend of more single people and couples without children residing in the county's two most populous cities. Household growth in the county and municipalities is projected to increase 1.1% through 2025.

Table P-3: Total Households, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	5,993	6,359	6,130	6,234	6,344	6,410	6,458	6,485	6,469	6,419
Avera	92	92	92	95	99	100	111	111	110	109
Bartow	120	112	104	100	95	96	97	97	96	95
Louisville	985	930	875	935	994	1,004	1,111	1,115	1,112	1,093
Stapleton	146	139	131	120	110	111	112	112	111	110
Wadley	778	808	838	802	765	772	776	779	777	761
Wrens	849	867	888	896	903	1,003	1,110	1,114	1,111	1,092

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC

Average household size has continually declined in Jefferson County and the municipalities in the past two decades (Table P-4). Between 1980 and 2000, average household size declined by 0.36 in the unincorporated area, 0.26 in Louisville, 0.41 in Wadley and 0.21 in Wrens. Since 1990, average household size has decreased by 0.42 in Avera, 0.4 in Bartow, and 0.39 in Stapleton. Average household size throughout the county and municipalities is projected to decline by an average of 0.03 through 2025.

Table P-4: Average Household Size, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	3.01	2.81	2.77	2.72	2.65	2.61	2.59	2.58	2.59	2.62
Avera	N/A	N/A	2.30	2.09	1.88	1.84	1.82	1.81	1.82	1.85
Bartow	N/A	N/A	2.90	2.70	2.50	2.46	2.44	2.43	2.44	2.47
Louisville	2.70	2.70	2.70	2.57	2.44	2.40	2.38	2.37	2.38	2.41
Stapleton	N/A	N/A	2.70	N/A	2.31	2.27	2.25	2.24	2.25	2.28
Wadley	3.02	2.91	2.80	2.70	2.61	2.57	2.55	2.54	2.55	2.58
Wrens	2.85	2.78	2.70	2.67	2.64	2.60	2.58	2.57	2.58	2.61

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

Age

Table P-5 presents historical trends and projections in the age distribution of Jefferson County and municipalities residents. Overall, there are significant differences in the distribution of ages within the county and the municipalities. The unincorporated area as well as Louisville Wadley and Wrens have, on average, 10% more residents in the 0-17 and 18-34 age brackets than the other municipalities. The number of residents in the 45-

64 age bracket has increased in proportion to the decline of younger age groups. There are no significant differences in the distribution of ages among other age groups.

Since 1980, there was been a continual decline of residents in the 0-17 age bracket among all jurisdictions, ranging from a low of 0.1% in Wadley to a high of 15% in Bartow.

Through 2025, residents in the 0-17 and 35-44 age brackets are projected to decline. A decline in the 35-44 age bracket is almost always correlated with a decline in lower age groups since they account for most of the children residents. Senior age groups are projected to increase by 5% through the planning period and will account for most of the relative population growth in the county and municipalities.

Table P-5: Age Distribution

Jefferson Co. Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	33.5%	32%	30.4%	29.4%	28.4%	25.9%	25.7%	26.1%	26.2%	26.1%
18-34 Years Old	25.4%	24.9%	24.5%	23%	21.4%	22.4%	23.1%	23.3%	22.6%	21.6%
35-44 Years Old	9.4%	11.3%	13.3%	14.1%	15%	13.4%	12%	11.4%	11.5%	12.3%
45-64 Years Old	17.9%	17.5%	17%	19.1%	21.3%	24%	25.6%	25.4%	23.9%	22.6%
65+ Years Old	13.6%	14.1%	14.6%	14.1%	13.7%	12.9%	13%	14%	15.8%	17.2%
Avera Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	26.2%	23.4%	20.7%	19.8%	18.9%	16.4%	16.2%	16.6%	16.7%	16.6%
18-34 Years Old	19.7%	20.4%	21.2%	20.1%	19.1%	20.1%	20.8%	21%	20.3%	19.3%
35-44 Years Old	12.5%	10.9%	9.4%	13%	16.6%	15%	13.6%	13%	13.1%	13.9%
45-64 Years Old	16.9%	20%	23.1%	26%	29%	31.7%	33.3%	33.1%	31.6%	30.3%
65+ Years Old	24.6%	25.1%	25.7%	20.4%	15.2%	14.4%	14.5%	15.5%	17.3%	18.7%
Bartow Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	36.9%	30.3%	23.7%	22.8%	21.9%	19.4	19.2	19.6%	19.7%	19.6%
18-34 Years Old	21%	28%	35.1%	28%	21%	22	22.7	22.9%	22.2%	21.2%
35-44 Years Old	8.9%	7.5%	6.2%	11.8%	17.4%	15.8	14.4	13.8%	13.9%	14.7%
45-64 Years Old	17.6%	19.7%	21.9%	26.6%	31.4%	34.1	35.7	35.5%	33%	31.7%
65+ Years Old	15.4%	14.1%	12.8%	14.2%	15.7%	14.9	15	16%	17.8%	19.2%
Louisville Age Distribution %										
	1980	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
0-17 Years Old	27.6%	27.2%	26.9%	25.5%	24.1%	21.6	21.4%	21.8%	21.9%	21.8%
18-34 Years Old	24.7%	25.1%	25.6%	21%	16.5%	17.5	18.2%	18.4%	17.7%	16.7%
35-44 Years Old	7.6%	9.2%	10.9%	13.2%	15.6%	14	12.6%	12%	12.1%	12.9%
45-64 Years Old	21.3%	19.9%	18.6%	18.8%	18.9%	21.6	23.2%	23%	21.5%	20.2%
65+ Years Old	18.7%	18.2%	17.8%	17.6%	17.5%	16.7	16.8%	17.8%	19.6%	21%

Table P-5: Age Distribution Continued										
Stapleton Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	30.4%	28.8%	27.3%	23.2%	19.1%	16.6	16.4%	16.8%	16.9%	16.8%
18-34 Years Old	20.6%	18.8%	17%	17.2%	17.5%	18.5	19.2%	19.4%	18.7%	17.7%
35-44 Years Old	8.5%	11.9%	15.3%	14.2%	13.2%	11.6	10.2%	9.8%	9.9%	10.7%
45-64 Years Old	13.6%	19.6%	25.6%	21.4%	17.2%	19.9	21.5%	21.3%	19.8%	18.5%
65+ Years Old	17.7%	15.9%	14.2%	12.7%	11.3%	10.5	10.6%	11.6%	13.4%	14.8%
Wadley Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	34.2%	33%	31.9%	32.1%	32.1%	29.8%	29.6%	30%	30.1%	30%
18-34 Years Old	25.6%	25%	24.4%	24.6%	24.7%	25.7%	26.4%	26.6%	25.9%	24.9%
35-44 Years Old	7.7%	10.4%	13.1%	12.7%	12.4%	10.8%	9.4%	8.8%	8.9%	9.7%
45-64 Years Old	15.7%	14.9%	14.2%	14.6%	15.1%	17.8%	19.4%	19.4%	17.9%	16.6%
65+ Years Old	16.6%	16.5%	16.2%	16%	15.9%	15.1%	15.2%	16.2%	18%	19.4%
Wrens Age Distribution %										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0-17 Years Old	32.9%	32.7%	32.6%	32.4%	32.2%	29.7%	29.5%	29.4%	29.5%	29.4%
18-34 Years Old	25.9%	25%	23.1%	21.5%	20%	21%	21.7%	21.9%	21.2%	20.2%
35-44 Years Old	10.1%	11.9%	13.8%	13.8%	13.8%	12.2%	10.8%	10.2%	10.3%	10.1%
45-64 Years Old	17.1%	16.5%	15.9%	18.1%	20.4%	23.1%	24.7%	24.5%	23%	21.7%
65+ Years Old	13.9%	14.1%	14.3%	16%	17.8%	17%	17.1%	18.1%	19.9%	21.3%
Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC										

Race

In 2000, the population of Jefferson County was compromised of 42% white, 56.2% black, 1.4% Hispanic, 0.01% Asian or Pacific Islander, and 0.01% Native American (Table P-6). Between 1980 and 2000, the proportional population of all racial groups has remained relatively constant in the unincorporated area but has changed significantly in the municipalities. The change is more evident in Louisville and Wadley where the percentage of black residents has increased approximately 11% and 14% respectively between 1980 and 2000. In Bartow, Stapleton and Wrens, the black population has increased by approximately 8% while in Avera, the black population declined by 8%. There has not been significant change in other population groups in the past two decades.

Table P-6 : Racial Composition										
Jefferson Co. Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	8,296	**45**	7,976	**43.9**	7,656	**43.9**	7,461	**42.6**	7,267	**42**
Black	10,058	**54.6**	9,905	**54.5**	9,753	**55.9**	9,735	**55.6**	9,717	**56.2**
Hispanic	268	**1.4**	264	**1.4**	259	**1.4**	259	**1.4**	259	**1.4**
Native	9	**0.01**	5	**0.01**	1	**0.01**	10	**0.01**	21	**0.01**
Asian & Pacific Islander	20	**0.01**	15	**0.01**	9	**0.01**	18	**0.01**	28	**0.01**

Table P-6 : Racial Composition Continued

Avera Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	199	80.2	195	83.6	189	89.1	190	89.2	192	88.4
Black	49	19.7	36	15.5	23	10.8	23	10.8	23	10.6
Hispanic	4	1.6	2	0.8	0	0	0	0	1	0.4
Native	0	0	0	0	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Bartow Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	188	52.6	164	47.8	140	43.9	115	42.1	90	40.3
Black	169	47.3	175	51	179	56.1	156	57.1	133	59.6
Hispanic	7	2	4	1.1	2	0.6	2	0.8	3	0.6
Native	0	0	0	0	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Louisville Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	1,262	44.7	1,157	44	1,052	43.5	982	38.2	912	33.6
Black	1,553	55	1,461	55.5	1,369	56.5	1,579	61.4	1,788	65.9
Hispanic	20	0.7	10	0.3	0	0	5	0.2	10	0.3
Native	0	0	0	0	0	0	0	0	1	0.1
Asian & Pacific Islander	8	0.3	4	0.1	0	0	3	0.1	6	0.2
Stapleton Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	302	77.8	302	81.4	302	79.1	263	78.9	223	70.1
Black	80	20.6	65	17.5	49	18.5	70	21	91	28.6
Hispanic	3	0.7	1	0.2	0	0	0	0	0	0
Native	6	1.5	3	0.6	0	0	0	0	0	0
Asian & Pacific Islander	0	0	0	0	0	0	0	0	0	0
Wadley Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	859	35.3	739	29.8	619	25.3	521	22.9	423	20.2
Black	1,573	64.5	1,701	68.7	1,827	74.6	1,718	75.6	1,610	77.1
Hispanic	57	2.3	32	1.3	7	0.3	30	1.3	52	2.5
Native	1	0.04	0	0	0	0	1	0.01	3	0.1
Asian & Pacific Islander	5	0.2	2	0.01	0	0	0	0	1	0.05
Wrens Racial Composition										
	1980	%	1985	%	1990	%	1995	%	2000	%
White	1,018	42.1	964	39.7	909	37.9	839	35.7	768	33.2
Black	1,380	57.1	1,429	58.9	1,477	61.6	1,493	63.6	1,508	65.1
Hispanic	46	1.9	24	1	2	0.08	10	0.4	18	0.8
Native	2	0.1	2	0.1	1	0.04	1	0.05	2	0.1
Asian & Pacific Islander	7	0.3	8	0.3	9	0.3	5	0.2	4	0.1

Source: U.S. Bureau of the Census

County stands at 58.3%, significantly lower than the CSRA average of 66.4% and the state average of 78.6%. The percentage of population with a Bachelor's degree or more in Jefferson County is 9%, while the CSRA average is 11.95%, and the state average is 24.3%.

Table P-7: Educational Attainment, 1980-2000

	Jefferson Co.	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
1980							
Less than 9th grade	41.3%	N/A	N/A	N/A	N/A	N/A	N/A
9th to 12th grade (no diploma)	22.2%	N/A	N/A	N/A	N/A	N/A	N/A
High school graduate	21.6%	N/A	N/A	N/A	N/A	N/A	N/A
Some college (no degree)	7.9%	N/A	N/A	N/A	N/A	N/A	N/A
Associate degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bachelor's degree	6.8%	N/A	N/A	N/A	N/A	N/A	N/A
Graduate or professional degree	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1990							
	Jefferson Co.	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Less than 9th grade	27%	24%	28.1%	29.4%	46.6%	39.5%	32.3%
9th to 12th grade (no diploma)	23.3%	31.8%	29.4%	17.5%	35.1%	37.6%	29.1%
High school graduate	30.1%	41.8%	24.1%	43.4%	36.9%	32.5%	39.3%
Some college (no degree)	9.9%	8.5%	16.3%	13.2%	5.4%	9.6%	14.7%
Associate degree	3.4%	7.7%	1.3%	3.9%	1.8%	3.7%	4.2%
Bachelor's degree	4.4%	1.5%	9.1%	9%	6%	4.5%	8.1%
Graduate or professional degree	1.8%	0%	4.5%	4%	0.6%	2.1%	3.8%
2000							
	Jefferson Co.	Avera	Bartow	Louisville	Stapelton	Wadley	Wrens
Less than 9th grade	16.7%	5%	20.6%	15.1%	21.4%	25.6%	17.2%
9th to 12th grade (no diploma)	24.7%	37.9%	28.8%	25.7%	15.9%	28%	23.3%
High school graduate	33.9%	41.7%	18.8%	30.8%	36.8%	27.5%	34.4%
Some college (no degree)	11.8%	6.9%	18.8%	11%	14.1%	8.7%	12.5%
Associate degree	3.6%	3.8%	1.7%	2%	2.4%	5.1%	3.7%
Bachelor's degree	6.2%	4.4%	3.5%	10%	2.4%	3.5%	4.6%
Graduate or professional degree	2.8%	0%	7.6%	5.1%	6.7%	1.5%	4%

Source: U.S. Bureau of the Census
N/A: Not Available

The number of Jefferson County high school graduates attending Georgia public colleges and technical schools has varied since 1995 (Table P-8). With the exception of 1997 and 1998, public college attendance has averaged between 18% and 20%. Public college attendance is significantly below neighboring Burke and Washington Counties and the state average.

Similarly, public technical college attendance has varied since 1985. On average, Jefferson County high school graduates attend public technical colleges at a rate of twice the state average. The county's public technical college attendance is on par with neighboring Burke and Washington Counties.

Table P-8: Post-Secondary Education Attendance							
	Georgia Public Colleges						
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	18.3%	19.9%	14.3%	15.6%	20.9%	N/A	N/A
Burke County	24.4%	25.2%	26.3%	21.8%	22.5%	N/A	N/A
Washington County	15.2%	29.1%	30.2%	27.9%	27.6%	N/A	N/A
Georgia	35%	30%	30.2%	38.8%	37.5%	37.3%	36.1%
	Georgia Public Technical Colleges						
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	11.7%	10.9%	11.8%	15.1%	10.2%	16%	N/A
Burke County	8.1%	13.8%	7.3%	12.2%	14.7%	22.7%	N/A
Washington County	2.7%	21.8%	34.6%	13.3%	9.7%	16%	N/A
Georgia	5.4%	6.2%	7.1%	6.5%	6.4%	7.4%	8.8%
Source: Georgia Department of Education N/A: Not Available							

Test Scores and Dropout Rates

High School graduation test scores decreased continually in Jefferson County from 1995 to 2001, mirroring a statewide trend of declining test scores (Table P-9). Overall, test scores are 29% lower in Jefferson County than the state average and approximately 20% below neighboring Burke and Washington Counties. In 1995, the peak test attainment year in county, Jefferson test scores were close to the state average and significantly above neighboring jurisdictions.

Table P-9: Test Scores and Dropout Rates							
High School Test Scores							
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	76%	55%	47%	34%	36%	39%	36%
Burke County	70%	62%	63%	58%	63%	54%	55%
Washington County	65%	53%	51%	48%	54%	56%	56%
Georgia	82%	76%	67%	68%	66%	68%	65%
High School Drop Out Rate							
	1995	1996	1997	1998	1999	2000	2001
Jefferson County	7.9%	8.6%	8.4%	7%	6.3%	5.4%	4.6%
Burke County	12.2%	10.7%	8.8%	9%	11.3%	8.9%	9.9%
Washington County	16.7%	11.8%	12%	11%	9.4%	7.6%	7.7%
Georgia	9.2%	8.6%	7.3%	6.5%	6.5%	6.5%	6.4%
Source: Georgia Department of Education							

The high school dropout rate in Jefferson County declined from 7.9% in 1995 to 4.6% in 2001 and is currently below the state average (6.4) and significantly below neighboring Burke (9.9%) and Washington (7.7%) Counties (Table P-9).

manufacturing of kaolin is a focus of the region's industry. These three areas, as well as Burke, Emmanuel, Jenkins, Johnson and Screven Counties, are also impacted by the Floridian Aquifer. The aquifer supplies approximately 50% of Georgia's water supply.

The northern and southern tips of Jefferson County are Enterprise Communities. Based on census tract analysis and a designation by the federal government, the Enterprise Community classification deems these two areas in the county as some of the poorest of the region and thus, warranting special attention. An Enterprise Community receives money from the federal government for the implementation of new and innovative projects to help the area. Other Enterprise Communities in the CSRA include the entire lower half of Warren County, the northeastern portion of Hancock County, the western majority of Taliaferro County and one-third of eastern Burke County.

POPULATION

Jefferson County and the municipalities have undergone slow but gradual population decline over the last two decades (Table P-1). The county has lost 1,137 of its population, representing a 6.1% decline. In percentage terms, Wadley has lost the most population at 14.3% while Wrens' population decline was the lowest at 4.1%. Only Louisville among the municipalities has regained some of the population losses of the 1980s in the 1990s.

Table P-1: Total Population, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	18,403	17,906	17,408	17,337	17,266	17,214	17,234	17,264	17,358	17,448
Avera	248	230	212	215	217	216	217	218	219	220
Bartow	357	338	319	312	304	303	306	308	309	311
Louisville	2,823	2,622	2,421	2,567	2,712	2,704	2,707	2,712	2,726	2,739
Stapleton	388	370	351	335	318	317	318	319	320	321
Wadley	2,438	2,442	2,446	2,267	2,088	2,082	2,085	2,090	2,103	2,116
Wrens	2,415	2,405	2,396	2,355	2,314	2,307	2,310	2,316	2,328	2,330

Source: U.S. Bureau of the Census; Woods & Poole (2002)

Population projections for the county and municipalities highlight very limited population growth through the planning period. Population in Jefferson County and the municipalities is projected to increase 1.2% through 2025 (Table P-2), significantly below the projected rural CSRA growth rate of 10.5% and state (+35.9) and national (+27) averages.

Table P-2: Population Change, 1980-2025

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Jefferson County	N/A	-2.7%	-2.8%	0.4%	-0.4%	-0.3%	0.1%	0.2%	0.5%	0.5%
Avera	N/A	-7.2%	-7.8%	1.4%	0.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Bartow	N/A	-5.3%	-5.6%	-15%	-17%	-0.3%	0.1%	0.2%	0.5%	0.5%
Louisville	N/A	-7.1%	-7.6%	6.1%	5.6%	-0.3%	0.1%	0.2%	0.5%	0.5%
Stapleton	N/A	-4.6%	-5.1%	-4.5%	-5%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wadley	N/A	0.1%	0.1%	7.3%	-7.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wrens	N/A	0.4%	0.3%	-1.7%	1.7%	-0.3%	0.1%	0.2%	0.5%	0.5%

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

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Jefferson County	N/A	-2.7%	-2.8%	0.4%	-0.4%	-0.3%	0.1%	0.2%	0.5%	0.5%
Avera	N/A	-7.2%	-7.8%	1.4%	0.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Bartow	N/A	-5.3%	-5.6%	-15%	-17%	-0.3%	0.1%	0.2%	0.5%	0.5%
Louisville	N/A	-7.1%	-7.6%	6.1%	5.6%	-0.3%	0.1%	0.2%	0.5%	0.5%
Stapleton	N/A	-4.6%	-5.1%	-4.5%	-5%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wadley	N/A	0.1%	0.1%	7.3%	-7.9%	-0.3%	0.1%	0.2%	0.5%	0.5%
Wrens	N/A	0.4%	0.3%	-1.7%	1.7%	-0.3%	0.1%	0.2%	0.5%	0.5%

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A: Not Available

INCOME

Per Capita and Average Household Income

Per capita income in Jefferson County has risen significantly in the past two decades, from $10,525 in 1980 to $17,664 in 2000 (1996 dollars) (Table P-10). Per capita income is projected to increase further to $24,938 by 2025. The statewide per capita income increased from $15,353 in 1980 to $25,433 by 2000, and is expected to rise to $33,413 by 2025. Although both county and state incomes are projected to rise through the planning period, per capita income will rise much faster in the county (41.1%) than the statewide average (31.3%).

Jefferson County has a higher per capita income than all of the municipalities. Wadley and Bartow have the lowest incomes at $9,369 and $11,873 respectively, while Louisville and Stapleton are in the $15,000 range, just shy of the county average. All of the municipalities posted significant per capita income increases since 1990, outpacing both the county and statewide growth rate. Overall, increases in per capita income since 1990 have averaged 50%, with a high of low of 34.8% in Wadley and a high of 62% in Bartow.

Table P-10: Per Capita and Household Income

Per Capita Income (1996 $)						
	1980	1985	1990	1995	2000	2025
Jefferson County	$10,525	$12,533	$14,198	$16,093	$17,664	$24,938
Avera	N/A	N/A	$9,358	$11,980	$14,613	N/A
Bartow	N/A	N/A	$7,320	$9,597	$11,873	N/A
Louisville	N/A	N/A	$9,948	$12,488	$15,028	N/A
Stapleton	N/A	N/A	$9,305	$12,567	$15,829	N/A
Wadley	N/A	N/A	$6,948	$8,159	$9,369	N/A
Wrens	N/A	N/A	$8,488	$10,457	$12,425	N/A
Georgia	$15,353	$18,512	$20,715	$22,287	$25,433	$33,413
Average Household Income (current $)						
	1980	1985	1990	1995	2000	2025
Jefferson County	N/A	N/A	$18,005	$25,719	$28,088	$45,060
Avera	N/A	N/A	$18,000	$23,115	$28,229	N/A
Bartow	N/A	N/A	$18,281	$21,016	$23,750	N/A
Louisville	N/A	N/A	$20,915	$20,399	$19,883	N/A
Stapleton	N/A	N/A	$19,231	$27,260	$35,288	N/A
Wadley	N/A	N/A	$12,107	$13,704	$15,300	N/A
Wrens	N/A	N/A	$16,322	$19,973	$23,623	N/A
Georgia	N/A	N/A	$33,259	$35,692	$42,158	$59,049

Source: U.S. Bureau of the Census; Woods & Poole (2002); Calculations by CSRA RDC
N/A= Not Available

A similar trend can be seen with the mean household income: both the county and state mean household incomes increased between 1990 to 2000, but county household income rose more rapidly than the state average (Table P-10). In 1990, county mean household income was $18,005 (in current dollars) while the

statewide average was $33,259, a difference of approximately $15,000 higher. By 2000, county mean household income reached $28,088 while the statewide average toped $42,158, a difference of close to $14,000.

Unlike per capita income, average household income for most municipalities is closer in line with the county average. In Avera ($28,229) and Stapleton ($35,288) income are actually higher than the county. Household incomes in Louisville ($19,883) and Wadley ($15,300) are lower, reflecting a trend identified in the per capita income section. Overall, the rise in household income is on par with per capita income rates.

Distribution of Households by Income

The distribution of income in Jefferson County and the municipalities has continually increased in the past two decades. In 1980, over 51.7% of Jefferson County residents earned less than $9,999. By 2000, this number dropped to 20.2%. The most significant changes are found in the municipalities. In Bartow, Louisville, Wadley and Wrens, the percentage of residents currently earning less than $9,999 is less than half the 1980 rate. The percentage of residents earning less than $9,999 in Bartow declined from 45.6% in 1980 to 3.2% in 2000, and dropped from 31.3% to 8.7% in Stapleton during that same period. Both Bartow and Stapleton have significantly less residents in that income bracket than the statewide average.

Table P-11: Households by Income %, 1980-2000

1980								
	Jefferson Co.	**Avera**	**Bartow**	**Louisville**	**Stapleton**	**Wadley**	**Wrens**	**Georgia**
Less than $9,999	51.7%	43.4%	45.6%	43.2%	31.3%	61.9%	49.4%	33.3%
$10,000-$29,999	36%	33.2%	26.4%	31.7%	23.3%	35.6%	36.5%	42%
$30,000-$49,999	9.4%	9%	5.6%	9.7%	5.6%	6.9%	9.4%	17.1%
$50,000-$74,999	0.6%	0%	0%	0.8%	0%	1.4%	0.1%	3.5%
$75,000 +	2.1%	3%	1.6%	1.1%	2%	1.3%	2.7%	4%
1990								
	Jefferson Co.	**Avera**	**Bartow**	**Louisville**	**Stapleton**	**Wadley**	**Wrens**	**Georgia**
Less than $9,999	35.2%	18.2%	17.5%	30.1%	16.5%	42.9%	35.2%	16.7%
$10,000-$29,999	41%	26%	41.3%	36.9%	37.8%	38.2%	38.8%	34.6%
$30,000-$49,999	18.4%	20.6%	26.6%	20.9%	31%	13.1%	15.2%	25.7%
$50,000-$74,999	6.6%	6.5%	4.5%	6.6%	2.2%	3.7%	8.5%	14.4%
$75,000 +	1.5%	4.3%	0%	5.4%	2.2%	2%	2.1%	8.4%
2000								
	Jefferson Co.	**Avera**	**Bartow**	**Louisville**	**Stapleton**	**Wadley**	**Wrens**	**Georgia**
Less than $9,999	20.2%	3.2%	24%	26.1%	8.7%	33.6%	24.4%	10.1%
$10,000-$29,999	37%	55.7%	35.6%	32.2%	34.8%	41.2%	37.5%	24.6%
$30,000-$49,999	22.3%	29.5%	23%	19.8%	29.1%	15%	19.3%	23%
$50,000-$74,999	13%	7.4%	11.5%	9.9%	15.6%	5.7%	11.9%	19.7%
$75,000 +	7.6%	4.2%	5.8%	11.9%	11.7%	4.8%	6.8%	22.7%

Source: U.S. Bureau of the Census

Table E-2: Employment by Sector For Jefferson County										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
TOTAL EMPLOYMENT	7,288	7,684	7,764	8,150	7,571	7,793	8,044	8,313	8,603	8,915
FARM EMPLOYMENT	921	802	656	561	544	526	505	488	475	467
AGRICULTURAL SERVICES, OTHER	135	109	227	352	417	472	505	533	561	592
MINING	96	47	76	55	55	51	49	47	47	46
CONSTRUCTION	330	363	251	297	363	371	381	391	399	407
MANUFACTURING	2,189	2,729	2,683	2,799	1,980	1,968	1,980	1,996	2,014	2,037
TRANSPORT, COMM. & PUBLIC UTIL	216	235	203	235	257	263	287	310	331	349
WHOLESALE TRADE	231	333	345	363	254	293	315	334	353	371
RETAIL TRADE	689	713	840	978	996	989	1,009	1,036	1,066	1,097
FINANCE, INS. & REAL ESTATE	266	245	232	266	319	342	359	374	390	407
SERVICES	1,006	977	996	1,093	1,152	1,205	1,264	1,332	1,409	1,494
FEDERAL CIVILIAN GOVT	56	51	54	50	60	60	61	61	62	61
FEDERAL MILITARY GOVT	76	89	77	73	62	63	64	65	65	66
STATE AND LOCAL GOVT	1,077	991	1,124	1,028	1,112	1,190	1,265	1,346	1,431	1,521
Source: U.S. Bureau of the Census; Woods & Poole Economics										

Table E-3 employment by sector for Jefferson County broken down into percentages:

Table E-3: Employment by Sector for Jefferson County (%)										
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
FARM EMPLOYMENT	12.64	10.44	8.45	6.88	7.19	6.75	6.28	5.87	5.52	5.24
AGRICULTURAL SERVICES, OTHER	1.85	1.42	2.92	4.32	5.51	6.06	6.28	6.41	6.52	6.64
MINING	1.32	0.61	0.98	0.67	0.73	0.65	0.61	0.57	0.55	0.52
CONSTRUCTION	4.53	4.72	3.23	3.64	4.79	4.76	4.74	4.7	4.64	4.57
MANUFACTURING	30.04	35.52	34.56	34.34	26.15	25.25	24.61	24.01	23.41	22.85
TRANSPORT, COMM. & PUBLIC UTIL	2.96	3.06	2.61	2.88	3.39	3.37	3.57	3.73	3.85	3.91
WHOLESALE TRADE	3.17	4.33	4.44	4.45	3.35	3.76	3.92	4.02	4.1	4.16
RETAIL TRADE	9.45	9.28	10.82	12	13.16	12.69	12.54	12.46	12.39	12.31
FINANCE, INS. & REAL ESTATE	3.65	3.19	2.99	3.26	4.21	4.39	4.46	4.5	4.53	4.57
SERVICES	13.8	12.71	12.83	13.41	15.22	15.46	15.71	16.02	16.38	16.76
FEDERAL CIVILIAN GOVT	0.77	0.66	0.7	0.61	0.79	0.77	0.76	0.73	0.72	0.68
FEDERAL MILITARY GOVT	1.04	1.16	0.99	0.9	0.82	0.81	0.8	0.78	0.76	0.74
STATE AND LOCAL GOVT	14.78	12.9	14.48	12.61	14.69	15.27	15.73	16.19	16.63	17.06
Source: U.S. Bureau of the Census; Woods & Poole Economics										

Table E-3 shows that the 3 highest sectors of employment for the county in the year 2000 were: manufacturing, services and state and local government. Over the course of the next 20 years that is expected to change somewhat where state and local government will replace the service sector in second place. However, manufacturing will continue to be the sector with the highest percentage of employees in Jefferson County. This graph also shows how the farm employment sector is decreasing and will continue to do so. This sector has decreased by almost half in the last 20 years.

Neighboring Washington and Burke Counties have similar patterns in the various employment sectors, however it is important to note that neither of these counties shows a forecasted decrease in total employment numbers like Jefferson County.

Tables E-4 and E-5 display the six incorporated cities within Jefferson County in the year 2000. The first graph shows the six incorporated cities and total number of employees in each sector.

Table E-4: Percentage of Employees in each Sector, 2000

	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Agriculture, forestry, fishing and hunting, and mining	10.3	15.1	2.4	1.2	0.6	4.5
Construction	6.2	11.6	3.4	2.5	7.5	6.3
Manufacturing	38.1	20.9	32.9	25.9	40.1	19.5
Wholesale trade	3.1	0	1	2.5	2.6	4
Retail trade	15.5	0	11	22.2	7	8
Transportation and warehousing, and utilities	8.2	7	4	6.2	7.2	3.8
Information	0	0	1.7	3.7	1.4	0.8
Finance, insurance, real estate, and rental and leasing	3.1	3.5	4.3	2.5	1.4	2.8
Professional, scientific, management, administrative, and waste management services	0	3.5	7.5	3.7	5.1	4.3
Educational, health and social services	9.3	14	22.5	8.6	12.1	23
Arts, entertainment, recreation, accommodation and food services	0	14	5.6	0	3.7	8.3
Other services (except public administration)	6.2	4.7	1.3	8.6	2	6.2
Public administration	0	5.8	2.3	12.3	9.3	8

Source: U.S. Bureau of the Census

Manufacturing has the highest percentage of employees in each sector. This can be explained by the numerous small factories and manufacturing plants within the county. Many of the numbers are easy to explain. The Bartow Community Center and the activities that are offered there could explain the 14% in Bartow in the arts and entertainment sector. This table shows us that the three largest sectors were manufacturing; educational, health and social services, and retail trade.

Table E-5: Number of Employees Per Sector, 2000						
	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
TOTAL EMPLOYMENT	97	86	875	81	653	599
Agriculture, forestry, fishing and hunting, and mining	10	13	21	1	4	27
Construction	6	10	30	2	49	38
Manufacturing	37	18	288	21	262	117
Wholesale trade	3	0	9	2	17	24
Retail trade	15	0	96	18	46	48
Transportation and warehousing, and utilities	8	6	35	5	47	23
Information	0	0	15	3	9	5
Finance, insurance, real estate, and rental and leasing	3	3	38	2	9	17
Professional, scientific, management, administrative, and waste management services	0	3	66	3	33	26
Educational, health and social services	9	12	197	7	79	138
Arts, entertainment, recreation, accommodation and food services	0	12	49	0	24	50
Other services (except public administration)	6	4	11	7	13	37
Public administration	0	5	20	10	61	49
Source: U.S. Bureau of the Census						

Table E-6 shows the percentage of employees in each sector for Jefferson County, Burke County, Washington County, the state of Georgia, and the United States of America.

Table E-6: Percentage of Employees per Sector, 2000					
	Jefferson	Burke	Washington	Georgia	U.S.A
FARM EMPLOYMENT	7.19	15.68	4.66	1.37	1.85
AGRICULTURAL SERVICES, OTHER	5.51	0.6	1.00	1.16	1.29
MINING	0.73	0.11	15.41	0.19	0.47
CONSTRUCTION	4.79	12.22	4.86	6.24	5.74
MANUFACTURING	26.15	19.62	6.62	12.23	11.41
TRANSPORT, COMM. & PUBLIC UTIL	3.39	9.11	10.93	6.17	4.92
WHOLESALE TRADE	3.35	2.02	1.91	5.61	4.53
RETAIL TRADE	13.16	10.54	12.73	16.72	16.33
FINANCE, INS. & REAL ESTATE	4.21	2.87	2.66	7.1	8.06
SERVICES	15.22	12.63	17.1	29.08	31.81
FEDERAL CIVILIAN GOVT	0.79	0.71	0.52	1.97	1.73
FEDERAL MILITARY GOVT	0.82	1.02	0.64	1.92	1.24
STATE AND LOCAL GOVT	14.69	12.87	20.96	10.25	10.61
TOTAL EMPLOYMENT	100	100	100	100	100
Source: U.S. Bureau of the Census					

It is important to note that while over one quarter of all the jobs held by Jefferson county residents are manufacturing, the national average is only around ten percent. In addition, while approximately 30% of the U.S. population works in the service industry; only 15% do so in Jefferson County.

In the service sector, it can be seen that Jefferson County has half of the national average percentage. In the agricultural services, it is seen that Jefferson County's percentage of employees in the agricultural sector is five times greater than the national average, the State of Georgia and the two peer counties.

Table E-7 offers a comparison of the percent of jobs by sector in the County and the State of Georgia for the years 2000, 2010, 2020 and 2025. One of the primary differences between Jefferson County and the State of Georgia is in the Manufacturing sector. Jefferson County's numbers are more than double the state percentage. In addition, the services sector is another sector where Jefferson County and the State of Georgia differ greatly. While there is forecasted growth for the State of Georgia, Jefferson County is expected to experience little growth in this sector.

Table E-7: Comparison of Jobs by Sector

PERCENTAGES	2000		2010		2020		2025	
	Jefferson County	Georgia	Jefferson County	Georgia	Jefferson County	Georgia	Jefferson County	Georgia
FARM EMPLOYMENT	7.19	1.37	6.28	1.13	5.52	0.95	5.24	0.88
AGRICULTURAL SERVICES, OTHER	5.51	1.16	6.28	1.22	6.52	1.23	6.64	1.23
MINING	0.73	0.19	0.61	0.17	0.55	0.16	0.52	0.15
CONSTRUCTION	4.79	6.24	4.74	6.22	4.64	6.1	4.57	5.98
MANUFACTURING	26.15	12.23	24.61	11.13	23.41	10.08	22.85	9.58
TRANSPORT, COMM. & PUBLIC UTIL	3.39	6.17	3.57	6.38	3.85	6.34	3.91	6.22
WHOLESALE TRADE	3.35	5.61	3.92	5.71	4.1	5.71	4.16	5.7
RETAIL TRADE	13.16	16.72	12.54	16.45	12.39	16.27	12.31	16.15
FINANCE, INS. & REAL ESTATE	4.21	7.1	4.46	7	4.53	6.87	4.57	6.78
SERVICES	15.22	29.08	15.71	30.89	16.38	33.12	16.76	34.42
FEDERAL CIVILIAN GOVT	0.79	1.97	0.76	1.66	0.72	1.46	0.68	1.38
FEDERAL MILITARY GOVT	0.82	1.92	0.8	1.72	0.76	1.53	0.74	1.44
STATE AND LOCAL GOVT	14.69	10.25	15.73	10.31	16.63	10.17	17.06	10.08

Source: U.S. Bureau of the Census; Woods & Poole Economics

Of the businesses in Jefferson County, only 5.4% of them have 50 or more employees. This translates into 94.6% of the businesses having fewer than 50 employees.

Earnings by Sector

Much of the following analysis uses the term "economic sector". According to the 2002 Woods and Poole Georgia State profile, the following industries existed in Jefferson County in 2000:

- Farm Employment
- Agricultural Services, Other
- Mining
- Construction
- Manufacturing
- Transport, Comm. & Public Utilities
- Wholesale Trade

- Retail Trade
- Finance, Insurance and Real Estate
- Services
- Federal Civilian Government
- Federal Military Government
- State and Local Government

According to the 2002 Woods and Poole Economics inc. Georgia State Profile, there are approximately 350 businesses in Jefferson County. Of these businesses, 24.3% are classified as retail trade; 11.4% are classified as health care and 10.4% are classified as services.

Tables E-8 and E-9 present earnings that include the total of wages, salaries and other earned income paid to persons working for the businesses or industries located in a given geographic area. In addition there are comparisons to the peer counties, and the State of Georgia.

Table E-8: Jefferson County: Earnings by Sector

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total (1996 $)	$119,870,000	$143,206,000	$151,365,000	$172,677,000	$173,658,000	$187,598,000	$202,319,000	$218,080,000	$235,004,000	$253,304,000
Farm (1996 $)	($603,000)	$4,860,000	$5,686,000	$9,333,000	$7,746,000	$8,371,000	$8,960,000	$9,624,000	$10,390,000	$11,280,000
Agricultural Services, Other (1996 $)	$2,393,000	$1,514,000	$4,083,000	$8,682,000	$6,013,000	$6,820,000	$7,563,000	$8,306,000	$9,095,000	$9,960,000
Mining (1996 $)	$7,087,000	$4,134,000	$6,518,000	$5,615,000	$4,330,000	$4,634,000	$4,914,000	$5,196,000	$5,489,000	$5,798,000
Construction (1996 $)	$5,013,000	$7,611,000	$4,319,000	$6,219,000	$8,495,000	$8,736,000	$8,989,000	$9,260,000	$9,540,000	$9,833,000
Manufacturing (1996 $)	$48,914,000	$61,886,000	$61,455,000	$70,444,000	$60,161,000	$62,803,000	$65,985,000	$69,405,000	$73,004,000	$76,810,000
Trans, Comm, & Public Utilities (1996 $)	$6,718,000	$7,451,000	$6,321,000	$8,184,000	$13,646,000	$15,545,000	$17,472,000	$19,463,000	$21,475,000	$23,482,000
Wholesale Trade (1996 $)	$4,454,000	$5,665,000	$7,349,000	$7,993,000	$6,056,000	$6,676,000	$7,289,000	$7,949,000	$8,666,000	$9,447,000
Retail Trade (1996 $)	$9,625,000	$10,470,000	$9,995,000	$11,344,000	$13,338,000	$14,737,000	$16,030,000	$17,279,000	$18,535,000	$19,837,000
Finance, Insurance, & Real Estate (1996 $)	$3,008,000	$3,172,000	$3,751,000	$4,537,000	$5,887,000	$6,880,000	$7,750,000	$8,645,000	$9,622,000	$10,720,000
Services (1996 $)	$11,788,000	$11,608,000	$14,286,000	$14,821,000	$17,441,000	$19,753,000	$22,423,000	$25,443,000	$28,833,000	$32,629,000
Federal Civilian Government (1996 $)	$2,188,000	$1,933,000	$1,908,000	$2,016,000	$2,077,000	$2,071,000	$2,095,000	$2,136,000	$2,187,000	$2,245,000
Federal Military Government (1996 $)	$533,000	$1,037,000	$842,000	$823,000	$865,000	$919,000	$972,000	$1,025,000	$1,077,000	$1,128,000
State & Local Government (1996 $)	$18,752,000	$21,865,000	$24,852,000	$22,666,000	$27,603,000	$29,653,000	$31,877,000	$34,349,000	$37,091,000	$40,135,000

Source: U.S. Bureau of the Census; Woods & Poole Economics

Table E-9: Jefferson County: Earnings by Sector (%)										
Category	**1980**	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
Total (1996 $)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Farm (1996 $)	-0.50%	3.39%	3.76%	5.40%	4.46%	4.46%	4.43%	4.41%	4.42%	4.45%
Agricultural Services, Other (1996 $)	2.00%	1.06%	2.70%	5.03%	3.46%	3.64%	3.74%	3.81%	3.87%	3.93%
Mining (1996 $)	5.91%	2.89%	4.31%	3.25%	2.49%	2.47%	2.43%	2.38%	2.34%	2.29%
Construction (1996 $)	4.18%	5.31%	2.85%	3.60%	4.89%	4.66%	4.44%	4.25%	4.06%	3.88%
Manufacturing (1996 $)	40.81%	43.21%	40.60%	40.80%	34.64%	33.48%	32.61%	31.83%	31.07%	30.32%
Trans, Comm, & Public Utilities (1996 $)	5.60%	5.20%	4.18%	4.74%	7.86%	8.29%	8.64%	8.92%	9.14%	9.27%
Wholesale Trade (1996 $)	3.72%	3.96%	4.86%	4.63%	3.49%	3.56%	3.60%	3.64%	3.69%	3.73%
Retail Trade (1996 $)	8.03%	7.31%	6.60%	6.57%	7.68%	7.86%	7.92%	7.92%	7.89%	7.83%
Finance, Insurance, & Real Estate (1996 $)	2.51%	2.21%	2.48%	2.63%	3.39%	3.67%	3.83%	3.96%	4.09%	4.23%
Services (1996 $)	9.83%	8.11%	9.44%	8.58%	10.04%	10.53%	11.08%	11.67%	12.27%	12.88%
Federal Civilian Government (1996 $)	1.83%	1.35%	1.26%	1.17%	1.20%	1.10%	1.04%	0.98%	0.93%	0.89%
Federal Military Government (1996 $)	0.44%	0.72%	0.56%	0.48%	0.50%	0.49%	0.48%	0.47%	0.46%	0.45%
State & Local Government (1996 $)	15.64%	15.27%	16.42%	13.13%	15.90%	15.81%	15.76%	15.75%	15.78%	15.84%
Source: U.S. Bureau of the Census; Woods & Poole Economics										

Table E-10: Georgia – Earnings by Sector (%)										
Category	**1980**	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
Total (1996 $)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Farm (1996 $)	0.16%	1.27%	1.36%	1.40%	0.98%	0.93%	0.89%	0.85%	0.82%	0.79%
Agricultural Services, Other (1996 $)	0.37%	0.41%	0.46%	0.53%	0.59%	0.60%	0.61%	0.62%	0.62%	0.62%
Mining (1996 $)	0.65%	0.48%	0.36%	0.29%	0.27%	0.25%	0.22%	0.21%	0.19%	0.18%
Construction (1996 $)	5.66%	6.57%	5.82%	5.39%	6.00%	5.86%	5.67%	5.46%	5.26%	5.06%
Manufacturing (1996 $)	22.54%	20.03%	17.51%	16.84%	14.86%	14.45%	14.05%	13.59%	13.08%	12.53%
Trans, Comm, & Public Utilities (1996 $)	9.33%	8.85%	8.75%	9.43%	9.89%	9.99%	10.01%	9.96%	9.84%	9.63%
Wholesale Trade (1996 $)	8.87%	9.04%	8.86%	8.17%	8.44%	8.36%	8.21%	8.05%	7.88%	7.71%
Retail Trade (1996 $)	10.33%	10.64%	9.17%	9.08%	8.99%	8.97%	8.93%	8.87%	8.80%	8.71%
Finance, Insurance, & Real Estate (1996 $)	5.44%	5.59%	6.43%	6.86%	7.57%	7.66%	7.73%	7.78%	7.81%	7.82%
Services (1996 $)	15.63%	17.36%	21.95%	24.33%	26.77%	27.78%	29.02%	30.44%	32.02%	33.73%
Federal Civilian Government (1996 $)	5.64%	5.11%	4.66%	4.17%	3.39%	3.11%	2.87%	2.67%	2.49%	2.33%
Federal Military Government (1996 $)	3.72%	3.68%	2.69%	2.49%	2.06%	1.94%	1.83%	1.72%	1.62%	1.53%
State & Local Government (1996 $)	11.67%	10.97%	11.97%	11.01%	10.18%	10.10%	9.95%	9.78%	9.58%	9.37%
Source: U.S. Bureau of the Census; Woods & Poole Economics										

Table E-10 highlights current statewide sector earnings. Similar to sector employment rates, the Georgia economy is much more diverse than that of Jefferson County and no sector accounts for more than a quarter of total earnings. The widest gap is found in manufacturing, where sector earnings account for over 10% more in Jefferson County than the state average. The service sector, on the other hand, contributes a higher share

of earnings statewide. Whereas the service sector accounts for 24.3% of earnings in Georgia, it accounts for less than 10% in Jefferson County.

Wages

In 1999, the average weekly wage paid in Jefferson County was $452, significantly lower than the Georgia average of $629 (Tables E-11, E-12). Between 1989 and 1999, average weekly wages have increased 52.5%. Current average weekly wages paid by sector range from a low of $324 in services to a high of $914 in Mining. Historically, these sectors have always been at the higher and lower ends of the wage scale. The highest wage growth rates between 1990 and 2000 were in construction (45.7%), retail trade (44.1%), manufacturing (44%), and Agriculture (26.2%).

Table E-11: Jefferson – Average Weekly Wages

Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	$316	$322	$328	$347	$347	$362	$379	$399	$429	$433	$452
Agriculture, Forestry, Fishing	277	329	367	436	NA	382	NA	NA	NA	NA	NA
Mining	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Construction	NA	242	312	329	273	NA	268	309	NA	399	440
Manufacturing	NA	328	343	371	365	392	417	453	517	501	522
Transportation, Comm, Util	NA	468	498	499	516	534	558	535	579	557	NA
Wholesale	NA	307	323	354	338	374	376	384	386	400	437
Retail	NA	181	183	200	201	203	210	220	239	251	255
Financial, Insurance, Real Estate	NA	396	377	351	384	394	399	409	418	425	444
Services	NA	252	247	269	264	269	277	280	275	293	314
Federal Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
State Gov	NA	416	NA	NA	NA	NA	NA	NA	NA	NA	NA
Local Gov	NA	244	NA	NA	NA	280	287	290	311	332	338

Source: U.S. Bureau of Labor Statistics; NA: Not Available

Table E-12: Georgia— Average Weekly Wages

Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	$404	$424	$444	$471	$480	$488	$509	$531	$562	$598	$629
Agri, Forestry, Fishing	267	276	285	297	304	312	322	336	347	373	390
Mining	561	589	605	NA	NA	698	734	741	781	832	866
Construction	NA	434	439	451	461	479	508	534	556	590	623
Manufacturing	NA	450	473	503	511	531	555	588	620	656	684
Transportation, Comm, Util	NA	603	635	689	709	720	737	769	805	842	895
Wholesale	NA	603	632	669	695	711	729	762	809	873	932
Retail	NA	236	244	255	260	267	275	286	299	318	335
Financial, Insurance, Real Estate	NA	544	569	627	648	648	693	741	799	872	900
Services	NA	414	439	464	471	475	501	519	551	580	611
Federal Gov	NA	543	584	612	651	667	666	701	774	791	808
State Gov	NA	451	462	460	471	NA	493	517	533	561	579
Local Gov	NA	387	401	401	410	420	440	461	480	506	523

Source: U.S. Bureau Labor Statistics
NA: Not Available

In 2001 the average weekly wage paid in Jefferson County was $488, which was considerably lower than the statewide average of $676 during that same time period. Average weekly pay was considerably higher for neighboring Burke and Washington Counties at $599 and $561 respectively (Table E-13). In Jefferson County the Mining sector had the highest weekly wages at $ 914. The lowest sector was retail trade at $324 dollars a week. In Jefferson County the wholesale trade sector averaged $519 a week while the State of Georgia averaged $1,022, almost twice as much.

Table E-13: Average Weekly Wage By Sector, 2001

INDUSTRY	Jefferson County	Burke County	Washington County	State of Georgia
Agriculture, forestry	$446.00	$350.00	$482.00	$417.00
Construction	$446.00	$397.00	$383.00	$687.00
Manufacturing	$586.00	$508.00	$546.00	$711.00
Wholesale Trade	$519.00	$496.00	$528.00	$1,022.00
Retail Trade	$324.00	$311.00	$303.00	$433.00
Finance and insurance	$513.00	$485.00	$516.00	$1,051.00
Real estate and rental and leasing	$335.00	$252.00	$312.00	$670.00
Transportation and warehousing	$534.00	$463.00	$527.00	$808.00
Services	$376.00	$635.00	$473.00	$680.00
Mining	$914.00	NA	$1,064.00	$876.00
Average Weekly Wage (all Sectors)	$488.00	$559.00	$561.00	$676.00

Source: U.S. Bureau of Labor Statistics
NA: Not Available

The overall 1990 to 2002 increases in Jefferson County wages were below the state average and local wages remain significantly lower than elsewhere in Georgia. The only sectors comparable in actual wages were agriculture/forestry and mining where county wages exceeded the state average. The largest local-statewide wage gaps are found in finance and insurance and wholesale trade where the state wage doubles the county wage.

Sources of Personal Income

The sources of personal income are indicators of how a community receives its income. The state of Georgia Department of Community Affairs, with the assistance of Woods & Poole Economics, Inc. has developed categories of personal income. These five categories of personal income include the following:

1) **Wage and Salary**-Total income earned as compensation for working or rendering services;
2) **Other Labor Income**-Total employer contributions to private pension or worker's compensation funds;
3) **Proprietor's Income**-Proprietor's Income measured total profits earned from partnership and sole proprietorships;
4) **Dividends-Investments-Rent-Interest Payments and Interest Income**-total income from investments and rental property; and
5) **Transfer Payments**-Total income from payments by the government under many different programs that include Social Security, unemployment insurance, food stamps, veterans benefits and countless others.

Associated with these figures is a Residence Adjustment Category, which measures the net amount of personal income of residents of the county that is earned outside the county. When the number is positive, as in Jefferson County it means the amount of income earned outside the county by residents of the county is greater than the amount of income earned in the county by non-residents. This confirms the data trends seen in the previous chart that states that incomes are higher outside the county.

Table E-14 provides sources of income data for Jefferson County, the state and the nation.

Table E-14: Sources of Personal Income

PERCENTAGES	1990			1995			2000		
	Jefferson	Georgia	U.S.A	Jefferson	Georgia	U.S.A	Jefferson	Georgia	U.S.A
PERSONAL INCOME	100	100	100	100	100	100	100	100	100
WAGES AND SALARIES	49.01	60.36	56.16	48.5	59.07	55.25	45.06	61.54	58.16
OTHER LABOR INCOME	6.99	8.68	7.85	6.78	8.63	7.96	5.24	7.05	6.37
PROPRIETORS INCOME	5.29	7.11	7.8	6.38	7.96	8.04	7.24	8.36	8.61
DIVIDENDS, INTEREST & RENT	16.15	17.34	20.18	14.89	16.31	18.79	16.77	16.64	18.29
TRANSFER PMTS. TO PERSONS	24.6	10.94	12.17	27.62	12.62	14.31	26.51	11.04	12.87
LESS SOCIAL INS. CONTRIBUTIONS	3.66	4.33	4.15	4	4.45	4.33	3.36	4.42	4.3
RESIDENCE ADJUSTMENT	1.61	-0.1	-0.02	-0.18	-0.15	-0.01	2.54	-0.21	-0.01
PERCENTAGES	2010			2020			2025		
	Jefferson	Georgia	U.S.A	Jefferson	Georgia	U.S.A	Jefferson	Georgia	U.S.A
PERSONAL INCOME	100	100	100	100	100	100	100	100	100
WAGES AND SALARIES	46.05	61.72	58.69	46.82	61.62	58.93	47.07	61.51	58.96
OTHER LABOR INCOME	4.79	6.59	6.24	4.74	6.37	6.08	4.71	6.26	6
PROPRIETORS INCOME	6.56	8.22	8.49	6.47	8.06	8.37	6.41	7.97	8.29
DIVIDENDS, INTEREST & RENT	16.12	16.28	17.95	15.31	16.05	17.8	14.99	16.05	17.78
TRANSFER PMTS. TO PERSONS	27.6	11.34	13.3	28.09	11.71	13.82	28.37	11.96	14.1
LESS SOCIAL INS. CONTRIBUTIONS	3.61	4.77	4.68	3.89	5.09	5.01	4	5.21	5.14
RESIDENCE ADJUSTMENT	2.49	0.63	0	2.46	1.27	0	2.44	1.47	0

Source: U.S. Bureau of the Census; Woods & Poole Economics

When comparing Jefferson County to the State of Georgia and the United States as a whole several differences become apparent. During the period from 1990-2000 Jefferson County's percentage of wages and salary is considerably lower than the state or national percentages. This can be attributed to the fact that Jefferson County has a lower average income and salary than the state or national averages. Similar comparisons can be made in the "other labor" category.

The most dramatic difference between Jefferson County and the state and nation is in the transfer payments category. This category reflects a variety of government programs such as social security, food stamps and unemployment insurance. This number, which over the course of the past 10 years has been more than double the state and national average is reflective of the county's poverty rate which is 23%, higher than the state rate at 13% and more than double the national rate at 9%.

Jefferson County's residence adjustment will continue to be positive through the year 2025. This suggests the continuing trend of residents of Jefferson County earning more money outside the county than the money being earned in Jefferson County by residents. The state residence adjustment has remained steady since 1990 and that trend is

projected to continue through 2025. The resident who earns income in one county but lives in a different county would have that income counted under positive residential adjustment in the county in which the resident lives, and the county in which the resident works would have a negative adjustment. Although higher than the state averages, Jefferson County's increasing amount of personal income earned outside the county by residents compared to the amount of income earned in the county by nonresidents demonstrates a decrease in the job base in Jefferson County. The State of Georgia's numbers are extremely close to 0%, which shows that almost all residents of Georgia earn their income in the state. The same can be said for the United States.

Table E-15: Sources of Personal Income, Percentage

	1990			1995			2000		
	Jefferson	Burke	Washington	Jefferson	Burke	Washington	Jefferson	Burke	Washington
PERSONAL INCOME	100	100	100	100	100	100	100	100	100
WAGES AND SALARIES	49.01	60.51	60.51	48.5	48.93	48.93	45.06	49.76	49.76
OTHER LABOR INCOME	6.99	8.77	8.77	6.78	7.49	7.49	5.24	6.13	6.13
PROPRIETORS INCOME	5.29	6.48	6.48	6.38	5.26	5.26	7.24	6.76	6.76
DIVIDENDS, INTEREST & RENT	16.15	14.75	14.75	14.89	13.91	13.91	16.77	14.38	14.38
TRANSFER PMTS. TO PERSONS	24.6	21.68	21.68	27.62	24.76	24.76	26.51	22.48	22.48
LESS SOCIAL INS. CONTRIBUTIONS	3.66	4.36	4.36	4	3.69	3.69	3.36	3.59	3.59
RESIDENCE ADJUSTMENT	1.61	-7.84	-7.84	-0.18	3.35	3.35	2.54	4.09	4.09
	2010			2020			2025		
	Jefferson	Burke	Washington	Jefferson	Burke	Washington	Jefferson	Burke	Washington
PERSONAL INCOME	100	100	100	100	100	100	100	100	100
WAGES AND SALARIES	46.05	50	50	46.82	49.91	49.91	47.07	49.74	49.74
OTHER LABOR INCOME	4.79	5.47	5.47	4.74	5.33	5.33	4.71	5.24	5.24
PROPRIETORS INCOME	6.56	6.91	6.91	6.47	6.68	6.68	6.41	6.57	6.57
DIVIDENDS, INTEREST & RENT	16.12	13.94	13.94	15.31	13.62	13.62	14.99	13.53	13.53
TRANSFER PMTS. TO PERSONS	27.6	23.59	23.59	28.09	24.7	24.7	28.37	25.32	25.32
LESS SOCIAL INS. CONTRIBUTIONS	3.61	3.85	3.85	3.89	4.07	4.07	4	4.15	4.15
RESIDENCE ADJUSTMENT	2.49	3.94	3.94	2.46	3.82	3.82	2.44	3.76	3.76

Source: U.S. Bureau of the Census; Woods & Poole Economics

When comparing Jefferson County sources of personal income to the sources of neighboring counties, Jefferson county's wages and salaries were significantly lower than the neighboring counties in 1990, but in the years after, the neighboring counties wages and salaries actually decreased to a similar level as Jefferson County's (Table E-15).

MAJOR ECONOMIC ACTIVITIES

The Jefferson County area has seen some increase in economic activity since 1970; however, growth has slowed somewhat during the last decade. Jefferson County's proximity to the Augusta and Atlanta metro areas is one of the main reasons for the growth that has occurred. Below is a detailed description of economic development opportunities by sector within the County and region.

Retail Trade and Services

Service employment in Jefferson County increased from 966 jobs in 1990 to 1,152 jobs in 2000. This is an increase of 156 jobs. The retail trade also saw an increase of 156 jobs increasing from 840 to 996. Besides agricultural services, these two sectors saw the greatest increase. Jefferson County has the potential to increase these numbers with the numerous recreational and historical opportunities in the county by increasing and promoting more tourism.

Manufacturing and Wholesale Trade

Manufacturing and wholesale trade are reviewed in this section together because these sectors share many of the same characteristics such as land use, employee education and skill levels. Manufacturing employment in Jefferson County went from 2,683 in 1990 to 1980 in the year 2000 this is a loss of 703 jobs, the largest loss. The percentage of jobs in the manufacturing sector remained almost the same, which shows that almost all of the jobs lost in the county were in the manufacturing sector. Wholesale trade also saw a loss of jobs from 345 to 254. Regaining these jobs will be important in the future. The widening of US Route 1 will bring potential for these sectors to increase greatly.

Table E-16: Major Manufacturers in Jefferson County

Company	City	# of Employees
Thermo King Corp.	Louisville	437
Battle Lumber Co., Inc.	Wadley	240
Glit, Inc.	Wrens	207
J. M. Huber Corp., Engineered Materials Division	Wrens	178
Cadet Mfg. Corp.	Louisville	175
Wadley Shirt Co.	Wadley	138
Fulghum Industries, Inc.	Wadley	125
Lewis Steel Works	Wrens	122
Air Balance, Inc., Div. of MESTEK, Inc.	Wrens	119
A & M Products Manufacturing Company	Wrens	88
Lamb Lumber Holding Co., Inc.	Wrens	72
Georgia Tennessee Mining & Chem. Co.	Wrens	42
Dixieland Wood Products, Inc.	Louisville	26
L T & E, Inc.	Wrens	25
Atwell Pecan Co., Inc.	Wrens	20
Central Steel Building System	Louisville	20
Cooper Machine Co, Inc.	Wadley	18
Helena Chemical Co.	Louisville	12
Rachels Machine & Fabrication, Inc.	Wadley	10
Fall Line Publishing, Inc.	Louisville	9
The News & Farmer/Jefferson Reporter	Louisville	7
A. P. Jones Timber Co.	Louisville	5
Hodges Machine Shop, Inc.	Bartow	4
C & G Machining & Welding	Stapleton	2
Riverside Mfg. Co.	Wadley	5

Source: Georgia Department of Industry, Trade & Tourism

Small and medium firms manufacturing a variety of products represent the manufacturing sector in Jefferson County such as those located in the Louisville Airport Industrial Park. Key Manufacturers in Jefferson County are included in Table E-16.

Special and Unique Economic Activities

The Jefferson County Development Authority and the chamber of commerce are the primary vehicles to attract and provide available locations and opportunities for industrial development. The Development Authority has had success as of late. The Development Authority was responsible for the retention and growth of Glit/Microtron. In addition the Development Authority has been successful in obtaining grants from a variety of sources for the expansion of both the Louisville and Wrens airports and the Louisville Industrial Park. Other accomplishments include creating the Shake Rag Industrial site.

Tourism

Jefferson County is well positioned to capitalize on tourism. In addition to the Ogeechee River, numerous historical and recreation qualities provide good tourism opportunities. The county has applied for various state and federal grants aimed at enhancing potential tourist areas such as the Louisville downtown historic district.

Wrens is home to the largest gourd farm this side of the Mississippi River. The farm is located on Highway One and is a gem in the community. It attracts many people and is well known nationally and internationally.

LABOR FORCE ANALYSIS

Employment by Occupation

This section includes an inventory and assessment of the employment of Jefferson County's labor force. Work force characteristics include gender, amount of participation in the work force, and occupation and sector of the workers.

Table E-17 shows the percentages of total employment by occupational classifications for 2000 in Jefferson County. Comparisons are also made with Burke and Washington Counties, the State of Georgia and the United States. Also included is a breakdown of the six incorporated municipalities in the county. This analysis looks at the occupations of the residents of the county, regardless of where they work.

Table E-17: Percentages of Total Employment by Occupation, 2000

	Jefferson	Burke	Washington	Georgia	U.S.A
Employed civilian population 16 years and over	100	100	100	100	100
OCCUPATION					
Management, professional, and related occupations	22.8	21.4	22.8	32.7	33.6
Service occupations	15.6	15.7	20.1	13.4	14.9
Sales and office occupations	17.9	20.3	19.4	26.8	26.7
Farming, fishing, and forestry occupations	2.7	1.7	1.5	0.6	0.7
Construction, extraction, and maintenance occupations	10.6	11.4	13.4	10.8	9.4
Production, transportation, and material moving occupations	30.4	29.5	22.8	15.7	14.6

Source: U.S. Bureau of the Census

Table E-18 shows the information for the six incorporated cities in Jefferson County

Table E-18: Percentages of Total Employment by Occupation—Jefferson County, 2000						
	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Employed civilian population 16 years and over	100	100	100	100	100	100
OCCUPATION						
Management, professional, and related occupations	7.2	24.4	27.3	21	11.6	27.2
Service occupations	4.1	22.1	14.2	8.6	17.6	21
Sales and office occupations	24.7	14	25.6	24.7	10.9	21.5
Farming, fishing, and forestry occupations	0	3.5	1.4	0	1.4	1.2
Construction, extraction, and maintenance occupations	23.7	11.6	5.5	23.5	12.1	5.5
Production, transportation, and material moving occupations	40.2	24.4	26.1	22.2	46.4	23.5
Source: U.S. Bureau of the Census; Woods & Poole Economics						

Tables E-19 - E-22 provide local, state and national employment data. The three top occupations of County residents in the year 2000 were production, transportation, and material moving occupations (30.4%), management, professional and related occupations (22.8%) and sales and office occupations (17.9%). These occupations account for over 70 % of the working residents of Jefferson County. Jefferson County has similar percentages to both Burke and Washington County. However the difference is more noticeable when compared to state and national figures.

It can be seen from these two graphs that in the two skilled labor categories, management and professional and sales and office, Jefferson County falls below both the state and national averages. However in the production, transportation and material moving category Jefferson County has more than twice the percentage of employees in that sector. Continued development of industrial and commercial facilities may have a future impact on where residents work.

Table E-19: Employment by Occupation												
	Avera		Bartow		Louisville		Stapleton		Wadley		Wrens	
Category	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
TOTAL All Occupations	70	97	132	86	1083	875	153	81	826	653	919	599
Executive, Administrative and Managerial (not Farm)	4	0	14	9	26	121	5	6	51	12	69	56
Professional and Technical Specialty	2	7	8	12	142	118	10	11	58	64	103	107
Technicians & Related Support	2	NA	2	NA	12	NA	2	NA	9	NA	18	NA
Sales	3	6	12	0	146	96	10	3	65	21	95	41
Clerical and Administrative Support	11	18	19	12	107	128	17	17	69	50	115	88
Private Household Services	0	NA	0	NA	7	NA	0	NA	6	NA	8	NA
Protective Services	2	NA	2	NA	16	NA	0	NA	8	NA	20	NA
Service Occupations (not Protective & Household)	2	6	19	6	96	89	25	6	86	35	114	50
Farming, Fishing and Forestry	0	0	7	3	29	12	3	0	17	9	11	7
Precision Production, Craft, and Repair	17	27	13	18	142	189	27	10	99	218	68	71

Table E-19: Employment by Occupation Continued												
Machine Operators, Assemblers & Inspectors	17	23	29	10	201	48	27	19	249	79	194	33
Transportation & Material Moving	8	12	2	3	55	39	14	8	50	85	43	70
Handlers, Equipment Cleaners, helpers & Laborers	2	NA	5	NA	104	NA	13	NA	59	NA	61	NA
Source: U.S. Bureau of the Census; NA: Not Available												

Table E-20: Employment by Occupation (%)												
	Avera		**Bartow**		**Louisville**		**Stapleton**		**Wadley**		**Wrens**	
Category	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**	**1990**	**2000**
TOTAL All Occupations	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Executive, Administrative and Managerial (not Farm)	5.71%	0.00%	10.61%	10.47%	2.40%	13.83%	3.27%	7.41%	6.17%	1.84%	7.51%	9.35%
Professional and Technical Specialty	2.86%	7.22%	6.06%	13.95%	13.11%	13.49%	6.54%	13.58%	7.02%	9.80%	11.21%	17.86%
Technicians & Related Support	2.86%	NA	1.52%	NA	1.11%	NA	1.31%	NA	1.09%	NA	1.96%	NA
Sales	4.29%	6.19%	9.09%	0.00%	13.48%	10.97%	6.54%	3.70%	7.87%	3.22%	10.34%	6.84%
Clerical and Administrative Support	15.71%	18.56%	14.39%	13.95%	9.88%	14.63%	11.11%	20.99%	8.35%	7.66%	12.51%	14.69%
Private Household Services	0.00%	NA	0.00%	NA	0.65%	NA	0.00%	NA	0.73%	NA	0.87%	NA
Protective Services	2.86%	NA	1.52%	NA	1.48%	NA	0.00%	NA	0.97%	NA	2.18%	NA
Service Occupations (not Protective & Household)	2.86%	6.19%	14.39%	6.98%	8.86%	10.17%	16.34%	7.41%	10.41%	5.36%	12.40%	8.35%
Farming, Fishing and Forestry	0.00%	0.00%	5.30%	3.49%	2.68%	1.37%	1.96%	0.00%	2.06%	1.38%	1.20%	1.17%
Precision Production, Craft, and Repair	24.29%	27.84%	9.85%	20.93%	13.11%	21.60%	17.65%	12.35%	11.99%	33.38%	7.40%	11.85%
Machine Operators, Assemblers & Inspectors	24.29%	23.71%	21.97%	11.63%	18.56%	5.49%	17.65%	23.46%	30.15%	12.10%	21.11%	5.51%
Transportation & Material Moving	11.43%	12.37%	1.52%	3.49%	5.08%	4.46%	9.15%	9.88%	6.05%	13.02%	4.68%	11.69%
Handlers, Equipment Cleaners, helpers & Laborers	2.86%	NA	3.79%	NA	9.60%	NA	8.50%	NA	7.14%	NA	6.64%	NA
Source: U.S. Bureau of the Census; NA: Not Available												

Table E-21: Employment by Occupation								
	Jefferson County				**Georgia**			
Category	**1990**		**2000**		**1990**		**2000**	
TOTAL All Occupations	6,780	100%	5,952	100%	3,092,057	100%	3,839,756	100%
Executive, Administrative and Managerial (not Farm)	331	4.88%	576	9.68%	378,984	12.26%	538,647	14.03%
Professional and Technical Specialty	496	7.32%	784	13.17%	383,012	12.39%	717,312	18.68%
Technicians & Related Support	207	3.05%	NA	NA	110,766	3.58%	NA	NA
Sales	598	8.82%	440	7.39%	379,746	12.28%	446,876	11.64%
Clerical and Administrative Support	642	9.47%	624	10.48%	494,823	16.00%	581,364	15.14%
Private Household Services	52	0.77%	NA	NA	15,882	0.51%	NA	NA
Protective Services	94	1.39%	NA	NA	52,596	1.70%	NA	NA

Table E-21: Employment by Occupation Continued								
Service Occupations (not Protective & Household)	774	11.42%	556	9.34%	302,084	9.77%	444,077	11.57%
Farming, Fishing and Forestry	349	5.15%	158	2.65%	68,111	2.20%	24,489	0.64%
Precision Production, Craft, and Repair	860	12.68%	1,209	20.31%	366,819	11.86%	346,326	9.02%
Machine Operators, Assemblers & Inspectors	1,486	21.92%	630	10.58%	262,930	8.50%	415,849	10.83%
Transportation & Material Moving	392	5.78%	602	10.11%	142,189	4.60%	254,652	6.63%
Handlers, Equipment Cleaners, helpers & Laborers	499	7.36%	NA	NA	134,115	4.34%	NA	NA
Source: U.S. Bureau of the Census; NA: Not Available								

Table E-22: US Employment by Occupation				
Category	**1990**		**2000**	
TOTAL All Occupations	115,452,905	100%	129,721,512	100%
Executive, Administrative and Managerial (not Farm)	14,227,916	12.32%	17,448,038	13.45%
Professional and Technical Specialty	16,287,187	14.11%	26,198,693	20.20%
Technicians & Related Support	4,251,007	3.68%	NA	NA
Sales	13,606,870	11.79%	14,592,699	11.25%
Clerical and Administrative Support	18,769,526	16.26%	20,028,691	15.44%
Private Household Services	520,183	0.45%	NA	NA
Protective Services	1,981,723	1.72%	NA	NA
Service Occupations (not Protective & Household)	12,746,927	11.04%	15,575,101	12.01%
Farming, Fishing and Forestry	2,835,950	2.46%	951,810	0.73%
Precision Production, Craft, and Repair	13,077,829	11.33%	11,008,625	8.49%
Machine Operators, Assemblers & Inspectors	7,886,595	6.83%	12,256,138	9.45%
Transportation & Material Moving	4,715,847	4.08%	7,959,871	6.14%
Handlers, Equipment Cleaners, helpers & Laborers	4,545,345	3.94%	NA	NA
Source: U.S. Bureau of the Census; NA: Not Available				

Employment Status

Table E-23 outlines labor force participation in Jefferson, Burke and Washington Counties, the State of Georgia and the United states in 2000.

Table E-23: Labor Force Participation, 2000					
	Jefferson	**U.S.A.**	**Georgia**	**Burke**	**Washington**
Total in Labor Force	52.2	63.9	66.1	56.5	53.7
Civilian Labor Force	52.2	63.4	65	56.2	53.7
Military Labor Force	0	0.5	1.1	0.3	0
Males in Labor Force	52.4	42.5	40.6	47.7	53.7
Females in Labor Force	47.6	57.4	59.4	52.3	46.3
Source: U.S. Bureau of the Census					

It can be seen from this chart that Jefferson County has the lowest percentage of the total population 16 years or older (labor force) that are participants in the labor force. Jefferson County has a total force of 52.2 % of 16 year olds that are working. This is somewhat lower than Burke (56.5%) and Washington (53.7%) counties and considerably lower than the State of Georgia (66.1%) and the United States (63.9) It is also interesting to point out that Jefferson County and Washington County both have a greater percentage of males in the labor force while Burke County, the state of Georgia and the United States have a greater percentage of females.

Unemployment

Table E-24 shows information about labor force participation and unemployment in Jefferson County in 1990. These figures are compared to Burke and Washington Counties, the State of Georgia and the United States. The unemployment rate in 1990 in Jefferson County was higher than the state and national unemployment rate, but was very similar to neighboring counties. This illustrates the regional distress in the economy, in and around Jefferson County.

It is important to point out that between 1990 and 2000 the state and national unemployment rates dropped while the three counties increased, with Jefferson County seeing the largest increase from 7.9% to 11.75%.

Table E-24: Labor Force Participation and Unemployment, 1990

	Jefferson	U.S.A.	Georgia	Burke	Washington
Labor Force	7,362	123,473,450	3,278,378	8,614	8,703
Employed	6,780	115,681,202	3,090,276	7,905	8,053
Unemployed	582	7,792,248	188,102	709	650
Unemployed rate of Labor Force	7.9	6.31	5.73	8.23	7.4

Source: U.S. Bureau of the Census; Woods & Poole Economics

Table E-25: Labor Force Participation and Unemployment, 2000

	Jefferson	U.S.A.	Georgia	Burke	Washington
Labor Force	6,747	138,820,935	4,129,666	9,108	8,626
Employed	5,952	129,721,512	3,839,756	8,220	7,804
Unemployed	793	7,947,286	223,052	842	822
Unemployed Rate of Labor Force	11.75%	5.70%	5.40%	9.24%	9.52%

Source: U.S. Bureau of the Census; Woods & Poole Economics

Table E-25 represents the labor force participation and unemployment in 2000. The table shows that Jefferson County has an unemployment rate of 11.75%. Ten years later, the unemployment rate in Jefferson County has increase 4 percentage points and remains higher than the state and national rates. The rate is also higher than Burke and Washington Counties by 2% and more than double the State and national rates. These rates are even higher after the labor force decreased, but the number of unemployed workers increased by 211. The neighboring counties' unemployment rates increased, but only half of the increase that Jefferson County saw.

Table E-26 shows a year -by -year breakdown of unemployment rates for Jefferson County, Burke County, Washington County, the state of Georgia and the nation.

The three counties have consistently fluctuated over the past twelve years, while the state and nation have remained quite steady, not increasing or decreasing by more than 2% from any year to the other. This illustrates that a small economy like Jefferson County with relatively few employers, is much more sensitive to economic shifts such as plant closings, lay-offs, or downsizing than is a large economy like the Georgia economy or the U.S. economy.

Table E-26: Year-By-Year Breakdown of Unemployment Rates

	Jefferson	Burke	Washington	Georgia	U.S.A.
1990	8.2	10.9	5.9	5.5	5.6
1991	6.7	11.2	5.1	5.0	6.8
1992	8.7	15.8	5.6	7.0	7.5
1993	7.6	12.0	4.5	5.8	6.9
1994	7.2	12.3	3.8	5.2	6.1
1995	11.3	13.9	5.5	4.9	5.6
1996	13.6	16.4	6.0	4.6	5.4
1997	13.3	14.7	9.0	4.5	4.9
1998	12.3	13.1	8.4	4.2	4.5
1999	13.4	9.6	7.5	4.0	4.2
2000	9.2	7.7	5.1	3.7	4.0
2001	9.8	7.8	4.8	4.0	4.7
2002	10.6	8.8	5.4	5.1	5.8

Source: U.S. Bureau of the Census; Woods & Poole Economics

Commuting Patterns

Employment opportunities within the county are primarily service or public administration geared to the needs of the immediate population. In 2002 approximately 66% of the working population of Jefferson County worked within the county. This number is higher than the state average but lower than the national average.

Table E-27: Jefferson County: Labor Force by Place of Work

Category	1990	2000
Worked in County of Residence	5219	3842
Worked outside county of Residence	1399	1924

Source: U.S. Bureau of the Census; Woods & Poole Economics

Overall there is a trend for more and more people to work outside of their county of residence. It can be seen that Jefferson County experienced a greater percentage loss than its peer counties, the State of Georgia and the Nation as a whole. Although the county will continue to actively promote and encourage non- residential development in appropriate locations, it will most likely increase its commuter/bedroom community orientation.

The table below takes a closer look as to where Jefferson County residents are commuting to work:

Table E-28: Number of Commuters From Jefferson County and Destination County		
Number of Workers	County of Employment	County of Residence
3,842	Jefferson County	Jefferson County
507	Richmond County	Jefferson County
315	Washington County	Jefferson County
220	McDuffie County	Jefferson County
192	Burke County	Jefferson County
153	Columbia County	Jefferson County
153	Emanuel County	Jefferson County
106	Johnson County	Jefferson County
51	Baldwin County	Jefferson County
40	Glascock County	Jefferson County
34	Jefferson County	Jefferson County
26	Bibb County	Jefferson County
26	Hancock County	Jefferson County
16	Laurens County	Jefferson County
14	Bulloch County	Jefferson County
14	Jenkins County	Jefferson County
13	Fulton County	Jefferson County
13	Tattnall County	Jefferson County
10	Chatham County	Jefferson County
8	Wilkinson County	Jefferson County
6	Houston County	Jefferson County
4	Toombs County	Jefferson County
3	Hall County	Jefferson County
Source: U.S. Bureau of the Census		

Table E-29: Persons Working in Jefferson County		
County of Residence	Number of Workers	% of Workers
Jefferson County	3842	69.9%
Richmond County	292	5.5%
McDuffie County	220	4.0%
Burke County	192	3.5%
Glascock County	175	3.2%
Emanuel County	170	3.1%
Columbia County	132	2.4%
Washington County	67	1.2%
Other	409	7.4%
Source: U.S. Bureau of the Census		

The cities of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens experienced similar housing trends since 1980. In all cases, the number and percentage of single-family units declined while the share of mobile home units increased. The most dramatic change occurred in Bartow where the percentage of single-family units dropped from 92.8% to 69.4%. Throughout the municipalities, the number of multi-family units has remained relatively stable, with the exception of increases in both Wadley (+96.2%) and Wrens (+34.7%). The increase in multi-family units in Wadley and Wrens is a direct result of affordable and public housing initiatives undertaken since the 1980s.

Table H-1: Housing Stock by Type, 1980-2000

	1980		1990		2000	
	Total	%	Total	%	Total	%
Jefferson Co.						
Single-Family	5,174	79.7%	4,727	66.9%	4,560	63.1%
Multi-Family	630	9.7%	556	7.9%	671	9.3%
Mobile Home	688	10.6%	1782	25.2%	1990	27.6%
Total	6,492	100.0%	7,065	100.0%	7,221	100.0%
Avera						
Single-Family	111	84.1%	95	77.2%	120	74.1%
Multi-Family	3	2.3%	0	0.0%	0	0.0%
Mobile Home	18	13.6%	28	22.8%	42	25.9%
Total	132	100.0%	123	100.0%	162	100.0%
Bartow						
Single-Family	128	92.8%	114	85.1%	75	69.4%
Multi-Family	6	4.3%	1	0.7%	6	5.6%
Mobile Home	4	2.9%	19	14.2%	27	25.0%
Total	138	100.0%	134	100.0%	108	100.0%
Louisville						
Single-Family	845	78.2%	719	76.9%	833	76.4%
Multi-Family	167	15.5%	108	11.6%	137	12.6%
Mobile Home	68	6.3%	108	11.6%	120	11.0%
Total	1080	100.0%	935	100.0%	1090	100.0%
Stapleton						
Single-Family	141	75.8%	104	61.9%	86	71.7
Multi-Family	22	11.7%	13	7.4%	8	6.6
Mobile Home	23	12.5%	51	30.7%	26	21.7
Total	186	100.0%	168	100.0%	120	100.0%
Wadley						
Single-Family	711	85.7%	606	63.3%	519	59.1%
Multi-Family	79	9.5%	107	11.1%	155	17.6%
Mobile Home	39	4.8%	235	25.6%	204	23.3%
Total	829	100.0%	958	100.0%	878	100.0%

Table H-1: Housing Stock by Type, 1980-2000 Continued						
Wrens						
Single-Family	678	73.1%	666	68.6%	677	64%
Multi-Family	187	20.2%	180	18.5%	252	23.8%
Mobile Home	62	6.7%	112	12.9%	128	12.2%
Total	927	100.0%	970	100.0%	1,057	100.0%
Georgia						
Single-Family	1,525,070	75.8%	1,712,259	64.9%	2,201,467	67.1%
Multi-Family	334,622	16.6%	598,271	22.7%	681,019	20.8%
Mobile Home	152,948	7.6%	327,888	12.4%	399,251	12.1%
Total	2,012,640	100.0%	2,638,418	100.0%	3,281,737	100.0%
Source: U.S. Bureau of the Census						

Age and Condition of Housing Supply

There is a great variety in age of the housing supply in Jefferson County, as seen in Table H-2. Over 60% of the houses were built prior to 1980. The largest decade of growth was from 1990 to 2000 when 23.2%, a total of 1676 houses were built. This growth occurred after a decline during the 1980's. The City of Avera, which has the smallest percentage of homes built before 1939 (4.9%) saw the most growth during the period of 1990-2000. Over 58% or 94 of Wrens' housing were constructed during that period. The City of Wrens saw the smallest percentage of growth during that same time period with only 13.1% of the stock being constructed then. The town of Bartow has the highest percentage of houses built before 1939 (33.3%). As a whole Jefferson County saw a smaller percentage of new housing (23.2%) built during the 1990-2000 decade than did the state of Georgia (27.3%)

Table H-2: Housing Stock by Age, 1980-2000				
Jefferson County	**HOUSING UNITS**		**ACCUMULATED UNITS**	
year structure built	number	percent	number	percent
1939 or earlier	755	10.5	775	10.5 more than 60 years old
1940-1959	1135	15.7	1890	26.1 more than 40 years old
1960-1969	982	13.6	2872	39.8 more than 30 years old
1970-1979	1479	20.5	4351	60.3 more than 20 years old
1980-1989	1194	16.5	5545	76.8 more than 10 years old
1990-march 2000	1676	23.2	1676	23.2 less than 10 years old
Total	7221	100	7221	100
Avera	**HOUSING UNITS**		**ACCUMULATED UNITS**	
year structure built	number	percent	number	percent
1939 or earlier	8	4.9	8	4.9 more than 60 years old
1940-1959	21	13	29	17.9 more than 40 years old
1960-1969	11	6.8	40	24.7 more than 30 years old
1970-1979	15	9.3	55	40 more than 20 years old
1980-1989	13	8	68	42 more than 10 years old
1990-march 2000	94	58	94	58 less than 10 years old
Total	162	100	162	100

Table H-2: Housing Stock by Age, 1980-2000 Continued				
Bartow	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	36	33.3	36	33.3 more than 60 years old
1940-1959	23	21.3	59	54.6 more than 40 years old
1960-1969	9	8.3	68	63 more than 30 years old
1970-1979	9	8.4	77	71.3 more than 20 years old
1980-1989	16	14.8	93	86.1 more than 10 years old
1990-march 2000	15	13.9	15	13.9 less than 10 years old
Total	108	100	108	100
Louisville	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	100	9.2	100	9.2 more than 60 years old
1940-1959	380	34.9	480	44 more than 40 years old
1960-1969	176	16.1	656	60.2 more than 30 years old
1970-1979	190	17.4	846	77.6 more than 20 years old
1980-1989	117	10.7	963	88.3 more than 10 years old
1990-march 2000	127	11.7	127	11.7 less than 10 years old
Total	1090	100	1090	100
Stapleton	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	21	17.5	21	17.5 more than 60 years old
1940-1959	12	10	33	27.5 more than 40 years old
1960-1969	22	18.3	55	45.8 more than 30 years old
1970-1979	29	24.2	84	70 more than 20 years old
1980-1989	8	6.7	92	76.7 more than 10 years old
1990-march 2000	28	23.3	28	23.3 less than 10 years old
Total	120	100	120	100
Wadley	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	137	15.6	137	15.6 more than 60 years old
1940-1959	172	19.6	309	35.2 more than 40 years old
1960-1969	89	10.1	398	45.3 more than 30 years old
1970-1979	119	13.6	517	58.9 more than 20 years old
1980-1989	125	14.2	642	73.1 more than 10 years old
1990-march 2000	236	26.9	236	26.9 less than 10 years old
Total	878	100	878	100
Wrens	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	119	11.3	119	11.3 more than 60 years old
1940-1959	188	17.8	307	29 more than 40 years old
1960-1969	131	12.4	438	41.4 more than 30 years old
1970-1979	297	28.1	735	69.5 more than 20 years old
1980-1989	183	17.3	918	86.9 more than 10 years old
1990-march 2000	139	13.1	139	13.1 less than 10 years old
Total	1057	100	1057	100

Table H-2: Housing Stock by Age, 1980-2000 Continued				
Georgia	HOUSING UNITS		ACCUMULATED UNITS	
year structure built	number	percent	number	percent
1939 or earlier	192972	5.9	192972	5.9 more than 60 years old
1940-1959	427488	13	620420	18.9 more than 40 years old
1960-1969	416047	12.7	1036467	31.6 more than 30 years old
1970-1979	608926	18.6	1645393	50.1 more than 20 years old
1980-1989	721174	22	2366567	72.1 more than 10 years old
1990-march 2000	915130	27.9	915130	27.9 less than 10 years old
Total	3281737	100	3281737	100
Source: U.S. Bureau of the Census				

The availability of plumbing facilities and percentage of homes built prior to 1939 are often used as indicators of substandard housing. Overall, housing conditions throughout Jefferson County and the municipalities is adequate and comparable to state levels (Table H-3). This represents a significant improvement, particularly for the county, which managed to cut the number of housing units without complete plumbing facilities from 13.3% in 1980 to 1.7% in 2000. The only exception is Bartow where the percentage of housing units without adequate plumbing facilities is 10 to 15 times higher than countywide, regional and statewide figures.

The higher percentage of pre-1939 units highlights increased usage of historic homes and buildings in the municipalities, particularly within the cities' historic districts. Given the number and importance of historic districts in Jefferson County, date of construction is not an accurate indicator of housing conditions.

Table H-3: Housing Conditions						
	Lack Plumbing			Pre-1939		
	1980	1990	2000	1980	1990	2000
Jefferson Co.	13.34%	4.36%	1.72%	24.21%	13.04%	10.46%
Avera	2.27%	7.32%	0.00%	37.12%	47.97%	4.94%
Bartow	36.96%	20.15%	16.67%	51.45%	22.39%	33.33%
Louisville	9.91%	1.07%	1.19%	23.89%	8.66%	9.17%
Stapleton	6.45%	1.79%	0.00%	38.17%	24.40%	17.50%
Wadley	7.84%	5.01%	1.71%	19.42%	9.71%	15.60%
Wrens	5.07%	1.03%	0.47%	21.47%	17.22%	11.26%
CSRA	N/A	2.10%	1.50%	N/A	9.40%	7.40%
Georgia	N/A	1.10%	0.90%	15.00%	8.00%	5.90%
Source: U.S. Bureau of the Census; N/A = Not Available						

OCCUPANCY AND TENURE

Housing occupancy and tenure characteristics are important variables in determining the adequacy of the existing housing stock. Owner-occupied housing in Jefferson County and the cities of Bartow, Louisville, Wadley and Wrens is on par with the CSRA and state averages (Table H-4). Avera and Stapleton have significantly higher rates of owner-occupied housing, reflecting typically higher home ownership rates found in smaller rural communities. The percentage of owner-occupied housing units has remained

relatively stable throughout Jefferson County and the municipalities. Bartow is the only jurisdiction to experience a sharp rise in the percentage of owner-occupied units.

The owner to renter ratio mirrors the above-mentioned trends and highlights either stable or increased home ownership throughout most jurisdictions in the county (Table H-4). In the unincorporated areas, the ratio has increased from 2.00:1 to 2.59:1 in the past decade, indicating that for every renter-occupied unit, there are 2.59 owner-occupied units. The trend of high owner to renter ratios is also seen in the municipalities, as well as the CSRA and elsewhere in the state. The only exception is Avera, where the ratio dropped from 6.62:1 to 4.63:1 since 1980.

Table H-4: Occupancy and Tenure of Housing, 1980-2000

	Occupied Units			Vacancy Rate			Owner-Occupied %		
	1980	1990	2000	1980	1990	2000	1980	1990	2000
Jefferson Co.	5,946	6,093	6,339	N/A	15.93%	14.00%	61.09%	59.63%	63.34%
Avera	99	92	95	N/A	36.96%	57.89%	86.87%	67.39%	92.63%
Bartow	125	109	104	N/A	27.52%	11.54%	54.40%	53.21%	71.15%
Louisville	973	843	962	N/A	13.17%	12.06%	65.47%	64.89%	66.94%
Stapleton	150	132	103	N/A	21.97%	16.50%	78.00%	88.64%	78.64%
Wadley	775	830	764	N/A	14.46%	14.14%	63.61%	63.25%	62.96%
Wrens	848	893	932	N/A	9.74%	15.13%	61.91%	57.22%	54.94%
CSRA	117,685	139,071	158,840	N/A	13.10%	12.40%	65.10%	65.70%	68.40%
Georgia	1,871,700	2,366,600	3,006,400	7.00%	10.30%	8.40%	60.40%	58.20%	67.50%

	Owner				Renter			
	Vacancy %	Renter-Occupied %			Vacancy %	Owner-Renter Ratio		
	2000	1980	1990	2000	2000	1980	1990	2000
Jefferson Co.	0.02%	33.30%	30.81%	28.01%	0.15%	2.00: 1	2.24: 1	2.59: 1
Avera	0.00%	13.13%	29.35%	20.00%	0.00%	6.62: 1	2.30: 1	4.63: 1
Bartow	4.93%	45.60%	42.20%	21.15%	0.00%	1.19: 1	1.26: 1	3.36: 1
Louisville	0.27%	34.53%	32.86%	34.30%	0.48%	1.90: 1	1.97: 1	1.95: 1
Stapleton	8.73%	22.00%	16.67%	21.36%	0.00%	3.55: 1	5.32: 1	3.68: 1
Wadley	0.84%	36.39%	37.71%	37.83%	1.34%	1.75: 1	1.68: 1	1.66: 1
Wrens	0.31%	38.09%	41.66%	43.35%	0.92%	1.63: 1	1.37: 1	1.27: 1
CSRA	2.10%	34.90%	34.30%	31.60%	7.90%	1.89 : 1	1.91 : 1	2.17 : 1
Georgia	2.20%	32.00%	31.50%	32.50%	8.40%	1.85 : 1	0.100706019	2.0 : 1

Source: U.S. Bureau of the Census; N/A = Not Available

Vacant homes and apartment units are necessary to provide a choice of location and price for housing consumers. A healthy vacancy rate is approximately 5% and fluctuates according to the housing market. Too few vacant units drive up prices and limit housing choices, while too many reduces the demand for new units. Vacancy rates throughout Jefferson County are above both the CSRA and state average (Table H-4). In 2000, the vacancy rate in the county was 14% and ranged from 11.5% to 16.5% in the municipalities. The only exception is Avera where the vacancy rate is unusually high at 57.8%. In the past decade, vacancy rates declined in the county and Bartow, Louisville,

City of Avera
Current Land Use

Legend

- Railways
- Highways
- Cities
- County Boundaries

Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities

CENTRAL SAVANNAH RIVER AREA REGIONAL DEVELOPMENT CENTER

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S

CSRA Regional Development Center
GIS Department
2003

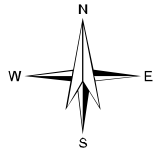
City of Avera
Future Land Use

Legend

- Railways
- Highways
- Cities
- County Boundaries

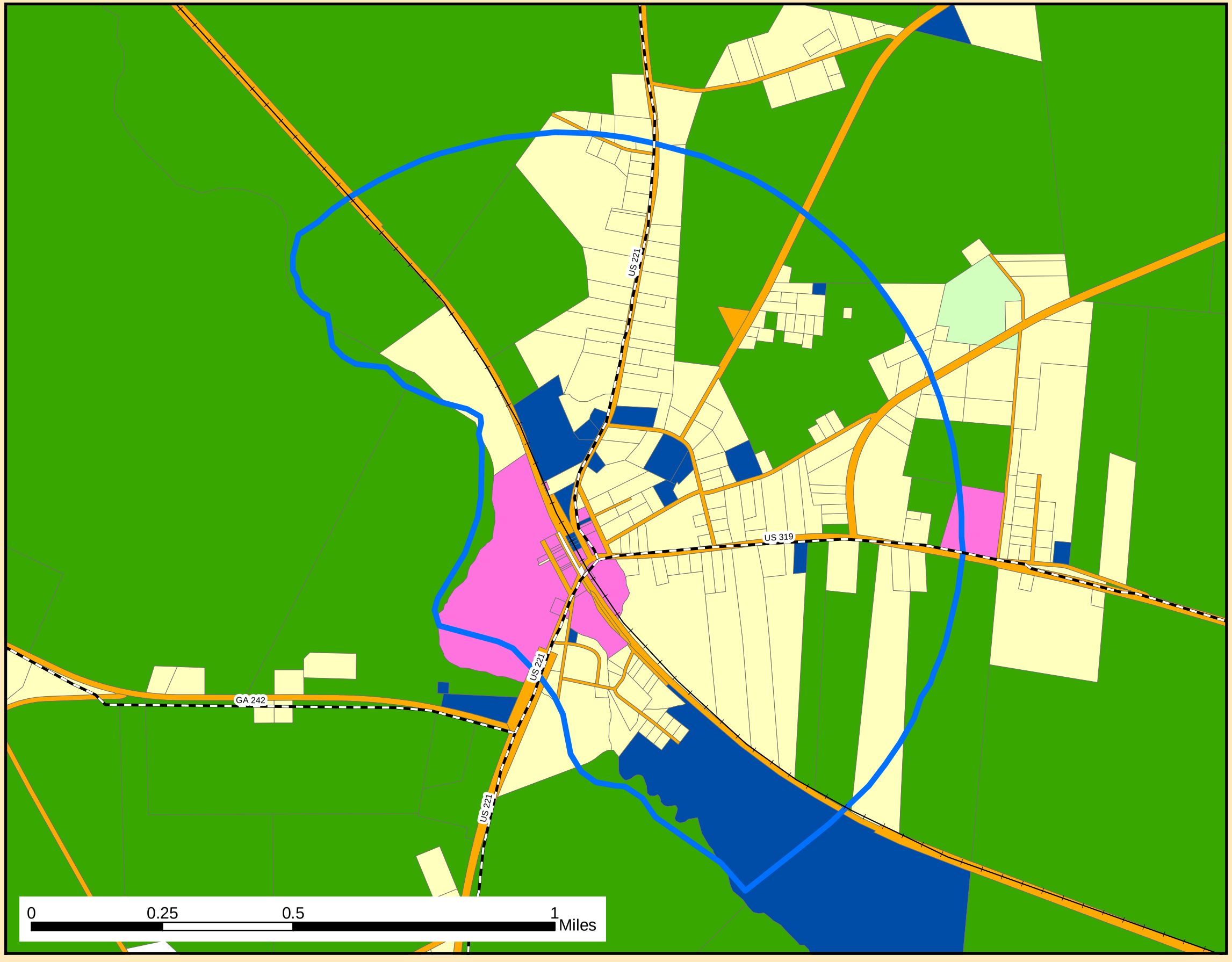
Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003

City of Bartow
Current Land Use

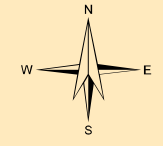


Legend

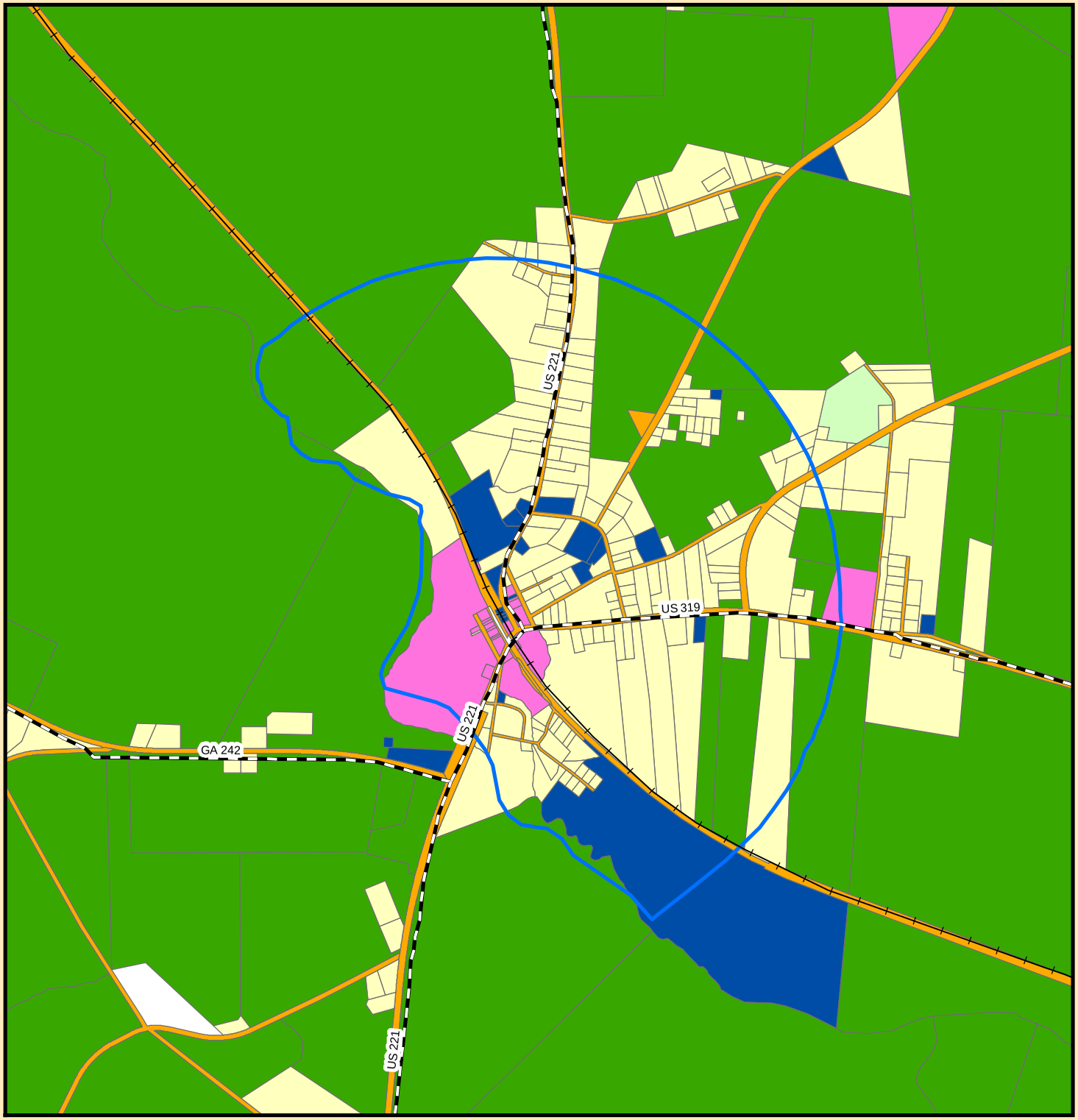
- Railways
- Highways
- Cities
- County Boundaries

Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003



City of Bartow
Future Land Use

Legend

- Railways
- Highways
- Cities

Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities

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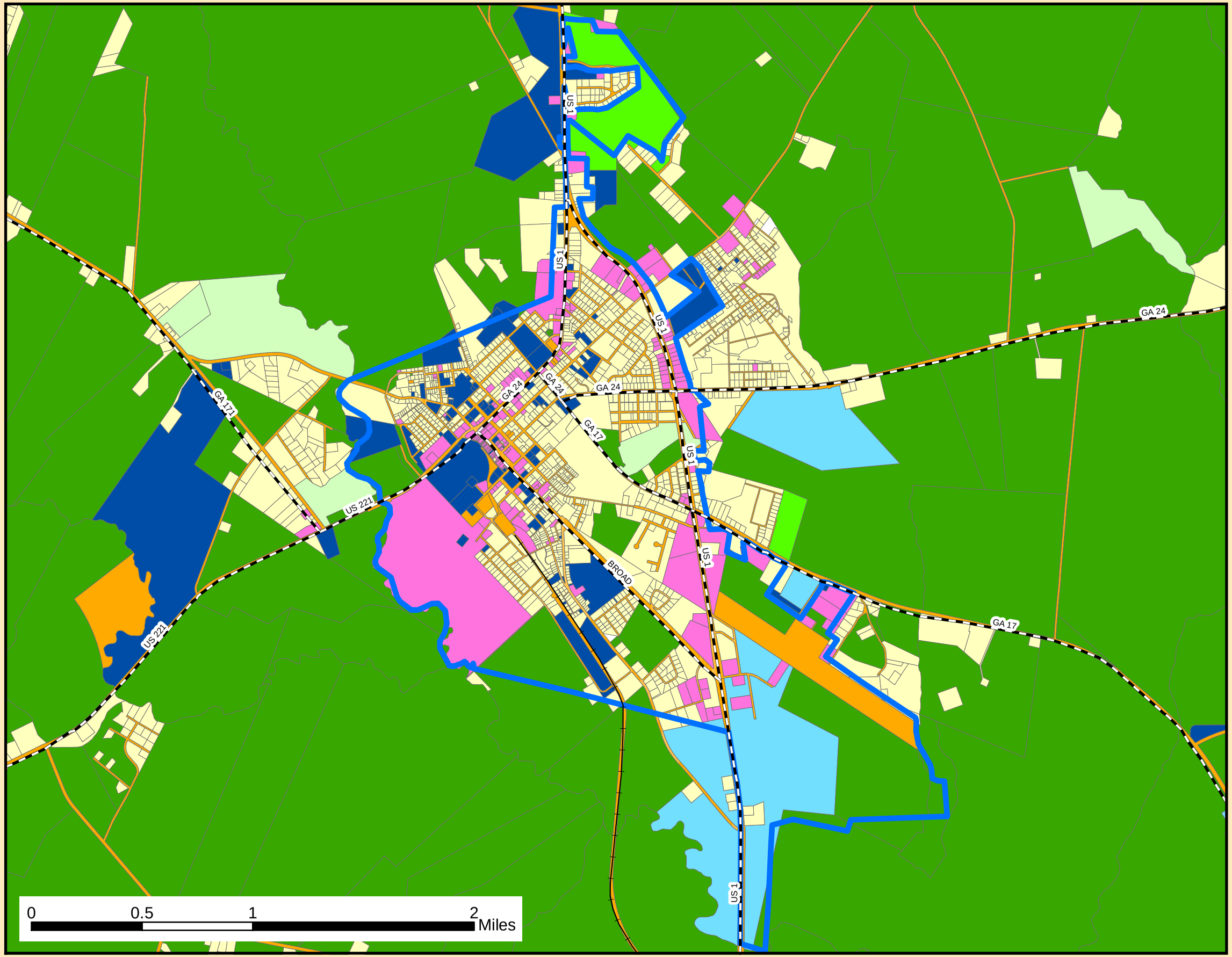
CSRA Regional Development Center
GIS Department
2003

City of Louisville
Current Land Use

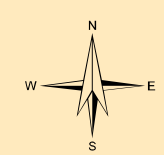


Legend

- Railways
- Highways
- Cities
- County Boundaries

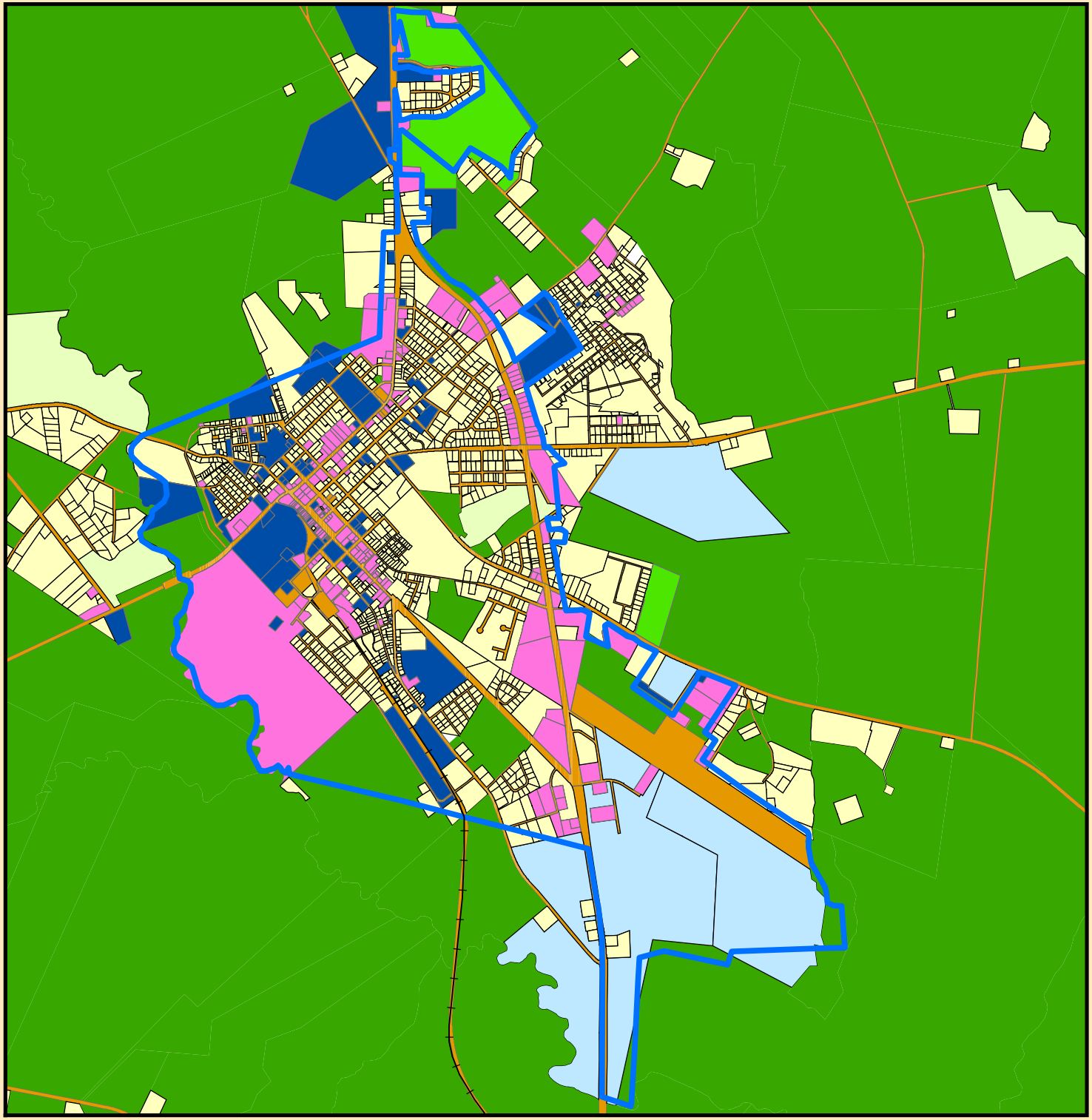
Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003

City of Louisville Future Land Use



Legend

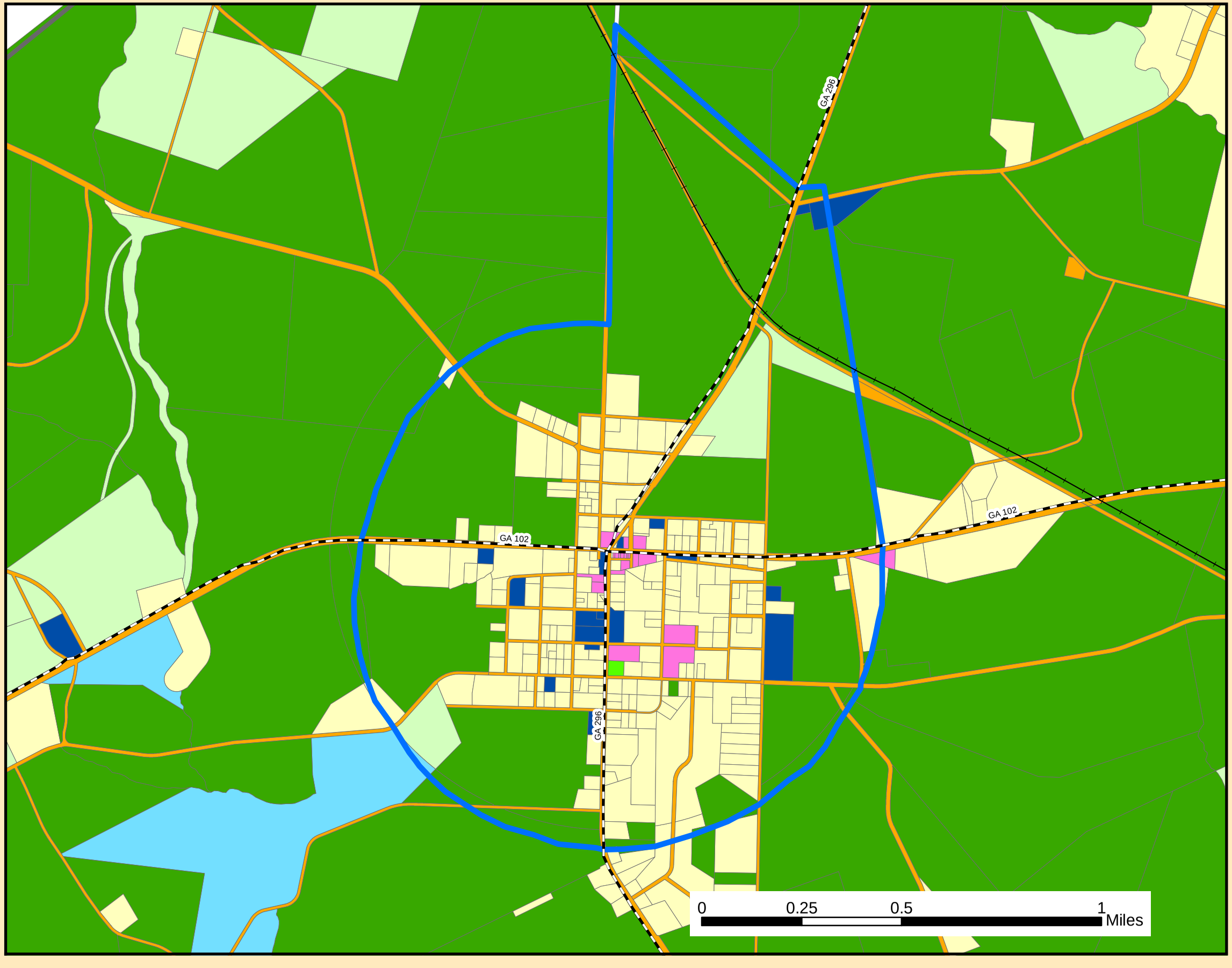
- Railways
- Cities
- County Boundaries

Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communicatons/Utilities

CSRA Regional Development Center
GIS Department
2003

City of Stapleton
Current Land Use

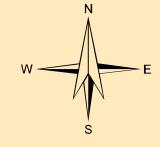


Legend

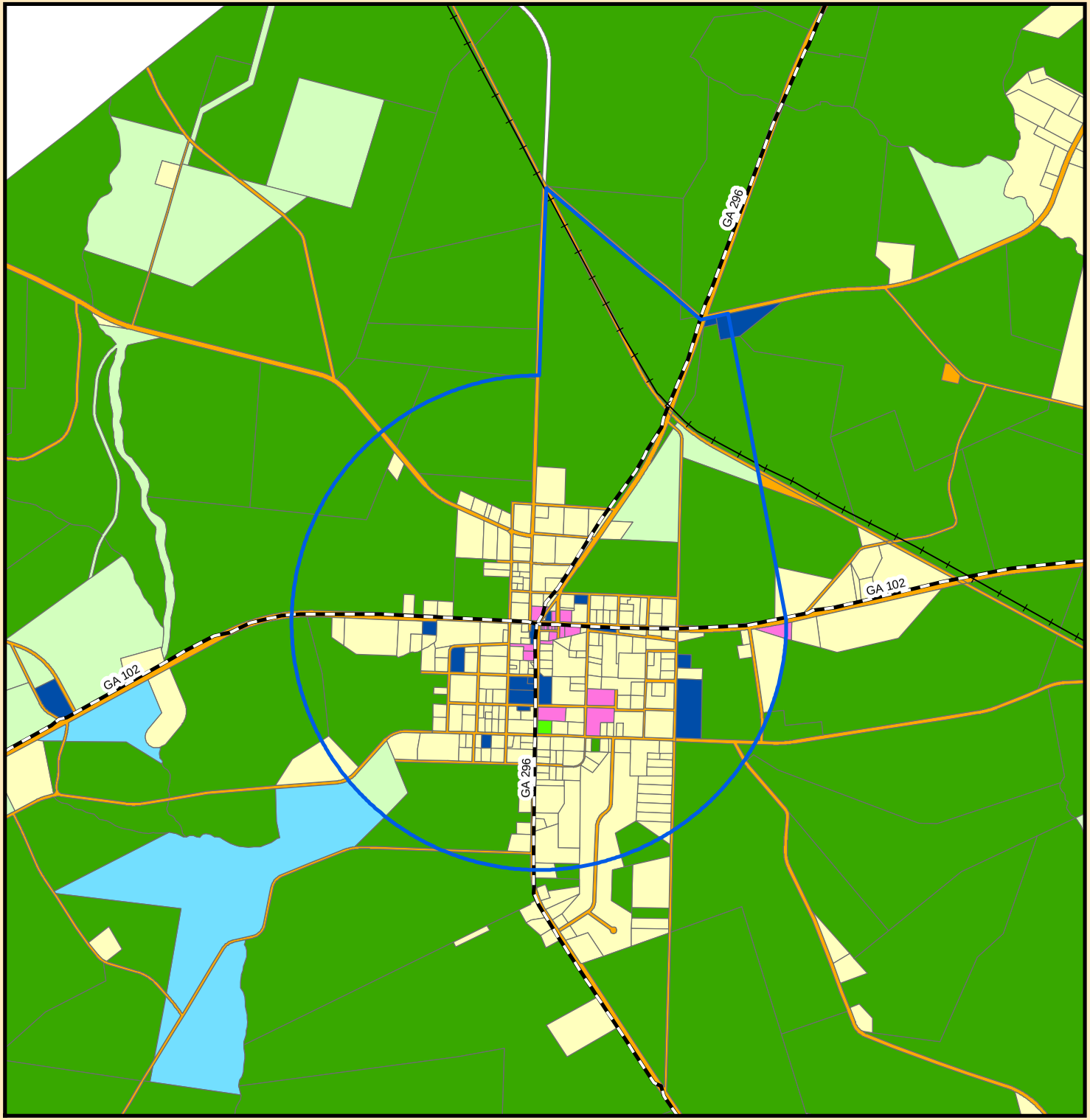
- Railways
- Highways
- Cities
- County Boundaries

Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003



City of Stapleton Future Land Use

Legend

- Railways
- Highways

Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities
- City Limits, Tax Records

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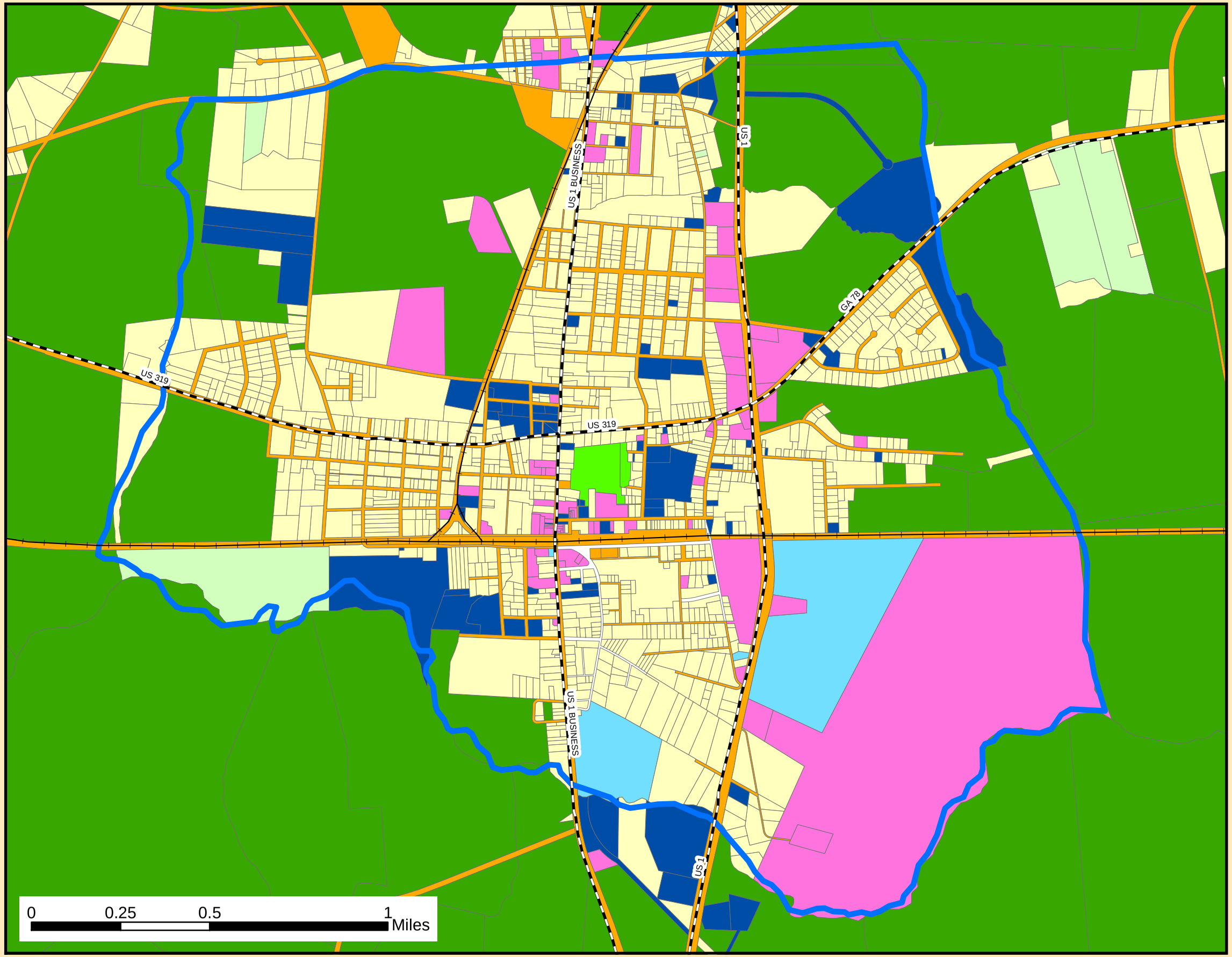
CSRA Regional Development Center
GIS Department
2003

City of Wadley
Current Land Use

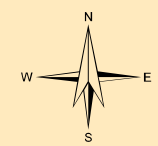


Legend

- Railways
- Highways
- Cities
- County Boundaries

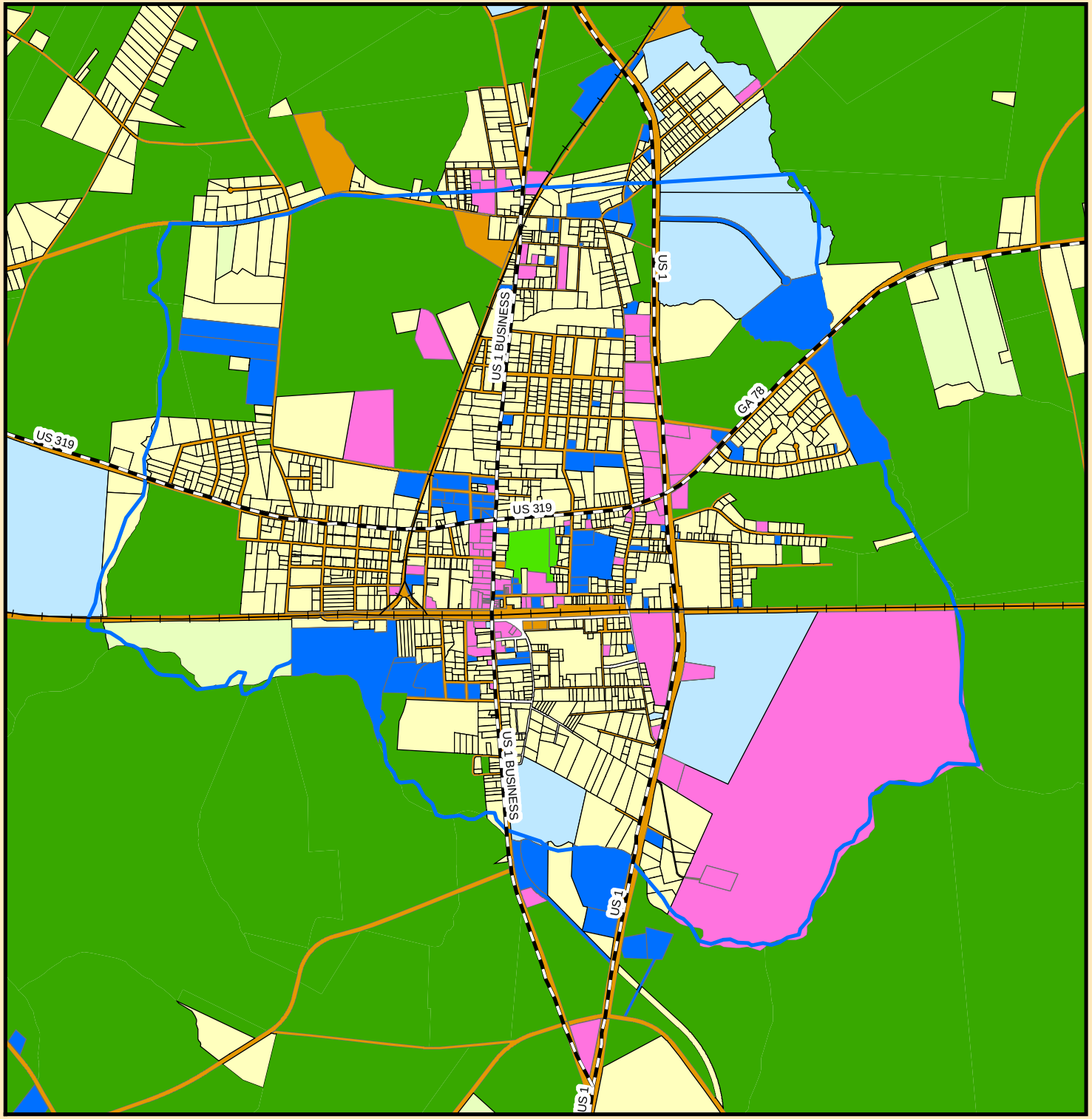
Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003

City of Wadley Future Land Use



Legend

- Railways
- Highways
- Cities
- County Boundaries

Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communicatons/Utilities

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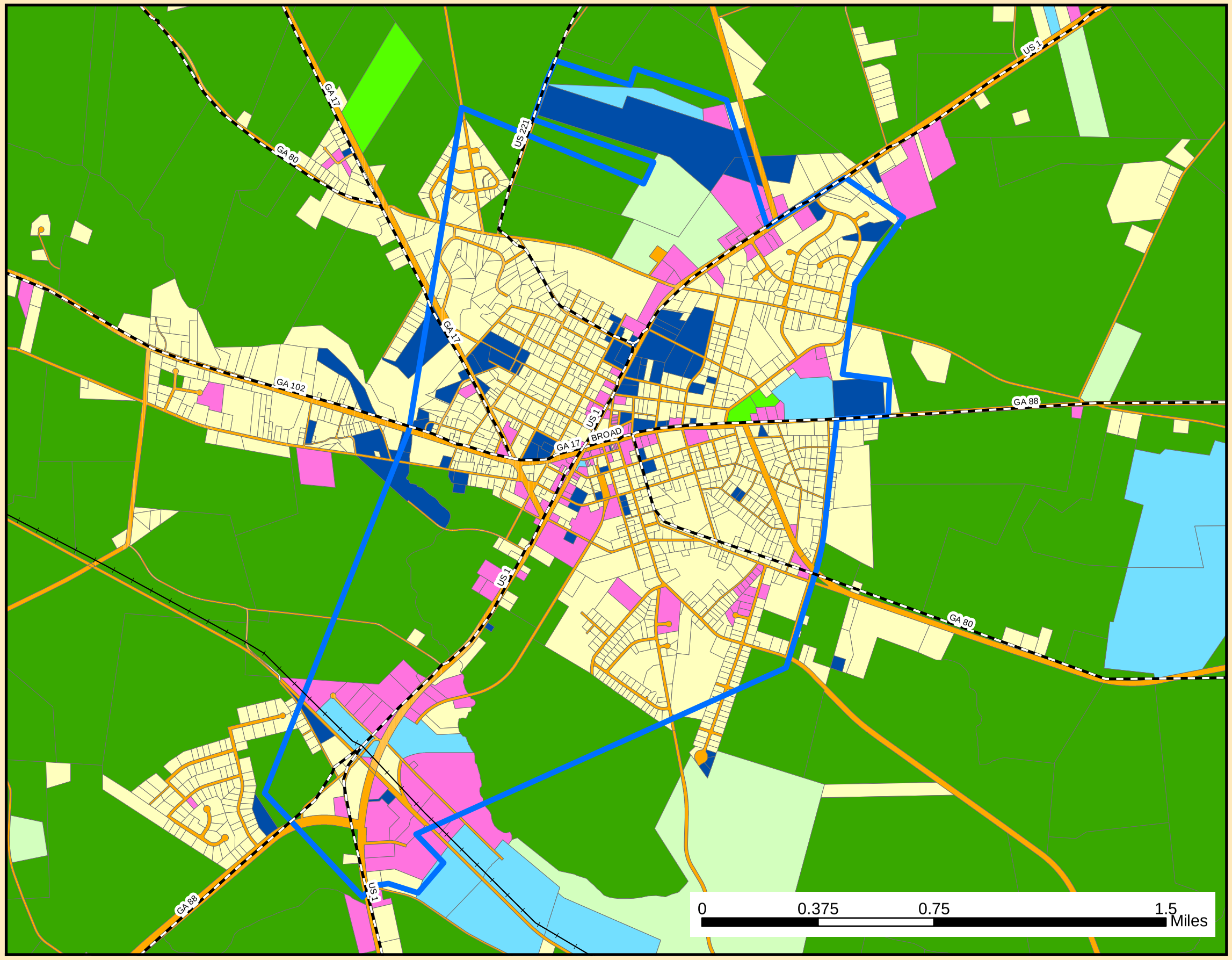
CSRA Regional Development Center
GIS Department
2003

City of Wrens
Current Land Use

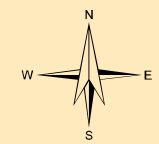


Legend

- Railways
- Highways
- Cities
- County Boundaries

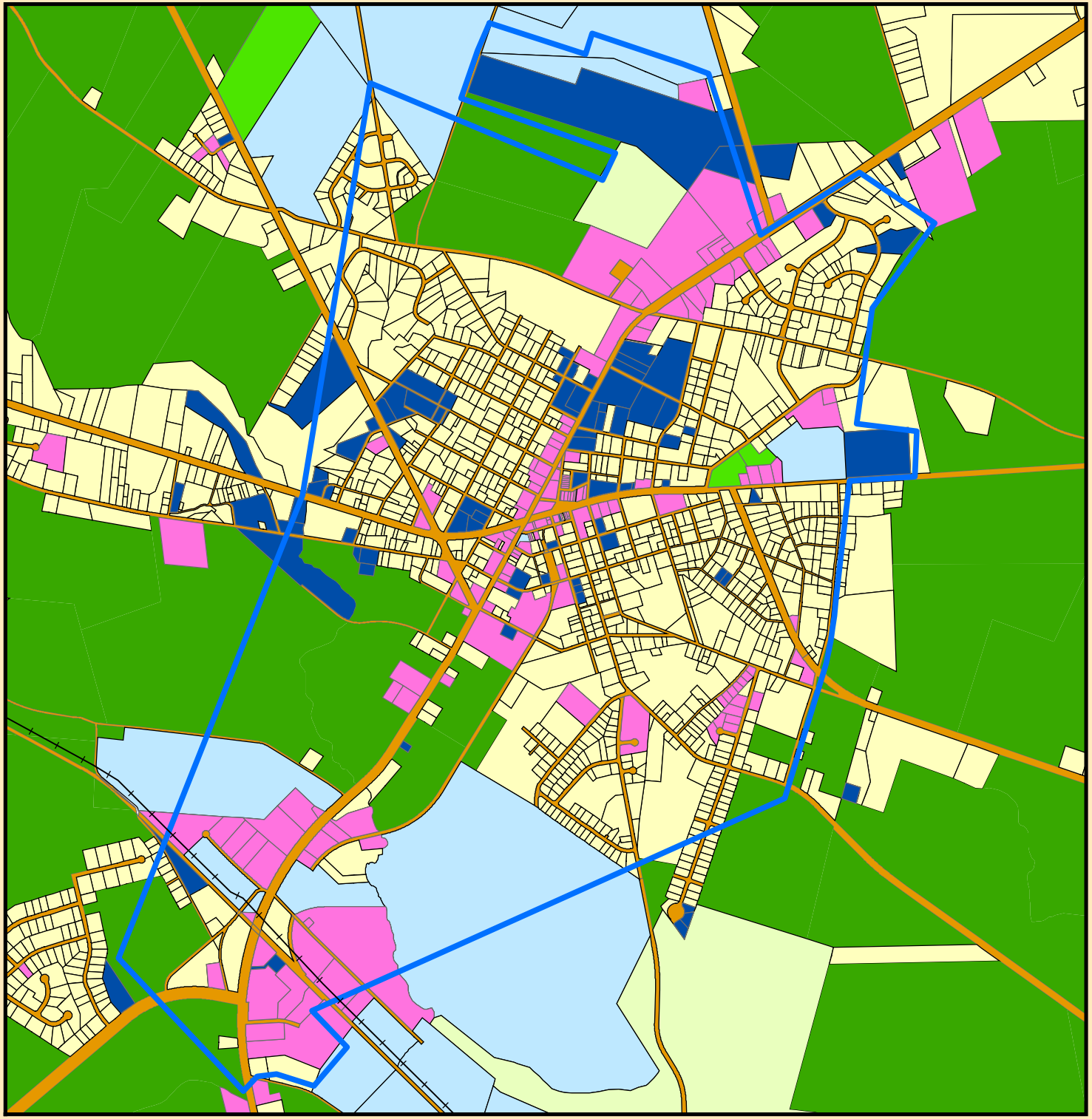
Existing Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities



CSRA Regional Development Center
GIS Department
2003

City of Wrens Future Land Use



Legend

- Railways
- Cities
- County Boundaries

Future Land Use

- Agriculture
- Commercial
- Forestry
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communicatons/Utilities

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W E
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CSRA Regional Development Center
GIS Department
2003

Jefferson County

Georgia

AREA LABOR PROFILE

Updated: Jul 2014

Labor Force Activity - 2013

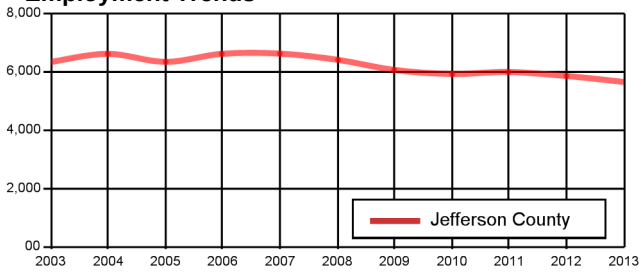
2013 ANNUAL AVERAGES

	Labor Force	Employed	Unemployed	Rate
Jefferson	6,619	5,649	970	14.7%
Burke	9,581	8,508	1,073	11.2%
Emanuel	9,909	8,782	1,127	11.4%
Glascock	1,128	1,001	127	11.3%
Johnson	3,501	3,055	446	12.7%
McDuffie	10,007	9,073	934	9.3%
Richmond	87,923	79,662	8,261	9.4%
Warren	2,632	2,302	330	12.5%
Washington	7,332	6,538	794	10.8%
Jefferson Area	**138,632**	**124,570**	**14,062**	**10.1%**
Georgia	4,767,323	4,378,029	389,294	8.2%
United States	155,389,000	143,929,000	11,460,000	7.4%

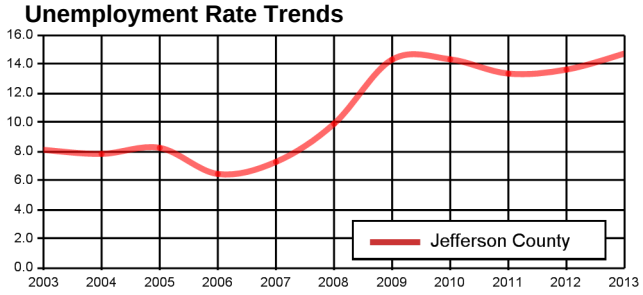
Note: This series reflects the latest information available. Labor Force includes residents of the county who are employed or actively seeking employment.

Source: Georgia Department of Labor; U.S. Bureau of Labor Statistics.

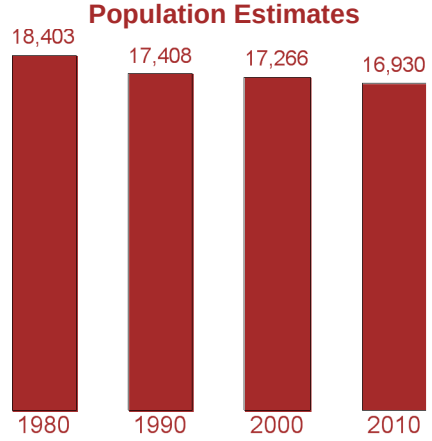
Employment Trends



Unemployment Rate Trends



Population Estimates



Population

	2010 Census	2013 Rank	2013 Estimate	% Change 2010-2013	2025 Projected*	% Change 2010-2025
Jefferson	**16,930**	**105**	**16,320**	**-3.6**	**16,028**	**-5.3**
City of Louisville	2,493					
Jefferson Area	**325,351**		**324,781**	**-0.2**	**370,090**	**13.8**
Georgia	9,687,653		9,992,167	3.1	13,426,590	38.6
United States	308,745,538		316,128,839	2.4	349,439,199	13.2

Source: Population Division, U.S. Census Bureau, *Governor's Office of Planning and Budget.

MARK BUTLER - COMMISSIONER, GEORGIA DEPARTMENT OF LABOR
Equal Opportunity Employer/Program
Auxillary Aids and Services Available upon Request to Individuals with Disabilities

Workforce Statistics & Economic Research: E-mail: Workforce_Info@gdol.ga.gov Phone: (404) 232-3875

Industry Mix - Annual Averages of 2013

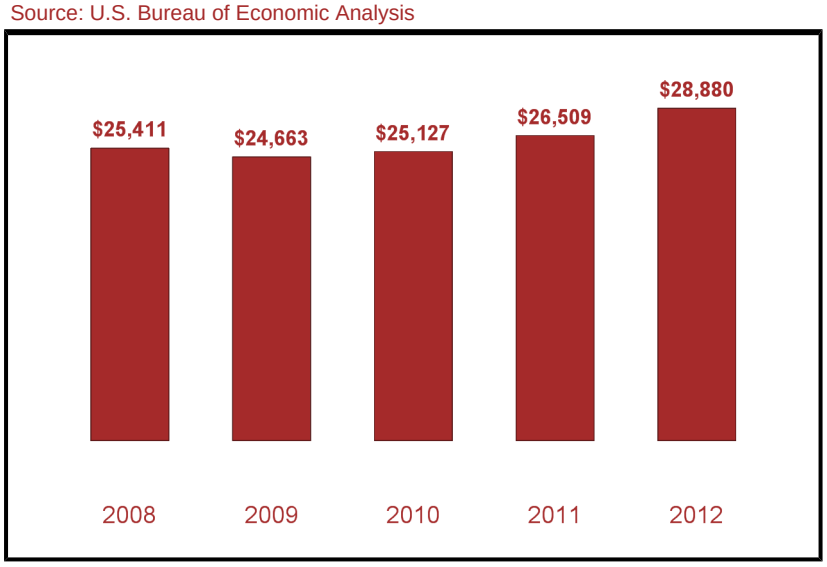
INDUSTRY	Jefferson NUMBER OF FIRMS	Jefferson EMPLOYMENT NUMBER	Jefferson EMPLOYMENT PERCENT	Jefferson WEEKLY WAGE	Jefferson Area NUMBER OF FIRMS	Jefferson Area EMPLOYMENT NUMBER	Jefferson Area EMPLOYMENT PERCENT	Jefferson Area WEEKLY WAGE
Goods-Producing	**97**	**1,336**	**30.2**	**767**	**941**	**19,236**	**14.4**	**921**
Agriculture, Forestry, Fishing and Hunting	35	260	5.9	681	129	1,304	1.0	760
Mining, Quarrying, and Oil and Gas Extraction	4	268	6.1	1,142	22	639	0.5	1,030
Construction	28	185	4.2	619	521	4,847	3.6	878
Manufacturing	30	623	14.1	686	269	12,449	9.3	948
Food	2	*	*	*	21	1,682	1.3	768
Apparel	1	*	*	*	5	141	0.1	506
Wood Product	6	*	*	*	26	1,027	0.8	776
Paper	1	*	*	*	12	1,483	1.1	1,320
Printing and Related Support Activities	1	*	*	*	16	118	0.1	651
Nonmetallic Mineral Product	1	*	*	*	18	822	0.6	1,089
Fabricated Metal Product	8	124	2.8	522	49	1,214	0.9	712
Machinery	4	117	2.6	922	17	412	0.3	657
Furniture and Related Product	6	17	0.4	675	13	35	0.0	551
Petroleum and Coal Products	0	0	0.0	0	1	*	*	*
Primary Metal	0	0	0.0	0	2	*	*	*
Beverage and Tobacco Product	0	0	0.0	0	2	*	*	*
Computer and Electronic Product	0	0	0.0	0	2	*	*	*
Textile Mills	0	0	0.0	0	4	583	0.4	760
Plastics and Rubber Products	0	0	0.0	0	5	334	0.3	777
Electrical Equipment, Appliance, and Component	0	0	0.0	0	6	598	0.4	732
Textile Product Mills	0	0	0.0	0	8	587	0.4	393
Miscellaneous	0	0	0.0	0	16	789	0.6	916
Transportation Equipment	0	0	0.0	0	23	1,027	0.8	1,107
Chemical	0	0	0.0	0	23	1,349	1.0	1,597
Service-Providing	**216**	**2,008**	**45.3**	**508**	**5,484**	**81,421**	**61.0**	**695**
Utilities	5	*	*	*	22	1,909	1.4	1,893
Wholesale Trade	13	206	4.7	588	301	3,863	2.9	984
Retail Trade	60	583	13.2	397	1,198	14,306	10.7	455
Transportation and Warehousing	11	59	1.3	708	178	3,184	2.4	771
Information	4	20	0.5	401	95	2,291	1.7	949
Finance and Insurance	18	103	2.3	736	363	2,647	2.0	987
Real Estate and Rental and Leasing	11	45	1.0	476	275	1,260	0.9	712
Professional, Scientific, and Technical Services	15	48	1.1	899	602	4,845	3.6	1,153
Management of Companies and Enterprises	2	*	*	*	33	758	0.6	1,263
Administrative and Support and Waste Management and Remediation Services	7	36	0.8	540	321	8,881	6.6	446
Educational Services	1	*	*	*	47	984	0.7	567
Health Care and Social Assistance	20	347	7.8	432	863	20,018	15.0	884
Arts, Entertainment, and Recreation	2	*	*	*	69	1,687	1.3	589
Accommodation and Food Services	23	249	5.6	238	579	11,668	8.7	274
Other Services (except Public Administration)	24	70	1.6	328	538	3,128	2.3	510
Unclassified - industry not assigned	**7**	*****	*****	*****	**190**	**120**	**0.1**	**818**
Total - Private Sector	**320**	**3,347**	**75.6**	**611**	**6,615**	**100,777**	**75.4**	**738**
Total - Government	**43**	**1,081**	**24.4**	**566**	**462**	**32,795**	**24.6**	**849**
Federal Government	12	40	0.9	925	126	7,637	5.7	1,128
State Government	13	70	1.6	526	153	10,740	8.0	922
Local Government	18	971	21.9	554	183	14,418	10.8	645
ALL INDUSTRIES	**363**	**4,428**	**100.0**	**600**	**7,077**	**133,572**	**100.0**	**766**
ALL INDUSTRIES - Georgia					**278,502**	**3,917,423**		**899**

Note: *Denotes confidential data relating to individual employers and cannot be released. These data use the North American Industrial Classification System(NAICS) categories. Average weekly wage is derived by dividing gross payroll dollars paid to all employees - both hourly and salaried - by the average number of employees who had earnings; average earnings are then divided by the number of weeks in a reporting period to obtain weekly figures. Figures in other columns may not sum accurately due to rounding. All figures are annual averages of 2013.

Source: Georgia Department of Labor. These data represent jobs that are covered by unemployment insurance laws.

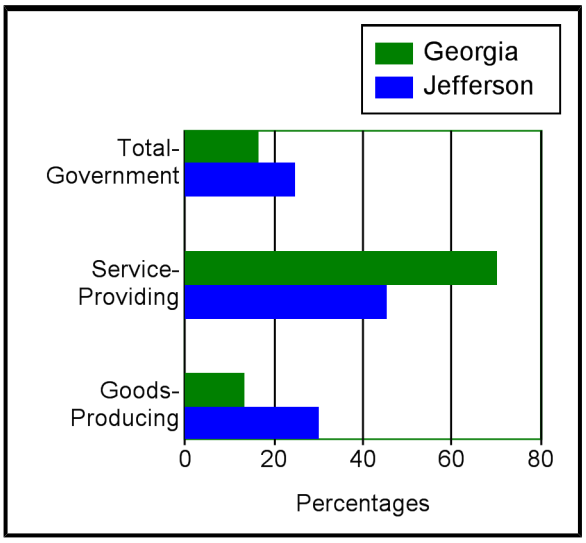
Jefferson Per Capita Income

Source: U.S. Bureau of Economic Analysis



Jefferson Industry Mix 2013

Source: See Industry Mix data on Page 2.



Top Ten Largest Employers - 2013*

Jefferson

Battle Lumber Co, Inc.
Floco Foods
Fulghum Industries, Inc.
Ingles Markets, Inc.
Jefferson Energy Cooperative
Kamin Holding Co, LLC
Queensborough National Bank & Trust Company
Thiele Kaolin Co
Unihealth Post-Acute Care - Old Capitol
Vero Health And Rehab Of Wadley

*Note: Represents employment covered by unemployment insurance excluding all government agencies except correctional institutions, state and local hospitals, state colleges and universities. Data shown for the Third Quarter of 2013. Employers are listed alphabetically by area, not by the number of employees.

Source: Georgia Department of Labor

Jefferson Area

	COUNTY
Doctors Hospital of Augusta, LLC	Richmond
Georgia Regents University	Richmond
MCG Health, Inc.	Richmond
Sitel Operating Corporation	Richmond
Southern Nuclear Operating Co	Burke
Textron, Inc.	Richmond
Trinity Hospital of Augusta	Richmond
University Home Health in Augusta	Richmond
Walmart	Richmond
Xpedx	Richmond

Commuting Patterns

EMPLOYED RESIDENTS OF

Jefferson

COUNTY WHERE EMPLOYED	NUMBER	PERCENT OF TOTAL
Jefferson, GA	4,184	67.0
Richmond, GA	510	8.2
Washington, GA	295	4.7
Emanuel, GA	274	4.4
Columbia, GA	231	3.7
Burke, GA	228	3.6
McDuffie, GA	186	3.0
Aiken, SC	77	1.2
Other	263	4.2
Total Residents:	**6,248**	**100.0**

PERSONS WORKING IN

Jefferson

COUNTY OF RESIDENCE	NUMBER	PERCENT OF TOTAL
Jefferson, GA	4,184	71.6
Emanuel, GA	398	6.8
Washington, GA	181	3.1
Burke, GA	179	3.1
Glascock, GA	165	2.8
McDuffie, GA	149	2.5
Columbia, GA	133	2.3
Aiken, SC	103	1.8
Other	352	6.0
Total Residents:	**5,844**	**100.0**

Note: Other category represents employment from U.S. counties only.

Source: U.S. Census Bureau - 2010 County-To-County Worker Flow Files.

Education of the Labor Force

Jefferson Area

	PERCENT OF TOTAL	PERCENT DISTRIBUTION BY AGE				
		18-24	25-34	35-44	45-64	65+
Elementary	6.8%	3.2%	2.5%	4.0%	6.2%	19.7%
Some High School	15.2%	21.0%	12.9%	13.0%	14.5%	16.1%
High School Grad/GED	35.3%	37.8%	32.8%	35.2%	36.7%	33.1%
Some College	21.9%	28.5%	27.4%	22.8%	19.2%	14.4%
College Grad 2 Yr	6.1%	3.1%	8.0%	8.1%	6.8%	3.0%
College Grad 4 Yr	9.6%	6.0%	10.9%	11.7%	10.0%	8.2%
Post Grad Studies	5.1%	0.5%	5.5%	5.2%	6.7%	5.5%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Totals are based on the portion of the labor force between ages 18 - 65+. Some College category represents the percentage total of workers with either Some College with no degree or an Associate degree.

Source: U.S. Census Bureau - 2010 ACS 5-year estimate.

High School Graduates - 2013**

	PUBLIC SCHOOLS	PRIVATE SCHOOLS*	TOTAL
Burke	240	--	240
Emanuel	197	--	197
Glascock	25	--	25
Jefferson	159	--	159
Johnson	51	--	51
McDuffie	202	--	202
Richmond	1,369	--	1,369
Warren	39	--	39
Washington	175	--	175
Jefferson Area	**2,457**	**--**	**2,457**

Note: Public schools include city as well as county schools systems.

* Private schools data is not available for 2013 from Georgia Independent School Association.

** Data shown represents Annual 2013.

Colleges and Universities

Jefferson Area

Richmond

Virginia College-Columbus	
Troy University	augusta.troy.edu
Georgia Regents University - ASU	www.aug.edu
Augusta Technical College	www.augustatech.edu
Georgia Regents University - GHSU	www.georgiahealth.edu
Georgia Military College-Ft Gordon	www.gmc.cc.ga.us
Miller-Motte Technical College	www.miller-motte.edu/campuses/georgia-campuses/augusta-ga
Paine College	www.paine.edu
University of Phoenix-Augusta Campus	www.phoenix.edu
Savannah River College	www.savannahrivercollege.edu
Augusta Area Dietetic Internship-University Hospital	www.universityhealth.org
Virginia College-Augusta	www.vc.edu/campus/augusta-georgia-college.cfm

Burke

Waynesboro Campus (Satellite campus of Augusta Technical College)	www.augustatech.edu

McDuffie

Thomson Campus (Satellite campus of Augusta Technical College)	www.augustatech.edu

Emanuel

East Georgia State College	www.ega.edu
Swainsboro Campus (Satellite campus of Southeastern Technical College)	www.southeasterntech.edu

Jefferson

Jefferson County Center (Satellite campus of Oconee Fall Line Technical College)	www.oftc.edu

Washington

Oconee Fall Line Technical College	www.oftc.edu
Transportation Center (Satellite campus of Oconee Fall Line Technical College)	www.oftc.edu

Johnson

Johnson County Adult Center (Satellite campus of Southeastern Technical College)	www.southeasterntech.edu

Note: The colleges and universities listed include public and private institutions. This list is updated periodically as information becomes available.

Source: Integrated Postsecondary Education Data System (IPEDS).

Technical College Graduates - 2013*

PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2011	2012	2013	2011-2012	2012-2013
Accounting Technology/Technician and Bookkeeping	74	47	46	-36.5	-2.1
Administrative Assistant and Secretarial Science, General	76	48	41	-36.8	-14.6
Automobile/Automotive Mechanics Technology/Technician	42	25	3	-40.5	-88.0
Business Administration and Management, General	3	10	1	233.3	-90.0
Business Administration, Management and Operations, Other	8	8	4	0.0	-50.0
Computer Systems Networking and Telecommunications	36	5	1	-86.1	-80.0
Cosmetology/Cosmetologist, General	61	23	32	-62.3	39.1
Criminal Justice/Safety Studies	66	42	33	-36.4	-21.4
Data Processing and Data Processing Technology/Technician	11	13	27	18.2	107.7
Early Childhood Education and Teaching	76	49	50	-35.5	2.0
Electrical/Electronics Equipment Installation and Repair, General	33	27	5	-18.2	-81.5
Emergency Medical Technology/Technician (EMT Paramedic)	17	10	44	-41.2	340.0
General Office Occupations and Clerical Services	21	10	8	-52.4	-20.0
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/	62	77	49	24.2	-36.4
Heavy Equipment Maintenance Technology/Technician	6	8	3	33.3	-62.5
Industrial Mechanics and Maintenance Technology	44	35	16	-20.5	-54.3
Machine Shop Technology/Assistant	3	5	2	66.7	-60.0
Radiologic Technology/Science - Radiographer	11	9	7	-18.2	-22.2
Respiratory Care Therapy/Therapist	14	8	7	-42.9	-12.5
Web Page, Digital/Multimedia and Information Resources Design	35	1	1	-97.1	0.0
Welding Technology/Welder	144	89	90	-38.2	1.1

Definition: All graduates except those listed as technical certificates are diploma and degree graduates. Diploma and degree programs are one to two years in length. Technical certificates are less than a year in length.

Source: Integrated Postsecondary Education Data System

*Data shown represents Annual 2011, 2012, and 2013.

Note - The data shown is from Oconee Fall Line Technical College

Active Applicants - Georgia Department of Labor

	Mgt.	Bus. & Finance	Compu. & Math	Arch. & Eng.	Life & Soc. Svcs.	Comm. & Svcs	Legal	Ed. & Training	Arts & Design	Health Prac.	Health Support
Burke	28	7	7	6	8	7	2	15	2	8	16
Emanuel	38	8	6	4	7	8	1	15	5	15	29
Glascock	8	1	1	0	0	0	0	1	1	1	0
Jefferson	26	6	3	3	5	9	0	28	2	10	22
Johnson	9	1	1	0	0	1	0	9	3	2	9
McDuffie	51	12	8	6	3	8	1	17	8	18	23
Richmond	395	174	124	63	52	112	18	233	95	183	297
Warren	7	2	2	1	2	3	0	13	1	5	9
Washington	20	3	3	3	1	16	0	13	1	13	25
Subtotal Area	**582**	**214**	**155**	**86**	**78**	**164**	**22**	**344**	**118**	**255**	**430**

Active Applicants - Georgia Department of Labor (cont.)

	Protect. Svcs.	Food Prep.	Ground Cleaning	Personal Care	Sales	Office Support	Farm. & Forestry	Cons-truction	Installation Main.	Prod.	Trans. & Moving
Burke	24	54	24	25	65	155	3	160	49	258	154
Emanuel	23	46	25	30	89	122	13	81	47	327	135
Glascock	0	7	2	0	3	25	0	7	10	21	23
Jefferson	20	38	22	19	65	135	9	74	43	361	169
Johnson	10	29	19	12	36	87	3	77	28	163	113
McDuffie	19	74	32	35	85	200	3	91	61	249	142
Richmond	207	674	410	285	793	2,012	15	761	404	1,125	1,081
Warren	8	9	8	6	20	41	3	22	13	102	62
Washington	19	43	34	36	54	107	6	62	32	137	133
Subtotal Area	**330**	**974**	**576**	**448**	**1,210**	**2,884**	**55**	**1,335**	**687**	**2,743**	**2,012**

Total Area **15,702**

Note: For current applicant data available for a specific occupation, contact the nearest Georgia Department of Labor Career Center.

Source: Georgia Department of Labor (active applicants as of June 2014).

Georgia Department of Labor Location(s)

Career Center(s)
601 Greene Street
Augusta GA 30901
Phone: (706) 721 - 3131 **Fax:** (706) 721 - 7680

For copies of Area Labor Profiles, please visit our website at: www.dol.state.ga.us or contact Workforce Statistics & Economic Research, Georgia Department of Labor, 148 Andrew Young International Blvd N.E. Atlanta, GA. 30303-1751. Phone: 404-232-3875; Fax: 404-232-3888 or Email us at Workforce_Info@gdol.ga.gov

DP-1 | Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Wrens city, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	2,187	100.0
Under 5 years	165	7.5
5 to 9 years	156	7.1
10 to 14 years	162	7.4
15 to 19 years	160	7.3
20 to 24 years	123	5.6
25 to 29 years	137	6.3
30 to 34 years	127	5.8
35 to 39 years	107	4.9
40 to 44 years	118	5.4
45 to 49 years	139	6.4
50 to 54 years	152	7.0
55 to 59 years	155	7.1
60 to 64 years	134	6.1
65 to 69 years	118	5.4
70 to 74 years	84	3.8
75 to 79 years	60	2.7
80 to 84 years	49	2.2
85 years and over	41	1.9
Median age (years)	38.1	(X)
16 years and over	1,674	76.5
18 years and over	1,608	73.5
21 years and over	1,509	69.0
62 years and over	431	19.7
65 years and over	352	16.1
Male population	1,008	46.1
Under 5 years	91	4.2
5 to 9 years	91	4.2
10 to 14 years	79	3.6
15 to 19 years	87	4.0
20 to 24 years	61	2.8
25 to 29 years	56	2.6
30 to 34 years	51	2.3
35 to 39 years	49	2.2
40 to 44 years	47	2.1
45 to 49 years	67	3.1
50 to 54 years	72	3.3
55 to 59 years	60	2.7
60 to 64 years	52	2.4
65 to 69 years	53	2.4
70 to 74 years	36	1.6

Subject	Number	Percent
75 to 79 years	24	1.1
80 to 84 years	17	0.8
85 years and over	15	0.7
Median age (years)	33.8	(X)
16 years and over	730	33.4
18 years and over	696	31.8
21 years and over	636	29.1
62 years and over	170	7.8
65 years and over	145	6.6
Female population	1,179	53.9
Under 5 years	74	3.4
5 to 9 years	65	3.0
10 to 14 years	83	3.8
15 to 19 years	73	3.3
20 to 24 years	62	2.8
25 to 29 years	81	3.7
30 to 34 years	76	3.5
35 to 39 years	58	2.7
40 to 44 years	71	3.2
45 to 49 years	72	3.3
50 to 54 years	80	3.7
55 to 59 years	95	4.3
60 to 64 years	82	3.7
65 to 69 years	65	3.0
70 to 74 years	48	2.2
75 to 79 years	36	1.6
80 to 84 years	32	1.5
85 years and over	26	1.2
Median age (years)	41.3	(X)
16 years and over	944	43.2
18 years and over	912	41.7
21 years and over	873	39.9
62 years and over	261	11.9
65 years and over	207	9.5
RACE		
Total population	2,187	100.0
One Race	2,162	98.9
White	699	32.0
Black or African American	1,414	64.7
American Indian and Alaska Native	1	0.0
Asian	12	0.5
Asian Indian	7	0.3
Chinese	0	0.0
Filipino	0	0.0
Japanese	0	0.0
Korean	3	0.1
Vietnamese	2	0.1
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	36	1.6

Subject	Number	Percent
Two or More Races	25	1.1
White; American Indian and Alaska Native [3]	3	0.1
White; Asian [3]	2	0.1
White; Black or African American [3]	15	0.7
White; Some Other Race [3]	0	0.0
Race alone or in combination with one or more other races: [4]		
White	719	32.9
Black or African American	1,434	65.6
American Indian and Alaska Native	7	0.3
Asian	15	0.7
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	37	1.7
HISPANIC OR LATINO		
Total population	2,187	100.0
Hispanic or Latino (of any race)	55	2.5
Mexican	39	1.8
Puerto Rican	10	0.5
Cuban	0	0.0
Other Hispanic or Latino [5]	6	0.3
Not Hispanic or Latino	2,132	97.5
HISPANIC OR LATINO AND RACE		
Total population	2,187	100.0
Hispanic or Latino	55	2.5
White alone	20	0.9
Black or African American alone	1	0.0
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	34	1.6
Two or More Races	0	0.0
Not Hispanic or Latino	2,132	97.5
White alone	679	31.0
Black or African American alone	1,413	64.6
American Indian and Alaska Native alone	1	0.0
Asian alone	12	0.5
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	2	0.1
Two or More Races	25	1.1
RELATIONSHIP		
Total population	2,187	100.0
In households	2,187	100.0
Householder	860	39.3
Spouse [6]	290	13.3
Child	676	30.9
Own child under 18 years	450	20.6
Other relatives	286	13.1
Under 18 years	124	5.7
65 years and over	24	1.1
Nonrelatives	75	3.4
Under 18 years	5	0.2
65 years and over	5	0.2
Unmarried partner	43	2.0
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0

Subject	Number	Percent
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	860	100.0
Family households (families) [7]	614	71.4
With own children under 18 years	236	27.4
Husband-wife family	290	33.7
With own children under 18 years	73	8.5
Male householder, no wife present	52	6.0
With own children under 18 years	17	2.0
Female householder, no husband present	272	31.6
With own children under 18 years	146	17.0
Nonfamily households [7]	246	28.6
Householder living alone	225	26.2
Male	96	11.2
65 years and over	29	3.4
Female	129	15.0
65 years and over	72	8.4
Households with individuals under 18 years	299	34.8
Households with individuals 65 years and over	269	31.3
Average household size	2.54	(X)
Average family size [7]	3.04	(X)
HOUSING OCCUPANCY		
Total housing units	986	100.0
Occupied housing units	860	87.2
Vacant housing units	126	12.8
For rent	39	4.0
Rented, not occupied	1	0.1
For sale only	18	1.8
Sold, not occupied	5	0.5
For seasonal, recreational, or occasional use	11	1.1
All other vacants	52	5.3
Homeowner vacancy rate (percent) [8]	3.7	(X)
Rental vacancy rate (percent) [9]	9.0	(X)
HOUSING TENURE		
Occupied housing units	860	100.0
Owner-occupied housing units	469	54.5
Population in owner-occupied housing units	1,167	(X)
Average household size of owner-occupied units	2.49	(X)
Renter-occupied housing units	391	45.5
Population in renter-occupied housing units	1,020	(X)
Average household size of renter-occupied units	2.61	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Wadley city, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	2,061	100.0
Under 5 years	144	7.0
5 to 9 years	180	8.7
10 to 14 years	149	7.2
15 to 19 years	161	7.8
20 to 24 years	131	6.4
25 to 29 years	111	5.4
30 to 34 years	120	5.8
35 to 39 years	131	6.4
40 to 44 years	105	5.1
45 to 49 years	144	7.0
50 to 54 years	145	7.0
55 to 59 years	125	6.1
60 to 64 years	130	6.3
65 to 69 years	76	3.7
70 to 74 years	68	3.3
75 to 79 years	51	2.5
80 to 84 years	44	2.1
85 years and over	46	2.2
Median age (years)	36.4	(X)
16 years and over	1,560	75.7
18 years and over	1,491	72.3
21 years and over	1,392	67.5
62 years and over	364	17.7
65 years and over	285	13.8
Male population	948	46.0
Under 5 years	71	3.4
5 to 9 years	95	4.6
10 to 14 years	89	4.3
15 to 19 years	76	3.7
20 to 24 years	65	3.2
25 to 29 years	52	2.5
30 to 34 years	56	2.7
35 to 39 years	65	3.2
40 to 44 years	42	2.0
45 to 49 years	67	3.3
50 to 54 years	55	2.7
55 to 59 years	55	2.7
60 to 64 years	63	3.1
65 to 69 years	34	1.6
70 to 74 years	25	1.2

Subject	Number	Percent
75 to 79 years	19	0.9
80 to 84 years	13	0.6
85 years and over	6	0.3
Median age (years)	32.6	(X)
16 years and over	682	33.1
18 years and over	655	31.8
21 years and over	601	29.2
62 years and over	132	6.4
65 years and over	97	4.7
Female population	1,113	54.0
Under 5 years	73	3.5
5 to 9 years	85	4.1
10 to 14 years	60	2.9
15 to 19 years	85	4.1
20 to 24 years	66	3.2
25 to 29 years	59	2.9
30 to 34 years	64	3.1
35 to 39 years	66	3.2
40 to 44 years	63	3.1
45 to 49 years	77	3.7
50 to 54 years	90	4.4
55 to 59 years	70	3.4
60 to 64 years	67	3.3
65 to 69 years	42	2.0
70 to 74 years	43	2.1
75 to 79 years	32	1.6
80 to 84 years	31	1.5
85 years and over	40	1.9
Median age (years)	39.8	(X)
16 years and over	878	42.6
18 years and over	836	40.6
21 years and over	791	38.4
62 years and over	232	11.3
65 years and over	188	9.1
RACE		
Total population	2,061	100.0
One Race	2,057	99.8
White	359	17.4
Black or African American	1,632	79.2
American Indian and Alaska Native	3	0.1
Asian	13	0.6
Asian Indian	3	0.1
Chinese	5	0.2
Filipino	5	0.2
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	50	2.4

Subject	Number	Percent
Two or More Races	4	0.2
White; American Indian and Alaska Native [3]	0	0.0
White; Asian [3]	0	0.0
White; Black or African American [3]	4	0.2
White; Some Other Race [3]	0	0.0
Race alone or in combination with one or more other races: [4]		
White	363	17.6
Black or African American	1,636	79.4
American Indian and Alaska Native	3	0.1
Asian	13	0.6
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	50	2.4
HISPANIC OR LATINO		
Total population	2,061	100.0
Hispanic or Latino (of any race)	98	4.8
Mexican	88	4.3
Puerto Rican	1	0.0
Cuban	2	0.1
Other Hispanic or Latino [5]	7	0.3
Not Hispanic or Latino	1,963	95.2
HISPANIC OR LATINO AND RACE		
Total population	2,061	100.0
Hispanic or Latino	98	4.8
White alone	42	2.0
Black or African American alone	3	0.1
American Indian and Alaska Native alone	0	0.0
Asian alone	4	0.2
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	49	2.4
Two or More Races	0	0.0
Not Hispanic or Latino	1,963	95.2
White alone	317	15.4
Black or African American alone	1,629	79.0
American Indian and Alaska Native alone	3	0.1
Asian alone	9	0.4
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	1	0.0
Two or More Races	4	0.2
RELATIONSHIP		
Total population	2,061	100.0
In households	1,972	95.7
Householder	752	36.5
Spouse [6]	213	10.3
Child	625	30.3
Own child under 18 years	421	20.4
Other relatives	287	13.9
Under 18 years	143	6.9
65 years and over	21	1.0
Nonrelatives	95	4.6
Under 18 years	5	0.2
65 years and over	2	0.1
Unmarried partner	45	2.2
In group quarters	89	4.3
Institutionalized population	74	3.6
Male	23	1.1

Subject	Number	Percent
Female	51	2.5
Noninstitutionalized population	15	0.7
Male	8	0.4
Female	7	0.3
HOUSEHOLDS BY TYPE		
Total households	752	100.0
Family households (families) [7]	510	67.8
With own children under 18 years	230	30.6
Husband-wife family	213	28.3
With own children under 18 years	77	10.2
Male householder, no wife present	42	5.6
With own children under 18 years	9	1.2
Female householder, no husband present	255	33.9
With own children under 18 years	144	19.1
Nonfamily households [7]	242	32.2
Householder living alone	218	29.0
Male	91	12.1
65 years and over	24	3.2
Female	127	16.9
65 years and over	63	8.4
Households with individuals under 18 years	299	39.8
Households with individuals 65 years and over	188	25.0
Average household size	2.62	(X)
Average family size [7]	3.21	(X)
HOUSING OCCUPANCY		
Total housing units	851	100.0
Occupied housing units	752	88.4
Vacant housing units	99	11.6
For rent	14	1.6
Rented, not occupied	5	0.6
For sale only	6	0.7
Sold, not occupied	3	0.4
For seasonal, recreational, or occasional use	12	1.4
All other vacants	59	6.9
Homeowner vacancy rate (percent) [8]	1.3	(X)
Rental vacancy rate (percent) [9]	4.4	(X)
HOUSING TENURE		
Occupied housing units	752	100.0
Owner-occupied housing units	452	60.1
Population in owner-occupied housing units	1,202	(X)
Average household size of owner-occupied units	2.66	(X)
Renter-occupied housing units	300	39.9
Population in renter-occupied housing units	770	(X)
Average household size of renter-occupied units	2.57	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Stapleton city, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	438	100.0
Under 5 years	37	8.4
5 to 9 years	28	6.4
10 to 14 years	25	5.7
15 to 19 years	29	6.6
20 to 24 years	19	4.3
25 to 29 years	25	5.7
30 to 34 years	22	5.0
35 to 39 years	27	6.2
40 to 44 years	42	9.6
45 to 49 years	25	5.7
50 to 54 years	20	4.6
55 to 59 years	26	5.9
60 to 64 years	33	7.5
65 to 69 years	26	5.9
70 to 74 years	14	3.2
75 to 79 years	9	2.1
80 to 84 years	18	4.1
85 years and over	13	3.0
Median age (years)	40.9	(X)
16 years and over	340	77.6
18 years and over	329	75.1
21 years and over	313	71.5
62 years and over	98	22.4
65 years and over	80	18.3
Male population	212	48.4
Under 5 years	15	3.4
5 to 9 years	19	4.3
10 to 14 years	16	3.7
15 to 19 years	13	3.0
20 to 24 years	11	2.5
25 to 29 years	12	2.7
30 to 34 years	12	2.7
35 to 39 years	13	3.0
40 to 44 years	24	5.5
45 to 49 years	15	3.4
50 to 54 years	7	1.6
55 to 59 years	16	3.7
60 to 64 years	11	2.5
65 to 69 years	12	2.7
70 to 74 years	7	1.6

Subject	Number	Percent
75 to 79 years	2	0.5
80 to 84 years	4	0.9
85 years and over	3	0.7
Median age (years)	38.4	(X)
16 years and over	160	36.5
18 years and over	156	35.6
21 years and over	146	33.3
62 years and over	35	8.0
65 years and over	28	6.4
Female population	226	51.6
Under 5 years	22	5.0
5 to 9 years	9	2.1
10 to 14 years	9	2.1
15 to 19 years	16	3.7
20 to 24 years	8	1.8
25 to 29 years	13	3.0
30 to 34 years	10	2.3
35 to 39 years	14	3.2
40 to 44 years	18	4.1
45 to 49 years	10	2.3
50 to 54 years	13	3.0
55 to 59 years	10	2.3
60 to 64 years	22	5.0
65 to 69 years	14	3.2
70 to 74 years	7	1.6
75 to 79 years	7	1.6
80 to 84 years	14	3.2
85 years and over	10	2.3
Median age (years)	43.0	(X)
16 years and over	180	41.1
18 years and over	173	39.5
21 years and over	167	38.1
62 years and over	63	14.4
65 years and over	52	11.9
RACE		
Total population	438	100.0
One Race	429	97.9
White	290	66.2
Black or African American	135	30.8
American Indian and Alaska Native	2	0.5
Asian	1	0.2
Asian Indian	0	0.0
Chinese	0	0.0
Filipino	0	0.0
Japanese	1	0.2
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	1	0.2

Subject	Number	Percent
Two or More Races	9	2.1
White; American Indian and Alaska Native [3]	0	0.0
White; Asian [3]	1	0.2
White; Black or African American [3]	1	0.2
White; Some Other Race [3]	3	0.7
Race alone or in combination with one or more other races: [4]		
White	299	68.3
Black or African American	136	31.1
American Indian and Alaska Native	6	1.4
Asian	2	0.5
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	8	1.8
HISPANIC OR LATINO		
Total population	438	100.0
Hispanic or Latino (of any race)	6	1.4
Mexican	6	1.4
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino [5]	0	0.0
Not Hispanic or Latino	432	98.6
HISPANIC OR LATINO AND RACE		
Total population	438	100.0
Hispanic or Latino	6	1.4
White alone	0	0.0
Black or African American alone	0	0.0
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	1	0.2
Two or More Races	5	1.1
Not Hispanic or Latino	432	98.6
White alone	290	66.2
Black or African American alone	135	30.8
American Indian and Alaska Native alone	2	0.5
Asian alone	1	0.2
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	4	0.9
RELATIONSHIP		
Total population	438	100.0
In households	438	100.0
Householder	175	40.0
Spouse [6]	77	17.6
Child	125	28.5
Own child under 18 years	93	21.2
Other relatives	41	9.4
Under 18 years	16	3.7
65 years and over	5	1.1
Nonrelatives	20	4.6
Under 18 years	0	0.0
65 years and over	3	0.7
Unmarried partner	7	1.6
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0

Subject	Number	Percent
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	175	100.0
Family households (families) [7]	115	65.7
With own children under 18 years	47	26.9
Husband-wife family	77	44.0
With own children under 18 years	32	18.3
Male householder, no wife present	9	5.1
With own children under 18 years	2	1.1
Female householder, no husband present	29	16.6
With own children under 18 years	13	7.4
Nonfamily households [7]	60	34.3
Householder living alone	54	30.9
Male	21	12.0
65 years and over	7	4.0
Female	33	18.9
65 years and over	25	14.3
Households with individuals under 18 years	53	30.3
Households with individuals 65 years and over	63	36.0
Average household size	2.50	(X)
Average family size [7]	3.11	(X)
HOUSING OCCUPANCY		
Total housing units	197	100.0
Occupied housing units	175	88.8
Vacant housing units	22	11.2
For rent	3	1.5
Rented, not occupied	0	0.0
For sale only	4	2.0
Sold, not occupied	0	0.0
For seasonal, recreational, or occasional use	1	0.5
All other vacants	14	7.1
Homeowner vacancy rate (percent) [8]	3.2	(X)
Rental vacancy rate (percent) [9]	5.4	(X)
HOUSING TENURE		
Occupied housing units	175	100.0
Owner-occupied housing units	122	69.7
Population in owner-occupied housing units	316	(X)
Average household size of owner-occupied units	2.59	(X)
Renter-occupied housing units	53	30.3
Population in renter-occupied housing units	122	(X)
Average household size of renter-occupied units	2.30	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Louisville city, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	2,493	100.0
Under 5 years	212	8.5
5 to 9 years	176	7.1
10 to 14 years	157	6.3
15 to 19 years	176	7.1
20 to 24 years	172	6.9
25 to 29 years	147	5.9
30 to 34 years	127	5.1
35 to 39 years	137	5.5
40 to 44 years	158	6.3
45 to 49 years	156	6.3
50 to 54 years	163	6.5
55 to 59 years	169	6.8
60 to 64 years	142	5.7
65 to 69 years	96	3.9
70 to 74 years	73	2.9
75 to 79 years	66	2.6
80 to 84 years	77	3.1
85 years and over	89	3.6
Median age (years)	37.8	(X)
16 years and over	1,917	76.9
18 years and over	1,839	73.8
21 years and over	1,744	70.0
62 years and over	475	19.1
65 years and over	401	16.1
Male population	1,127	45.2
Under 5 years	107	4.3
5 to 9 years	93	3.7
10 to 14 years	75	3.0
15 to 19 years	91	3.7
20 to 24 years	68	2.7
25 to 29 years	76	3.0
30 to 34 years	57	2.3
35 to 39 years	61	2.4
40 to 44 years	71	2.8
45 to 49 years	79	3.2
50 to 54 years	63	2.5
55 to 59 years	70	2.8
60 to 64 years	66	2.6
65 to 69 years	47	1.9
70 to 74 years	34	1.4

Subject	Number	Percent
75 to 79 years	27	1.1
80 to 84 years	18	0.7
85 years and over	24	1.0
Median age (years)	34.8	(X)
16 years and over	839	33.7
18 years and over	793	31.8
21 years and over	748	30.0
62 years and over	182	7.3
65 years and over	150	6.0
Female population	1,366	54.8
Under 5 years	105	4.2
5 to 9 years	83	3.3
10 to 14 years	82	3.3
15 to 19 years	85	3.4
20 to 24 years	104	4.2
25 to 29 years	71	2.8
30 to 34 years	70	2.8
35 to 39 years	76	3.0
40 to 44 years	87	3.5
45 to 49 years	77	3.1
50 to 54 years	100	4.0
55 to 59 years	99	4.0
60 to 64 years	76	3.0
65 to 69 years	49	2.0
70 to 74 years	39	1.6
75 to 79 years	39	1.6
80 to 84 years	59	2.4
85 years and over	65	2.6
Median age (years)	40.5	(X)
16 years and over	1,078	43.2
18 years and over	1,046	42.0
21 years and over	996	40.0
62 years and over	293	11.8
65 years and over	251	10.1
RACE		
Total population	2,493	100.0
One Race	2,486	99.7
White	711	28.5
Black or African American	1,754	70.4
American Indian and Alaska Native	1	0.0
Asian	15	0.6
Asian Indian	6	0.2
Chinese	4	0.2
Filipino	5	0.2
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	5	0.2

Subject	Number	Percent
Two or More Races	7	0.3
White; American Indian and Alaska Native [3]	0	0.0
White; Asian [3]	0	0.0
White; Black or African American [3]	7	0.3
White; Some Other Race [3]	0	0.0
Race alone or in combination with one or more other races: [4]		
White	718	28.8
Black or African American	1,761	70.6
American Indian and Alaska Native	1	0.0
Asian	15	0.6
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	5	0.2
HISPANIC OR LATINO		
Total population	2,493	100.0
Hispanic or Latino (of any race)	17	0.7
Mexican	11	0.4
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino [5]	6	0.2
Not Hispanic or Latino	2,476	99.3
HISPANIC OR LATINO AND RACE		
Total population	2,493	100.0
Hispanic or Latino	17	0.7
White alone	4	0.2
Black or African American alone	9	0.4
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	4	0.2
Two or More Races	0	0.0
Not Hispanic or Latino	2,476	99.3
White alone	707	28.4
Black or African American alone	1,745	70.0
American Indian and Alaska Native alone	1	0.0
Asian alone	15	0.6
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	1	0.0
Two or More Races	7	0.3
RELATIONSHIP		
Total population	2,493	100.0
In households	2,286	91.7
Householder	875	35.1
Spouse [6]	259	10.4
Child	766	30.7
Own child under 18 years	484	19.4
Other relatives	303	12.2
Under 18 years	163	6.5
65 years and over	30	1.2
Nonrelatives	83	3.3
Under 18 years	5	0.2
65 years and over	18	0.7
Unmarried partner	45	1.8
In group quarters	207	8.3
Institutionalized population	207	8.3
Male	138	5.5

Subject	Number	Percent
Female	69	2.8
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	875	100.0
Family households (families) [7]	587	67.1
With own children under 18 years	255	29.1
Husband-wife family	259	29.6
With own children under 18 years	91	10.4
Male householder, no wife present	32	3.7
With own children under 18 years	10	1.1
Female householder, no husband present	296	33.8
With own children under 18 years	154	17.6
Nonfamily households [7]	288	32.9
Householder living alone	267	30.5
Male	99	11.3
65 years and over	32	3.7
Female	168	19.2
65 years and over	78	8.9
Households with individuals under 18 years	333	38.1
Households with individuals 65 years and over	250	28.6
Average household size	2.61	(X)
Average family size [7]	3.26	(X)
HOUSING OCCUPANCY		
Total housing units	1,006	100.0
Occupied housing units	875	87.0
Vacant housing units	131	13.0
For rent	40	4.0
Rented, not occupied	5	0.5
For sale only	10	1.0
Sold, not occupied	4	0.4
For seasonal, recreational, or occasional use	13	1.3
All other vacants	59	5.9
Homeowner vacancy rate (percent) [8]	1.9	(X)
Rental vacancy rate (percent) [9]	10.0	(X)
HOUSING TENURE		
Occupied housing units	875	100.0
Owner-occupied housing units	519	59.3
Population in owner-occupied housing units	1,327	(X)
Average household size of owner-occupied units	2.56	(X)
Renter-occupied housing units	356	40.7
Population in renter-occupied housing units	959	(X)
Average household size of renter-occupied units	2.69	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Jefferson County, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	16,930	100.0
Under 5 years	1,171	6.9
5 to 9 years	1,221	7.2
10 to 14 years	1,139	6.7
15 to 19 years	1,177	7.0
20 to 24 years	1,032	6.1
25 to 29 years	1,002	5.9
30 to 34 years	960	5.7
35 to 39 years	1,019	6.0
40 to 44 years	1,100	6.5
45 to 49 years	1,207	7.1
50 to 54 years	1,153	6.8
55 to 59 years	1,220	7.2
60 to 64 years	1,031	6.1
65 to 69 years	823	4.9
70 to 74 years	574	3.4
75 to 79 years	427	2.5
80 to 84 years	358	2.1
85 years and over	316	1.9
Median age (years)	38.8	(X)
16 years and over	13,177	77.8
18 years and over	12,659	74.8
21 years and over	11,992	70.8
62 years and over	3,086	18.2
65 years and over	2,498	14.8
Male population	8,183	48.3
Under 5 years	607	3.6
5 to 9 years	650	3.8
10 to 14 years	573	3.4
15 to 19 years	621	3.7
20 to 24 years	510	3.0
25 to 29 years	513	3.0
30 to 34 years	459	2.7
35 to 39 years	533	3.1
40 to 44 years	520	3.1
45 to 49 years	603	3.6
50 to 54 years	510	3.0
55 to 59 years	573	3.4
60 to 64 years	486	2.9
65 to 69 years	381	2.3
70 to 74 years	240	1.4

Subject	Number	Percent
75 to 79 years	191	1.1
80 to 84 years	120	0.7
85 years and over	93	0.5
Median age (years)	36.6	(X)
16 years and over	6,242	36.9
18 years and over	5,979	35.3
21 years and over	5,608	33.1
62 years and over	1,280	7.6
65 years and over	1,025	6.1
Female population	8,747	51.7
Under 5 years	564	3.3
5 to 9 years	571	3.4
10 to 14 years	566	3.3
15 to 19 years	556	3.3
20 to 24 years	522	3.1
25 to 29 years	489	2.9
30 to 34 years	501	3.0
35 to 39 years	486	2.9
40 to 44 years	580	3.4
45 to 49 years	604	3.6
50 to 54 years	643	3.8
55 to 59 years	647	3.8
60 to 64 years	545	3.2
65 to 69 years	442	2.6
70 to 74 years	334	2.0
75 to 79 years	236	1.4
80 to 84 years	238	1.4
85 years and over	223	1.3
Median age (years)	41.1	(X)
16 years and over	6,935	41.0
18 years and over	6,680	39.5
21 years and over	6,384	37.7
62 years and over	1,806	10.7
65 years and over	1,473	8.7
RACE		
Total population	16,930	100.0
One Race	16,782	99.1
White	7,206	42.6
Black or African American	9,213	54.4
American Indian and Alaska Native	18	0.1
Asian	68	0.4
Asian Indian	30	0.2
Chinese	9	0.1
Filipino	18	0.1
Japanese	1	0.0
Korean	4	0.0
Vietnamese	4	0.0
Other Asian [1]	2	0.0
Native Hawaiian and Other Pacific Islander	2	0.0
Native Hawaiian	2	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	275	1.6

Subject	Number	Percent
Two or More Races	148	0.9
White; American Indian and Alaska Native [3]	20	0.1
White; Asian [3]	7	0.0
White; Black or African American [3]	62	0.4
White; Some Other Race [3]	25	0.1
Race alone or in combination with one or more other races: [4]		
White	7,328	43.3
Black or African American	9,303	54.9
American Indian and Alaska Native	55	0.3
Asian	91	0.5
Native Hawaiian and Other Pacific Islander	8	0.0
Some Other Race	311	1.8
HISPANIC OR LATINO		
Total population	16,930	100.0
Hispanic or Latino (of any race)	517	3.1
Mexican	435	2.6
Puerto Rican	18	0.1
Cuban	13	0.1
Other Hispanic or Latino [5]	51	0.3
Not Hispanic or Latino	16,413	96.9
HISPANIC OR LATINO AND RACE		
Total population	16,930	100.0
Hispanic or Latino	517	3.1
White alone	191	1.1
Black or African American alone	26	0.2
American Indian and Alaska Native alone	0	0.0
Asian alone	4	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	262	1.5
Two or More Races	34	0.2
Not Hispanic or Latino	16,413	96.9
White alone	7,015	41.4
Black or African American alone	9,187	54.3
American Indian and Alaska Native alone	18	0.1
Asian alone	64	0.4
Native Hawaiian and Other Pacific Islander alone	2	0.0
Some Other Race alone	13	0.1
Two or More Races	114	0.7
RELATIONSHIP		
Total population	16,930	100.0
In households	16,403	96.9
Householder	6,241	36.9
Spouse [6]	2,612	15.4
Child	5,043	29.8
Own child under 18 years	3,327	19.7
Other relatives	1,849	10.9
Under 18 years	892	5.3
65 years and over	180	1.1
Nonrelatives	658	3.9
Under 18 years	47	0.3
65 years and over	59	0.3
Unmarried partner	342	2.0
In group quarters	527	3.1
Institutionalized population	460	2.7
Male	340	2.0

Subject	Number	Percent
Female	120	0.7
Noninstitutionalized population	67	0.4
Male	58	0.3
Female	9	0.1
HOUSEHOLDS BY TYPE		
Total households	6,241	100.0
Family households (families) [7]	4,407	70.6
With own children under 18 years	1,782	28.6
Husband-wife family	2,612	41.9
With own children under 18 years	939	15.0
Male householder, no wife present	332	5.3
With own children under 18 years	116	1.9
Female householder, no husband present	1,463	23.4
With own children under 18 years	727	11.6
Nonfamily households [7]	1,834	29.4
Householder living alone	1,620	26.0
Male	733	11.7
65 years and over	209	3.3
Female	887	14.2
65 years and over	481	7.7
Households with individuals under 18 years	2,248	36.0
Households with individuals 65 years and over	1,813	29.0
Average household size	2.63	(X)
Average family size [7]	3.16	(X)
HOUSING OCCUPANCY		
Total housing units	7,298	100.0
Occupied housing units	6,241	85.5
Vacant housing units	1,057	14.5
For rent	211	2.9
Rented, not occupied	23	0.3
For sale only	86	1.2
Sold, not occupied	42	0.6
For seasonal, recreational, or occasional use	188	2.6
All other vacants	507	6.9
Homeowner vacancy rate (percent) [8]	2.0	(X)
Rental vacancy rate (percent) [9]	9.6	(X)
HOUSING TENURE		
Occupied housing units	6,241	100.0
Owner-occupied housing units	4,274	68.5
Population in owner-occupied housing units	11,130	(X)
Average household size of owner-occupied units	2.60	(X)
Renter-occupied housing units	1,967	31.5
Population in renter-occupied housing units	5,273	(X)
Average household size of renter-occupied units	2.68	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Bartow town, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	286	100.0
Under 5 years	14	4.9
5 to 9 years	15	5.2
10 to 14 years	21	7.3
15 to 19 years	12	4.2
20 to 24 years	22	7.7
25 to 29 years	13	4.5
30 to 34 years	11	3.8
35 to 39 years	13	4.5
40 to 44 years	25	8.7
45 to 49 years	25	8.7
50 to 54 years	28	9.8
55 to 59 years	21	7.3
60 to 64 years	14	4.9
65 to 69 years	19	6.6
70 to 74 years	12	4.2
75 to 79 years	11	3.8
80 to 84 years	5	1.7
85 years and over	5	1.7
Median age (years)	44.7	(X)
16 years and over	234	81.8
18 years and over	231	80.8
21 years and over	215	75.2
62 years and over	62	21.7
65 years and over	52	18.2
Male population	136	47.6
Under 5 years	6	2.1
5 to 9 years	4	1.4
10 to 14 years	12	4.2
15 to 19 years	10	3.5
20 to 24 years	12	4.2
25 to 29 years	8	2.8
30 to 34 years	6	2.1
35 to 39 years	6	2.1
40 to 44 years	11	3.8
45 to 49 years	12	4.2
50 to 54 years	10	3.5
55 to 59 years	12	4.2
60 to 64 years	5	1.7
65 to 69 years	11	3.8
70 to 74 years	3	1.0

Subject	Number	Percent
75 to 79 years	5	1.7
80 to 84 years	1	0.3
85 years and over	2	0.7
Median age (years)	43.3	(X)
16 years and over	112	39.2
18 years and over	109	38.1
21 years and over	98	34.3
62 years and over	26	9.1
65 years and over	22	7.7
Female population	150	52.4
Under 5 years	8	2.8
5 to 9 years	11	3.8
10 to 14 years	9	3.1
15 to 19 years	2	0.7
20 to 24 years	10	3.5
25 to 29 years	5	1.7
30 to 34 years	5	1.7
35 to 39 years	7	2.4
40 to 44 years	14	4.9
45 to 49 years	13	4.5
50 to 54 years	18	6.3
55 to 59 years	9	3.1
60 to 64 years	9	3.1
65 to 69 years	8	2.8
70 to 74 years	9	3.1
75 to 79 years	6	2.1
80 to 84 years	4	1.4
85 years and over	3	1.0
Median age (years)	46.8	(X)
16 years and over	122	42.7
18 years and over	122	42.7
21 years and over	117	40.9
62 years and over	36	12.6
65 years and over	30	10.5
RACE		
Total population	286	100.0
One Race	285	99.7
White	118	41.3
Black or African American	167	58.4
American Indian and Alaska Native	0	0.0
Asian	0	0.0
Asian Indian	0	0.0
Chinese	0	0.0
Filipino	0	0.0
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	0	0.0

Subject	Number	Percent
Two or More Races	1	0.3
White; American Indian and Alaska Native [3]	0	0.0
White; Asian [3]	0	0.0
White; Black or African American [3]	0	0.0
White; Some Other Race [3]	0	0.0
Race alone or in combination with one or more other races: [4]		
White	118	41.3
Black or African American	168	58.7
American Indian and Alaska Native	0	0.0
Asian	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	1	0.3
HISPANIC OR LATINO		
Total population	286	100.0
Hispanic or Latino (of any race)	1	0.3
Mexican	0	0.0
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino [5]	1	0.3
Not Hispanic or Latino	285	99.7
HISPANIC OR LATINO AND RACE		
Total population	286	100.0
Hispanic or Latino	1	0.3
White alone	0	0.0
Black or African American alone	0	0.0
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	1	0.3
Not Hispanic or Latino	285	99.7
White alone	118	41.3
Black or African American alone	167	58.4
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	0	0.0
RELATIONSHIP		
Total population	286	100.0
In households	286	100.0
Householder	110	38.5
Spouse [6]	58	20.3
Child	86	30.1
Own child under 18 years	45	15.7
Other relatives	26	9.1
Under 18 years	9	3.1
65 years and over	4	1.4
Nonrelatives	6	2.1
Under 18 years	0	0.0
65 years and over	2	0.7
Unmarried partner	1	0.3
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0

Subject	Number	Percent
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	110	100.0
Family households (families) [7]	81	73.6
With own children under 18 years	28	25.5
Husband-wife family	58	52.7
With own children under 18 years	18	16.4
Male householder, no wife present	2	1.8
With own children under 18 years	1	0.9
Female householder, no husband present	21	19.1
With own children under 18 years	9	8.2
Nonfamily households [7]	29	26.4
Householder living alone	26	23.6
Male	12	10.9
65 years and over	5	4.5
Female	14	12.7
65 years and over	10	9.1
Households with individuals under 18 years	35	31.8
Households with individuals 65 years and over	37	33.6
Average household size	2.60	(X)
Average family size [7]	3.10	(X)
HOUSING OCCUPANCY		
Total housing units	139	100.0
Occupied housing units	110	79.1
Vacant housing units	29	20.9
For rent	0	0.0
Rented, not occupied	1	0.7
For sale only	2	1.4
Sold, not occupied	3	2.2
For seasonal, recreational, or occasional use	7	5.0
All other vacants	16	11.5
Homeowner vacancy rate (percent) [8]	2.3	(X)
Rental vacancy rate (percent) [9]	0.0	(X)
HOUSING TENURE		
Occupied housing units	110	100.0
Owner-occupied housing units	81	73.6
Population in owner-occupied housing units	220	(X)
Average household size of owner-occupied units	2.72	(X)
Renter-occupied housing units	29	26.4
Population in renter-occupied housing units	66	(X)
Average household size of renter-occupied units	2.28	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

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Geography: Avera city, Georgia

Subject	Number	Percent
SEX AND AGE		
Total population	246	100.0
Under 5 years	22	8.9
5 to 9 years	10	4.1
10 to 14 years	17	6.9
15 to 19 years	19	7.7
20 to 24 years	11	4.5
25 to 29 years	17	6.9
30 to 34 years	11	4.5
35 to 39 years	24	9.8
40 to 44 years	21	8.5
45 to 49 years	18	7.3
50 to 54 years	20	8.1
55 to 59 years	14	5.7
60 to 64 years	11	4.5
65 to 69 years	10	4.1
70 to 74 years	5	2.0
75 to 79 years	8	3.3
80 to 84 years	3	1.2
85 years and over	5	2.0
Median age (years)	38.8	(X)
16 years and over	188	76.4
18 years and over	183	74.4
21 years and over	175	71.1
62 years and over	37	15.0
65 years and over	31	12.6
Male population	129	52.4
Under 5 years	16	6.5
5 to 9 years	7	2.8
10 to 14 years	12	4.9
15 to 19 years	10	4.1
20 to 24 years	6	2.4
25 to 29 years	7	2.8
30 to 34 years	5	2.0
35 to 39 years	12	4.9
40 to 44 years	14	5.7
45 to 49 years	6	2.4
50 to 54 years	11	4.5
55 to 59 years	8	3.3
60 to 64 years	4	1.6
65 to 69 years	3	1.2
70 to 74 years	0	0.0

Subject	Number	Percent
75 to 79 years	3	1.2
80 to 84 years	2	0.8
85 years and over	3	1.2
Median age (years)	36.8	(X)
16 years and over	89	36.2
18 years and over	87	35.4
21 years and over	84	34.1
62 years and over	13	5.3
65 years and over	11	4.5
Female population	117	47.6
Under 5 years	6	2.4
5 to 9 years	3	1.2
10 to 14 years	5	2.0
15 to 19 years	9	3.7
20 to 24 years	5	2.0
25 to 29 years	10	4.1
30 to 34 years	6	2.4
35 to 39 years	12	4.9
40 to 44 years	7	2.8
45 to 49 years	12	4.9
50 to 54 years	9	3.7
55 to 59 years	6	2.4
60 to 64 years	7	2.8
65 to 69 years	7	2.8
70 to 74 years	5	2.0
75 to 79 years	5	2.0
80 to 84 years	1	0.4
85 years and over	2	0.8
Median age (years)	42.5	(X)
16 years and over	99	40.2
18 years and over	96	39.0
21 years and over	91	37.0
62 years and over	24	9.8
65 years and over	20	8.1
RACE		
Total population	246	100.0
One Race	241	98.0
White	224	91.1
Black or African American	17	6.9
American Indian and Alaska Native	0	0.0
Asian	0	0.0
Asian Indian	0	0.0
Chinese	0	0.0
Filipino	0	0.0
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	0	0.0

Subject	Number	Percent
Two or More Races	5	2.0
White; American Indian and Alaska Native [3]	0	0.0
White; Asian [3]	1	0.4
White; Black or African American [3]	2	0.8
White; Some Other Race [3]	1	0.4
Race alone or in combination with one or more other races: [4]		
White	229	93.1
Black or African American	20	8.1
American Indian and Alaska Native	1	0.4
Asian	1	0.4
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	1	0.4
HISPANIC OR LATINO		
Total population	246	100.0
Hispanic or Latino (of any race)	0	0.0
Mexican	0	0.0
Puerto Rican	0	0.0
Cuban	0	0.0
Other Hispanic or Latino [5]	0	0.0
Not Hispanic or Latino	246	100.0
HISPANIC OR LATINO AND RACE		
Total population	246	100.0
Hispanic or Latino	0	0.0
White alone	0	0.0
Black or African American alone	0	0.0
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	0	0.0
Not Hispanic or Latino	246	100.0
White alone	224	91.1
Black or African American alone	17	6.9
American Indian and Alaska Native alone	0	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	5	2.0
RELATIONSHIP		
Total population	246	100.0
In households	246	100.0
Householder	100	40.7
Spouse [6]	48	19.5
Child	73	29.7
Own child under 18 years	58	23.6
Other relatives	17	6.9
Under 18 years	5	2.0
65 years and over	0	0.0
Nonrelatives	8	3.3
Under 18 years	0	0.0
65 years and over	0	0.0
Unmarried partner	6	2.4
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0

Subject	Number	Percent
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	100	100.0
Family households (families) [7]	63	63.0
With own children under 18 years	33	33.0
Husband-wife family	48	48.0
With own children under 18 years	27	27.0
Male householder, no wife present	5	5.0
With own children under 18 years	2	2.0
Female householder, no husband present	10	10.0
With own children under 18 years	4	4.0
Nonfamily households [7]	37	37.0
Householder living alone	35	35.0
Male	15	15.0
65 years and over	5	5.0
Female	20	20.0
65 years and over	15	15.0
Households with individuals under 18 years	36	36.0
Households with individuals 65 years and over	28	28.0
Average household size	2.46	(X)
Average family size [7]	3.19	(X)
HOUSING OCCUPANCY		
Total housing units	120	100.0
Occupied housing units	100	83.3
Vacant housing units	20	16.7
For rent	6	5.0
Rented, not occupied	0	0.0
For sale only	2	1.7
Sold, not occupied	3	2.5
For seasonal, recreational, or occasional use	2	1.7
All other vacants	7	5.8
Homeowner vacancy rate (percent) [8]	2.7	(X)
Rental vacancy rate (percent) [9]	16.7	(X)
HOUSING TENURE		
Occupied housing units	100	100.0
Owner-occupied housing units	70	70.0
Population in owner-occupied housing units	159	(X)
Average household size of owner-occupied units	2.27	(X)
Renter-occupied housing units	30	30.0
Population in renter-occupied housing units	87	(X)
Average household size of renter-occupied units	2.90	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

APPENDIX C

OTHER PLANNING DOCUMENTS

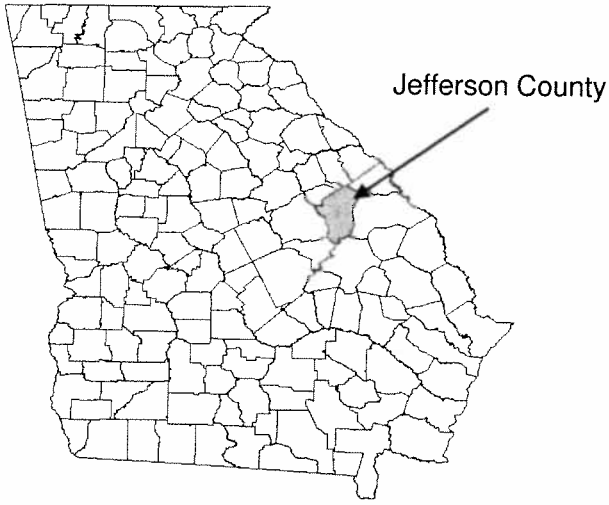
FLOOD INSURANCE STUDY

JEFFERSON COUNTY, GEORGIA

AND INCORPORATED AREAS

Community Name	*Community Number*
*AVERA, CITY OF	130600
BARTOW, CITY OF	130115
JEFFERSON COUNTY (UNINCORPORATED AREAS)	130538
KEYSVILLE, TOWN OF	130104
LOUISVILLE, CITY OF	130441
STAPLETON, CITY OF	130433
WADLEY, CITY OF	130116
WRENS, CITY OF	130117

*NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED



Effective: December 17, 2010

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
13163CV000A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) report may not contain all data available within the Community Map Repository. Please contact the Community Map Repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this FIS report at any time. In addition, FEMA may revise part of this FIS report by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS report. Therefore, users should consult with community officials and check the Community Map Repository to obtain the most current FIS report components.

Selected Flood Insurance Rate Map panels for this community contain information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways, cross sections). In addition, former flood hazard zone designations have been changed as follows:

Old Zone(s)	New Zone
Al through A30	AE
B	X
C	X

Initial Countywide FIS Effective Date: December 17, 2010

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FLOOD INSURANCE STUDY
JEFFERSON COUNTY, GEORGIA AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and updates information on the existence and severity of flood hazards in the geographic area of Jefferson County, including the Cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens; Town of Keysville and the unincorporated areas of Jefferson County (referred to collectively herein as Jefferson County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood-risk data for various areas of the community that will be used to establish actuarial flood insurance rates and to assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

Please note that the Town of Keysville is geographically located in Burke and Jefferson Counties. Only the portion of Keysville located in Jefferson County is included in this FIS report. See the separately published FIS report and Flood Insurance Rate Map (FIRM) for Burke County for flood-hazard information outside of Jefferson County.

Please note that the City of Avera has no mapped special flood hazard areas.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

The Digital Flood Insurance Rate Map (DFIRM) and FIS report for this countywide study have been produced in digital format. Flood hazard information was converted to meet the Federal Emergency Management Agency (FEMA) DFIRM database specifications and Geographic Information System (GIS) format requirements. The flood hazard information was created and is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community.

1.2 Authority and Acknowledgments

The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

All communities within Jefferson County have no previously printed FIS reports.

Redelineation for approximately studied streams and new approximate analyses for this countywide FIS report were performed by Post, Buckley, Schuh and Jernigan, Inc. (PBS&J), for the Georgia Department of Natural Resources (DNR), under contract No. EMA-2008-CA-5870. The work was completed in July 2009.

Base map information shown on the Flood Insurance Rate Map (FIRM) was derived from the National Agriculture Imagery Program produced at a scale of 1:12,000 from photography dated 2007 or later. The projection used in the preparation of this map is State Plane Georgia East, and the horizontal datum used is North American Datum (NAD) of 1983.

1.3 Coordination

An initial meeting is held with representatives from FEMA, the community, and the study contractor to explain the nature and purpose of a FIS, and to identify the streams to be studied or restudied. A final meeting is held with representatives from FEMA, the community, and the study contractor to review the results of the study.

The initial meeting was held on July 9, 2008, and attended by representatives of the Georgia DNR, the Cities of Louisville, Wadley, and Wrens, Jefferson County, and Watershed Concepts.

The results of the study were reviewed at the final meeting held on September 9, 2009, and attended by representatives of PBS&J, FEMA, Georgia DNR, and the communities. All problems raised at that meeting have been addressed.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Jefferson County, Georgia, including the incorporated communities listed in Section 1.1. The flood hazards in Jefferson County were studied by approximate methods.

For this countywide revision, all areas studied by approximate methods were either newly studied or revised based on updated hydrologic and hydraulic models. Approximate analyses were used to study those areas having low development potential or minimal flood hazards. The scope and methods of study were proposed to and agreed by FEMA and Jefferson County.

For this countywide FIS, the FIS report and FIRM were converted to countywide format, and the flooding information for the entire county, including both incorporated and unincorporated areas, is shown. Also, the vertical datum was converted from the National Geodetic Vertical Datum of 1929 (NGVD) to the North American Vertical Datum of 1988 (NAVD). In addition, the Transverse Mercator, State Plane coordinates, previously referenced to the NAD 1927, are now referenced to the NAD 1983.

2.2 Community Description

Jefferson County, which is located in eastern Georgia, is bordered on the west by Washington County, on the east by Richmond County, on the south by Johnson and Emanuel Counties, and on the north by Glascock, Warren, and Richmond Counties.

According to the 2000 Census, the population of Jefferson County was 17,266. The county has a total land area of 528 square miles (U.S. Census Bureau, 2009).

Jefferson County, originally part of Burke and Warren counties, was created in 1796 and named for Thomas Jefferson. The City of Louisville is the County Seat (State of Georgia, 2009).

The average high temperature occurs in July and is 92 degrees Fahrenheit (°F). The average low temperature is 57°F and occurs in January. Jefferson County receives an average of 45.9 inches of rainfall per year (The Weather Channel, 2009).

2.3 Principal Flood Problems

Based on recent flood-related state and federal disaster declarations, Jefferson County has experienced flooding associated with severe storms, torrential rains, severe low pressure systems, torrential downpours, severe thunderstorms, and hurricanes (Georgia Emergency Management Agency, 2009).

2.4 Flood Protection Measures

Flood protection measures are not known to exist in Jefferson County.

3.0 ENGINEERING METHODS

For the flooding sources studied in the county, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates.

These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 1-percent-annual-chance (100-year) flood in any 50-year period is approximately 40 percent (4 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied.

Discharges for approximate analysis streams were estimated using the published U.S. Geological Survey (USGS) regional regression equations for rural areas in Georgia (Stamey and Hess, 1993). Regression equations estimate peak discharges for ungauged streams based on characteristics of nearby gauged streams. Drainage areas were developed from USGS 30-meter Digital Elevation Models (DEMs).

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

For the streams studied by approximate methods, cross section data was obtained from the USGS 10-meter DEMs. Hydraulically significant roads were modeled as bridges, with opening data approximated from available inventory data or approximated from the imagery. Top of road elevations were estimated from the best available topography. The studied streams were modeled using the US Army Corps of Engineers (USACE) Hydrologic Engineering Center's (HEC) HEC-RAS version 4.0 (HEC, 2008).

Floodplains were delineated using the computer 1-percent-annual-chance water-surface elevations and the USGS 10-meter DEMs (USGS, 2009).

The hydraulic analyses for this study were based on unobstructed flow. The flood delineations are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

3.3 Vertical Datum

All FIS reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FIS reports and FIRMs was NGVD. With the finalization of NAVD, many FIS reports and FIRMs are being prepared using NAVD as the referenced vertical datum.

All models created for this FIS report are referenced to NAVD. Structure and ground elevations in the community must, therefore, be referenced to NAVD. It is important to note that adjacent communities may be referenced to NGVD.

In this countywide revision, an average vertical datum conversion of -0.61 foot was calculated from NGVD to NAVD, using the National Geodetic Survey's (NGS) VERTCON online utility (NGS, 2009). The data points used to determine the conversion are listed in Table 1.

Table 1 - Vertical Datum Conversion

Quad Name	Corner	Latitude	Longitude	Conversion from NGVD to NAVD
Bastonville	SE	33.250	-82.500	-0.581
Bowdens Pond	SE	33.250	-82.375	-0.617
Avondale	SE	33.250	-82.250	-0.646
Mitchell	SE	33.125	-82.675	-0.554
Gibson	SE	33.125	-82.500	-0.591
Wrens	SE	33.125	-82.375	-0.597
Matthews	SE	33.125	-82.250	-0.604
Grange	SE	33.000	-82.500	-0.600
Louisville	SE	33.000	-82.375	-0.620
Kellys Pond	SE	33.000	-82.250	-0.627
Davisboro	SE	32.875	-82.500	-0.610
Louisville South	SE	32.875	-82.375	-0.643
Wadley	SE	32.750	-82.375	-0.627
			Average:	**-0.609**

For additional information regarding conversion between NGVD and NAVD, visit the National Geodetic Survey website at www.ngs.noaa.gov, or contact the National Geodetic Survey at the following address:

Vertical Network Branch, N/CG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the Technical Support Data Notebook associated with the FIS report and FIRM for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance (100-year) flood elevations and delineations of the 1- and 0.2-percent-annual-chance (500-year) floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Table, and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community, although none were mapped for this study.

For the streams studied by approximate methods, the boundaries were delineated using the USGS 10-meter DEMs (USGS, 2009).

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A), and the 0.2-percent-annual-chance floodplain boundary corresponds

to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by approximate methods, the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 1)

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1 foot, provided that hazardous velocities are not produced.

No floodways have been mapped for Jefferson County.

5.0 INSURANCE APPLICATIONS

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or base flood depths are shown within this zone.

Zone X

Zone X is the flood insurance risk zone that corresponds to areas outside the 0.2-percent-annual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square

mile, and areas protected from the 1-percent-annual-chance flood by levees. No BFEs or base flood depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance risk zones as described in Section 5.0. Insurance agents use the zones in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1-percent-annual-chance floodplains.

The countywide FIRM presents flooding information for the entire geographic area of Jefferson County. Previously, FIRMs were prepared for each incorporated community and the unincorporated areas of the County identified as flood-prone. Historical data relating to the maps prepared for each community are presented in Table 2.

7.0 OTHER STUDIES

No previous countywide FIS reports have been prepared for the counties surrounding Jefferson County.

This report either supersedes or is compatible with all previous studies on streams studied in this report and should be considered authoritative for purposes of the NFIP.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, Koger Center – Rutgers Building, 3003 Chamblee Tucker Road, Atlanta, Georgia 30341.

9.0 BIBLIOGRAPHY AND REFERENCES

Georgia Emergency Management Agency, Georgia Disaster History. Retrieved April 16, 2009, from http://www.gema.ga.gov.

Hydrologic Engineering Center, HEC-RAS River Analysis System, Version 4.0.0, U.S. Army Corps of Engineers, Davis, California, March 2008.

National Geodetic Survey, VERTCON-North American Vertical Datum Conversion Utility. Retrieved April 3, 2009, from http://www.ngs.noaa.gov.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE	FIRM EFFECTIVE DATE	FIRM REVISION DATE
*Avera, City of	N/A	None	N/A	None
Bartow, City of	August 22, 1975	None	January 1, 1992	None
Jefferson County (Unincorporated Areas)	December 17, 2010	None	December 17, 2010	None
Keysville, Town of	December 17, 2010	None	December 17, 2010	None
Louisville, City of	August 15, 1975	None	January 1, 1992	None
Stapleton, City of	April 4, 1975	None	August 19, 1986	None
Wadley, City of	August 22, 1975	None	August 19, 1986	None
Wrens, City of	May 10, 1974	August 27, 1976	June 17, 1986	None

*No special flood hazard areas identified

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

JEFFERSON COUNTY, GA
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

Stamey, T.C. and G. W. Hess, Techniques for Estimating Magnitude and Frequency of Floods in Rural Basins of Georgia, Water Resources Investigation Report 93-4016, U.S. Geological Survey, 1993.

State of Georgia, Jefferson County Profile. Retrieved on April 21, 2009, from http://jeffersoncounty.georgia.gov.

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U.S. Census Bureau, American FactFinder, Jefferson County, Georgia, 2000. Retrieved March 13, 2009, from http://factfinder.census.gov.

U.S. Geological Survey, Seamless Data Distribution System - 10 meter Digital Elevation Model. Downloaded March 2009, from http://seamless.usgs.gov/.

GEORGIA FORESTRY COMMISSION

Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Jefferson County, Georgia

A Program of the Georgia Forestry Commission
with support from the U.S. Forest Service

+

NOVEMBER 16, 2011

SIGNATURE PAGE

_____ _____
Honorable William Rabun, Chairman Date
Jefferson County Board of County Commissioners

_____ _____
Adam Mestres Date
Quitman County EMA Director

_____ _____
Lamar Baxley Date
Jefferson County Fire Chief

_____ _____
James M. Peebles Date
Jefferson County Fire Association President

_____ _____
Reggie Morgan Date
GFC, Ranger 1/Forest Tech

Prepared by:

Shane Barrow, Glascock/Jefferson Ranger 1 / Forest Tech
Eric Mosley, Community Wildfire Protection Specialist
Georgia Forestry Commission
2755 Mennonite Church Rd
Stapleton GA 30823

The following report is a collaborative effort among various entities; the representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plan's contents:

County Commission Chair, Jefferson County

Jefferson County Emergency Management Director

Jefferson County Fire Chief

Shane Barrow
Ranger 1 / Forest Tech, Glascock/Jefferson County Forestry Unit

Eric Mosley
Community Wildfire Protection Specialist

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Jefferson County Wildfire Pre-suppression Plan

NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

I. OBJECTIVES

A Community Wildfire Protection Plan (CWPP) provides a community with a road map to reduce its risk from wildfire. A CWPP is designed through collaboration between state and local fire agencies, homeowners and landowners, and other interested parties such as city councils, utilities, homeowners associations, environmental organizations, and other local stakeholders. The plan identifies strategic sites and methods for risk reduction and structural protection projects across jurisdictional boundaries.

Comprehensive plans provide long-term guidance for growth, reflecting a community's values and future expectations. The plan implements the community's values and serves to protect natural and community resources and public safety. Planning also enables communities to address their development patterns in the Wildland Urban Interface and determine how they can reduce their risk through alternative development patterns. The formal legal standing of the plan and its central role in local government decision making underscores the opportunity to use this planning process as an effective means for reducing wildfire risk.

The mission of the following plan is to set clear priorities for the implementation of wildfire mitigation in Jefferson County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will protect this community and its essential infrastructure. It also includes a plan for wildfire suppression. Specifically, the plan includes community-centered actions that will:

- Educate citizens on wildfire, its risks, and ways to protect lives and properties,
- Support fire rescue and suppression entities,
- Focus on collaborative decision-making and citizen participation,
- Develop and implement effective mitigation strategies, and
- Develop and implement effective community ordinances and codes.

II. COMMUNITY COLLABORATION

Wildfire risk reduction strategies are most effective when approached collaboratively – involving groups of residents, elected officials, community decision makers, emergency managers, and natural resource mangers –and when combined with effective outreach approaches. Collaborative approaches make sense as the initial focus of any community attempting to work toward wildfire risk reduction. In all Community Wildfire Protection Plan collaborations, the goal is to cooperatively identify problems and reach a consensus for mutual action. In the case of wildfire mitigation, a reduction in the wildfire risk to the community's lives, houses, and property is the desired outcome.

The collaborative core team convened in early February 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local county government, local fire authorities, and the Georgia Forestry Commission.

Below are the groups included in the task force:

Jefferson County Government

County Fire Department
Emergency Management
Board of County Commissioners

Georgia Forestry Commission

It was decided to conduct community assessments on the basis of the high risk communities and the individual fire districts in the county. The Chief of the Jefferson County Fire Department and the representative of the local Georgia Forestry Commission office reconvened in late August and again in late October for the purpose of completing the following:

Risk Assessment	Assessed wildfire hazard risks and prioritized mitigation actions. The wildfire risk assessment will help homeowners, builders, developers, and emergency personnel whether the area needs attention and will help direct wildfire risk reduction practices to the areas at highest risk.
Fuels Reduction	Identified strategies for coordinating fuels treatment projects.
Structure Ignitability	Identified strategies for reducing the ignitability of structures within the Wildland interface.
Emergency Management	Forged relationships among local government and fire districts and developed/refined a pre-suppression plan.
Education and Outreach	Developed strategies for increasing citizen awareness and action and to conduct homeowner and community leader workshops. Outreach and education programs are designed to raise awareness and improve audience knowledge of wildfire risk reduction needs and practices. In the best cases, education and outreach programs will influence attitudes and opinions and result in effective action.

III. COUNTY BACKGROUND AND WILDFIRE HISTORY

County Background

Jefferson County, in east central Georgia southwest of Augusta, was established in 1796 on land formerly a part of Burke and Warren counties. It was named after U.S. president Thomas Jefferson, author of the Declaration of Independence and the first U.S. secretary of state.

Louisville, the county seat, was the third capital of Georgia. Unlike its predecessors, Savannah and Augusta, it was founded specifically as the permanent state capital, with the first planned capitol building, which was completed in 1796. In recognition of French support during the Revolutionary War (1775-83), Georgia legislators named the town for Louis XVI, king of France (who had been executed three years earlier). The original design of Louisville was based on the squares of Philadelphia, Pennsylvania.

During the brief

Jefferson County Courthouse

period when Louisville was the state capital (1796-1806), the papers connected with the Yazoo land fraud were publicly burned and the Great Seal of Georgia was adopted (1799). According to the 1820 census the population of Jefferson County then included 3,932 free whites and 3,094 slaves. In 1807 Georgia government moved to its fourth capital, farther west in Baldwin County. The Jefferson County Courthouse (1904), a Neoclassical building designed by W. F. Denny, sits on the site of the original capitol.

By 1860 Jefferson County had 41 free blacks, 6,045 slaves, and 4,133 whites, of whom 431 were slaveholders. During the Civil War (1861-65), Louisville was a target on General William T. Sherman's march to the sea, and stores and houses on Broad Street were burned.

Jefferson County has maintained an agrarian base since its founding. In 1860 there were 475 farms. The 2002 U.S. Department of Agriculture Census showed 388 farms on a total of 137,217 acres across Jefferson County. Historically, cotton was the major cash crop. The Jefferson Energy Cooperative, based in Wrens, provides power for the area's farms, including cotton, wheat, timber, cattle, and dairy operations.

The author Erskine Caldwell (1903-87), though born in Coweta County, spent his young adult years in Jefferson County, where his father, a Presbyterian minister, was posted in the town of Wrens. Though he worked as a writer for the local newspaper, his job as a driver for a country doctor had greater impact. On house calls, he saw the squalid living conditions of early-twentieth-century sharecroppers and day laborers. His two most successful novels, *Tobacco Road* (1932) and *God's Little Acre* (1933), were inspired by his observations of the hard lives they led. *You Have Seen Their Faces* (1937), with the photographer Margaret Bourke-White (his second wife), also reflected his experiences during this time. As a journalist, he exposed in national magazine articles the mistreatment of tenant farmers in Jefferson and adjacent counties.

Other well-known residents of Jefferson County include two Georgia governors, William Schley and

Howell Cobb, as well as Cobb's brother, jurist Thomas R. R. Cobb, who served as a general during the Civil War. Another Confederate general, Ambrose Wright, was born in Louisville and later became owner and editor of the *Augusta Chronicle*. Prominent twentieth-century state legislator Roy V. Harris also grew up in the county.

Wildfire History

Recent data show that a majority of the fastest growing areas in the U.S. are in wildfire-prone environments. It is not a surprise that some of these fastest growing areas are in Georgia. In last decade of the 20th Century, Georgia's population increased substantially. Homeowners in Georgia must contend with natural hazards including wildfire, tornados, and flooding. This combination of factors – burgeoning population, abundant natural areas, development pressures, and lack of public awareness makes Georgia a perfect state for creating solutions to various hazards. Georgia is looked to throughout the southern region as a leader in comprehensive and hazard mitigation planning.

Many of Georgia's existing and new residents living in the urban interface are unaware of the vital role fire plays in our landscape and that their homes are extremely vulnerable to wildfire damage. Balancing development pressures with wildfire risk reduction and education creates a unique challenge for local governments, emergency managers, and wildfire management agencies such as the Georgia Forestry Commission.

Over the past ten years, Jefferson County has averaged 59 reported wildfires per year. The occurrence of these fires is fairly uniform throughout the year with a slight peak in the months of February and March and a slight decrease during the fall months. These fires have burned an average of 210 acres annually. While the numbers of fires remain fairly similar every month, there is a marked difference in the monthly acreage lost. The monthly acres lost during the late winter through summer period show a tenfold increase over the acres lost during the fall and early winter. Additionally while the annual numbers of fires have not increased noticeably during the 10 year period that records are available, the annual acreage lost appears to have decreased in later years. This perhaps a result of the increase in the practice of prescribed burning. The local Georgia Forestry Commission office needs to be commended for their valiant work increasing their very impressive prescribed burning regiment. The Glascock / Jefferson Unit lead their district in Central Georgia for burning. Despite their work, more homes are being built outside of traditional communities into the wildland urban interface. With this migration of people to the wildland urban interface the potential for a wildfire disaster continues to increase for Jefferson County.

The leading causes of these fires in Jefferson County were escaped agricultural fires and arson which came to almost 50 percent of all fires reported. Though these causes are a bit disturbing, local efforts of outreach and education can easily curb this problem.

County = Jefferson	Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	3	↑	0.55	1.40	4.80
Children	Children	11	↑	4.46	4.40	1.68
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	16	↑	163.55	8.00	67.42
Debris: Construction Land Clearing	Debris: Construction Land Clearing	1		0.65	1.00	4.28
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	10	↑	14.05	5.00	9.09
Debris: Household Garbage	Debris: Household Garbage	1		0.10	1.60	4.97
Debris: Other	Debris: Other	4	↑	17.60	2.20	6.64
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	14	↑	15.76	13.60	16.56
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	2		1.80	5.00	13.64
Incendiary	Incendiary	1		0.20	2.40	8.17
Lightning	Lightning	8	↑	33.42	5.60	12.79
Machine Use	Machine Use	17	↑	43.39	14.80	42.64
Miscellaneous	Miscellaneous	21	↑	14.55	9.80	17.62
Railroad	Railroad	1	↑	1.90	0.40	0.45

IV. COMMUNITY BASE MAP

V. COMMUNITY WILDFIRE RISK ASSESSMENT

The Wildland-Urban Interface

There are many definitions of the Wildland-Urban Interface (WUI), however from a fire management perspective it is commonly defined as an area where structures and other human development meet or intermingles with undeveloped wildland or vegetative fuels. As fire is dependent on a certain set of conditions, the National Wildfire Coordinating Group has defined the wildland-urban interface as a set of conditions that exists in or near areas of wildland fuels, regardless of ownership. This set of conditions includes type of vegetation, building construction, accessibility, lot size, topography and other factors such as weather and humidity. When these conditions are present in certain combinations, they make some communities more vulnerable to wildfire damage than others. This "set of conditions" method is perhaps the best way to define wildland-urban interface areas when planning for wildfire prevention, mitigation, and protection activities.

There are three major categories of wildland-urban interface. Depending on the set of conditions present, any of these areas may be at risk from wildfire. A wildfire risk assessment can determine the level of risk.

1. "Boundary" wildland-urban interface is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.

2. "Intermix" wildland-urban interface areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.

3. "Island" wildland-urban interface, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands.

(courtesy *Fire Ecology and Wildfire Mitigation in Florida* 2004)

Wildland Urban Interface Hazards

Firefighters in the wildland urban interface may encounter hazards other than the fire itself, such as hazardous materials, utility lines and poor access.

- Hazardous Materials

    - Common chemicals used around the home may be a direct hazard to firefighters from flammability, explosion potential and/or vapors or off-gassing. Such chemicals include paint, varnish and other flammable liquids; fertilizer; pesticides; cleansers; aerosol cans, fireworks, batteries and ammunition. In addition, some common household products such as plastics may give off very toxic fumes when they burn. Stay OUT of the smoke from burning structures and any unknown sources such as trash piles.

- Illicit Activities

    - Marijuana plantations or drug production labs may be found in wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered, as well as booby traps.

- Propane tanks

    - Both large (household size) and small (gas grill size) liquefied propane gas (LPG) tanks can present hazards to firefighters, including explosion. See the "LPG Tank Hazards" discussion for details.

- Utility lines

    - Utility lines may be located above and below ground and may be cut or damaged by tools

or equipment. Don't spray water on utility lines or boxes.

- Septic tanks and fields
    - Below-ground structures may not be readily apparent and may not support the weight of engines or other apparatus.

- New construction materials
    - Many new construction materials have comparatively low melting points and may "off-gas" extremely hazardous vapors. Plastic decking materials that resemble wood are becoming more common and may begin softening and losing structural strength at 180° F, though they normally do not sustain combustion once direct flame is removed. However, if they continue to burn they exhibit the characteristics of flammable liquids.

- Pets and livestock
    - Pets and livestock may be left when residents evacuate and will likely be highly stressed, making them more inclined to bite and kick. Firefighters should not put themselves at risk to rescue pets or livestock.

- Evacuation occurring
    - Firefighters may be taking structural protection actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property, and firefighters may need to disengage from fighting fire to contact law enforcement officers for assistance. In most jurisdictions firefighters do not have the authority to force evacuations. Firefighters should not put themselves at risk trying to protect someone who will not evacuate!

- Limited access
    - Narrow one-lane roads with no turn-around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized-up and an evacuation plan for all emergency personnel should be developed.

The wildland fire risk assessments conducted in 2011 by the Jeffersn County Fire Department and the Georgia Forestry Commission returned an average score of 112, placing Jefferson County in the “very high risk” hazard range. The risk assessment instrument used to evaluate wildfire hazards to

Jefferson County's WUI was the Hazard and Wildfire Risk Assessment Checklist. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard score for Jefferson County:

- Dead end roads with inadequate turn arounds
- Narrow roads without drivable shoulders
- Long, narrow, and poorly labeled driveways
- Limited street signs and homes not clearly addressed
- Thick, highly flammable vegetation surrounding many homes
- Minimal defensible space around structures
- Homes with wooden siding and roofs with heavy accumulations of vegetative debris
- No pressurized or non-pressurized water systems available
- Above ground utilities
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildups in adjacent wildlands
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations
- Distance from fire stations
- Lack of homeowner or community organizations

The Communities-at-Risk within Jefferson County that led to its **Very High Hazard** risk rating are:

Community	Score	Hazard Rating
Ogeechee Heights	**114**	**Very High Hazard**
Taylor Lane	**54**	**Moderate Hazard**
Golf Drive	**105**	**Very High Hazard**
Berrien Branch	**71**	**Moderate Hazard**
Casson Creek Subdivision	**120**	**Very High Hazard**
Oak Hill Subdivision	**101**	**Very High Hazard**
Stellaville Community	**128**	**Extreme Hazard**
Mathews Community	**105**	**Very High Hazard**
Red McDonald Community	**156**	**Extreme Hazard**
Sitadey Oaks Community	**147**	**Extreme Hazard**
Gus Perdue Community	**116**	**Very High Hazard**
Country Club Circle	**74**	**Moderate Hazard**
Kelly Quarter	**142**	**Extreme Hazard**
Whitley Community	**115**	**Very High Hazard**
Deerwood Circle	**110**	**Very High Hazard**
Sylvan Grove	**93**	**High Hazard**
Brown Terrace	**78**	**High Hazard**
Jefferson County Average	**107**	**Very High Hazard**

These hazard ratings were completed by the Georgia Forestry Commission's local office and Community Wildfire Protection Specialist during the month of October. The Georgia Forestry Commission Hazard and Wildfire Risk Assessment Score Sheets were used. This document evaluates communities (groups of homes) based upon six criteria: community access, surrounding vegetation, building construction, fire protection, utilities and additional rating factors. The cumulative wildfire hazard rating scores range from a low rating of 0 to 50 points to an extreme hazard rating with over 120 points. The cumulative wildfire hazard rating scores help establish priorities for mitigation activities in the CWPP Action Plan. Those various mitigation recommendations are provided below the action plan created for Jefferson County.

VI. COMMUNITY HAZARDS MAPS

See Attached Maps

VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As Central Georgia continues to see increased growth from other areas seeking less crowded and warmer climes, new development will occur more frequently on forest and wildland areas. The County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

Over the past 20 years, much has been learned about how and why homes burn during wildland fire emergencies. Perhaps most importantly, case histories and research have shown that even in the most severe circumstances, wildland fire disasters can be avoided. Homes can be designed, built and maintained to withstand a wildfire even in the absence of fire services on the scene. The national Firewise Communities program is a national awareness initiative to help people understand that they don't have to be victims in a wildfire emergency. The National Fire Protection Association has produced two standards for reference: NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

The following recommendations were developed by the Jefferson County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county and city officials. A priority order was determined based on which mitigation projects would best reduce the hazard of wildfire in the assessment area.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Primary Protection for Community and Its Essential Infrastructure		
Treatment Area	Treatment Types	Treatment Method(s)
1. All Structures	Create minimum of 30-feet of defensible space**	Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.
2. Applicable Structures	Reduce structural ignitability**	Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.
3. Community Clean-up Day	Cutting, mowing, pruning**	Cut, prune, and mow vegetation in shared community spaces.
4. Driveway Access	Culvert installation	See that adequate lengths of culverts are installed to allow emergency vehicle access.
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds.
Proposed Community Wildland Fuel Reduction Priorities		
Treatment Area	Treatment Types	Treatment Method(s)
1. Adjacent WUI Lands	Reduce hazardous fuels	Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas. County resolution to state recommending that the Ga Forestry Commission not charge for prescribed burning in WUI areas. Seek grant for WUI mitigation team.

2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Locate additional dry hydrants as needed.
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear. Investigate need for "brush" trucks near communities at risk.
3. Water Sources	Drafting equipment	Investigate need for additional drafting pumps.
4. Personnel	Training	Obtain Wildland Fire Suppression training for fire personnel to include S130, S190, and S215.
**Actions to be taken by homeowners and community stakeholders		

Proposed Education and Outreach Priorities

1. Conduct "How to Have a Firewise Home" Workshop for County Residents
Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Distribute materials promoting Firewise practices and planning through local community and governmental meetings.

2. Conduct "Firewise" Workshop for Community Leaders
Arrange for GFC Firewise Coordinator to work with local community leaders and governmental officials on the importance of "Firewise Planning" in developing ordinances and codes as the county as the need arises. Identified "communities-at-risk" including: Kelly Quarter, Mathews Community Stellaville, and Ogeechee Heights should be sought after for inclusion in the National Firewise Communities Program.
3. Spring Clean-up Event
Conduct clean-up event every spring involving the Georgia Forestry Commission, Jefferson County Fire Departments, Cities of Wrens, Louisville, Wadley and local residence of rural Jefferson County. Set up information table with educational materials and refreshments. Initiate the event with a morning briefing by GFC Firewise coordinator and local fire officials detailing plans for the day and safety precautions. Activities to include the following: • Clean flammable vegetative material from roofs and gutters • Trim shrubs and vines to 30 feet away from structures • Trim overhanging limbs • Clean hazardous or flammable debris from adjacent properties
4. Informational Packets
Develop and distribute informational packets to be distributed by realtors and insurance agents. Included in the packets are the following: • Be Firewise Around Your Home • Firewise Guide to Landscape and Construction • Firewise Communities USA Bookmarks
5. Wildfire Protection Display
Create and exhibit a display for the general public at the local events. Display can be independent or combined with the Georgia Forestry Commission display.
6. Press
Invite the local and regional news media to community "Firewise" functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Jefferson County.

VIII. ACTION PLAN

Roles and Responsibilities

The following roles and responsibilities have been developed to implement the action plan:

Role	Responsibility
Hazardous Fuels and Structural Ignitability Reduction	
Jefferson County WUI Fire Council	Create this informal team or council comprised of residents, GFC officials, County Fire department officials, a representative from the city and county government and the EMA Director for Jefferson County. Meet periodically to review progress towards mitigation goals, appoint and delegate special activities, work with federal, state, and local officials to assess progress and develop future goals and action plans. Work with residents to implement projects and Firewise activities.
Key Messages to focus on	1 Defensible Space and Firewise Landscaping 2 Debris Burning Safety 3 Firewise information for homeowners 4 Prescribed burning benefits
Communications objectives	1 Create public awareness for fire danger and defensible space issues 2 Identify most significant human cause fire issues 3 Enlist public support to help prevent these causes 4 Encourage people to employ fire prevention and defensible spaces in their communities.
Target Audiences	1 Homeowners 2 Forest Landowners and users 3 Civic Groups 4 School Groups
Methods	1 News Releases 2 Personal Contacts 3 Key messages and prevention tips 4 Visuals such as signs, brochures and posters

Spring Clean-up Day	
Event Coordinator	Coordinate day's events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.
Publicity Coordinator	Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.
Work Supervisor	Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, Jefferson County Fire Departments, and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local city and county officials, develop safety protocol. Supervise work and monitor activities for safety the day of the event.

Funding Needs

The following funding is needed to implement the action plan:

Project	Estimated Cost	Potential Funding Source(s)
1. Create a minimum of 30 feet of defensible space around structures	Varies	Residents will supply labor and fund required work on their own properties.
2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material.	Varies	Residents will supply labor and fund required work on their own properties.
3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.	No Cost	To be adopted by city and county government.
4. Spring Cleanup Day	Varies	Community Business Donations.
5. Fuel Reduction Activities	$15 / acre	FEMA & USFS Grants

POTENTIAL FUNDING SOURCES:

As funding is questionable in these times of tight government budgets and economic uncertainty, unconventional means should be identified whereby the need for funding can be reduced or eliminated.

Publications / Brochures –

- FIREWISE materials are available for cost of shipping only at www.firewise.org.
- Another source of mitigation information can be found at www.nfpa.org.
- Access to reduced cost or free of charge copy services should be sought whereby publications can be reproduced.
- Free of charge public meeting areas should be identified where communities could gather to be educated regarding prevention and firewise principles.

Mitigation –

- Community Protection Grant:
    - USFS sponsored prescribed burn program. Communities with at risk properties that lie within 3 miles of the USFS border may apply with the GFC to have their forest land prescribed burned free of charge.
- FEMA Mitigation Policy MRR-2-08-01: through GEMA - Hazard Mitigation Grant Program (HMGP) and Pre Disaster Mitigation (PDM)
    - To provide technical and financial assistance to local governments to assist in the implementation of long term cost effective hazard mitigation measures.
    - This policy addresses wildfire mitigation for the purpose of reducing the threat to all-risk structures through creating defensible space, structural protection through the application of ignition resistant construction, and limited hazardous fuels reduction to protect life and property.
    - With a complete and registered plan (addendum to the State plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP if the county is declared under a wildfire disaster.
- GFC - Plowing and burning assistance can be provided through the Georgia Forestry Commission as a low cost option for mitigation efforts.
- Individual Homeowners –
    - In most cases of structural protection ultimately falls on the responsibility of the community and the homeowner. They will bear the cost; yet they will reap the benefit from properly implemented mitigation efforts.
    - GEMA Grant - PDM (See above)

Ultimately it is our goal to help the communities by identifying the communities threatened with a high risk to wildfire and educate those communities on methods to implement on reducing those risks.

Assessment Strategy

To accurately assess progress and effectiveness for the action plan, the Jefferson County WUI Fire Council will implement the following:

- Annual wildfire risk assessment will be conducted to re-assess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning, and clearing of defensible space) will be incorporated into an annual renewal of the original action plan.
- Mitigation efforts that could not be funded in the requested year will be incorporated into the annual renewal of the original action plan.
- Continuing educational and outreach programs will be conducted and assessed for effectiveness. Workshops will be evaluated based on attendance and post surveys that are distributed by mail 1month and 6 months following workshop date.
- The Jefferson County WUI Council will publish an annual report detailing mitigation projects initiated and completed, progress for ongoing actions, funds received, funds spent, and in-kind services utilized. The report will include a "state of the community" section that critically evaluates mitigation progress and identifies areas for improvement. Recommendations will be incorporated into the annual renewal of the action plan.
- An annual survey will be distributed to residents soliciting information on individual mitigation efforts on their own property (e.g., defensible space). Responses will be tallied and reviewed at the next Jefferson County WUI Council meeting. Needed actions will be discussed and delegated.

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. An agreed-upon schedule for meeting to review accomplishments, solve problems, and plan for the future should extend beyond the scope of this plan. Without this follow up this plan will have limited value

GEORGIA FORESTRY COMMISSION

P. O. Box 819Macon, GA 312021-800-GA-TREESGaTrees.org

The Georgia Forestry Commission provides leadership, service, and education in the protection and conservation of Georgia's forest resources. An Equal Opportunity Employer and Service Provider

GEORGIA DROUGHT MANAGEMENT PLAN

1) DROUGHT DECLARATION PROCESS

2) AGENCIES and ORGANIZATIONS

3) PRE-DROUGHT STRATEGIES

4) DROUGHT RESPONSES

5) DROUGHT INDICATORS and TRIGGERS

6) CLIMATE DIVISIONS MAP

March 26, 2003

GEORGIA DROUGHT MANAGEMENT PLAN
Preamble

The Georgia Drought Management Plan as approved by the Department of Natural Resources Board on March 26, 2003 consists of pre-drought mitigation strategies and drought response strategies.

Pre-drought mitigation strategies are measures designed to minimize the potential effect of drought. They are water conservation measures predominantly.

Drought response strategies are measures or actions to be implemented during various stages of drought.

The Georgia General Assembly and the Board of Natural Resources have previously assigned the Environmental Protection Division director significant drought management responsibilities and mandates. The director also shall have those designated responsibilities and mandates contained herein.

Divisions of DNR are required to implement provisions of this plan as soon as practicable.

Non-DNR state, federal, and local agencies and other organizations identified herein are encouraged to implement those aspects of the plan identified as appropriate to the entity as soon as practicable.

The actions and responses contained in this document are the result of a collaboration of approximately 85 citizens with an interest and expertise in water related matters.

These citizens represent a geographical and political cross section of the state, as well as a cross section of business, industry, environmental, and water management.

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Section 1) DROUGHT DECLARATION PROCESS

The following is the process for declaring drought conditions and responses:

1A): The State Climatologist's office and EPD will routinely monitor and evaluate stream flows, lake levels, precipitation, groundwater levels, and other climatic indicators that are supplied by several cooperating entities, principally the U. S. Army Corps of Engineers, the US Geological Service, and the National Drought Mitigation Center. These indicators reflect the health of the hydrologic system. They are referred to as drought indicators in this document. The indicators for each of Georgia's nine-climate divisions are described in section six of this document.

Each of the nine-climate divisions has several indicators. If any one of the indicators in any one or more of the nine climate divisions reaches or passes a certain prescribed condition for two consecutive months, a preliminary evaluation by the state climatologist and the EPD director is triggered.

If the preliminary evaluation indicates the possible need for a drought response declaration for that climate division and all or part of the relative hydrologic regions in and adjacent to that climate division, the director will consult with members of the Drought Response Committee (see 1E) to determine the potential severity of the drought condition(s), and the expected impacts. The director, in consultation with the committee, will make a determination of the appropriate level of response, if any, to be made. Response guidance for each level of drought severity is provided by this plan, but particular drought conditions may require greater or lesser responses than those contained herein.

The director and, as appropriate, other members of the committee will notify the local RDC's, local governments and water supply providers as to the appropriate action to be taken. Press releases will be prepared explaining the situation and state response requirements.

The State Climatologist and EPD will continue to monitor the drought indicators for indication of changing conditions, and will act in response to those changing conditions. The director will consult with the Committee as necessary and will keep the Committee apprised of changes in climate conditions.

As further explained in the Drought Indicators section of this plan, as conditions improve a conservative approach is to be taken. All of the drought indicators for the climate division should be in a more favorable condition for at least four consecutive months before the director takes action to decrease the level of drought response requirements.

1B): Numerous agencies and organizations are tasked in this plan with some level of water resource or water related management responsibilities. EPD and those agencies and organizations shall coordinate closely and share information about their drought or water conservation concerns and solutions.

1C): The Drought Response Committee shall review this plan at least every five years, and after each drought event to evaluate the performance and suitability of the drought indicators, the effect of the pre-drought and drought responses, and to what extent the plan is being followed. Based on this evaluation, the Committee shall make appropriate changes.

1D): The pre-drought strategies contained in this plan are principally water conservation strategies. They should be implemented and followed at all times, not just during a drought situation. The DNR water conservation coordinator, as well as some agencies, RDC's, local governments, and water supply providers have (or will develop) water conservation plans. Those plans and this drought management plan should be as seamless and non-conflicting as possible. As water conservation plans are developed, they should, at a minimum, reflect the pre-drought strategies of this plan as appropriate to the responsibilities and audience of the planning entity. As those plans are developed, they shall be provided to EPD. If appropriate, this plan shall be modified to reflect the measure(s) contained in those plans.

1E): The director shall convene as necessary a Drought Response Committee. The committee membership shall include the EPD Director as convener and chair, as well as senior managers of DNR's WRD, P2AD, and CRD and the water conservation coordinator. Also, DCA, GDOA, GEMA, GFC, GSWCC, GW&PCA, OSC, ARC, GUAC, USACE, USGS, USF&WS, one RDC, one NGO, and one representative organization each of the business community and agriculture industry, shall be represented.

1F): This plan recommends incentives and actions that may require funding. Funding requests (grants and/or appropriations) shall be developed by the participating agencies and supported by the committee.

Section 2): Agencies and organizations:

Acronyms

ACCG	Association County Commissioners of Georgia
ARC	Atlanta Regional Commission
CE	Cooperating Entities
CES	Cooperative Extension Service
CRD	Coastal Resources Division, Georgia Department of Natural Resources
DCA	Department of Community Affairs
DNR	Department of Natural Resources
EPD	Environmental Protection Division, Georgia Department of Natural Resources
FB	Farm Bureau
GDHR	Georgia Department of Human Resources
GDOA	Georgia Department of Agriculture
GEFA	Georgia Environmental Facilities Authority
GEMA	Georgia Emergency Management Agency
GEP	Georgia Environmental Partnership
GFA	Georgia Forestry Association
GFC	Georgia Forestry Commission
GMA	Georgia Municipal Association
GRWA	Georgia Rural Water Association
GSWCC	Georgia Soil and Water Conservation Commission
GUAC	Georgia Urban Agriculture Coalition
GW&PCA	Georgia Water and Pollution Control Association
ME	Marine Extension
NGO	Non-Government Organization
OSC	Office of the State Climatologist
P2AD	Pollution Prevention Assistance Division, Georgia Department of Natural Resources
RDC	Regional Development Center(s)
UGA	University of Georgia
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USG	University System of Georgia
USGS	U.S. Geologic Survey
WRD	Wildlife Resources Division, Georgia Department of Natural Resources

GEORGIA DROUGHT MANAGEMENT PLAN

PRE-DROUGHT STRATEGIES AND DROUGHT RESPONSES
SECTION 3 - PRE-DROUGHT STRATEGIES

"Pre-drought strategies" are longer-term actions, implemented before a drought, for the purposes of preparedness, mitigation, monitoring, and conservation. "Drought responses" are shorter-term actions, implemented during a drought, according to the level of drought severity.

Section 3A: MUNICIPAL AND INDUSTRIAL-- PRE-DROUGHT STRATEGIES

1. State actions

- Formalize the Drought Response Committee as a means of expediting communications among state, local, and federal agencies and non-governmental entities. [EPD, OSC, CE]

- Establish a drought communications system between the state and local governments and water systems. [EPD, OSC]

- Provide guidance to the local governments and water supply providers on long-term water supply, conservation and drought contingency planning. [DNR, EPD]

- Review the local governments and water supply providers' conservation and drought contingency plans. [EPD]

- Work with the golf course and turf industry to establish criteria for drought-tolerant golf courses. [EPD, P2AD]

- Encourage water re-use as opposed to additional withdrawals of raw water. [EPD, P2AD]

- Work with local water systems to provide water efficiency education for industry & business. [P2AD, CES]

- Through the Georgia Environmental Partnership, conduct voluntary water audits for businesses that use water for production of a product or service. [P2AD]

- Identify vulnerable water dependent industries (e.g. poultry, seafood, urban horticulture), and, as necessary and as funding is available, fund research to help determine impacts and improve predictive capabilities. As a long-term strategy, develop programs to assist communities impacted by drought effects on vulnerable industries. [P2AD, USG, CE, GDCA]

- Develop criteria for a voluntary certification program for landscape professionals (landscapers, golf course mangers, irrigation installers). [GUAC, EPD]

· The DNR water conservation coordinator is charged with developing and implementing a statewide water conservation program to encourage local and regional conservation measures. [EPD, DNR conservation coordinator, CE]

· Develop and implement an incentive program to encourage more efficient use of existing water supplies. [DNR, EPD, GDCA]

· At all times, including non-drought conditions, unless further restricted by the director or local authorities, outdoor watering shall follow the schedule specified in Section 4A. Exemptions to such schedule will be in accordance with Section 4A.

2. Local/regional actions

· Develop and implement a drought management and conservation plan, incorporating as many of the actions as are appropriate to the local or regional entity

- Assess and classify drought vulnerability of individual water systems (e.g., # of days/weeks supply remaining under certain drought conditions, water source, and soil moisture).

- Define pre-determined drought responses, with outdoor watering restrictions being at least as restrictive as the state minimum requirements listed below.

- Establish a drought communications system from local governments and water supply systems to the public.

SECTION 3B: AGRICULTURE -- PRE-DROUGHT STRATEGIES

1. Farmer Irrigation Education

- Recommend that farmers attend classes in best management practices and conservation irrigation, prior to (i) receiving a permit, (ii) using a new irrigation system, or (iii) irrigating for a coming announced drought season. [EPD, OSC, CE]

- Provide for additional continuing education opportunities for farmers throughout the year. [CES]

- Distribute to existing permit holders and encourage the use of best management practices, conservation irrigation, efficient use of irrigation systems, and the Cooperative Extension Service's water conservation guidelines. [EPD, P2AD, CES]

- Collaborate with Cooperative Extension Service to develop web-based information directly linked to Stripling Irrigation Research Park and supporting faculty, the Hooks-Hanner Center, and other research facilities. [EPD]

- Develop electronic database for communicating with permit holders. [EPD, CE]

- Encourage the development and distribution of information on water efficient irrigation techniques. [EPD, P2AD, CES]

2. Field / Crop Type Management

- Encourage the use of more drought resistant crops, subject to market conditions. [CES, CE]

- Encourage the use of innovative cultivation techniques to reduce the amount of water needed or lost by a crop during summer. [CES, CE]

- The appropriate agencies should conduct crop irrigation efficiency studies. [CES, UGA]

- Provide farmers with normal year, real time irrigation, irrigation scheduling, and crop evaporation/transpiration information. [EPD, OSC, CES]

- Monitor soil moisture and provide real time data to farmers. [EPD, CES, OSC]

3. Irrigation Equipment Management

- For new systems, encourage the installation of water efficient irrigation technology. [EPD, CE, CES, GSWCC]

- For older systems, recommend retrofitting with newer and better irrigation technology (e.g., travelers or water cannons replaced by spray on drops or under plastic drip irrigation for vegetable crops). Set goal for complete overhaul in 5 to 7 years. Recommend updating any system over ten years old. [EPD, CE, CES, GSWCC]

- Provide information and encourage farmers to take advantage of available financial incentives (tax credits, BMP cost share programs, buy-back programs, etc.) for retrofitting and updating older or less efficient systems. Prepare and distribute a list of such incentives. [GSWCC, FB]

- Recommend irrigation system efficiency audits every five to seven years. [GSWCC, CES, EPD]

4. Government Programs

- Improve irrigation permit data to create a high degree of confidence in the information on ownership, location, system type, water source, pump capacity, and acres irrigated for every irrigation system in Georgia. Use this information to determine which watersheds and aquifers will be strongly affected by agricultural water use, especially in droughts. [EPD, CES]

- Improve on the agriculture irrigation water measurement and accounting statewide. [EPD, GSWCC]

- Improve communications and cooperation among farmers and relevant state and Federal agencies regarding available assistance during drought conditions. [EPD, GDOA, GSWCC, GEFA]

- Support legislation and efforts (research, loan opportunities, and infrastructure improvements) to enhance the ability of farmers to secure adequate water supplies during drought conditions. For instance, establish low interest loan program for construction of on-farm off-stream storage facilities (ponds for surface water irrigation). [EPD, DNR, GEFA, CES, CE, GSWCC]

SECTION 3C: WATER QUALITY, FLORA, AND FAUNA -- PRE-DROUGHT STRATEGIES

1. State actions

- Encourage all responsible agencies to promote voluntary water conservation through activities such as:
  - Developing and distributing information (e.g., public service announcements) to all user groups about:
    - Efficient irrigation methods and techniques,
    - Efficient home water use,
    - Available services (i.e., audits, literature, technical information including evaporation – transpiration rates, and other information).
  - Recommending and explore providing for incentives, or requiring installation and use of automatic rain shut-off devices for irrigation systems.
  - Providing for and conducting "Home and Farm Assist" water conservation audits.
  - Encourage and explore providing for incentives for irrigation users to have irrigation system audits performed.
  - Providing updated information and incentives for water efficient/low impact landscaping.
  - Establishing conservation pricing rate structures.
  - Encourage agriculture and industry to maximize water use efficiency at all levels of production and services. [EPD, P2AD]

- Monitor streamflow and precipitation at selected locations on critical streams [USGS, EPD,]
- Monitor water quality parameters, such as temperature and dissolved oxygen at selected critical streams [USGS, EPD]
- Provide the streamflow and water-quality data in real time for use by drought managers; and work with drought managers to optimize information delivery and use [USGS, EPD]
- Evaluate the impact of water withdrawals on flow patterns, and the impact of wastewater discharges on water quality during drought [USGS, EPD, USF&WS, WRD]

- Investigate indicators and develop tools to analyze drought impacts for waterways such as:
  - Coastal ecosystems (considering flows, flooding periods, salinity, and previous season's spawning or harvest success of sensitive species)
  - Thermal refuges such as the Flint River
  - Trout streams

  [CRD, WRD, ME, UGA]

- Improve the agencies capabilities and resources to monitor land-disturbing activities that might result in erosion and sedimentation violations. This capability is important because, during drought, dry soil surfaces can increase the rate of runoff while low stream-flows make streams more vulnerable to the effects of storm-water runoff. [EPD, GSWCC, CES]

- Identify funding mechanisms and develop rescue and reintroduction protocols for threatened and endangered species during extreme events. [USFWS, WRD]

- Develop and execute an effort to identify pollutant load reduction opportunities by wastewater discharge permit holders (i.e., below levels in wastewater discharge permits). These reductions will be implemented during drought flow periods as a voluntary commitment on the part of permit holders. [EPD]

- Develop and execute an effort to identify opportunities for industry to decrease water use during drought periods (i.e., use less water in producing products and services during drought, and thereby potentially reducing quantity of wastewater discharged). Incentives ought to be considered to encourage voluntary participation. [P2AD]

- Evaluate the impact of water withdrawals on flow regimes and the impact of wastewater discharges on water quality during drought. [EPD, USGS, CE]

- Develop and promote implementation of sustainable lawn care programs based on selected BMPs and/or integrated pest management practices. Educate landscape professionals and individual homeowners on proper application of pesticides and fertilizers and conservation of water in order to reduce effects on water quality. The target audiences among landscape professionals include lawn maintenance contractors, landscape installation contractors, golf course superintendents, commercial lawn care providers and retail garden centers; education could be provided as part of a voluntary certification program for landscape professionals (see pre-drought M&I strategies). [P2AD, GUAC, GDOA, UGA, CES, CE]

- Encourage protection and restoration of vegetated stream buffers, including incentives for property owners to maintain buffers wider than the minimum required by state law. [EPD, CE]

- Provide for protection of recharge areas through measures including land purchase or acquisition of easements. [EPD, CE]

- Encourage and explore wildland fire mitigation measures (such as pre-suppression firebreaks, fuel reduction burning, mowing, and outdoor fire safety measures for homesteads and farms). [GFC, GFA]

- Enhance programs to assist landowners and farmers with outdoor burning. [GFC, GFA]

PRE-DROUGHT STRATEGIES AND DROUGHT RESPONSES

SECTION 4: DROUGHT RESPONSES

"Pre-drought strategies" are longer-term actions, implemented before a drought, for the purposes of preparedness, mitigation, monitoring, and conservation. "Drought responses" are shorter-term actions, implemented during a drought, according to the level of drought severity.

Section 4A: MUNICIPAL AND INDUSTRIAL -- DROUGHT RESPONSES

1. **Outdoor Watering Reduction Schedule:**

   - **Outdoor watering other than those exempted activities is to occur only on scheduled days**
   - **Prior to onset of declared drought conditions, outdoor water use can occur during any hours on the scheduled days.**
   - **During declared drought conditions, outdoor water use will only be allowed during scheduled hours on the scheduled days.**

   "Scheduled days are defined as follows":
   - Odd-numbered addresses may water on Tuesdays, Thursdays, and Sundays.
   - Even-numbered or unnumbered addresses may water on Mondays, Wednesdays, and Saturdays.

   "Scheduled weekend day is defined as follows":
   - Odd-numbered addresses may water on Sundays.
   - Even-numbered or unnumbered addresses may water on Saturdays.

   Schedule for Outdoor Water Use during Declared Drought Response Levels:

   Declared Drought Responses: Level One:

   Water on scheduled days - 12 midnight to 10 a.m - and - 4 p.m. to 12 midnight.

   Declared Drought Response: Level Two:

   Water on scheduled days - 12 midnight to 10 a.m.

   Declared Drought Response: Level Three:

   Water on scheduled weekend day - 12 midnight to 10 a.m.

   Declared Drought Response: Level Four:

   Complete outdoor water use ban

1a. Landscape Irrigation – Established Landscapes

Residential, commercial, industrial, governmental, and recreational landscapes:

° Established Landscapes using small capacity wells not requiring EPD water withdrawal permits for groundwater use are exempt from the above schedule.

° EPD will grant exemptions from the above schedule for use of recycled treated wastewater as determined on a case-by-case basis by EPD.

- Irrigation of personal food gardens is exempt from restrictions.
- Irrigation of landscapes (turf, ornamentals, annuals, and containerized plants) follows declared drought response levels schedule (above).

1b. Landscape Irrigation – Newly Installed Landscapes (in place less than 30 days)

Residential, commercial, industrial, governmental, and recreational landscapes

- Irrigation of landscapes (turf, ornamentals, annuals, and containerized plants) allowed any day of the week, during allowed hours for the level in effect, for a period of 30 days following installation. After this 30-day period, irrigation of newly installed landscapes follows schedule for established landscapes.
- For landscapes installed by licensed professionals, please see commercial exemptions below.

1c. Golf Courses

- Irrigation of fairways shall follow landscape irrigation schedules above, for unnumbered addresses.
    - Golf course using small capacity wells not requiring EPD water withdrawal permits for groundwater use are exempt from the above schedule
    - EPD will grant exemptions from the above schedule for use of recycled treated wastewater as determined on a case-by-case basis by EPD.
- Irrigation of greens and tees are exempt from restrictions.

1d. Other Restricted Outdoor Water Uses

Follow Basic schedule for Levels One and Two: Listed Activities are prohibited for Levels Three and Four.

- Filling installed swimming pools (except when necessary for health care or structural integrity)
- Washing vehicles, such as cars, boats, trailers, motorbikes, airplanes, golf carts
- Washing buildings or structures (except for immediate fire protection)
- Non-commercial fund-raisers, such as car washes
- Using water for ornamental purposes, such as fountains, reflecting pools, and waterfalls (Except when necessary to support aquatic life)

Basic schedule for Level One: Prohibited for Levels Two, Three, and Four.

- Washing hard surfaces, such as streets, gutters, sidewalks, driveways (Except when necessary for public health and safety)

Prohibited during all Levels

- Using hydrants for any purpose other than firefighting, public health, safety, or flushing.

2: Commercial Uses Exempt from State-Mandated Outdoor Water Use Restrictions

- Professional licensed landscapers, golf course contractors, and sports turf landscapers: during installation and 30 days following installation only. Professional landscapers must be licensed for commercial exemptions to apply.
- Irrigation contractors: during installation and as needed for proper maintenance and adjustments only
- Sod producers
- Ornamental growers
- Fruit and vegetable growers
- Retail garden centers
- Hydro-seeding
- Power-washing
- Construction sites (e.g., to re-implement vegetation after earth moving)
- Producers of food and fiber
- Car washes
- Other activities essential to daily business

Prudent water management will be expected of all commercial uses.
Note that some of these state allowed exemptions may be curtailed in drought response levels 3&4 by locally imposed restrictions

3: Local and Regional Options:

In the event of an emergency at the local water supply provider or government level, contact EPD and GEMA for assistance as appropriate.

In addition to the mandated requirements outlined above, local and regional authorities retain the option of going beyond the State's minimum provisions and specifying additional pre-drought strategies or drought responses within their jurisdiction. Action items to consider at the local/regional level include, but are not limited to, the following: developing system integration and interconnection to reduce drought vulnerability, placing additional water use restrictions on specific commercial uses, and placing additional restrictions on outdoor watering.

Water conservation and drought mitigation strategies should include conservation pricing. Local governments and water supply providers are strongly encouraged to evaluate a number of conservation pricing options and select the one that most readily satisfies their goals for water conservation. DNR's Water Conservation Manager, EPD and P2AD, as well as DCA, ARC and the RDC's can provide assistance in this effort.

- Non-conservation pricing: Defined, as decreasing or flat pricing as quantity used increases - should be eliminated.

- Conservation pricing: Defined as; 1) rates in which the unit price increases as the quantity used increases – or- 2) seasonal rates or excess-use surcharges to reduce peak demands during summer months - should replace non-conservation pricing.
- The conservation pricing base price should be sufficient to cover the costs of operating and maintaining the system. Income above this amount derived from increased charges to heavy users should be used to fund incentive programs to effect efficiency in water use.

Section 4B: Agriculture Drought Response:

- Implement the Flint River Drought Protection Act whenever severe drought conditions are predicted in the Flint River Basin. Measure and improve the effectiveness of the protective activities called for in the Act. [EPD]

Section 4C: WATER QUALITY, FLORA, AND FAUNA -- DROUGHT RESPONSES

1. Declared Drought Response Level One:

a. State actions

- Maintain minimal water quality parameters by:
  - Providing special releases from reservoirs and implementing innovative reservoir management to meet critical needs (e.g., alternative release patterns, controlling temperature of releases, changing storage purposes/authorized uses). (Implement only when not in violation or conflict with Federal Energy Regulatory Commission or Congressional authorizations.)
  - Reducing water withdrawals through implementation of the municipal and industrial section of this drought management plan.
  - Encouraging utilities and local governments to increase surveillance for sewer spills and leaks that may be more apparent as drought conditions worsen. [EPD, CE]
- Implement voluntary pollutant load reduction opportunities (i.e., below levels in wastewater discharge permits) when flows are less than the flow upon which discharge permit limits were established. [EPD]

- Implement industrial water reduction opportunities previously identified (i.e., use less water in producing products and services during drought, and thereby reducing quantity of water in waste stream). [P2AD, EPD]

b. Local /regional actions

- Require water conservation, building on on-going water conservation and education during non-drought periods and drawing on GUAC as a resource for urban irrigation. In addition to outdoor watering restrictions specified for M&I users, conservation-related drought responses at the regional or local level could include:
  - Running public service announcements about proper watering techniques, frequency.
  - Providing daily evaporation-transpiration rates for irrigation scheduling.
- Increase fire prevention measures during drought. [GFC, GFA, CES]

2. Declared Drought Response Levels Two through Four

- Continue Level one measures.
- Implement rescue and reintroduction of threatened and endangered species as previously identified thresholds are met. [USFWS, WRD]
- Evaluate pre-drought protocols and enhance if necessary to minimize any future drought impacts to threatened and endangered species. [USFWS, WRD]

SECTION 5 -- DROUGHT INDICATORS AND TRIGGERS

March 24, 2003

5A): Drought Indicators:

Drought indicators are variables that help to detect, characterize, and monitor changing climatic and drought conditions. This plan will use four primary indicators: precipitation, reservoir levels, groundwater levels, and streamflows. Indicators are selected for each of the nine climate divisions (CDs) in Georgia.

CD	Drought Indicators
1	SPI-3, SPI-6, SPI-12 Lake Allatoona Chattooga River at Summerville
2	SPI-3, SPI-6, SPI-12 Lake Lanier, Lake Allatoona Etowah River at Canton Chestatee River near Dahlonega
3	SPI-3, SPI-6, SPI-12 Lake Hartwell, Clark Hill Broad River near Bell Chattahoochee River near Cornelia
4	SPI-3, SPI-6, SPI-12 Flint River at Montezuma
5	SPI-3, SPI-6, SPI-12 Groundwater Wells (2) Oconee River at Dublin Ocmulgee River at Macon
6	SPI-3, SPI-6, SPI-12 Lake Hartwell, Clark Hill Ogeechee River near Eden
7	SPI-3, SPI-6, SPI-12 Groundwater Wells (9) Spring Creek near Iron City Ichawaynochaway Creek at Milford
8	SPI-3, SPI-6, SPI-12 Alapaha River at Statenville
9	SPI-3, SPI-6, SPI-12 Satilla River at Atkinson

PRECIPITATION

Standardized Precipitation Index (SPI-3, 6, 12) (Precipitation during the last 3, 6, and 12 months compared to the same months historically)

RESERVOIR LEVELS

Lake Allatoona
Lake Lanier
Lake Hartwell
Clark Hill

GROUNDWATER LEVELS

CD5 wells:
11AA01, 21T001

CD7 wells:
13L180, 12M017, 11K003, 13J004, 12K014, 10G313, 08K001, 08G001, 09F520

STREAMFLOWS

Chattooga River at Summerville (02398000)
Etowah River at Canton (02392000)
Chestatee River near Dahlonega (02333500)
Broad River near Bell (02192000)
Chattahoochee River near Cornelia (02331600)
Flint River at Montezuma (02349500)
Oconee River at Dublin (02223500)
Ocmulgee River at Macon (02213000)
Ogeechee River near Eden (02202500)
Spring Creek near Iron City (02357000)
Ichawaynochaway Creek at Milford (02353500)
Alapaha River at Statenville (02317500)
Satilla River at Atkinson (02228000)

5B): DROUGHT TRIGGERS

• Drought triggers are specific values of indicators that help to determine when each level of drought response should begin or end. This plan contains four levels of increasing severity. A level is triggered when an indicator value reaches a certain percentile. By using percentiles, multiple indicators can be compared and combined within a consistent framework. Additional triggers are developed for reservoir levels based on zones, and streamflows based on average annual discharge (AAD) and monthly 7Q10 (M7Q10). (Analytic procedures are described in Section 5C.)

• Triggers are used for both going into a drought and coming out of a drought. Note that triggers do not automatically invoke a level and required response. Rather, the triggers prompt an evaluation (described in Section IA) about the possible need to declare a certain drought response level and take appropriate measures.

• Going into a drought: When <u>any one of the triggers</u> for any one of the CDs is at a more severe level for at least <u>two</u> consecutive months, then an evaluation is conducted about whether to increase the level of response.

• Getting out of a drought: When <u>all of the triggers</u> for that CD are at less severe level for at least <u>four</u> consecutive months, then an evaluation is conducted about whether to decrease the level of response.

Conditions	**Percentiles for All Triggers: Precipitation, Reservoir Levels, Groundwater Levels, Streamflows**
Level 1	**0.20 – 0.35**
Level 2	**0.10 – 0.20**
Level 3	**0.05 – 0.10**
Level 4	**0.00 – 0.05**

Conditions	Reservoirs Levels: Rule Curves
Level 1	< Zone 1
Level 2	< Zone 2
Level 3	< Zone 3
Level 4	< Zone 4

Conditions	Streamflows: AAD / M7Q10
Level 1	< 80/60/50 % AAD
Level 2	< M7Q10 + (2/3 ?)
Level 3	< M7Q10 + (1/3 ?)
Level 4	< M7Q10

5C: ANALYTIC PROCEDURES FOR INDICATORS AND TRIGGERS

The four levels of this plan were based on percentiles, relative to each month. This approach was designed to provide statistical comparability among indicators, temporal and spatial consistency, and ease of interpretation. For instance, percentiles can be related to probabilities of occurrence, and used to compare current conditions with historic conditions.

The indicators were selected through an analysis of several hundred combinations, using actual data, to generate the triggering sequences that would have occurred historically. These sequences were then compared to retrospective assessments of conditions in each of the climate divisions, and in each of the sectors of municipal and industrial, agriculture, and environmental, to determine the indicators and triggers that would have performed the best for the periods before, during, and after a drought.

To transform indicator data to percentiles, the following procedures were used:

- For precipitation, percentiles were calculated directly from the SPI value, which is a statistical Z-score, for each climate division. The SPI-3, -6, and -12 represents total precipitation during a 3, 6, and 12 month period, relative to those same months historically. Percentiles can also be determined by fitting a gamma distribution to the long-term record, and then determining 3, 6, and 12-month anomalies, relative to the historic record.
- For reservoir levels, percentiles were calculated using an empirical cumulative distribution function, which is a ranking procedure using the historic record of data, analyzed by each month. In addition, reservoir triggers were based on reservoir rule curves, and levels were associated with each of the zones.
- For groundwater, percentiles were calculated from U.S.G.S. duration analyses for probabilities of exceedance, using detrended data, and triggers were based on the most severe level for a majority of the selected wells.
- For streamflows, percentiles were calculated from empirical cumulative distribution functions, using long-term and equivalent records of average flow data, analyzed by each month. In addition to percentiles, an algorithm using average annual discharge (AAD) and monthly 7Q10 (M7Q10) was used for streamflow triggers. Here, delta (Δ) is the difference between 80/60/50% AAD and M7Q10, and 80/60/50% refers to 80%AAD for January through April, 60%AAD for May, June, and December, and 50%AAD for July through November.

Through evaluations of the drought plan and its performance (Section IC, it is likely that indicators, trigger levels, data sources, and calculation methods may change. This drought plan is designed to remain flexible, and to accommodate procedures that would provide the most useful guidance and ability to minimize the adverse impacts of drought.

Jefferson County Emergency Management Agency

Emergency Operations Plan

Plan Approved:
19-FEB-13

Revised:
14-AUG-14

Jefferson County
EMERGENCY OPERATIONS PLAN

Local Resolution

Record of Revisions

Distribution List

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PREFACE

This Emergency Operations Plan (EOP) describes the management and coordination of resources and personnel during periods of major emergency. This comprehensive local emergency operations plan is developed to ensure mitigation and preparedness, appropriate response and timely recovery from natural and man made hazards which may affect residents of Jefferson County.

This plan supersedes the Emergency Operations Plan dated from old eLEOP. It incorporates guidance from the Georgia Emergency Management Agency (GEMA) as well as lessons learned from disasters and emergencies that have threatened Jefferson County. The Plan will be updated at the latest, every four years. The plan:

- Defines emergency response in compliance with the State-mandated Emergency Operations Plan process.
- Establishes emergency response policies that provide Departments and Agencies with guidance for the coordination and direction of municipal plans and procedures.
- Provides a basis for unified training and response exercises.

The plan consists of the following components:

- The Basic Plan describes the structure and processes comprising a county approach to incident management designed to integrate the efforts of municipal governments, the private sector, and non-governmental organizations. The Basic Plan includes the: purpose, situation, assumptions, concept of operations, organization, assignment of responsibilities, administration, logistics, planning and operational activities.
- Appendices provide other relevant supporting information, including terms, definitions, and authorities.
- Emergency Support Function Annexes detail the missions, policies, structures, and responsibilities of County agencies for coordinating resource and programmatic support to municipalities during Incidents of Critical Significance.
- Support Annexes prescribe guidance and describe functional processes and administrative requirements necessary to ensure efficient and effective implementation of incident management objectives.
- Incident Annexes address contingency or hazard situations requiring specialized application of the EOP. The Incident Annexes describe the missions, policies, responsibilities, and coordination processes that govern the interaction of public and private entities engaged in incident management and emergency response operations across a spectrum of potential hazards. Due to security precautions and changing nature of their operational procedures, these Annexes, their supporting plans, and operational supplements are published separately.

The following is a summary of the 15 Emergency Support Functions:

1. *Transportation*: Support and assist municipal, county, private sector, and voluntary organizations requiring transportation for an actual or potential Incident of Critical Significance.

2. *Communications*: Ensures the provision of communications support to municipal, county, and private-sector response efforts during an Incident of Critical Significance.

3. *Public Works and Engineering*: Coordinates and organizes the capabilities and resources of the municipal and county governments to facilitate the delivery of services, technical assistance, engineering expertise, construction management, and other support to prevent, prepare for, respond to, and/or recover from an Incident of Critical Significance.

4. *Firefighting*: Enable the detection and suppression of wild-land, rural, and urban fires resulting from, or occurring coincidentally with an Incident of Critical Significance.

5. *Emergency Management Services*: Responsible for supporting overall activities of the County Government for County incident management.

6. *Mass Care, Housing and Human Services*: Supports County-wide, municipal, and non-governmental organization efforts to address non-medical mass care, housing, and human services needs of individuals and/or families impacted by Incidents of Critical Significance.

7. *Resource Support*: Supports volunteer services, County agencies, and municipal governments tracking, providing, and/or requiring resource support before, during, and/or after Incidents of Critical Significance.

8. *Public Health and Medical Services*: Provide the mechanism for coordinated County assistance to supplement municipal resources in response to public health and medical care needs (to include veterinary and/or animal health issues when appropriate) for potential or actual Incidents of Critical Significance and/or during a developing potential health and medical situation.

9. *Search and Rescue*: Rapidly deploy components of the National US Response System to provide specialized life-saving assistance to municipal authorities during an Incident of Critical Significance.

10. *Hazardous Materials*: Coordinate County support in response to an actual or potential discharge and/or uncontrolled release of oil or hazardous materials during Incidents of Critical Significance.

11. *Agriculture and Natural Resources*: supports County and authorities and other agency efforts to address: Provision of nutrition assistance; control and eradication of an outbreak of a highly contagious or economically devastating animal/zoonotic

disease; assurance of food safety and food security and; protection of natural and cultural resources and historic properties.

12. *Energy*: Restore damaged energy systems and components during a potential of actual Incident of Critical Significance.

13. *Public Safety and Security Services*: Integrates County public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual Incidents of Critical Significance.

14. *Long Term Recovery and Mitigation*: Provides a framework for County Government support to municipal governments, nongovernmental organizations, and the private sector designed to enable community recovery from the long-term consequences of an Incident of Critical Significance.

15. *External Affairs*: Ensures that sufficient County assets are deployed to the field during a potential or actual Incident of Critical Significance to provide accurate, coordinated, and timely information to affected audiences, including governments, media, the private sector, and the populace.

BASIC PLAN

I. INTRODUCTION

Summary

This plan establishes a framework for emergency management planning and response to: prevent emergency situations; reduce vulnerability during disasters; establish capabilities to protect residents from effects of crisis; respond effectively and efficiently to actual emergencies; and provide for rapid recovery from any emergency or disaster affecting the local jurisdiction and Jefferson County.

This Emergency Operations Plan (EOP) is predicated on the National Incident Management System (NIMS) which integrates the capabilities and resources of various municipal jurisdictions, incident management and emergency response disciplines, nongovernmental organizations (NGOs), and the private sector into a cohesive, coordinated, and seamless framework for incident management. The EOP, using the NIMS, is an all-hazards plan that provides the structure and mechanisms for policy and operational coordination for incident management. Consistent with the model provided in the NIMS, the EOP can be partially or fully implemented in the context of a threat, anticipation of a significant event, or the response to a significant event. Selective implementation through the activation of one or more of the systems components allows maximum flexibility in meeting the unique operational and information-sharing requirements of the situation at hand and enabling effective interaction between various entities. The EOP, as the core operational plan for incident management, establishes county-level coordinating structures, processes, and protocols that will be incorporated into certain existing interagency incident- or hazard-specific plans (such as the Hurricane Plan) that is designed to implement specific statutory authorities and responsibilities of various departments and agencies in particular contingency.

Purpose

The purpose of the EOP is to establish a comprehensive, countywide, all-hazards approach to incident management across a spectrum of activities including prevention, preparedness, response, and recovery. The EOP incorporates best practices and procedures from various incident management disciplines - homeland security, emergency management, law enforcement, firefighting, hazardous materials response, public works, public health, emergency medical services, and responder and recovery worker health and safety - and integrates them into a unified coordinating structure. The EOP provides the framework for interaction with municipal governments; the private sector; and NGOs in the context of incident prevention, preparedness, response, and recovery activities. It describes capabilities and resources and establishes responsibilities, operational processes, and protocols to help protect from natural and manmade hazards; save lives; protect public health, safety, property, and the environment; and reduce adverse psychological consequences and disruptions. Finally, the EOP serves as the foundation for the development of detailed supplemental plans and procedures to effectively and efficiently implement incident management activities and assistance in the context of specific types of incidents.

The EOP, using the NIMS, establishes mechanisms to:

- Maximize the integration of incident-related prevention, preparedness, response, and recovery activities;
- Improve coordination and integration of County, municipal, private-sector, and nongovernmental organization partners;
- Maximize efficient utilization of resources needed for effective incident management and Critical Infrastructure/Key Resources protection and restoration;
- Improve incident management communications and increase situational awareness across jurisdictions and between the public and private sectors;
- Facilitate emergency mutual aid and emergency support to municipal governments;
- Provide a proactive and integrated response to catastrophic events; and
- Address linkages to other incident management and emergency response plans developed for specific types of incidents or hazards.

A number of plans are linked to the EOP in the context of disasters or emergencies, but remain as stand-alone documents in that they also provide detailed protocols for responding to routine incidents that normally are managed by County agencies without the need for supplemental coordination. The EOP also incorporates other existing emergency response and incident management plans (with appropriate modifications and revisions) as integrated components, operational supplements, or supporting tactical plans.

This plan consists of the following components:

Scope and Applicability

The EOP covers the full range of complex and constantly changing requirements in anticipation of or in response to threats or acts of terrorism, major disasters, and other emergencies. The EOP also provides the basis to initiate long-term community recovery and mitigation activities.

The EOP establishes interagency and multi-jurisdictional mechanisms for involvement in and coordination of, incident management operations.

This plan distinguishes between incidents that require County coordination, termed disasters or emergencies, and the majority of incidents that are handled by responsible jurisdictions or agencies through other established authorities and existing plans.

In addition, the EOP:

- Recognizes and incorporates the various jurisdictional and functional authorities of departments and agencies; municipal governments; and private-sector organizations in incident management.

- Details the specific incident management roles and responsibilities of the departments and agencies involved in incident management as defined in relevant statutes and directives.

- Establishes the multi-agency organizational structures and processes required to implement the authorities, roles, and responsibilities for incident management.

This plan is applicable to all departments and agencies that may be requested to provide assistance or conduct operations in the context of actual or potential disasters or emergencies.

Disasters or emergencies are high-impact events that require a coordinated and effective response by an appropriate combination of County, municipal, private-sector, and nongovernmental entities in order to save lives, minimize damage, and provide the basis for long-term community recovery and mitigation activities.

Key Concepts

This section summarizes key concepts that are reflected throughout the EOP.

- Systematic and coordinated incident management, including protocols for:
    - Coordinated action;
    - Alert and notification;
    - Mobilization of County resources to augment existing municipal capabilities;
    - Operating under differing threats or threat levels; and
    - Integration of crisis and consequence management functions.

- Proactive notification and deployment of resources in anticipation of or in response to catastrophic events in coordination and collaboration with municipal governments and private entities when possible.

- Organizing interagency efforts to minimize damage, restore impacted areas to pre-incident conditions if feasible, and/or implement programs to mitigate vulnerability to future events.

- Coordinating worker safety and health, private-sector involvement, and other activities that are common to the majority of incidents (see Support Annexes).

- Organizing ESFs to facilitate the delivery of critical resources, assets, and assistance. Departments and agencies are assigned to lead or support ESFs based on authorities, resources, and capabilities.

- Providing mechanisms for vertical and horizontal coordination, communications, and information sharing in response to threats or incidents. These mechanisms

facilitate coordination among municipal entities and the County Government, as well as between the public and private sectors.

- Facilitating support to County departments and agencies acting under the requesting department or agencys own authorities.
- Developing detailed supplemental operations, tactical, and hazard-specific contingency plans and procedures.
- Providing the basis for coordination of interdepartmental and municipal planning, training, exercising, assessment, coordination, and information exchange.

II. PLANNING ASSUMPTIONS AND CONSIDERATIONS

The EOP is based on the planning assumptions and considerations presented in this section.

- Incidents are typically managed at the lowest possible organizational and jurisdictional level.
- Incident management activities will be initiated and conducted using the principles contained in the NIMS and the ICS.
- The combined expertise and capabilities of government at all levels, the private sector, and nongovernmental organizations will be required to prevent, prepare for, respond to, and recover from disasters and emergencies.
- Disasters and emergencies require the Jefferson County Emergency Management Agency to coordinate operations and/or resources, and may:
    - Occur at any time with little or no warning in the context of a general or specific threat or hazard;
    - Require significant information-sharing at the unclassified and classified levels across multiple jurisdictions and between the public and private sectors;
    - Involve single or multiple jurisdictions;
    - Have significant regional impact and/or require significant regional information sharing, resource coordination, and/or assistance;
    - Span the spectrum of incident management to include prevention, preparedness, response, and recovery;
    - Involve multiple, highly varied hazards or threats on a regional scale;
    - Result in numerous casualties; fatalities; displaced people; property loss; disruption of normal life support systems, essential public services, and basic infrastructure; and significant damage to the environment;
    - Impact critical infrastructures across sectors;
    - Overwhelm capabilities of municipal governments, and private-sector infrastructure owners and operators;
    - Attract a sizeable influx of independent, spontaneous volunteers and supplies;
    - Require extremely short-notice asset coordination and response timelines; and
    - Require prolonged, sustained incident management operations and support activities.

- Top priorities for incident management are to:
    - Save lives and protect the health and safety of the public, responders, and recovery workers;
    - Ensure security of the county;
    - Prevent an imminent incident, including acts of terrorism, from occurring;
    - Protect and restore critical infrastructure and key resources;
    - Conduct law enforcement investigations to resolve the incident, apprehend the perpetrators, and collect and preserve evidence for prosecution and/or attribution;
    - Protect property and mitigate the damage and impact to individuals, communities, and the environment; and
    - Facilitate recovery of individuals, families, businesses, governments, and the environment.

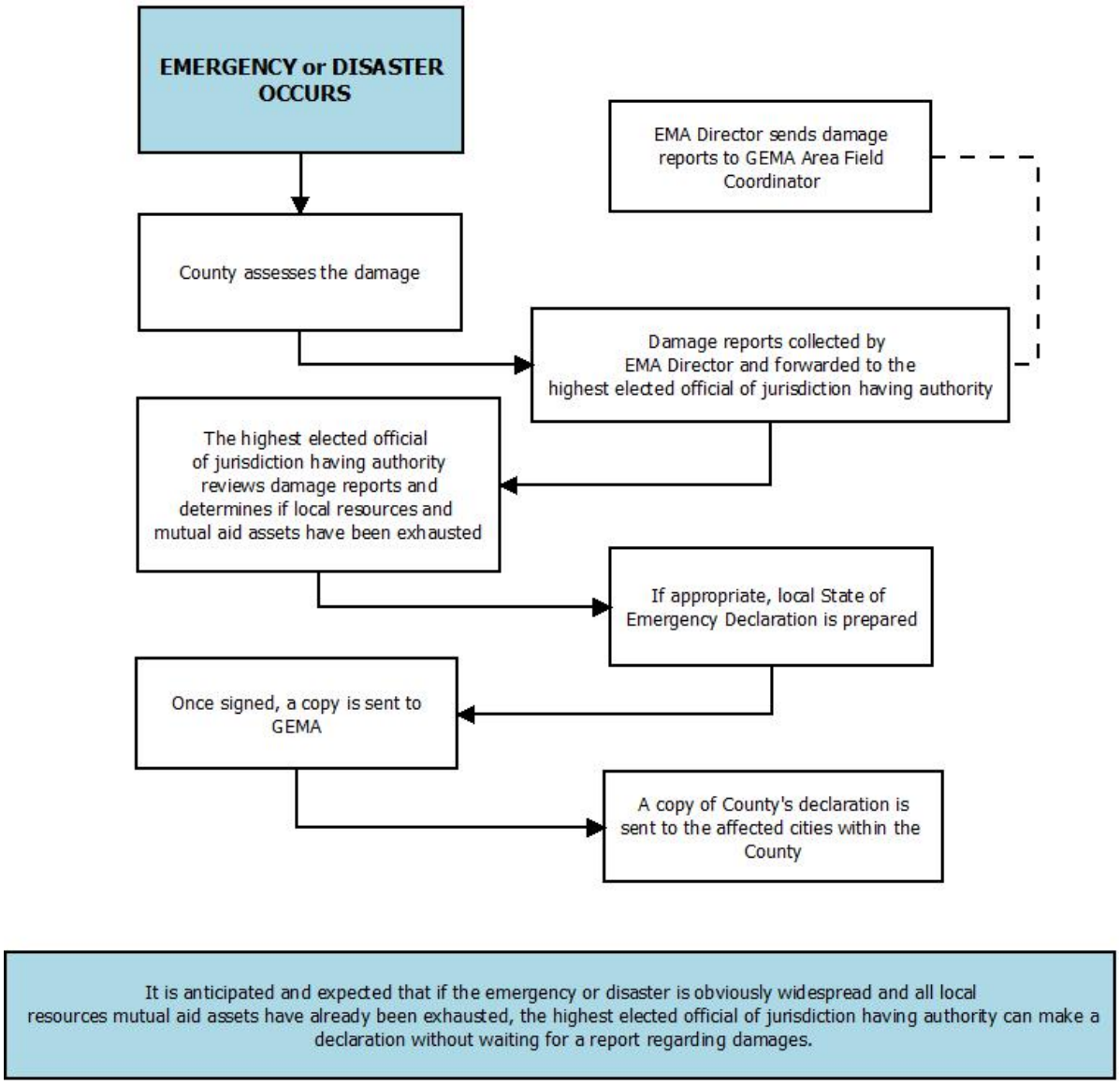
- Deployment of resources and incident management actions during an actual or potential terrorist incident are conducted in coordination with the Federal Bureau of Investigation (FBI).
- Departments and agencies at all levels of government and certain NGOs, such as the American Red Cross, may be required to deploy to disaster areas or emergency events on short notice to provide timely and effective mutual aid and/or intergovernmental assistance.
- The degree of County involvement in incident operations depends largely upon the specific authority or jurisdiction. Other factors that may be considered include:
    - The municipal needs and/or requests for external support, or ability to manage the incident;
    - The economic ability of the affected entity to recover from the incident;
    - The type or location of the incident;
    - The severity and magnitude of the incident; and
    - The need to protect the public health or welfare or the environment.
    - Departments and agencies support these mission in accordance with authorities and guidance and are expected to provide:
        - Initial and/or ongoing response, when warranted, under their own authorities and funding;

- Alert, notification, pre-positioning, and timely delivery of resources to enable the management of potential and actual disasters or emergencies; and

- Proactive support for catastrophic or potentially catastrophic incidents using protocols for expedited delivery of resources.

- For disasters or emergencies that are Presidentially declared, state and/or Federal support is delivered in accordance with relevant provisions of the Stafford Act. (Note that while all Presidentially declared disasters and emergencies under the Stafford Act are considered incidents of critical significance, not all incidents necessarily result in disaster or emergency declarations under the Stafford Act.)

Emergency Declaration Process



It is anticipated and expected that if the emergency or disaster is obviously widespread and all local resources mutual aid assets have already been exhausted, the highest elected official of jurisdiction having authority can make a declaration without waiting for a report regarding damages.

ESF MATRIX OF PRIMARY AND SUPPORT AGENCIES

Jefferson County	ESF														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Avera Fire Department				s					s	s					
Bartow Fire Department				s					s	s					
Bartow Police Department													s		
City of Avera	s		s		s		s					s		s	s
City Of Bartow	s		s		s		s					s		s	s
City Of Louisville	s	s	s		s		s					s		s	s
City Of Stapleton	s		s		s		s					s		s	s
City Of Wadley	s	s	s		s		s					s		s	s
City Of Wrens	s	s	s		s		s					s		s	s
Code Enforcement															
County Extension Service											P				
GA Forestry															
GA Power Louisville															
Gold Cross EMS								s							
Hillcrest Fire District				s					s	s					
Jefferson County 911		P													
Jefferson County C.I.															
Jefferson County Commissioner					s		s							s	s
Jefferson County Coroner								s					s		
Jefferson County DeFACS						P									
Jefferson County EMA					P	s	P		P			s		P	P
Jefferson County Health Dept								P							
Jefferson County Public Works			P									P			
Jefferson County School System	P					s									
Jefferson County Sheriff Department	s												P		
Jefferson County Transit	s														
Jefferson Energy												s			
Jefferson Hospital															
Louisville Fire Department				P					s	P					
Louisville Police Department	s												s		
Matthews Fire District				s					s	s					
Ogeechee Veterinary Associates PC											s				
Priority Care EMS								s							
Pro Gas Company															

Red Cross Emergency Service Director						s		s							
Stapleton Fire Department				s					s	s					
Town Country Gas															
Wadley Fire Dept				s					s	s					
Wadley Police Department	s												s		
Wrens Fire Department				s					s	s					
Wrens Police Department													s		

P = PRIMARY AGENCY:

Responsible for Management of the ESF; Devise, coordinate, and implement disaster recovery plans for the ESF.

S = SUPPORT AGENCY:

Responsible to provide expertise, experience, and assts to the ESF as needed or requested by the Primary Agency.

ESF's:
1 = TRANSPORTATION
2 = COMMUNICATIONS
3 = PUBLIC WORKS / ENGINEERING
4 = FIREFIGHTING
5 = EMERGENCY MANAGEMENT
6 = MASS CARE
7 = RESOURCE SUPPORT
8 = PUBLIC HEALTH / MEDICAL
9 = SEARCH AND RESCUE
10 = HAZARDOUS MATERIALS
11 = AG / NATURAL RESOURCES
12 = ENERGY
13 = PUBLIC SAFETY
14 = LONG TERM RECOVERY
15 = EXTERNAL AFFAIRS

Emergency Shelter Details

Louisville U. M.C
Address: 301 West 7th St
City: Louisville Ga
Zip: 30434
Contact: Pastor
Phone: 4786257669
Max Capacity: 103
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Jefferson County High School
Address: Mennonite Church Rd
City: Louisville Ga
Zip: 30434
Contact: Molly Howard
Phone: 4786259991
Max Capacity: 328
Size:
Shower: Y
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

South Jefferson Community Center
Address: College St
City: Wadley
Zip: 30477
Contact: Sally Adams
Phone: 4783770492
Max Capacity: 300
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals: Y
24 Hour: Y

Wrens Baptist Church
Address: 500 North Main St. NE
City:
Zip: 30833
Contact: Scott McKenny, Pastor
Phone: 7067999956
Max Capacity: 125
Size:

Shower: Y
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Louisville Academy
Address: 901 Mimosa Dr
City:
Zip: 30434
Contact: Hullet Kitterman
Phone: 4786253039
Max Capacity: 200
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Louisville Middle School
Address: 1200 School St
City:
Zip: 30434
Contact: Ken Hilderbrant
Phone: 7063397386
Max Capacity: 250
Size:
Shower: Y
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Carver Elementary School
Address: Bedingfield St
City:
Zip: 30434
Contact: Tiffany Pitts
Phone: 706-466-1871
Max Capacity: 150
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Wrens Middle School
Address: 101 Griffin St
City: Wrens
Zip: 30833
Contact: Julia Wells
Phone: 7065476580
Max Capacity: 150
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Jefferson County Leisure Center
Address: 201 East 7th St
City: Louisville
Zip: 30434
Contact: Tammie Bennett
Phone: 4786258820
Max Capacity: 50
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Jefferson County Service Center
Address: 1114 Clarksmille Rd
City: Louisville
Zip: 30434
Contact: Vicky Saxson
Phone: 9126826168
Max Capacity: 50
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Thomas Jefferson Academy
Address: 2264 Hwy 1 North
City: Louisville
Zip: 30434
Contact: Chuck Wimberly
Phone: 4784942325
Max Capacity: 100
Size:
Shower: Y
Bathroom: Y

Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Bartow Community Center
Address: Academy Center
City: Bartow
Zip: 30413
Contact: Dewayne Morris, Mayor
Phone: 7062140696
Max Capacity: 150
Size:
Shower: N
Bathroom:
Cook: N
Handicap: Y
Animals:
24 Hour: Y

Wrens Elementary School
Address: 1711 Hwy17 North
City: Wrens
Zip: 30833
Contact: Sharon Dye
Phone: 7065472063
Max Capacity: 100
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour:

Stapleton Baptist Church
Address: 360 Harvey St.
City: Stapleton
Zip: 30823
Contact: Pastor
Phone: 7065472371
Max Capacity: 50
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

Pleasant Grove Baptist Church
Address: 1350 Church St.
City: Avera
Zip: 30803
Contact: Donald Lumpkin
Phone: 7065472947

Max Capacity: 50
Size:
Shower: N
Bathroom: Y
Cook: Y
Handicap: Y
Animals:
24 Hour: Y

GEORGIA EMERGENCY OPERATIONS PLAN

2013

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PREFACE

The Georgia Emergency Operations Plan (GEOP) outlines how state agencies in Georgia prepare for and responds to various types of natural and manmade disasters. This document is in keeping with decades of planning and coordination between local, state, federal and non-governmental partners operating within or in support of the State of Georgia. The GEOP is specifically written to be consistent the National Response Framework and to support the local emergency operations plans for the 159 counties in Georgia to ensure seamless integration of federal and state resources when necessary.

The (GEOP) is written for all executives, private sector and non-governmental organization (NGOs) leaders, local emergency managers and any other individuals or organizations expected to work in or for Georgia performing emergency management functions. The GEOP is intended to clarify expectations for an effective response.

The GEOP is based on the authority of the State Government of Georgia, specifically that portion of the Official Code of Georgia, Title 38, Section 3, Articles 1 through 3, known as the Georgia Emergency Management Act of 1981, and is compliant with the National Incident Management System and supports the National Response Framework. It is promulgated by State Executive order and supports the Georgia Emergency Operations Command.

This plan consists of five components, which in aggregate outline the state emergency management program.

These components include:

1. **Basic Plan**
2. **Emergency Support Function and GaDoD Annexes**
3. **Support Annexes**
4. **Hazard, Threat and Incident Specific Annexes**
5. **Companion Documents**

2011 State of Georgia Ha ard Mitigation Strategy

GEMA

Georgia Ha ard Mitigation Strategy
Standard and Enhanced

Effective April 1, 2011– March 31, 2014

Prepared by the Georgia Emergency Management Agency

E ECUTIVE SUMMARY

The State of Georgia remains committed to reducing the devastating impacts of natural hazard events on the citizens of this state. Because of Georgia's potential to experience a wide range of natural disasters, the Georgia Emergency Management Agency (GEMA) envelops the concept of all-hazards planning. Not only does all-hazards planning apply to natural disasters such as meteorological, hydrological, and geophysical events but also to anthropogenic hazards such as social disruption, technological, biological and man-made events.

In response to this potential for disaster and in response to federal requirements, an aggregation of applicable state and federal agencies, county and local public officials, emergency management personnel, and GEMA concertedly pursues solutions to reducing or eliminating Georgia's future losses to hazard events. The result of these efforts of ensuring a safer Georgia lies within this document.

Georgia's Hazard Mitigation Strategy or Standard Plan, is a result of the State of Georgia's continued efforts to reduce the State's exposure to losses from natural hazards and to maintain eligibility for the full range of disaster assistance available under the Robert T. Stafford Disaster Relief and Emergency Assistance Act as amended by the Disaster Mitigation Act of 2000 (DMA2K). Georgia's initial Hazard Mitigation Strategy under DMA2K, which met approval in April of 2005, chronicled the original state planning efforts as well as presented a statewide hazard risk assessment and mitigation strategy. Due to new Federal Emergency Management Agency (FEMA) guidelines for the strategy's update, the mitigation planning effort has been updated with a more detailed account of the state planning process; a more detailed and methodical assessment of Georgia's hazard history, hazard risk, and social vulnerability; and an updated version of specific mitigation goals and objectives as well as a progress report of previously proposed actions. The updated Standard Plan continues to provide more information derived from local participation in mitigation efforts including a local capability assessment and the local mitigation plan development process. Also, the plan updates information regarding the maintenance of the strategy throughout the eligible years and regarding the next three year update process.

As demonstrated through this and previous plan updates, the State of Georgia is committed to the promotion of hazard mitigation. By reviewing its previous efforts of hazard mitigation through the plan development process, the state recognizes that effective mitigation begins with local participation and eventually leads to the modification of the hazard event and/or to the reduction of human vulnerability, which ultimately lead to the reduction of losses. By developing this document as a structure for implementing hazard mitigation efforts, the State of Georgia has been given the opportunity to adjust and adapt the strategy to remain relevant. In essence, Georgia's Standard Plan remains a living document that evolves throughout each three year cycle to protect Georgia from all hazard events.

CSRA REGIONAL PLAN 2035

REGIONAL ASSESSMENT
COMMUNITY PARTICIPATION PLAN
REGIONAL AGENDA

Central Savannah River Area
CSRA
RC
Regional Commission

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CSRA REGIONAL PLAN 2035

Regional Assessment

Section 1: INTRODUCTION

1.1 Regional Plan Overview

The CSRA Regional Plan 2035 (hereinafter 'the Plan') is the long-range plan for the management of the region's projected growth by local governments and the CSRA Regional Commission. The Plan's horizon is twenty years but will be updated in ten years to address changing regional conditions. The process is divided into three distinct parts, per the *Regional Planning Requirements* established by the Georgia Department of Community Affairs (DCA):

- Regional Assessment: Identification and analysis of existing conditions using available data
- Stakeholder Involvement Program: Strategy for public participation in the development of the Regional Agenda
- Regional Agenda: Regional vision and implementation program

The resulting analysis will assess the state of the region's socioeconomic, land use, and environmental opportunities and threats. The CSRA's vision and goals, together with an appraisal of the region, will set the strategic direction for the regional agenda. The regional agenda establishes program priorities for implementation.

This document contains the Regional Assessment and the Stakeholder Involvement Program, which will set the stage for the development of the Regional Agenda.

1.2 Regional Assessment Overview

This Regional Assessment includes a thorough analysis of issues and opportunities backed by extensive data gathering and analysis. It contains a map of Projected Development Patterns and an assessment of Areas Requiring Special Attention, which includes a range of categories, such as areas where rapid development is occurring or where infill or redevelopment is desirable. Finally, it includes an assessment of the region's development patterns in light of the state's Quality Community Objectives.

1.3 Stakeholder Involvement Program

This program outlines the process for participation by stakeholders in the creation of the Regional Agenda. It identifies stakeholders, outlines participation techniques and includes a schedule for the completion of the Regional Agenda.

1.4 Regional Agenda

The Regional Agenda is the culmination of the planning process. It will include a vision of the CSRA's future, along with an implementation program for how to get there.

1.5 How to Use This Plan

The CSRA Regional Plan is intended to serve as a reference and implementation point for potential users. A number of companion planning documents should be used in conjunction with the Regional Plan. These include:

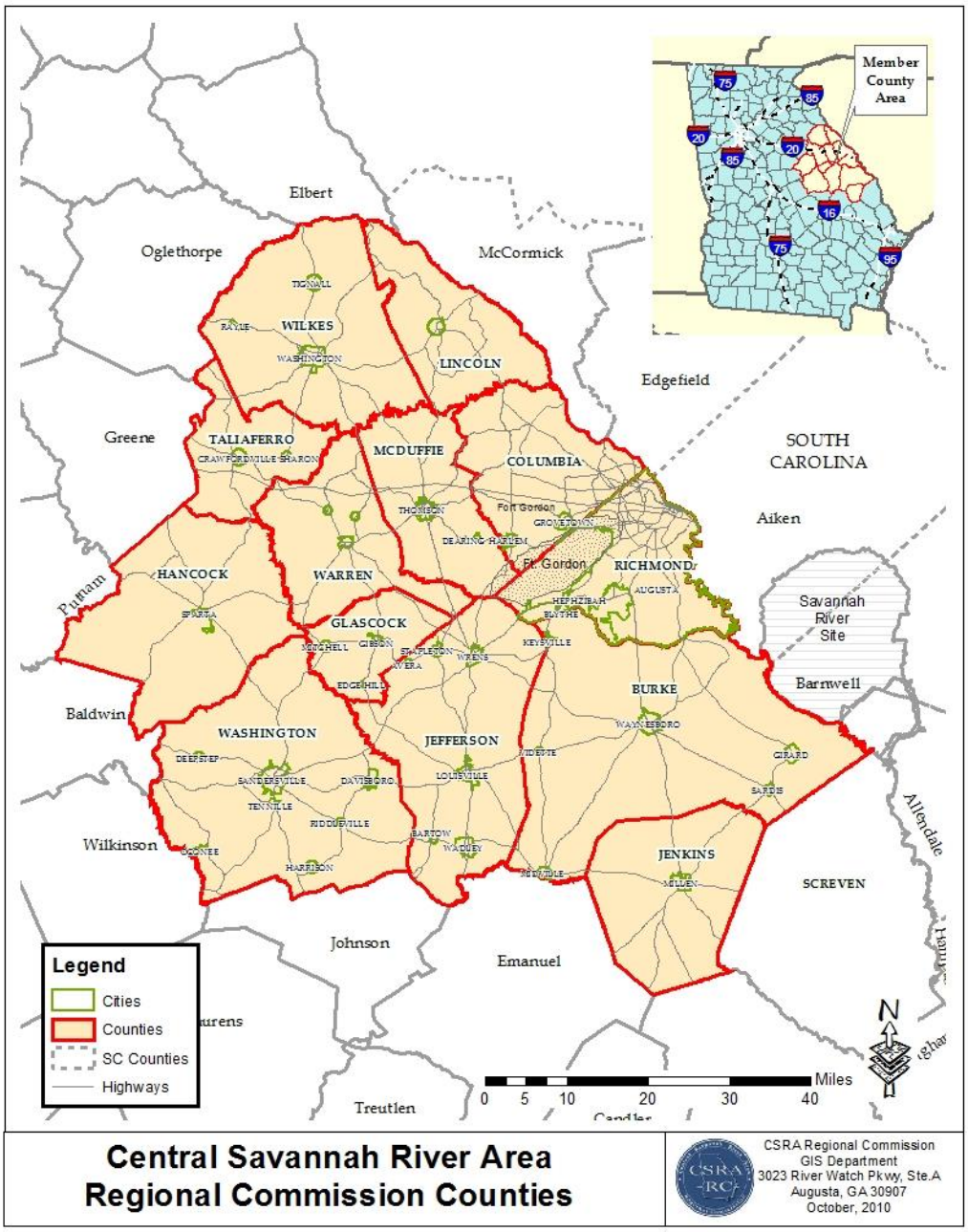
- CSRA Comprehensive Economic Development Strategy
- Augusta Area Diversification Initiative
- Fort Gordon Joint Land Use Study
- CSRA Regionally Important Resources Plan
- County and City Comprehensive Plans

- Statewide Plans

1.6 The Central Savannah River Area

The Central Savannah River Area (CSRA) encompasses an area nearly 6,500 square miles — the largest political region in the state. Located in the east-central Georgia, along the Savannah River, the CSRA includes 13 counties: Burke, Columbia, Glascock, Hancock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Taliaferro, Warren, Washington, and Wilkes (Figure 1). The largest city in the CSRA is Augusta – the economic core of the region.

Figure 1: CSRA Location Map



1.6 About the CSRA Regional Commission

The CSRA Regional Commission (CSRA RC) serves thirteen counties and 41 municipalities in east-central Georgia, providing services in the areas of planning and land-use development, grant writing and administration, economic development, historic preservation, and geographic information systems development and implementation to member jurisdictions.

Additionally, the CSRA RC serves as the state-designated Area Agency on Aging (AAA) for the region. In this capacity, the CSRA RC works with local providers to ensure that services for the elderly are provided and monitored. By utilizing pass-through funds from state and federal sources, the Commission's AAA serves as a gateway for programs and resources aimed at helping senior citizens improve the quality of their lives during their retirement years.

The CSRA RC is also the parent company of the CSRA Business Lending. CSRA Business Lending makes loans to small and start-up businesses for the purposes of creating jobs and economic development opportunities within its service area.

Section 2: POTENTIAL REGIONAL ISSUES AND OPPORTUNITIES

2. Potential Issues and Opportunities

This section provides an objective, professional analysis (not based on public or stakeholder input) of the region. This section, presented in divisions relating to classical planning analysis areas such as housing and transportation, presents a preliminary catalog of potential focal points to be examined during the development of Plan.

The Georgia Department of Community Affairs (DCA) publishes a list of typical issues and opportunities as part of the *State Planning Goals and Objectives*. This list, in addition to an evaluation for the region's consistency with the DCA's *Quality Community Objectives*, was used as the starting point for developing the Potential Issues and Opportunities list (please refer to the Appendix of this document for an assessment of the region based on these objectives). Further issues and opportunities were identified as part of a thorough analysis of regional datasets and regional development patterns. The issues and opportunities compiled in this Regional Assessment are preliminary in nature; they will be reexamined and a final list will be assembled as part of the Regional Agenda planning process.

2.1 Population

The population growth illustrated in historical trends is expected to continue over the twenty-year period. However, this growth is not uniform across the CSRA.

- By 2035, the 13-county region's population is projected at 575,304, an increase of approximately 26.5 percent over the 2010 population and 67.4 percent from 1980. This increase will have implications for housing, jobs, transportation, land use, environmental resources, and infrastructure.
- While the urbanized area (Augusta-Richmond and Columbia Counties) has enjoyed population growth, the rural areas continue to lag. Eight of eleven rural counties lost population since the last census. What little population growth is occurring in rural areas is further away from incorporated municipalities, where infrastructure is already established. Should this trend continue, county governments will have to pay more to extend and maintain public services in these areas.
- Household incomes continue to lag the state average. Most concerning, nearly a third of CSRA households are at income levels near or below the poverty line.
- The CSRA is aging rapidly. The proportion of residents 45 years and older has increased 10 percent since 1990, while the proportion of residents under 29 years declined by 8 percent. Needs associated with an aging population (affordable housing, transportation, and medical services) are anticipated to increase over the next twenty years.

Detailed data on population can be found on pages 21 through 25.

2.2 Housing

> ***State Planning Housing Goal****: To ensure that all residents of the state have access to adequate and affordable housing.*

The CSRA's housing stock is both a strength and weakness for residents.

- The region's housing stock contains a good balance of owner and rental units (55 percent and 30 percent respectively).
- Housing stocks are plentiful in the urbanized area but inadequate in rural counties. Although the official vacancy rate stands at 15 percent, over a third of vacant units are unavailable for purchase or rent. Another 17.2 percent of the region's housing is valued at less than $50,000, an indicator of poor housing conditions.
- Median ($99,937) and average ($127,997) housing values are among the lowest in the state and nation. Low housing costs are a major reason for the CSRA's low cost of living, and a major strength for new residents and business attraction.
- While affordable housing values are a benefit for the region, sprawl threatens county budgets by requiring public services further away from established municipalities. Sprawl also makes it more likely that transportation costs will increase for residents as they have to commute farther to work.

Detailed data on housing can be found on pages 25 through 27.

2.3 Economic Development

> ***State Planning Economic Development Goal****: To achieve a growing and balanced economy, consistent with the prudent management of the state's resources, that equitably benefits all segments of the population.*

The CSRA region's economy is diverse, and communities typically make concerted efforts to attract new business. However, coordinated economic development planning and promotion could be strengthened, both on a region-wide scale and between proximately-located communities.

- The CSRA RC serves as the region's Economic Development District in coordination with the U.S. Economic Development Administration (EDA), and encourages cooperation between local government officials, community-based organizations, and the private sector. Per EDA requirements, the CSRA RC developed a Comprehensive Economic Development Strategy (CEDS) in 2011.
- The CSRA's job base has shifted significantly in the last two decades. The service sector now accounts for 60 percent of all CSRA jobs, an increase of 20 percent since 1990. The goods-producing sector has declined from 35 percent in 1990 to less than 15 percent of employment today.

- The region's jobs balance is heavily slanted towards the urbanized area. Augusta-Richmond and Columbia Counties account for 78 percent of the CSRA's 233,147 jobs. The urbanized area also accounted for over 90 percent of job growth since 1990. Seven of 11 rural CSRA counties have fewer jobs today than they did in 1990. This corresponds to trends in population, which saw eight of those counties lose residents since 2000.

- Unemployment levels in the CSRA's rural counties have been chronic during the last decade. All rural counties have unemployment rates above the state average (9.7 percent). Three counties (Hancock, Jenkins, and Warren) have unemployment rates of 17 percent or higher. All rural counties meet the criteria of Economically Distressed Areas, according to the federal Public Works and Economic Development Act. The rapid increase in rural unemployment was caused by the closure of major manufacturing employers, which had sustained local economies.

- The CSRA lags behind the state in educational performance, raising concerns about workforce readiness in the new service economy. CSRA scores on the Scholastic Aptitude Test, Georgia High School Graduations Tests, and End-of-Course Assessments all fall below the state average.

Detailed data on economic development can be found on pages 27 through 50.

2.4 Land Use

State Planning Land Use and Transportation Goal*: To ensure the coordination of land use planning and transportation planning throughout the state in support of efficient growth and development patterns that will promote sustainable economic development, protection of natural and cultural resources and provision of adequate and affordable housing.*

The CSRA is a primarily rural region, with an urban core in the Augusta-Richmond County and Columbia County area. Approximately 88 percent of the region's land area is rural.

- The vast majority of the region's housing and commercial growth has occurred in the urbanized area. This corresponds to population trends, which saw the two urban counties gain 35,509 residents since 2000, while the 11 rural counties saw a net gain of only 433 people. Even that figure masks population decline in much of the area. In fact, eight counties - Hancock, Jefferson, Jenkins, Lincoln, Taliaferro, Warren, Washington and Wilkes – combined to lose 2,550 residents since 2000.

- The growth effect that has occurred in the last three decades (development away from established municipalities) resulted in sprawl beyond cities and city centers.

- While cities and downtown areas still have the largest densities, this is quickly eroding as residents locate into unincorporated areas. Revitalization efforts are critical in stemming city population decline.

- If the trend of growth in unincorporated areas continues, this will result in the region's county governments incurring additional costs of providing public infrastructure (such as water & sewer lines, parks, libraries, etc.) further away from established population centers.

Detailed data on land use can be found on pages 50 through 52.

2.5 Transportation and Community Facilities

State Planning Community Facilities and Services Goal*: To ensure the provision of community facilities and services throughout the state to support efficient growth and development patterns that will protect and enhance the quality of life of Georgia's residents.*

The region's physical infrastructure is extensive and diverse, featuring state and federal highways, hospitals, facilities to manage solid waste and wastewater, and other resources. Most community facilities are locally operated and maintained.

- The CSRA has a small network of interstates and four-lane U.S. highways that provide east-west and north-south access to regional and national markets. Interstates 20 and 520, as well as U.S. 1 and U.S. 25 link the CSRA's major cities to each other as well as to the state's major cities, such as Atlanta, Macon, and Savannah (Figure 25). However, the highway system does not fully meet needs throughout the region. Combined, the interstates and U.S 1 and U.S. 25 serve only portions of the CSRA, leaving large areas in the northern and southern part of the region without adequate highway infrastructure.

- While the transportation system serves automobiles relatively well, it is less friendly to other users. Many streets are designed only with vehicle traffic in mind, making them unsafe or unpleasant for pedestrians and cyclists. Moreover, development patterns in many cases continue to separate uses and rely on arterial roads to make connections. These two factors limit mobility for many residents and contribute to inactivity and growing obesity levels for children and adults in the region.

- The region's two primary rail freight carriers: Norfolk Southern and CSX Rail Service carry among the lowest volumes of rail freight in the state. Only Augusta-Richmond and Warren Counties have direct connections to major rail freight hubs in Atlanta and Macon.

- Augusta Regional Airport provides regularly-scheduled commercial flights. The airport currently has 21 daily departures and 22 daily arrivals to three major hubs (Atlanta, Charlotte and Dallas) from three carriers (Delta, U.S. Air and American). In calendar year 2010, the annual passenger volume at the Augusta airport was 246,587, compared to 198,489 (24.2 percent increase) in 2009. Between 2005 and 2010, Augusta Regional's growth rate was 57.9 percent, making it one of the fastest growing small commercial services airports in the nation. Air freight information is unavailable.

- Fixed-route public transit in the CSRA is limited to Augusta-Richmond County. Augusta Public Transit operates nine routes from Monday through Saturday, with daily ridership averaging approximately 3,000. The rest of the CSRA is served with demand-response service.

- Most areas of the CSRA outside of the urbanized parts of Columbia and Augusta-Richmond Counties lag in both choice and quality of broadband service. Most of these areas are not served by any land broadband service provider, making slower satellite internet service the only option. The CSRA RC considers broadband the region's top infrastructure priority and has been aggressively pursuing state and federal funding to remedy this deficiency by extending broadband infrastructure to areas of the region that currently lack it.

- Local community facilities such as parks, water and sewage services, public water, libraries, and medical facilities, are mostly located within incorporated municipalities. Access to some public facilities, however, remains a concern as rural county populations are widely dispersed.

Detailed data on transportation and community facilities can be found on pages 52 through 58.

2.6 Natural and Environmental Resources

***State Planning Natural and Cultural Resources Goal**: To conserve and protect the environmental, natural and cultural resources of Georgia's communities, regions and the state.*

The CSRA contains a wealth of natural and environmental resources that provide the region with numerous social, economic, and environmental benefits. However, these same resources are in need of protection if they are to continue providing these benefits.

- Timber resources account for 2.3 million acres in the CSRA, and are a major driver of the region's forest products industry.

- Kaolin, a type of clay, is the major mineral extracted in the region, providing substantial employment in Jefferson and Washington counties. This sector is under pressure from South American kaolin, which is now being exported around the world.

- Farmland accounts for 22.1 percent of the CSRA's land mass, and sustains approximately 5 percent of the region's employment. The number of farms in the region today is less than half the number of farms in operation in 1982, highlighting a trend towards large, industrial-scale farming.

- The CSRA contains a number of protected watershed areas in Lincoln, Wilkes, McDuffie, Warren, Burke, and Augusta-Richmond counties. The region's watersheds will need to be monitored to ensure future development does not render them vulnerable.

- The region's river basins and major lakes ensure adequate water supplies. However, continued growth of the urbanized area and out-of-region impacts over the next twenty years will place pressure on these supplies, as well as pollution threats from growth.

- The CSRA has a rich history and counts no less than 184 properties and districts listed in the National Register of Historic Places, including National Historic Landmarks, State Historic Parks and Sites. Most of these resources, however, lack preservation plans.

Detailed data on natural and environmental resources can be found on page 58 through 73.

2.7 Intergovernmental Coordination

***State Planning Intergovernmental Coordination Goal**: To ensure the coordination of local planning efforts with other local service providers and authorities, with neighboring communities and with state and regional plans and programs.*

The CSRA RC, founded in 1962, offers member governments avenues to coordinate planning, economic development, workforce development, and aging services. Other instances of intergovernmental coordination takes place between municipalities within a given county, between counties, from region to region, and with state and federal government agencies.

- The CSRA RC Area Agency on Aging provides consolidated services for seniors (including transportation) for the CSRA.
- The CSRA RC serves as the Economic Development District for the region.
- The CSRA RC serves as the coordinating mechanism for CSRA Unified Development Council (UDC). The UDC is a project-oriented volunteer organization comprised of economic, industrial, and regional development organizations, as well as service and educational institutions representing the entire CSRA. The UDC serves as the marketing arm for the CSRA.
- The CSRA RC serves as the coordinating mechanism for CSRA Unified Development Authority (UDA). The UDA promotes the economic development of the CSRA and encourages cooperation among economic development organizations within the member counties.
- The CSRA RC reviews and comments on applications for federal and state grant, loan, and permit assistance submitted by local governments and other applicants within the region. This is known as the Georgia Intergovernmental Consultation Process (Executive Order 12372), and is intended to offer comment on a proposed project's consistency with local and regional comprehensive plans.
- The CSRA RC develops and maintains the CSRA Regionally Important Resources Plan and the CSRA Comprehensive Economic Development Strategy.

The U.S. Endowment for Forestry and Communities

The Jefferson County Assets Index

Katie Premo
August 2012

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Jefferson County Assets Index

Executive Summary

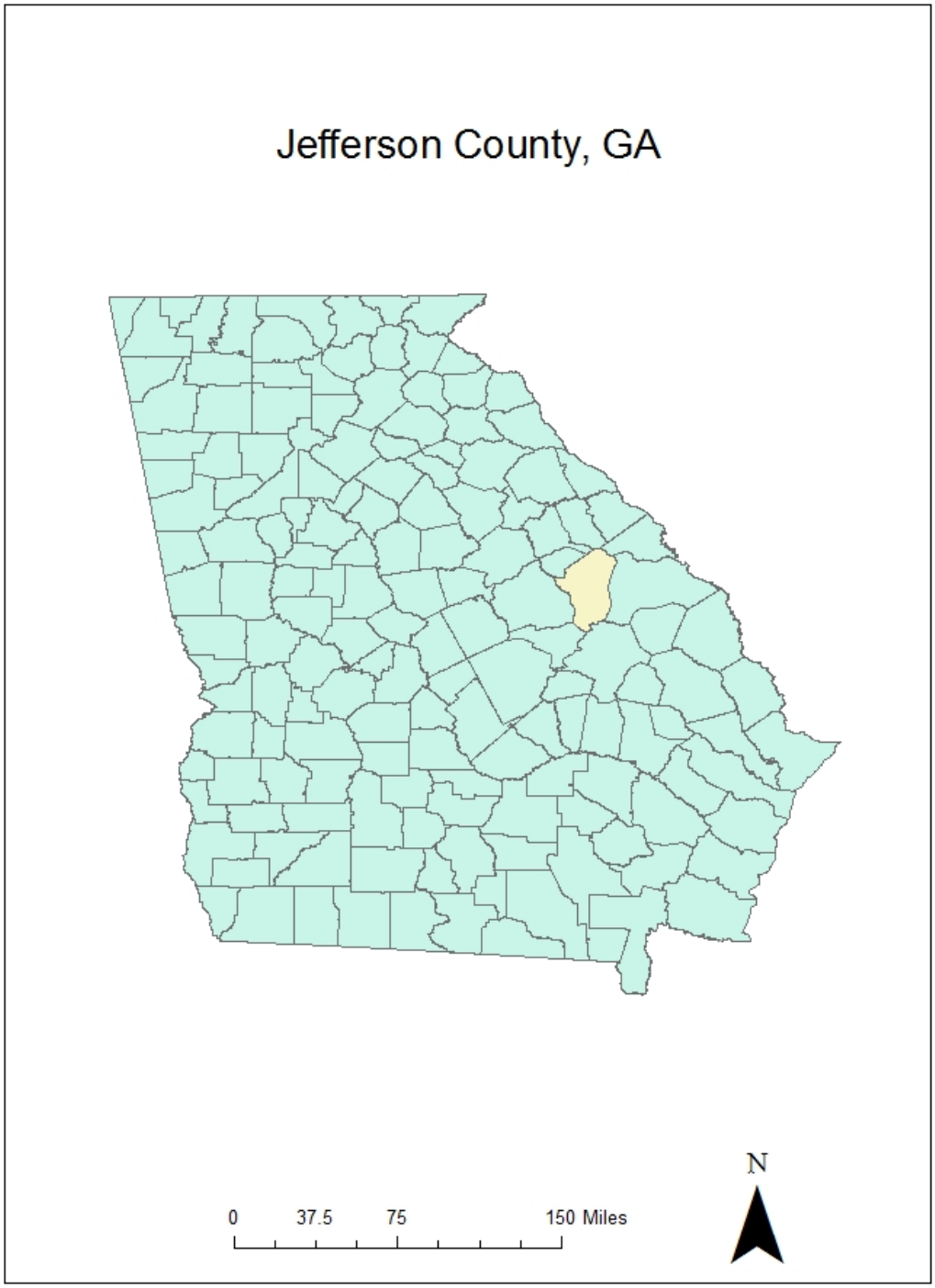
The Jefferson County Assets Index analyzes the economic and social trends within the county in order to determine the importance of certain community aspects. Information was gathered from a variety of sources including the most recent Censes and the International Revenue Service. The report analyzes Jefferson County (Map 1) on multiple levels; these levels include a comparison of Jefferson to its eight immediately surrounding counties (Maps 2-3) as well as on a more specified level of census tracts within Jefferson County (Map 4).

The report separates the indicators into three sections – baseline, trend, and target – that describe economic and social characteristics.

Baseline Data
Charitable Giving
Social Capital
Educational Attainment
Conservation Easements
Land Use
Trend Data
Population Change
Race Distribution
Emerging / Dominant Economic Sectors
Labor Force Stability
Retirement Income
Target Data
Farm and Timber Proprietors
Prosperity
Income Statistics
Affluent and Middle Class Families
Disposable Income
Net Worth
Household Ownership

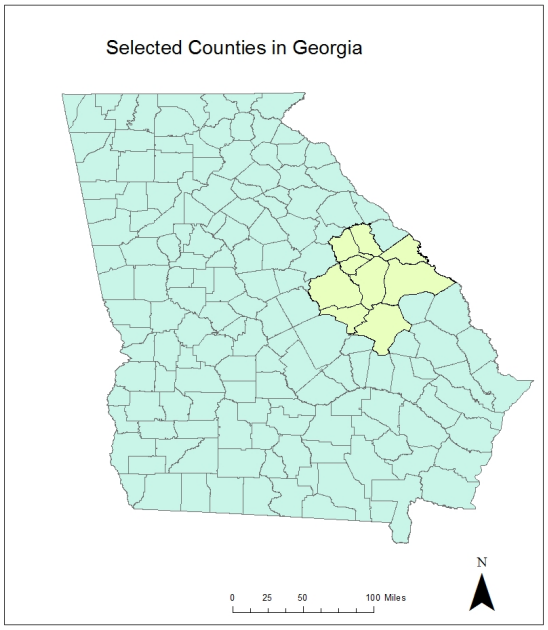
Jefferson County Assets Index

Map 1: Jefferson County



Jefferson County Assets Index

Maps 2 and 3: Jefferson County and Surrounding Counties



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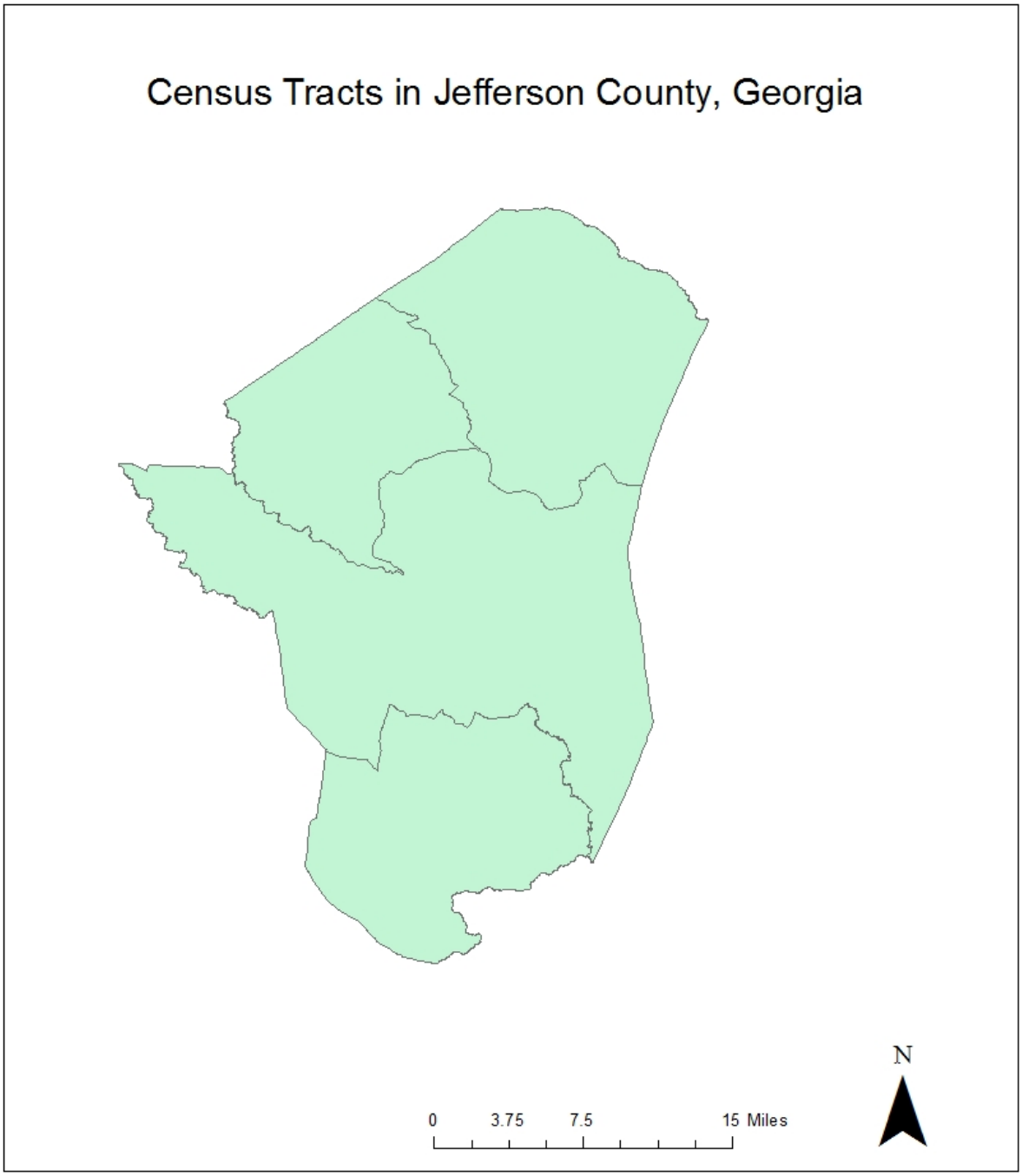
Map 4: Jefferson County Census Tracts



Jefferson County Assets Index

Summary of Baseline Data

This section outlines community variables to measure civic spirit, residential roots, and land use. By presenting this collected information and data before the beginning of a project, we can later use it to assess the program's impact. While some of this data is closely related to the goals and objectives of the program, other data may not necessarily be directly related, but still provide useful background information regarding the social context in which the program is set.

Defining Key Values and Presenting Findings:

Charitable Giving – this section identifies the average itemized charitable giving for each county as well as the aggregate, or total average, charitable giving. This data is important in the understanding of the amount of donations individuals are making in a year in comparison to surrounding counties, and State/National averages. In addition, Charitable Organizations who have awarded money to groups within Jefferson County are listed.

- **Methodology** – collecting this data on the county level allowed a comparison to be made depicting the average amount of donations being made in a year.

- **Findings** – in the county comparison, Jefferson County gives more than some counties, but less than most, however, as a percentage of income, Jefferson County residents on average give roughly 6% of their income.

Social Capital – these indicators represent social capital in the late 1990's, and were compiled by sociologists to measure civic spirit and residential roots.

- **Methodology** – collecting data on the county level from various sources for each social capital indicator and ranking the counties in order to determine Jefferson County's rank in comparison to the other counties in Georgia.

- **Findings** – Jefferson County ranked highest in the category of "Small manufacturing operations per capita", coming in at 9th place out of the 159 counties in Georgia.

Educational Attainment – comparing Jefferson County to eight directly surrounding counties provided insight to the level of educational attainment in Jefferson County in relation to surrounding counties and the State of Georgia.

- **Methodology** – data was collected from the Georgia Department of Education. The graduation rates from high schools in each county were taken from years 2010 and 2011 in order to compare the changes in recent graduation rates.

- **Findings** – Jefferson County has seen the largest improvement in high school graduation rates from 2010 to 2011, with nearly a 10% increase. The trend of graduation rates from 2003 to 2011 was mostly positive in Jefferson County, but the largest increase was from 2010 to 2011, surpassing the state of Georgia's graduation rate by over 10%.

Jefferson County Assets Index

Summary of Baseline Data (cont'd)

Conservation Easements – legally enforceable land preservation agreements, conservation easements provide insight in to the amount of land a county has that is protected from development. Conservation easements can protect both working and non-working land.

- **Methodology** – taken from the National Conservation Easement Database, the number of easements in Jefferson County and its eight surrounding county neighbors was collected. After determining the average number of easements in counties in Georgia, each of the 9 selected counties was assessed.

- **Findings** – with Burke County being the only one of the nine selected counties being above the county average with 16 easements, Jefferson County holds three conservation easements, which is more easements than six other of its county neighbors. The holder of the three easements in Jefferson County is the US Fish and Wildlife Service, protecting nearly 52 acres of land.

Land Use – this section outlines the current use of land in Jefferson County as well as land ownership and residential development. This provides us with important data regarding how the land of Jefferson County has changed over the years, specifically from 1980 to 2000, and what types of land are most valued within the community.

- **Methodology** – first analyzing the current use of land in acres, data tables, graphs, and maps were created to represent the current state of land in Jefferson County. Next, looking at land ownership, data was collected to determine the distribution of owned land throughout the county. Lastly, comparing residential development from 1980 to 2000, it was possible to see how much the land in Jefferson County has changed over the past 30+ years.

- **Findings** – with the highest percentage of land total at 84.5% and almost 300,000 acres, forested land is the largest portion of Jefferson County. Looking at land ownership, 98.9% of all lands in Jefferson County are privately owned, totaling 335,126 acres. The only other types of land ownership that hold acreage in Jefferson County are federal lands and military lands. Residential development in Jefferson County from 1980 to 2000 has seen a 130.4% increase, with 38,353 acres in residential land.

Jefferson County Assets Index

Summary of Trend Data

This section examines important socioeconomic trends in Jefferson County, GA over the past decade with focus on population shifts, changes in economic sectors, and growth or loss of retirement income. Changes in these factors impact economic and social welfare options.

Defining Key Values and Presenting Findings:

Population Changes – Changes in the population of Jefferson County from 2000 to 2010 are reviewed.

- **Methodology** – Examination of the U.S. Census Database allows comparison of population trends from 2000 to 2010. Comparing the population trends in Jefferson County to its immediately surrounding counties, Georgia, and the nation provides a context for understanding changes in Jefferson.

- **Findings** – While Jefferson County was one of the only two counties that experienced decrease in their populations from 2000 to 2010, we see that static concentrated in children and young adults, whereas mature adults and seniors both experienced increases of 15% and 31% respectively. The overall change in population for Jefferson County is 1.9%.

Race Distribution – The distribution of racial groups within Jefferson County is compared to the surrounding counties.

- **Methodology** – Data from the 2010 Census provided the distribution of racial groups in Jefferson County as well as its surrounding counties, the state of Georgia, and the United States.

- **Findings** – Jefferson County is predominantly African American at 54.42%. The percentage of whites closely follows at 42.56%, with the remaining small percentages, making up Asian, some other race, and two or more races, accounts for less than 5% of the population.

Jefferson County Assets Index

Summary of Trend Data (cont'd)

Emerging / Dominant Economic Sectors – understanding the economy and industries important to the vitality of Jefferson County.

- **Methodology** – With data from a variety of sources such as the Decennial Census, the Regional Economic Information System, and the Georgia Department of Labor, industries most important to the economy of Jefferson County are identified. Analyzing factors such as largest industries, changes in personal income (in regards to industries) and changes in the labor force, identified the industries that have been important to Jefferson County over the past decade.

- **Findings** –Overall, Jefferson County saw an increase of 5% in earnings from 2000 to 2010. The economic sectors that grew were Agriculture/Forestry, Resource Extraction, Trade, and Government. In contrast, Manufacturing, Construction, and High Value Services all experienced decreases. The two industries that stood out as valued were Agriculture/Forestry and Manufacturing. For example, the manufacturing industry brought in $38,232,000 in annual payroll in 2000. The sources of payroll are highly concentrated in Jefferson County. The top 5 industry sectors represent nearly 75% of annual payroll, whereas the state of Georgia and the United States only account for 50% of their payroll with their top 5 industry sectors. Jefferson County saw an increase of 0.81% in its labor force from 2000 to 2010 along with an increase of 6.53% in unemployment. The latest reported unemployment rate is 13.4% in Jefferson County, above rates of most surrounding counties, Georgia, and the United States.

Retirement Income – This section analyzes the aggregate and average retirement incomes for households in Jefferson County, and the changes in those factors from 2000 to 2010.

- **Methodology** – Data from the 2000 and 2010 Decennial Census is used to compare retirement income data in Jefferson County and its surrounding counties. A map comparing average retirement income within Jefferson County was generated to represent the distribution and value of retirement income within the county.

- **Findings** – In Jefferson County, only 961 out of 6,302 households have retirement income. Although that number has increased by nearly 8% from 2000 to 2010, it is still well below the state and national averages.

Jefferson County Assets Index

Summary of Target Data

This section of data outlines the economic side of household trends in relation to income, jobs, and ownership in order to analyze the holding of assets in the community of Jefferson County, Georgia. By looking at aspects of household data in regards to jobs, income, and ownership of homes, it was possible to begin to establish a baseline of assets within the community.

Defining Key Values and Presenting Findings:

Farm and Timber Proprietors – this data provides insight in to the industries that are important to Jefferson County.

- **Methodology** - The collection of employment and income data for the nine selected counties in these two industries shows the value to each county's economies. Found from Headwaters Economic 2012, the data collected showed the importance of each sectors' employment and income.

- **Findings** – Proprietary sectors of farm and timber employ over 8,000 people in the 9 counties and brought in over $220,000,000 in income this past year. While the manufacturing industry employs the most people in Jefferson County, farm and timber remain important to the economy.

Prosperity – the average earnings per job and unemployment rate in 2011

- **Methodology** – The data for average earnings per job along with the unemployment rate in 2011 for the selected counties were collected from Headwaters Economics. This data illustrates the earnings of an average employee in each county as well as the rate of unemployment.

- **Findings** – While Richmond County had the highest value of average earnings per job in the year of 2011 at $52,380, the average earnings per job in Jefferson County was very similar to surrounding counties such as Emanuel, McDuffie, and Washington; these four counties were all within $5,000 of each other in their averages. The rate of unemployment was overall similar from one county to the next, with the Jefferson County unemployment rate at 13.4%.

Income Statistics – this data set looks at median and per capita income in addition to poverty to further determine the demographics of prosperity mentioned above.

- **Methodology** – Collected from the 2000 Census, this data provides us with an in depth look at the comparison of the selected counties in regards to earnings and poverty. These data sets allow us to begin to understand household earning demographics.

Summary of Target Data (cont'd)

- **Findings** – with the Jefferson County poverty level percentage among the top three of the 9 counties compared at 26.9%, all of the counties are above the poverty level percentages of the State of Georgia and the United States. Median and Per Capita Income illustrated that the counties compared are similar in their averages, while all are below the averages of Georgia and the United States.

Affluent and Middle Class Families – beginning to determine the demographics of wealthier families within each county, this data set allows us to compare the selected counties in regards to high income .

- **Methodology** – this data was collected from the 2000 Census Database, and then modified to represent the percentages of households with high income in the selected categories. Affluent and middle class families are identified as households with income above $50,000 per year, and high-income households are identified as households with income above $100,000 and $200,000 per year respectively.

- **Findings** – while Jefferson County is among the lowest of the counties with percentages of households that are categorized as affluent/middle class and high income, like trends seen above, all counties compared were below the percentages of the State of Georgia and the United States. 20% of households in Jefferson County are categorized as affluent and middle class, while only 4% and 1.3% of households were categorized as above $100,000 and $200,000 per year respectively.

Disposable Income and Net Worth – defined as the income left over after taxes and personal expenditures respectively, these demographics further illustrate true income and personal assets.

- **Methodology** – this data was downloaded from the ESRI Business Online Analyst, giving us median and average disposable income and net worth for each county. Further analyzing this data, we were able to graph the retention of disposable income over time for each defined age group, which illustrates the change in disposable income as people age, as well as the total net worth by age.

- **Findings** – average disposable income was always higher than median disposable income; median disposable income gives us a more accurate representation since it is not skewed by higher values within one county. The median disposable income for households in Jefferson County is $25,269. Jefferson's median disposable income is higher than only two surrounding counties but within a very close range (within $3,000) with Burke, Emanuel, Glascock, Johnson, and Warren. Similarly, average net worth is higher than median net worth, with both median and averages below those of Georgia and the United States.

Jefferson County Assets Index

Baseline Data

Charitable Giving
Social Capital
Educational Attainment
Conservation Easements
Land Use

Jefferson County Assets Index

Baseline Data

1 Charitable Giving

Key Value: Average itemized charitable giving for each county

(Map 5)

Geography	Average Itemized Gifts by All Returns	Average Charitable Gifts Itemized on 1040 A	Total Itemized Charitable Gifts
Jefferson County	$874	$4,302	$6,648,000
Burke County	$811	$4,008	$7,166,000
Emanuel County	$673	$3,639	$6,032,000
Glascock County	$582	$4,577	$714,000
Johnson County	$768	$3,709	$2,346,000
McDuffie County	$1,048	$5,618	$9,872,000
Richmond County	$1,119	$5,192	$93,871,000
Washington County	$1,650	$6,104	$13,404,000
Georgia	$1,387	$9,001	$5,906,644,000
United States	$1,127	$9,359	$155,103,000,000

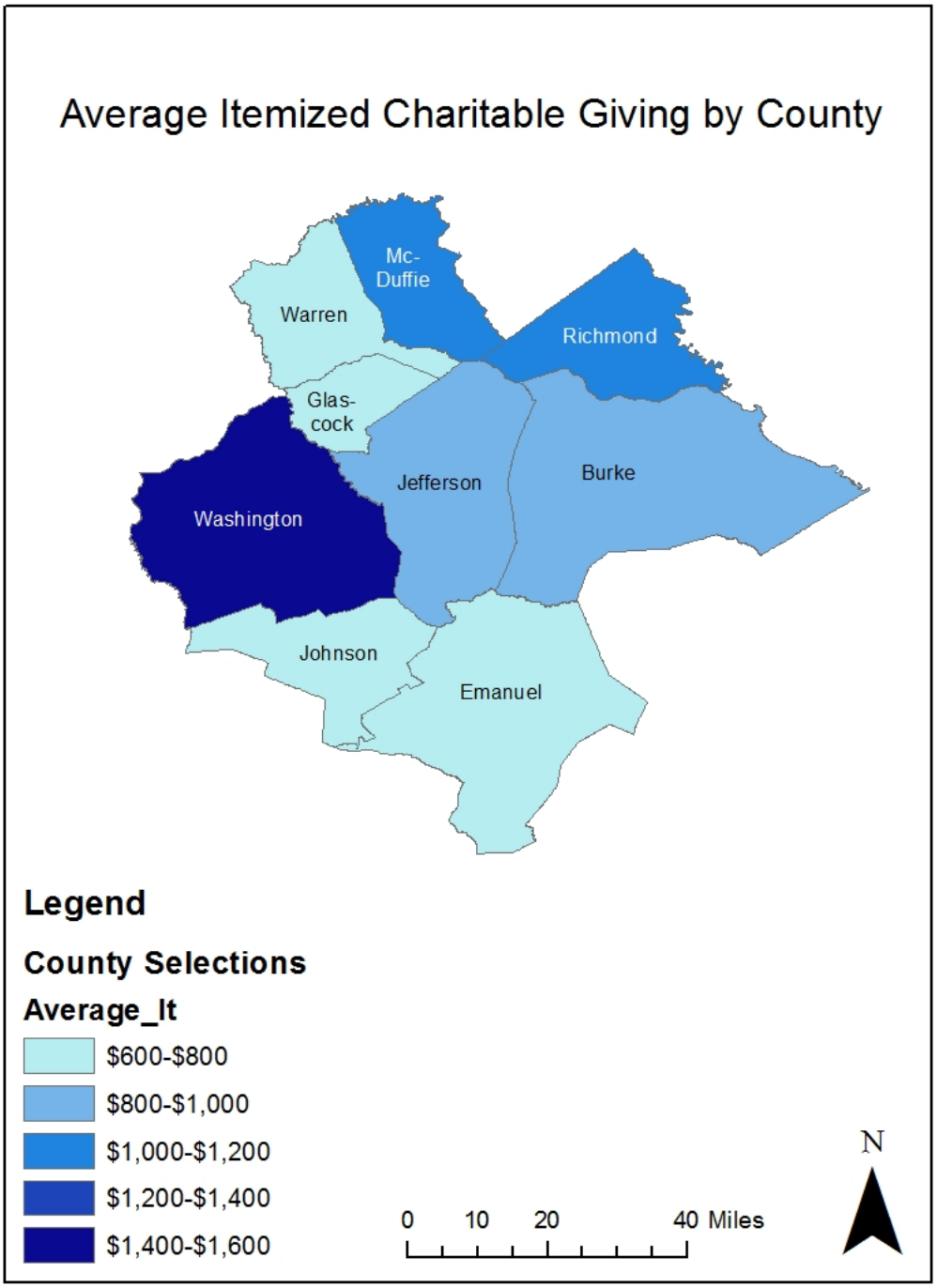
Key Value Charitable Organizations

City	Name of Foundation	Type of Grant-maker	Total Assets	Total Giving
Bartow	Dr. J. Harold Harrison Foundation, Inc.	Independent foundation	$22,651,138	$983,354
Louisville	George E. Crouch Foundation	Independent foundation	$1,648,500	$90,200
Louisville	George E. Crouch Foundation Charitable Trust	Independent foundation	$467,309	$200
Thomson	The Watson Brown Foundation	Independent foundation	$109,574,234	$3,449,554

Sources: **The Internal Revenue Service**
The National Center for Charitable Statistics, 2008
The Foundation Center, 2009

Jefferson County Assets Index

Map 5: Average Itemized Charitable Giving (in thousands)



Jefferson County Assets Index

Baseline Data

2 Social Capital

Key Value: Jefferson County on 6 social capital factors*

Jefferson County Only

No.	Rank in GA**	Category	Description	Source	Coverage Year	First Available
1	77th	Historic sites per capita	Buildings, sites, and structures on the National Register of Historic Places, maintained by the National Park Service	National Register Information System	Current, online registry	N.A.
2	19th	Percent Church Adherents	Number of adherents or church members identified from 149 religious denominations, associations and affiliations	Religious Congregations & Membership in the U.S.	2010	1980
3	153rd	Churches per capita	Number of churches / congregations identified from 149 religious denominations, associations and affiliations	Religious Congregations & Membership in the U.S.	2010	1980
4	66th	Associations per capita	Exempt organizations master list	Internal Revenue Service	2012	N.A.
5	9th	Small manufacturing operations per capita	The number of manufacturing firms with 20 or fewer employees	County Business Patterns	2000	2004
6	77th	Percent of non-movers to residents	Number of residents who live in the same residence in 2000 that they did in 1995	Census 2000	2000	2002

*These are updated indicators, which were originally determined by the Home Town Index (see www.ePodunk.com) to represent social capital in the late 1990's. The Hometown Index was compiled by sociologists to measure civic spirit and residential roots.

** The rank is based on the comparison of all 159 counties on a per capita or percent of the population basis.

Jefferson County Assets Index

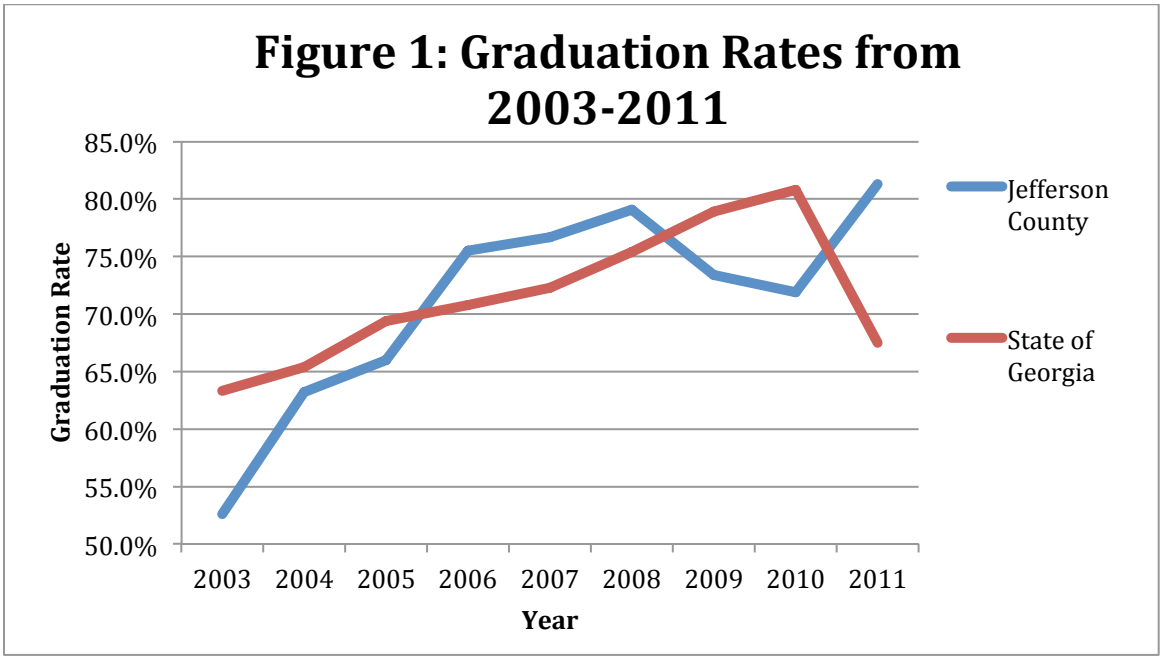
Baseline Data

3 Educational Attainment

Key Value: Percentage of educational attainment and ranking in GA

Area	Graduation Rate in 2010	Graduation Rate in 2011	Percent Change
Jefferson	71.90%	81.30%	9.40%
Burke	72.00%	79.60%	7.60%
Emanuel	81.70%	78.70%	**-3.00%**
Glascock	79.50%	84.80%	5.30%
Johnson	67.60%	76.50%	8.90%
McDuffie	85.40%	86.00%	0.60%
Richmond	74.70%	79.30%	4.60%
Warren	75.50%	74.50%	**-1.00%**
Washington	76.50%	74.50%	**-2.00%**
Georgia	80.80%	67.50%	**-13.30%**

Key Value: Graduation rates from 2003-2011



Sources: **Georgia Department of Education**

Jefferson County Assets Index

Baseline Data

4 Conservation Easements

Key Value: Identify protected lands in each county and their ranking in GA (2012)

Area	Number of Easements	Ranking in Georgia
Jefferson County	3	below average
Burke County	16	above average
Emanuel County	3	below average
Glascock County	0	below average
Johnson County	0	below average
McDuffie County	2	below average
Richmond County	1	below average
Warren County	0	below average
Washington County	2	below average
Georgia	707	
Ranking		
County Average	5.75	
County Median	4	

Key Value: Identify current easements held in Jefferson County (Map 6)

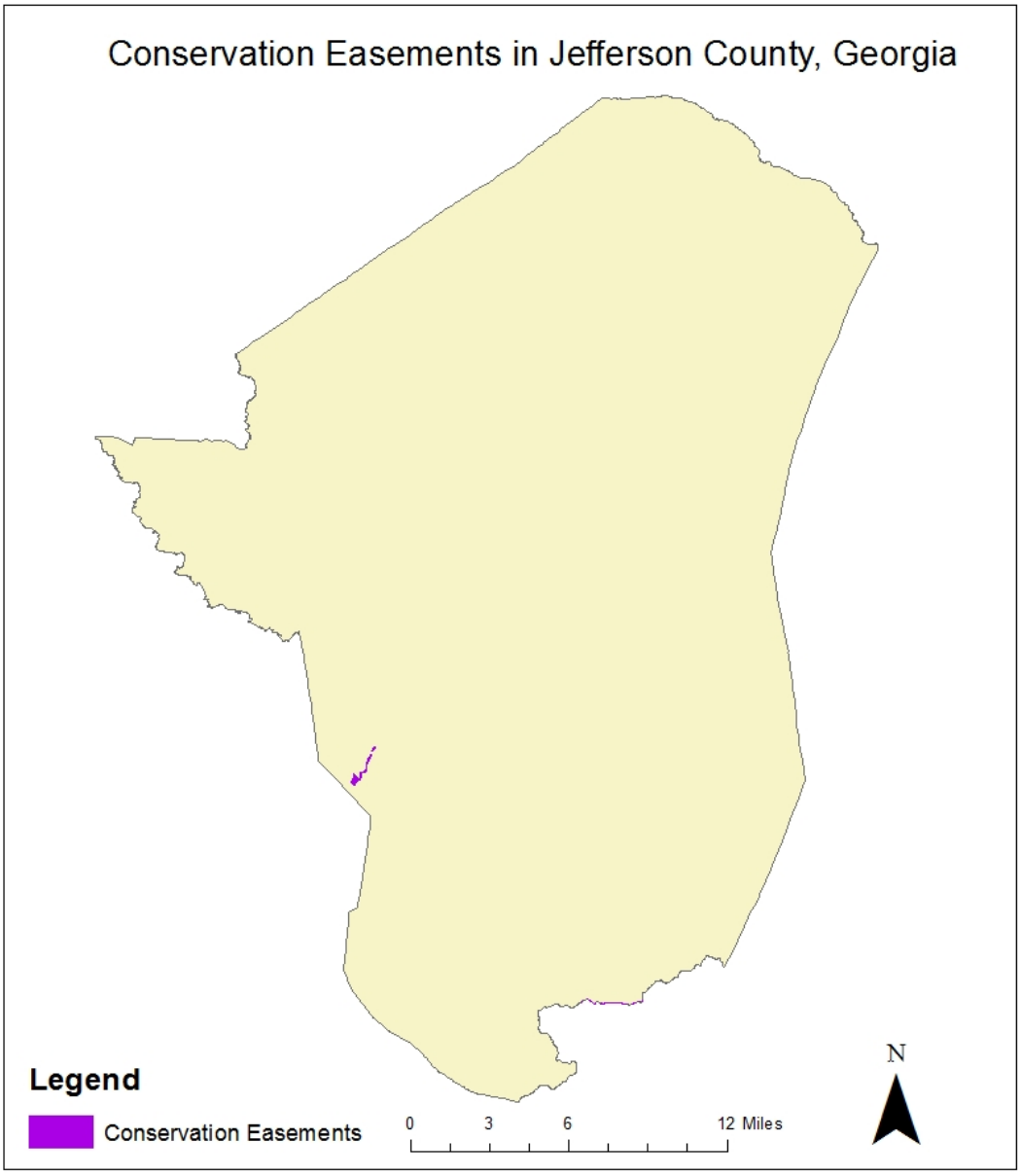
Jefferson County Only

Easements in Georgia	Holder	Acreage	Percent of County
Piedmont NWR	US Fish and Wildlife Service	30.33	0.0089%
Piedmont NWR	US Fish and Wildlife Service	18.95	0.0056%
Piedmont NWR	US Fish and Wildlife Service	2.55	0.0008%
	TOTALS	51.8	0.0153%

Source: The Conservation Registry Easement Database (2012), State of Georgia

Jefferson County Assets Index

Map 6: Conservation Easements



Jefferson County Assets Index

Baseline Data

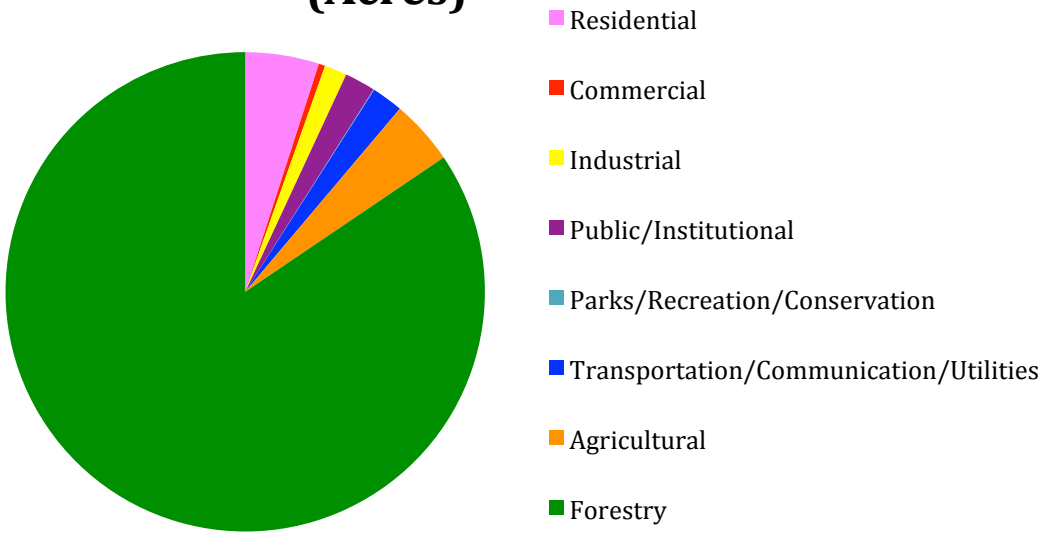
5 Land Use (Map 7)

Key Value: Identify the uses of land and their percentages of total acreage (Figure 1, Maps 7-9)

Jefferson County Only

Land Use	Acres	Percent of Total
Residential (Map 9)	16,916	5%
Commercial	1,470	0.40%
Industrial	5,166	1.50%
Public/Institutional	7,041	2%
Parks/Recreation/Conservation	168	0.10%
Transportation/Communication/Utilities	7,197	2.10%
Agricultural	14,847	4.40%
Forestry (Map 10)	287,186	84.50%
Totals	**339,991**	**100%**

Figure 2: Land Use in Jefferson County, GA (Acres)



Source: Jefferson County Comprehensive Plan, Tax Assessor's Office, 2009

Jefferson County Assets Index

Baseline Data

5 Land Use (cont'd)

Key Value: Land Ownership

Land Type	Jefferson County, GA
Total Area	338,843
Private Lands	335,126
Federal Lands	3,717
Forest Service	0
BLM	0
National Park Service	0
Military	3,680
Other Federal	37
State Lands	0
State Trust Lands*	0
Other State	0
Tribal Lands	0
Water	0
City, County, Other	0

98.9% of land in Jefferson County, Georgia is privately owned

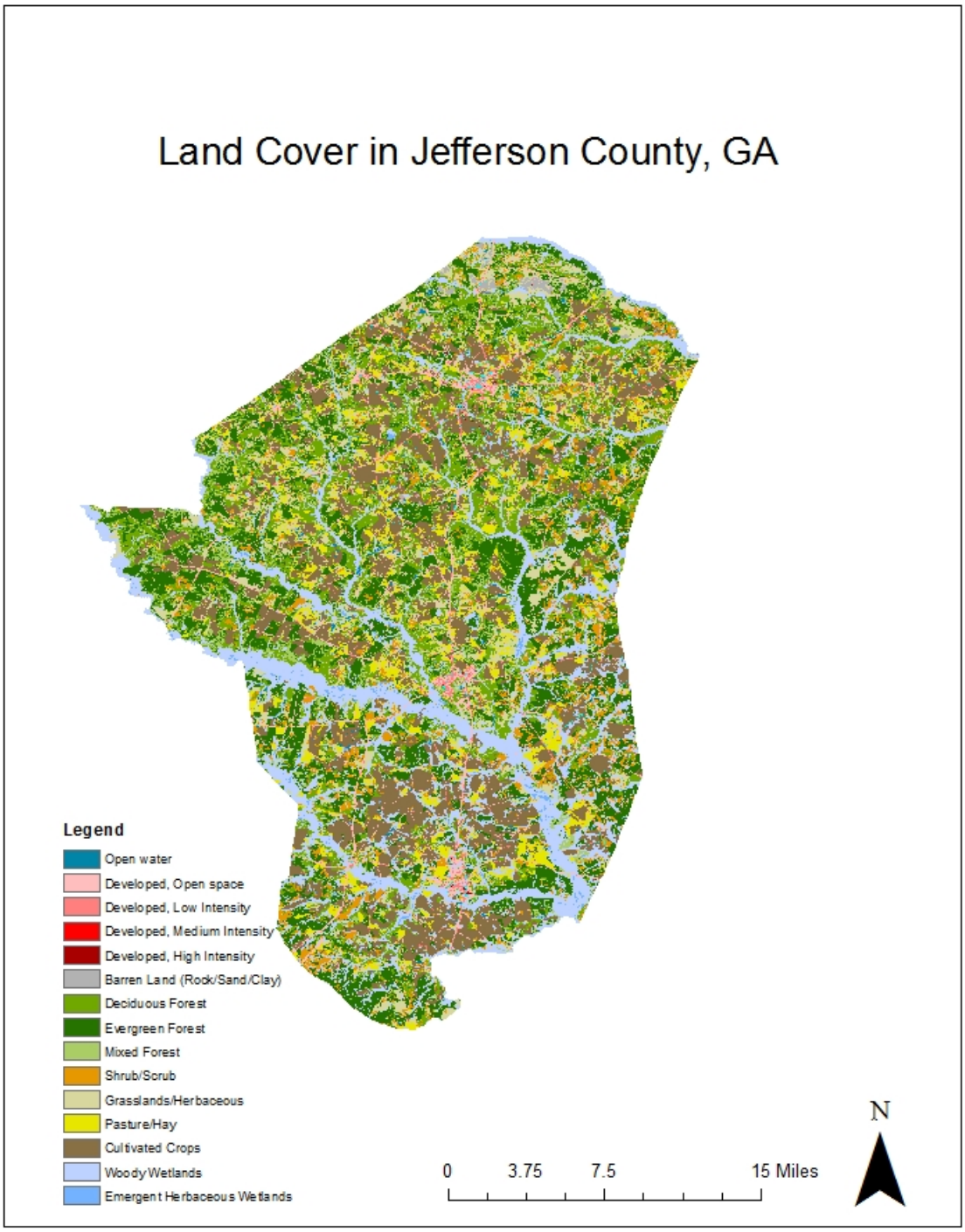
Key Value: Residential Development

Land Type	Jefferson County, GA
Total Private Land	335,126
Total Residential, 1980	16,647
Urban/Suburban, 1980	1,035
Exurban, 1980	15,612
Total Residential, 2000	38,353
Urban/Suburban, 2000	1,829
Exurban, 2000	36,525
Percent Change in Total Residential	**130.4%**

Source: **Headwaters Economics 2012**
Census Bureau 2000

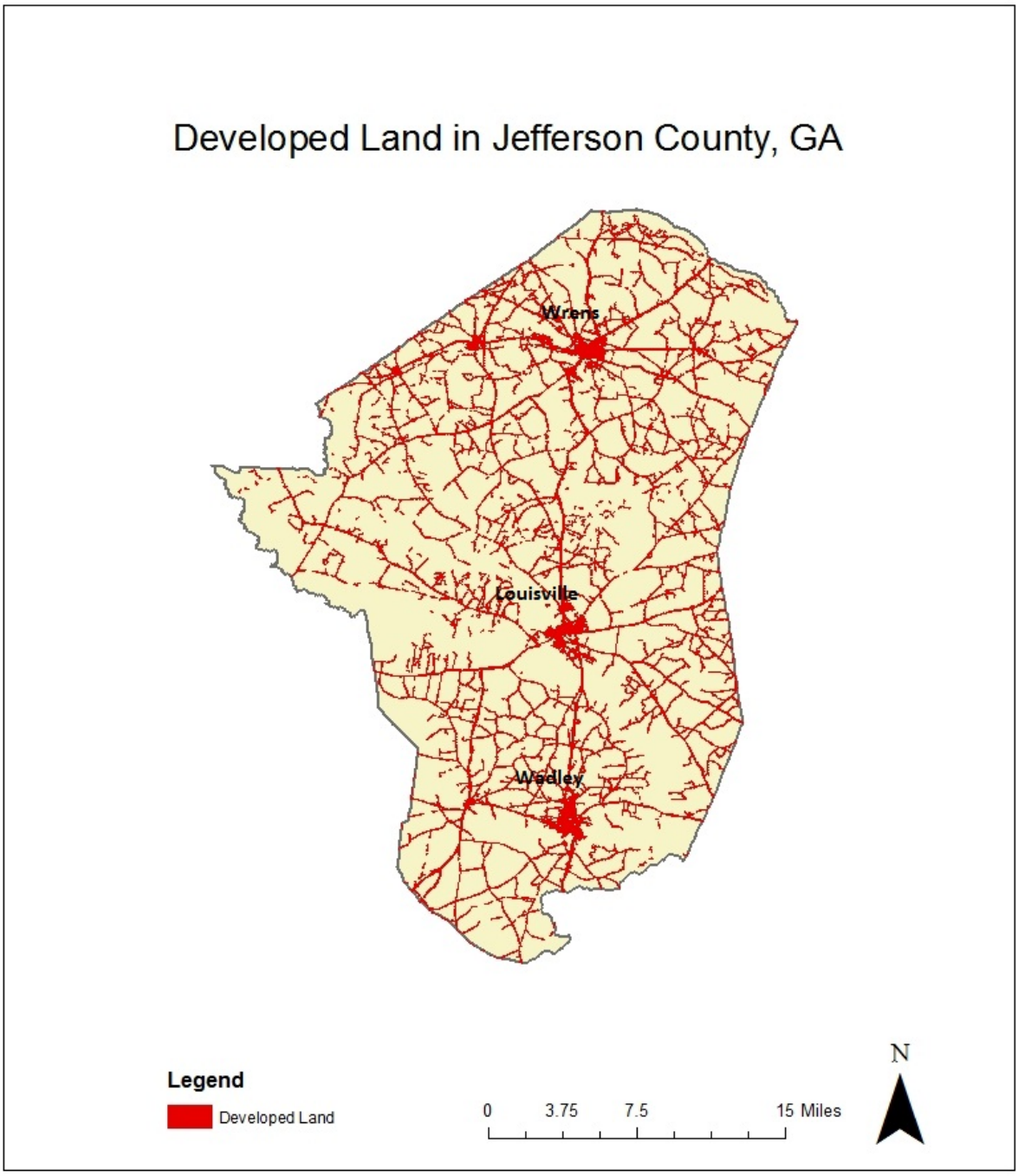
Jefferson County Assets Index

Map 7: Land Use – Land Cover (2009)



Jefferson County Assets Index

Map 8: Land Use – Developed Land (2009)



Map 9: Land Use – Forest Cover (2009)

TIMBER IMPACT ASSESSMENT

Georgia Ice Storm, February 11-13, 2014

By: James Johnson, Chip Bates & Gary White, Georgia Forestry Commission
(jjohnson@gfc.state.ga.us; cbates@gfc.state.ga.us ; gwhite@gfc.state.ga.us)

BACKGROUND

A winter storm impacted multiple southern states and more than 90 Georgia counties experienced some form of winter precipitation, beginning February 11th and lasting through the 13th. Northern tier counties recorded snowfalls of up to 13" (Rabun County), and although some timber / tree impacts occurred in this "snow zone," they were not widespread or considered severe.

During the storm, ice accumulation was measured from between a tenth of an inch and one inch (or possibly higher) in a zone from roughly north metro Atlanta to Augusta in northern Georgia, and from Macon to Sylvania in central Georgia. Because ice is much heavier than snow, widespread tree damage occurred, resulting in power disruption to nearly a million customers.

Governor Deal declared a state of emergency on Monday, February 10th, and a presidential declaration of emergency was issued as the storm hit the state. The map below depicts this zone (*Figure 1*).

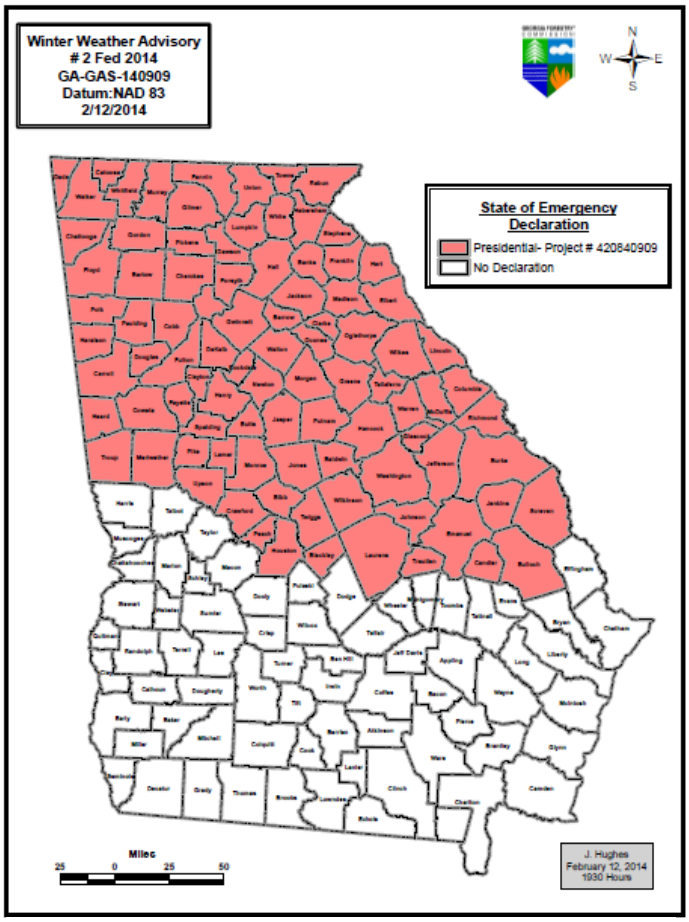


Figure 1: Counties included in the presidential declaration zone

The National Weather Service provided estimates of ice accumulations, and this information, coupled with field observation reports, helped define the area surveyed by the Georgia Forestry Commission for timber impact accounts. Small amounts of ice are known to affect trees, and higher amounts (especially exceeding three-fourths of an inch) can cause serious damage to certain timber types and age classes.

Another factor that affects tree damage is wind. Once ice accumulations peaked, a cold front moved through the state. Although wind speed varied, some areas reported winds of up to 35mph. Even minor winds during ice-loading can break or uproot trees. These occurrences were a major factor in the timber / tree damage associated with this storm, and may account for some of the variability detected.

OBSERVATIONS

A team of Georgia Forestry Commission foresters surveyed the zone believed to have endured the greatest impacts to our forests, and developed the map below. Please note that damage was observed beyond these counties, but it tended to be less intense than those shown by the map's shaded areas. Some of the highlighted counties had tremendous variations in the amount of damage observed. In addition, timber damage evaluation surveys were separated into rough categories of damage (at the county level), isolated timber stands within counties in the two lesser categories may have severe damage, and stands in the severe counties may only have minor damage. The variability of damage to similar stands even a few miles apart was extreme, so mangers should carefully evaluate timber throughout this broad region.

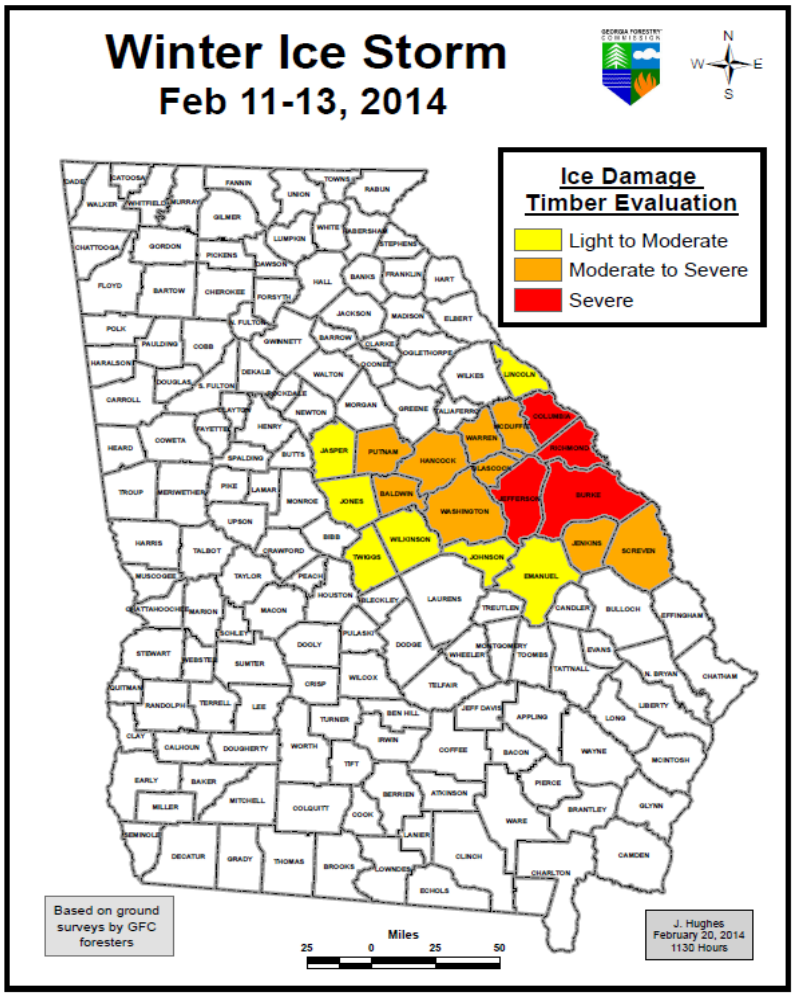


Figure 2: Counties with widespread Ice Damage

This survey examined landscape-level impacts and classifies them accordingly.

The categories of damage are based upon field observations about:

- Occurrence (frequency) of damage within a county.
- Levels of damage within two types of pine that were most frequently damaged (young pine stands, and pine stands on which a first-thinning had recently occurred.)

Ice Damage Intensity:

Light to moderate damage – Only branches and limbs broken from the tree, with minor damage to the overall stand and trees bent less than 45 degrees. No salvage operation will be necessary and the stand should recover with no additional management requirements, though long term yields will likely be impacted.

Moderate to severe damage – Branches and limbs broken from the trees with damage to the overall stand. More than 25% of stems broken and a salvage operation should be considered to minimize losses and remove trees that likely will not survive.

Severe damage – More than 30% of stems broken, tops broken out across the stand, limbs stripped, and trees bent more than 45 degrees. A salvage operation must be considered and a clearcut may be the prudent management decision.

Ice damage was not detected on most timber types but was concentrated on two types of pine: recently thinned pine stands, and younger stands less than 25 feet in height.

Recently thinned pine stands: These are primarily pine plantations that were thinned for the *first time* within the past several years. Trees adjust to the amount of space and competition within a stand, and those that have been thinned for the first time are adjusting to reduced protection from neighboring trees and are growing in diameter, which strengthens the main stem. They also respond by accelerating root growth which helps anchor the tree and aids in the increased moisture uptake needed to support larger live crowns. Depending on residual stand-density after thinning, it takes trees about five years to fully respond to the increased growing space. In the meantime, they are more prone to wind (and ice) damage.

These stands were particularly hard hit, which is unfortunate for landowners who have invested 15 to 20-plus years of growth getting their trees to this size. First-thinnings typically remove lower value wood (such as pulpwood / fuel wood), with the objective of allowing the residual stand to produce higher value products (such as sawtimber, plywood, and poles). From an investment standpoint, timber growth following a first thinning maximizes profits, so salvaging an ice-damaged stand is a devastating blow to expected returns.

Photo (left) – Twenty-one year old loblolly stand in Burke County; suffered over 30% stem breakage.

Thinning likely occurred two years ago.

Photo (right) – Nineteen year old loblolly stand in Jefferson County; suffered almost 50% stem breakage.

Thinning occurred within the past year.

Numerous older pine stands that had been thinned twice (or more) were also examined. Although some had damage, most would be considered minor, with many not requiring a salvage operation. The damage in these stands tended to be uprooted trees rather than stem breakage. This type of wind throw (tree that is completely uprooted) in older stands seemed prevalent throughout the region.

Landowners and managers of storm-damaged stands are highly encouraged to read and understand the implications of ice on different types of stands. Web links which provide detailed guidance are provided on the last page of this document.

Young pine stands: Pine plantations (of most species) that were 25 feet and taller - and *had never been thinned* - seemed to weather this ice storm well. The ability of dense stands to provide tree-to-tree support and prevent winds from uprooting individual trees was a big factor in these stands' withstanding minimal damage. Younger (and shorter) stands, however, didn't fare as well. One of the critical factors seemed to be that the trees still had many live branches almost to ground level, which likely accumulated so much ice that breaking points were reached for limbs and main stems.

Young stands of about six feet in height also seemed to fair well. Some of these have many bent stems (with some breakage), but young trees tend to correct this problem.

Some younger loblolly stands were damaged (especially in the counties noted as "Severe" on the map on page 2), but more damage occurred on longleaf and slash pine. Longleaf stands suffered the worst damage with stem and limb breakage but no stands seen were completely leveled. The resiliency of nature can be surprising, and the fate of these stands will become evident over the next few years. When tops break out, a lateral branch will assume dominance and there will be variation in long-term stem straightness.

Careful examination will be needed to determine the amount of permanent problems this storm has inflicted on each stand. Re-evaluation after the next growing season should give managers a better perspective on what lies ahead.

Photo (Left) – Five year old slash pine stand in Burke County showing many bent and leaning trees, with some breakage. Note the many leaning trees with limb breakage.

Photo (Right) – Nine year old longleaf pine stand in Burke County showing top and limb breakage. Note the many tops broken and some limb breakage.

EXTENT OF DAMAGE

GFC foresters evaluated the counties noted on the previous map and developed estimates of damage based upon a combination of this field work combined with a geospatial analysis of this region. These estimates do not include areas outside this zone, nor do they include hardwood, which was also impacted. Most hardwood damage consisted of limb and top breakage with most trees retaining enough live branches to support survival. Damage can be expected in the growth form of these trees and possibly in sluggish growth rates.

For pine type timber, an estimated 70,000+ acres were impacted, valued in excess of $65 million. The majority of these acres (61,000+) were in the recently thinned pine category. This estimate doesn't include damage outside of the zone shown on the map (page 2), and it does not account for hardwood damage acreages or values, so it should be considered conservative. Some of the merchantable pine will likely be salvaged, which could reduce the damage estimate somewhat. However, the values used were based upon landowners intending to grow these stands for at least 30 years, with the growing objective of solid wood products (sawtimber, plywood, and poles). So even if salvage occurs, part of the "loss" is in the future growth of these higher value products.

RECOMMENDATIONS

With the wide range of damage inflicted by this ice storm, there will likely be three distinct categories by which landowners make their evaluations:

1) Light damage or losses that may not warrant a salvage operation. This could include merchantable stands (trees are large enough to sell), which simply don't have enough timber damage to warrant a commercial harvest, or pre-merchantable stands where there is a good chance they will recover over time.

2) Stands with significant damage, mandating a salvage operation to recoup whatever value can be obtained from the stand. This might include a complete harvest for widespread damage, or a partial harvest of damaged timber to provide a commercial harvest.

3) Situations falling between the two scenarios above, in which a good bit of the timber is damaged but there might be enough timber to leave growing. In these cases, landowners are encouraged to use the services of a professional forester to help make the best decision for the situation. Immediately following a storm, it is difficult for landowners to accurately gauge how well a stand may recover, or to measure the amount of timber that could be allowed to remain for future growth and income.

For landowners facing a complete harvest to salvage their damaged timber, please consider reforesting the area. The Farm Service Agency has a cost share program that can assist with site preparation and planting costs called the Emergency Forest Restoration Program (EFRP). Apply at your local office.

Special thanks to other GFC foresters who helped develop this information:
Jeff Kastle, Chris Thompson, Chris Howell, Chris Barnes, Jeremy Hughes and Charles Bailey

URBAN TREE ASSESSMENTS

Georgia Forestry Commission certified arborist/foresters surveyed damage and storm-generated tree debris left to be removed from urban and rural communities. Survey results showed counties that experienced the most damage to their rural stands also suffered the most damage to their urban trees. The highest amount of damage, as one might expect, was found in Burke County.

Neighborhoods with large pine trees experienced the most loss, with the bulk of damage to branches and tree tops which were broken by the weight of ice. Additionally, "leaf on" trees, such as magnolia and cherry laurel, and old water oaks with structural issues, made up a large component of community forest tree failure. Crews observed very few trees that were completely destroyed or uprooted by the storm.

Much debris remains to be cut and stacked by homeowners and tree care companies before its removal from community rights-of-way can begin. Many trees that have lost more than 50% of their limbs, and trees that have been uprooted or split so that heartwood of the main trunk is evident, will need to be removed. Otherwise, impacted trees will require pruning, with particular attention being paid to higher risk trees with “hangers” (limbs broken, but not yet detached) and split limbs (see photo below). This will likely increase beyond initial assessments the total biomass that will eventually be collected.

Although the tree at left suffered minor ice damage, notice the branches that are broken and still hanging in the tree. These could impact the structure, the vehicle or humans. These “hangers” should be removed.

The pine tree at right lost half of the living portion of its crown and pruning is needed to remove branch stubs.

Special thanks to GFC foresters who helped with field work: Gary White, Joe Burgess, Joan Scales, Mark McClellan, Jeremy Hughes, Keith Murphy, Chris Howell and also Mark Millirons.

These resources can help forest landowners learn more about options and considerations for situations in which trees have been damaged by winter weather:

TIMBERLAND WIND / ICE DAMAGE:

How to Evaluate and Manage Storm-Damaged Forest Areas:
http://www.fs.fed.us/r8/foresthealth/pubs/storm_damage/contents.html

Evaluating wind / ice damage stands:
http://www.forestry.uga.edu/outreach/pubs/pdf/forestry/assessing_tornado_damaged_forest_stands5-30-08_1.pdf

Wind Wood Utilization (this has numerous documents and links that are beneficial):
http://www.windwoodutilization.org/salvage.asp

URBAN AND HAZARD TREE SAFETY:

http://www.gatrees.org/community-forests/management/trees-storm-safety/

Excellent site for Storm Damage…with an Urban Forestry angle:
http://hort.ifas.ufl.edu/treesandhurricanes/

TAXES:

National Timber Tax website (Master Index has good list of subject areas):
http://www.timbertax.org/

TIMBER SALES:

General information:
http://www.gatrees.org/forest-management/private-forest-management/timber-selling/

Landowners are encouraged to utilize professional foresters and arborists to help with decisions about timber management or potentially hazardous trees around homes and urban environments. Seeking independent advice is a sound way to reduce hasty judgments and insure all available options are considered.

SAVANNAH RIVER BASIN

(9) Little River near Lincolnton, Ga.

Location.—Lat. 33°39', long. 82°29', at Raysville Bridge on State Highway 70, half a mile downstream from Big Creek, 2½ miles south of Amity, and 10 miles south of Lincolnton, Lincoln County.

Drainage area.—574 square miles.

Gage.—Non-recording gage. Datum of gage is 27.17 feet above mean sea level (unadjusted).

Stage-discharge relation.—Defined by current-meter measurements below 17,000 second-feet.

Historical data.—Flood of Sept. 28, 1929 reached a stage of 44.3 feet according to information from local residents.

Annual Flood Peaks

CALENDAR YEAR	MONTH	DAY	GAGE HEIGHT (feet)	DISCHARGE (second-feet)
1929	Sept.	28	44.3	54,000
1943	Jan.	19	20.0	9,580
1944	Mar.	23	26.4	16,900
1945	Apr.	25	12.4	5,040
1945	Dec.	25	12.2	4,920
1947	Mar.	8	20.4	9,920
1948	Feb.	10	20.2	9,750
1948	Nov.	29	22.9	12,300

(10) Brier Creek at Millhaven, Ga.

Location.—Lat. 32°56', long. 81°39', at Savannah & Atlanta Railway trestle at Millhaven, Screven County, 8½ miles upstream from Beaverdam Creek.

Drainage area.—656 square miles.

Gage.—Non-recording gage. Datum of gage is 95.88 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.—Defined by current-meter measurements below 20,000 second-feet.

Historical data.—Flood of October 1929 was the greatest in the recollection of Burke County's oldest inhabitants according to the October 5, 1929 issue of "True Citizen". Local plantation owners believe this was the greatest flood since white men settled in this area.

Annual Flood Peaks

CALENDAR YEAR	MONTH	DAY	GAGE HEIGHT (feet)	DISCHARGE (second-feet)
1929	Oct.		25.1	64,000
1938	Apr.	13	10.0	3,220
1939	Mar.	3	12.2	5,900
1940	Aug.	16	17.4	25,400
1941	July	22	9.4	2,720
1942	Mar.	26	10.9	4,100

CALENDAR YEAR	MONTH	DAY	GAGE HEIGHT (feet)	DISCHARGE (second-feet)
1943	Mar.	26	10.9	4,100
1944	Mar.	28	12.4	6,360
1945	Mar.	3	6.0	997
1946	Jan.	1	8.3	2,040
1947	Mar.	13	10.6	3,800
1948	Sept.	11	11.6	4,980
1948	Dec.	3	11.4	4,700

OGEECHEE RIVER BASIN

(11) Ogeechee River near Louisville, Ga.

Location.—Lat. 32°58', long. 82°23', at bridge on U. S. Highway 1, 1 mile downstream from Louisville and Wadley Railroad bridge, 2 miles south of Louisville, Jefferson County.

Drainage area.—800 square miles.

Gage.—Non-recording gage prior to August 30, 1941, and recording gage thereafter. Datum of gage is 199.24 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Stage-discharge relation.—Defined by current-meter measurements below 17,000 second-feet and by slope-conveyance study above 17,000 second-feet.

Historical data.—Flood of October 1929 reached a stage of 21.3 feet (from information by Central of Georgia Railroad Company), and is the highest flood known to residents of the area.

Annual Flood Peaks

CALENDAR YEAR	MONTH	DAY	GAGE HEIGHT (feet)	DISCHARGE (second-feet)
1929	Oct.		21.3	46,000
1937	May	2	16.1	12,800
1938	Apr.	10	15.2	8,900
1939	Mar.	2	16.1	12,800
1940	Aug.	16	17.6	20,600
1941	July	19	12.2	2,880
1942	Mar.	24	16.2	13,000
1943	Mar.	24	15.4	9,500
1944	Mar.	23	16.9	16,500
1945	Feb.	28	10.6	1,650
1945	Dec.	30	13.2	4,030
1947	Mar.	10	15.7	10,700
1948	Feb.	12	14.8	7,500
1948	Dec.	1	16.5	14,500

(12) Ogeechee River at Scarboro, Ga.

Location.—Lat. 32°43', long. 81°53', at county highway bridge at Scarboro, Jenkins County, 3½ miles downstream from Sculls Creek, 6½ miles upstream from Horse Creek, and 7½ miles southeast of Millen.

Drainage area.—1,940 square miles.

Gage.—Non-recording gage prior to December 1941 and recording gage thereafter. Datum of gage is 111.81 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Stage-discharge relation.—Defined by current-meter measurements below 24,000 second-feet.

Annual Flood Peaks

CALENDAR YEAR	MONTH	DAY	GAGE HEIGHT (feet)	DISCHARGE (second-feet)
1937	May	6	10.7	12,900
1938	Apr.	14	10.4	11,600
1939	Mar.	5	12.1	20,600
1940	Aug.	17	12.8	24,800
1941	July	24	8.9	6,320
1942	Mar.	28	10.9	14,000
1943	Mar.	28	10.5	11,900
1944	Mar.	27	12.8	24,800
1945	Feb.	26	7.6	3,030
1946	Jan.	20	9.1	6,540
1947	Mar.	11	10.0	9,450
1948	Apr.	4	11.2	15,500
1948	Dec.	5	11.2	15,500

Flood of October 11–20, 1990, in East-Central Georgia

By Timothy C. Stamey

Torrential rain occurred in east-central Georgia on October 10–12, 1990. In places, rainfall totaled as much as 19.89 inches for the 3-day period, although most areas received from 7.0 to 10.0 inches of rain. The largest 24-hour rainfall amount recorded was 16.42 inches at Louisville, about 50 miles southwest of Augusta (National Oceanic and Atmospheric Administration, written commun., 1990). Severe flooding caused by the intense rain on already saturated ground occurred in several tributaries to the Ogeechee, Ohoopee, and Savannah Rivers. The most severely affected flood area is shown in figure 45.

The rains were the result of the convergence of a slow-moving cold front from the northwest, Tropical Storm Klaus from the east, and Tropical Storm Marco from the south. The resulting excessive rains approached or exceeded several long-standing rainfall records in Georgia. The most notable record was a 3-day rainfall of 19.89 inches in Louisville (National Oceanic and Atmospheric Administration, written commun., 1990).

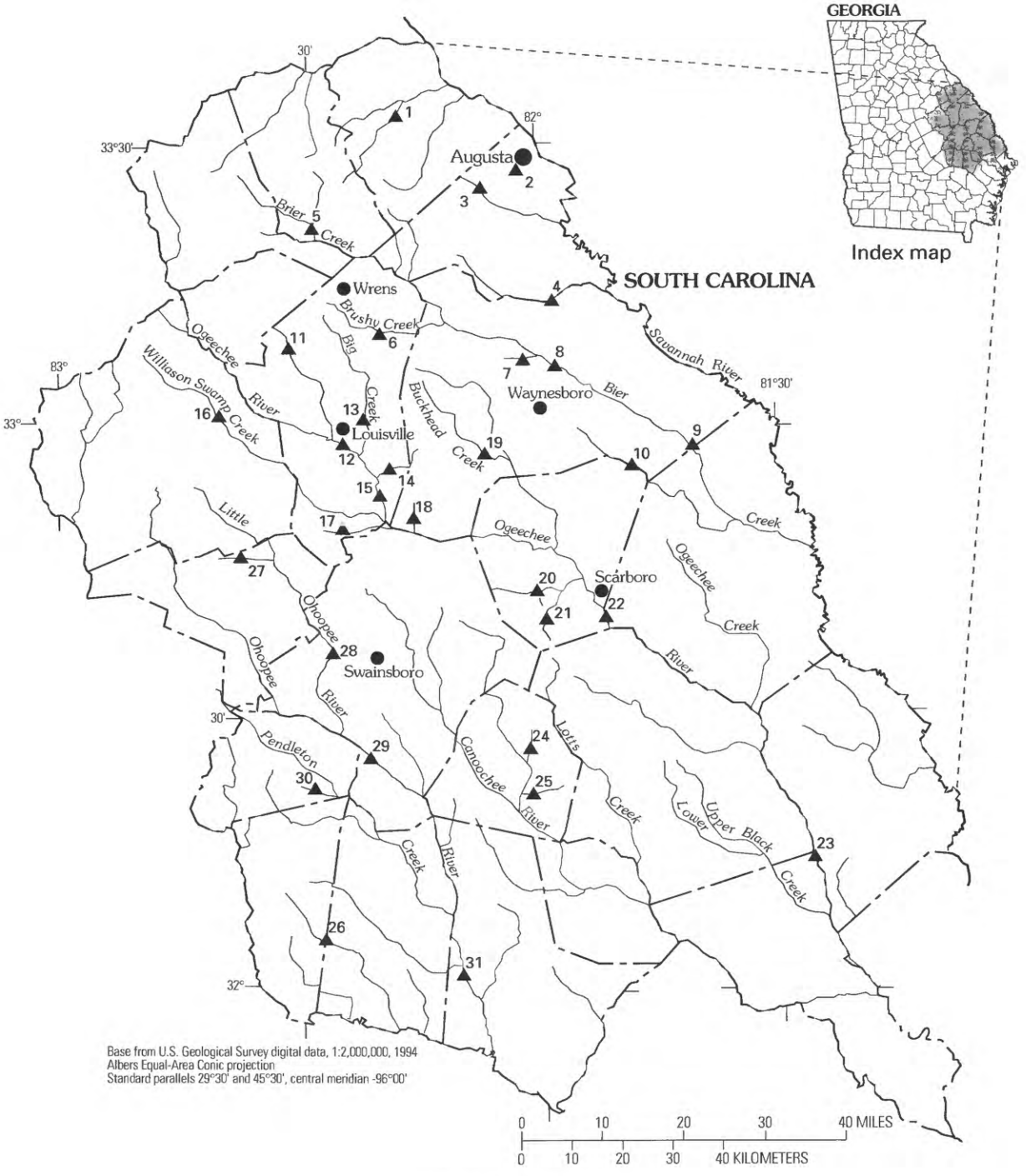
The flood of October 11–20 was the third severe flood to occur in Georgia in 1990, and the President of the United States declared nine counties in east-central Georgia flood-disaster areas. At least four people lost their lives after being swept away by floodwaters. Damage to roads and bridges was substantial and resulted in millions of dollars in damages to public and private property. Numerous dam failures were reported, and several hundred residents were evacuated (Federal Emergency Management Agency, written commun., 1990).

Maximum discharges of streams in east-central Georgia had recurrence intervals ranging from 2 years to more than 100 years. Record-high stages and discharges occurred at 14 sites in east-central Georgia where stage and discharge data were collected during October 1990 (table 38).

The most severe flooding occurred on Big Creek near Louisville (site 13), Brushy Creek near Wrens (site 6), and Buckhead Creek near Waynesboro (site 19), where the maximum discharges were much greater than the respective 100-year discharges. Known dam failures upstream of the gaged sites on Big Creek and Brushy Creek contributed to the severity of the flooding at these two sites. Also, there were at least six other streams within about a 50-mile radius of Augusta that experienced maximum discharges equal to or greater than those having a 100-year recurrence interval (fig. 45, table 38).

All sites where discharge equalled or exceeded the 100-year discharge within this 50-mile radius had drainage areas of less than 100 square miles, except sites on the Ogeechee River. The Ogeechee River experienced maximum discharges having recurrence intervals ranging from 10 to more than 100 years. The maximum discharge of 27,000 cubic feet per second for the Ogeechee River near Louisville (site 12) was the largest since 1929 at that site. The maximum stage for Ogeechee River at Scarboro (site 22) was 13.42 feet, which is the highest since March 1944 and the third highest stage since 1935 (flood stage is 8 feet). Maximum discharges attenuated as the flood progressed downstream (table 38).

The upstream reaches of the Ohoopee and Little Ohoopee Rivers and some small tributaries in the Swainsboro area also had maximum discharges equal to or in excess of the 100-year discharge. The maximum discharges on these streams also attenuated as the flood progressed downstream (table 38).



EXPLANATION

▲ 2 **Flood-determination site**—Number corresponds to that in table 38

Figure 45. Location of flood-determination sites for flood of October 11–20, 1990, in east-central Georgia.

Table 38. Maximum stages and discharges prior to and during flood of October 11–20, 1990, in east-central Georgia

[mi^2, square mile; ft, feet above arbitrary datum; ft^3/s, cubic feet per second; >, greater than; <, less than; --, not determined. Source: Recurrence intervals calculated from U.S. Geological Survey data. Other data from U.S. Geological Survey reports or data bases]

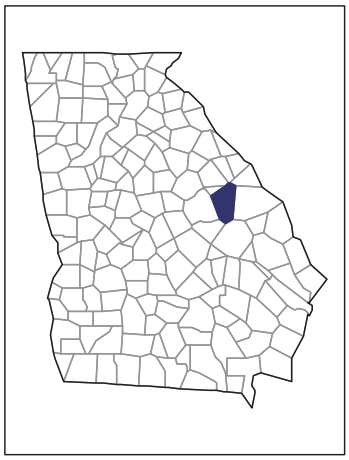
Site no. (fig. 45)	Station no.	Stream and place of determination	Drainage area (mi^2)	Maximum prior to October 1990				Maximum during October 1990			
				Period	Year	Stage (ft)	Discharge (ft^3/s)	Day	Stage (ft)	Discharge (ft^3/s)	Discharge recurrence interval (years)
				Savannah River Basin							
1	02195150	Kiokee Creek at Appling	43.9	1984–90	1985	10.27	1,900	12	15.53	11,500	>100
2	02196760	Rocky Creek tributary at Augusta	1.56	1979–90	1988	6.31	519	12	9.60	1,110	100
3	02196820	Butler Creek at Fort Gordon	7.5	1929–90	1929	12.40	2,300	12	13.30	4,700	--
4	02197190	McBean Creek near McBean	41.4	1929–90	1929	14.80	4,300	12	7.52	3,160	100
5	02197520	Brier Creek near Thomson	55.0	1797–1990	1929	--	12,000	12	13.53	2,210	10
6	02197600	Brushy Creek near Wrens	28.0	1959–90	1971	8.03	1,200	12	14.02	[1]11,400	>100
7	02197810	Walnut Branch near Waynesboro	11.9	1796–1990	1966	8.89	598	12	11.48	2,300	>100
8	02197830	Brier Creek near Waynesboro	473	1796–1990	1929	23.00	48,000	13	14.24	14,200	50
9	02198000	Brier Creek near Millhaven	646	1929–90	1929	25.10	64,000	15	15.58	14,600	50
10	02198100	Beaverdam Creek near Sardis	30.8	1987–90	1987	6.64	600	13	7.60	1,850	5
				Ogeechee River Basin							
11	02200400	Rocky Comfort Creek near Grange	188	1979–90	1980	14.82	4,020	12	12.08	1,840	5
12	02200500	Ogeechee River near Louisville	800	1840–1990	1929	21.30	46,000	13	16.82	27,000	>100
13	02200900	Big Creek near Louisville	95.8	1948–90	1948	12.00	19,000	12	12.70	[1]28,400	>100
14	02200930	Spring Creek near Louisville	14.2	1961–90	1980	7.35	1,130	12	10.38	2,200	>100
15	02200950	Ogeechee River near Wadley	990	1840–1990	1929	--	50,000	13	17.33	29,500	100
16	02201000	Williamson Swamp Creek at Davisboro	109	1929–90	1929	15.0	9,200	12	9.74	2,110	10
17	02201110	Nails Creek near Bartow	8.36	1964–90	1972	4.21	654	12	9.36	3,260	>100
18	02201250	Seals Creek tributary near Midville	.99	1964–74	1964	2.44	82	12	3.56	165	50

Table 38. Maximum stages and discharges prior to and during flood of October 11–20, 1990, in east-central Georgia—Continued

Site no. (fig. 45)	Station no.	Stream and place of determination	Drainage area (mi^2)	Maximum prior to October 1990				Maximum during October 1990			
				Period	Year	Stage (ft)	Discharge (ft^3/s)	Day	Stage (ft)	Discharge (ft^3/s)	Discharge recurrence interval (years)
				Ogeechee River Basin—Continued							
19	02201350	Buckhead Creek near Waynesboro	64.0	1929–90	1929	11.60	9,000	12	13.33	13,000	>100
20	02201800	Richardson Creek near Millen	43.0	1963–84	1980	6.04	2,400	12	2.02	100	<2
21	02201830	Sculls Creek near Millen	4.38	1965–90	1966	3.73	278	12	2.92	20	<2
22	02202000	Ogeechee River at Scarboro	1,940	1840–84	1929	17.00	75,000	15	13.42	37,300	25
23	02202500	Ogeechee River near Eden	2,650	1840–90	1929	20.00	78,000	20	14.41	26,800	10
24	02202820	Reedy Creek near Metter	3.41	1965–80	1966	6.74	278	12	4.18	20	<2
25	02202910	Ten Mile Creek tributary at Pulaski	1.14	1963–90	1966	7.67	599	12	4.32	140	2
				Altamaha River Basin							
26	02225100	Cobb Creek near Lyons	69	1929–90	1966	9.90	3,500	12	3.50	300	<2
27	02225210	Hurricane Branch near Wrightsville	3.53	1965–90	1973	4.28	650	12	6.52	1,100	>100
28	02225250	Little Ohoopee River near Swainsboro	216	1925–90	1929	14.00	13,500	13	13.40	15,800	>100
29	02225320	Ohoopee River near Aline	698	1925–90	1980	17.25	15,200	12	18.81	22,000	100
30	02225350	Pendleton Creek tributary no. 2 near Soperton	1.68	1965–90	1973, 1984	3.47	290	12	3.00	210	5
31	02225500	Ohoopee River near Reidsville	1,110	1886–1990	1925	28.40	47,000	16	20.34	16,400	25

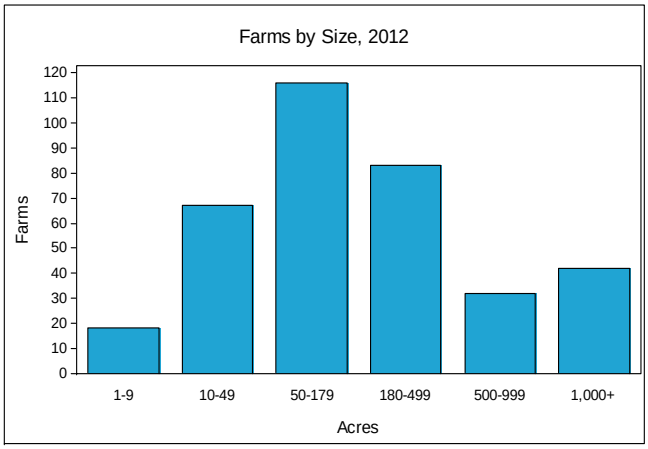
[1]Discharge affected by dam failure.

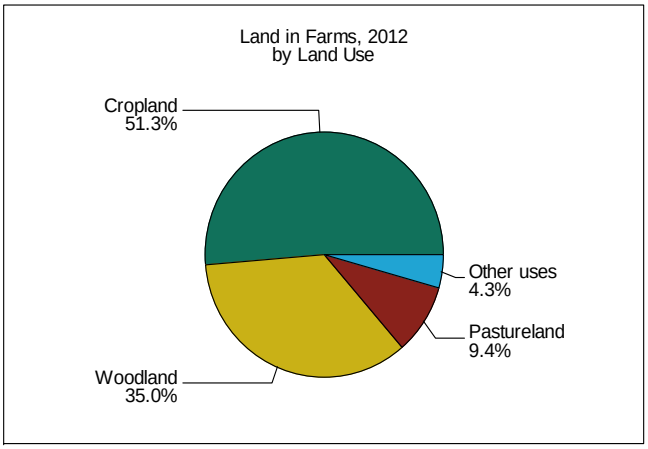
2012 CENSUS OF AGRICULTURE
COUNTY PROFILE



Jefferson County
Georgia

	2012	2007	% change
Number of Farms	358	315	+ 14
Land in Farms	145,588 acres	108,932 acres	+ 34
Average Size of Farm	407 acres	346 acres	+ 18
Market Value of Products Sold	$72,877,000	$29,324,000	+ 149
Crop Sales $52,999,000 (73 percent) Livestock Sales $19,878,000 (27 percent)			
Average Per Farm	$203,566	$93,092	+ 119
Government Payments	$2,695,000	$2,569,000	+ 5
Average Per Farm Receiving Payments	$11,516	$13,380	- 14





2012 CENSUS OF AGRICULTURE
COUNTY PROFILE

Jefferson County – Georgia

Ranked items among the 159 state counties and 3,079 U.S. counties, 2012

Item	Quantity	State Rank	Universe [1]	U.S. Rank	Universe [1]
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD ($1,000)					
Total value of agricultural products sold	72,877	47	159	1,460	3,077
Value of crops including nursery and greenhouse	52,999	30	159	1,122	3,072
Value of livestock, poultry, and their products	19,878	65	159	1,621	3,076
VALUE OF SALES BY COMMODITY GROUP ($1,000)					
Grains, oilseeds, dry beans, and dry peas	21,013	3	151	1,210	2,926
Tobacco	-	-	29	-	436
Cotton and cottonseed	11,669	33	84	153	635
Vegetables, melons, potatoes, and sweet potatoes	866	34	152	893	2,802
Fruits, tree nuts, and berries	(D)	(D)	156	(D)	2,724
Nursery, greenhouse, floriculture, and sod	(D)	(D)	144	(D)	2,678
Cut Christmas trees and short rotation woody crops	-	-	65	-	1,530
Other crops and hay	16,419	25	157	198	3,049
Poultry and eggs	4	137	153	2,716	3,013
Cattle and calves	(D)	6	158	(D)	3,056
Milk from cows	10,310	10	67	490	2,038
Hogs and pigs	9	50	124	2,156	2,827
Sheep, goats, wool, mohair, and milk	43	42	154	2,028	2,988
Horses, ponies, mules, burros, and donkeys	(D)	(D)	143	(D)	3,011
Aquaculture	(D)	7	57	(D)	1,366
Other animals and other animal products	(D)	129	135	(D)	2,924
TOP CROP ITEMS (acres)					
Cotton, all	14,288	35	84	181	635
Upland cotton	14,288	35	84	180	635
Peanuts for nuts	11,470	28	75	48	364
Wheat for grain, all	10,101	2	120	677	2,537
Winter wheat for grain	10,101	2	120	587	2,480
TOP LIVESTOCK INVENTORY ITEMS (number)					
Cattle and calves	15,963	15	158	1,533	3,063
Goats, all	686	23	155	883	2,996
Sheep and lambs	313	19	120	1,792	2,897
Pullets for laying flock replacement	310	53	116	945	2,637
Layers	251	122	156	2,682	3,040

Other County Highlights, 2012

Economic Characteristics	Quantity
Farms by value of sales:	
Less than $1,000	125
$1,000 to $2,499	11
$2,500 to $4,999	32
$5,000 to $9,999	36
$10,000 to $19,999	31
$20,000 to $24,999	9
$25,000 to $39,999	8
$40,000 to $49,999	4
$50,000 to $99,999	21
$100,000 to $249,999	20
$250,000 to $499,999	11
$500,000 or more	50
Total farm production expenses ($1,000)	49,860
Average per farm ($)	139,273
Net cash farm income of operation ($1,000)	27,418
Average per farm ($)	76,586

Operator Characteristics	Quantity
Principal operators by primary occupation:	
Farming	145
Other	213
Principal operators by sex:	
Male	315
Female	43
Average age of principal operator (years)	55.7
All operators by race [2]:	
American Indian or Alaska Native	-
Asian	-
Black or African American	40
Native Hawaiian or Other Pacific Islander	-
White	450
More than one race	-
All operators of Spanish, Hispanic, or Latino Origin [2]	6

See "Census of Agriculture, Volume 1, Geographic Area Series" for complete footnotes, explanations, definitions, and methodology.
- Represents zero. (D) Withheld to avoid disclosing data for individual operations.
[1] Universe is number of counties in state or U.S. with item. [2] Data were collected for a maximum of three operators per farm.

576,204,943 searches since Nov. 29, 2004

Jefferson County, Georgia

Summary Analyses:

- Farm Subsidy Payments by Category
- Farm Subsidy Payments by Program
- Crop Insurance

- Farm Commodity Payments
- Conservation Payments
- Farm Disaster Payments

Major Farm Programs:

- Direct Payments
- Counter Cyclical Payments

Commodity Program Top Recipients:

- Top Recipients in 1995-2012
- Top Recipients in 2012
- Top Recipients in 2011
- Top Recipients in 2010

Commodity Program Payment Concentration:

- Concentration, 1995-2012
- Concentration, 2012
- Concentration, 2011
- Concentration, 2010

Top Regions 1995-2012:

- State rankings
- County rankings
- Congressional District rankings

Top Regions 2012:

- State rankings
- County rankings
- Congressional District rankings

Search

- Search for farm subsidy recipients

Jefferson County, Georgia Summary Information

- $71.5 *million* in subsidies 1995-2012.
  - $46.1 *million* in commodity subsidies.
  - $11.9 *million* in crop insurance subsidies.
  - $4.72 *million* in conservation subsidies.
  - $8.83 *million* in disaster subsidies.
- **Georgia ranking:** 16 of 50 States
- **70 percent** of farms in Georgia did not collect subsidy payments - according to USDA.
- *Ten percent* collected **78 percent** of all subsidies.
- Amounting to **$46.5 *million*** over 18 years.
- **Top 10%:** $29,538 average per year between 1995 and 2012.
- **Bottom 80%:** $526 average per year between 1995 and 2012.

- Pick another state
- Pick a county
- Pick a congressional district

Crop Insurance is becoming more important to farmers than Direct Payments

2004
2005
2006
2007
2008
2009
2010
2011
2012

Top programs in Jefferson County, Georgia, 1995-2012:

Years: 2003, 2004, 2005, 2006, 2007, 2008, 2009**, 2010**, 2011**, 2012**, **1995-2012****

Rank	Program (click for top recipients, payment concentration and regional rankings)	Number of Recipients 1995-2012	Subsidy Total 1995-2012
1	Cotton Subsidies**	326**	$26,809,510
2	Wheat Subsidies**	657**	$10,730,927
3	Disaster Payments	288	$8,827,715
4	Peanut Subsidies	185**	$7,682,640
5	Corn Subsidies**	564**	$6,605,333

** Crop totals are an estimate. In the data received by EWG for 2009-2011, USDA does not differentiate Direct Payments or Counter-Cyclical Payments by crop as in previous years. EWG allocated the region's Direct Payments by crop for the 2009-2011 calendar year using the proportion of that crop's Direct Payments in 2008. Number of recipients receiving Direct Payments for that crop were not estimated. Due to the way Counter Cyclical Payments are made - EWG was not able to allocate Counter Cyclical Payments to crops. Also included in the crop totals are the crop insurance premiums as reported by the USDA Risk Management Agency for that crop. The crop insurance premium is the amount of money that is calculated by USDA to make the program actuarially sound. Crop insurance premium subsidies are available at the county, state and national level.

Note: The information on conservation spending for 2011and 2012 are incomplete due to missing data from USDA's Natural Resource Conservation Service. In addition some payments made in 2010 were not assigned to recipients in the data received from NRCS. Those payments are also not included.

The information provided for the Wetland Reserve Program (WRP) provides an inaccurate picture of how WRP payments are distributed. USDA's Natural Resource Conservation Service uses title companies as intermediaries to finalize wetlands easements under the Wetlands Reserve Program. As a result, the data provided to us shows large sums of money going to these title companies. In reality, the payments are ultimately distributed to landowners participating in the WRP.

Unfortunately, NRCS has not provided the data to show where these farms and wetlands are located or which farmers or landowners are enrolling in the program, so EWG is unable to allocate these large sums of money to individuals beyond the title companies. Therefore, these companies skew the conservation rankings and payment concentration, which EWG cannot avoid unless and until NRCS makes available the additional farm attribution data. Therefore, we have not included WRP payments in the 2011 or 2012 data update.

We have separated data on farm commodity, disaster and conservation payments in order to provide a more accurate picture of top recipients and concentration of payments among the three main categories of USDA programs.

Finally, EWG works hard to ensure the accuracy of the information it provides through its products and services, but obtains data for the Farm Subsidy Database from the U.S. Department of Agriculture pursuant to the Freedom of Information Act. Therefore, EWG cannot guarantee the accuracy of the information USDA provides or any analysis based thereon. If you find an error or discrepancy on the site, please contact your local USDA Farm Service Agency office to check its records before contacting EWG.

Jefferson County, Georgia

Subtotal, Disaster Payments

Top Recipients:

- Top Recipients in 1995-2012
- Top Recipients in 2012
- Top Recipients in 2011
- Top Recipients in 2010

Payment Concentration:

- Concentration, 1995-2012

Top Regions 1995-2012:

- State rankings
- County rankings
- Congressional District rankings

Top Regions 2012:

- State rankings
- County rankings
- Congressional District rankings

Search

- Search for farm subsidy recipients

Subtotal, Disaster Payments in Jefferson County, Georgia totaled $8.8 million from 1995-2012.

Year	Subtotal, Disaster Payments
1995	$125,770
1996	$0
1997	$0
1998	$0
1999	$1,945,024
2000	$1,655,895
2001	$1,709,080
2002	$248,159
2003	$1,230,458
2004	$75,903
2005	$587,267
2006	$0
2007	$20,091
2008	$625,533
2009	$139,146
2010	$188,516
2011	$159,634
2012	$110,344
Total	**$8,827,715**

Programs included in Subtotal, Disaster Payments

Program	Total Payments 1995-2012
Misc. Disaster Payments	$7,269,057
Livestock Disaster / Emergency	$1,024,505
Supplemental Revenue Assistance Payments Program	$189,312

Note: The information on conservation spending for 2011and 2012 are incomplete due to missing data from USDA's Natural Resource Conservation Service. In addition some payments made in 2010 were not assigned to recipients in the data received from NRCS. Those payments are also not included.

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APPENDIX D

WORKSHEETS USED IN PLANNING PROCESS

GEMA Worksheet #1 Identify the Hazard Step 1

Date: What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. *Research newspapers and other historical records*
2. *Review existing plans and reports.*
3. *Talk to the experts in your community, state, or region.*
4. *Gather information on Internet Websites.*
5. *Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.*

Task B. Focus on the most prevalent hazard in your community or state.

1. *Go to hazard Websites.*
2. *Locate your community or state on the Website map.*
3. *Determine whether you are in a high-risk area. Get more localized information if necessary.*
4. *Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that post a significant threat.*

Use this space to record information you find for each of the hazards you will be **researching**. *Attach additional pages as necessary. Note:* ***Bolded*** *hazards are addressed in this How-to Guide.*

	Task A	Task B
Avalanche		
Coastal Erosion		
Coastal Storm	X	
Dam Failure	X	X
Drought	X	X
Earthquake	X	
Expansive Soils		
Extreme Heat	X	
Flood	X	X
Hailstorm	X	
Hurricane	X	
Land Subsidence		
Landslide		
Severe Winter Storm	X	X
Tornado	X	X
Tsunami		
Volcano		
Wildfire	X	X
Windstorm		
Lightning	X	X
Tropical Storms	X	X
Thunderstorm Winds	X	X

Hazard or Event Description *(Type of hazard, date of event, number of injuries, cost and types of damage, etc.)*	**Source of Information**	**Map Available for this Hazard?**	**Scale of Map**
Dam Failure See Appendix A for this complete information	USGS, The Jefferson Reporter, NCDC	Only map of dams is available See Appendix A	
Drought See Appendix A for complete information	USDA, NCDC, SHELDUS, The Jefferson Reporter, Palmer Index	Maps area available for the state as a whole from the Palmer Index See Appendix A	
Flood See Appendix A for this complete information	USGS, NCDC, SHELDUS, The Jefferson Reporter,	Flood Plain Maps are available See Appendix A	
Severe Winter Weather See Appendix A for this complete information	SERRC, NCDC, SHELDUS, The Jefferson Reporter,	Maps are available in Appendix A	
Hail See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tornado See Appendix A for this complete information	Tornado History Project, NCDC, SHELDUS, The Jefferson Reporter,	Map is available See Chapter II. Section V.	
Lightning See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tropical Storms See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Thunderstorm Winds See Appendix A for this complete information	NCDC, SHELDUS,	No map is available Map is available for wind zone	
Wildfire See Appendix A for this complete information	GFC	Map is available for fire danger zones	

GEMA Worksheet #2 Profile Hazard Events Step 2

County: Date:

How Bad Can It Get?

Task A. Obtain or create a base map.

GEMA will be providing you with a base map, USGS topos and DOQQ as part of our deliverables to local government for the planning process. Additionally, we will be providing you with detailed hazard layer coverages. These data layers originate from state or nationwide coverage or datasets. Therefore, it is important for local government to assess what you already have at the local level. It is important for you at the local level to have an idea of what existing maps you have available for the planning process. Some important things to think about:

1) What maps do we already have in the county that would be relevant to the planning process?
2) Have other local plans used maps or mapping technology where there is specific data that is also needed in my local plan?
3) What digital maps do we have?
4) Do we have any Geographic Information System (GIS) data, map themes or layers or databases here at the local level (or regional) that we can use?
5) If we do have any GIS data, where is it located at, and who is our local expert?
6) Are there any ongoing GIS or mapping initiatives at the local level in other planning or mapping efforts? If so, what are they, and what are the timetables for completion?
7) Are there mapping needs that have been identified at the local level in the past? If so, what are they and when were they identified?
8) Of the existing maps, GIS data and other digital mapping information, what confidence do we have at the local level that it is accurate data?

Please answer the above questions on a separate sheet of paper and attach to this worksheet.
It is important to realize that those counties that already have GIS and digital mapping, (ie: parcel level data, GPS fire hydrants, etc) higher levels of spatial accuracy and detail will exist for some data layers at the local level. However, for this planning process, that level of detail will not be needed on all layers in the overall mapping and analysis.

You can use existing maps from:

- Road Maps
- USGS topographic maps or Digital Orthophoto Quarter Quads (DOQQ)
- Topographic and/or planimetric maps from other agencies
- Aerial topographic and/or planimetric maps
- Field Surveys
- GIS software
- CADD software
- Digitized paper map

Title of Map	Scale	Date

Task B. Obtain a hazard event profile.	Task C. Record your hazard event profile information.
Avalanche	
Coastal Storm / Coastal Erosion 1. Get a copy of your FIRM. _____ 2. Verify that the FIRM is up-to-date and complete. _____ 3. Determine the annual rate of coastal erosion. _____ 4. Find your design wind speed. _____	1. Transfer the boundaries of your coastal storm hazard areas onto your base map. 2. Transfer the BFEs onto your base map. 3. Record the erosion rates on your base map: _____ 4. Record the design wind speed here and on your base map: _____
Dam Failure	
Drought	
Earthquake 1. Go to the http://geohazards.cr.usgs.gov Website. 2. Locate your planning area on the map. 3. Determine your PGA.	1. Record your PGA: _____ 2. If you have more than one PGA print, download or order your PGA map.
Expansive Soils	
Extreme Heat	
Flood 1. Get a copy of your FIRM. _____ 2. Verify the FIRM is up-to-date and complete. _____	1. Transfer the boundaries from your firm onto your base map (floodway, 100-yr flood, 500-yr flood). 2. Transfer the BFEs onto your base map.
Hailstorm	
Hurricane	
Land Subsidence	
Landslide 1. Map location of previous landslides. _____ 2. Map the topography. _____ 3. Map the geology. _____ 4. Identify thee high-hazard areas on your map. _____	1. Mark the areas susceptible to landslides onto your base map.
Severe Winter Storm	
Tornado 1. Find your design wind speed. _____	1. Record your design wind speed: _____ 2. If you have more than one design wind speed, print, download or copy your design wind speed zones, copy the boundary of your design wind speed zones on your base map, then record the design wind speed zones on your base map.
Tsunami	
Wildfire 1. Map the fuel models located within the urban-wildland interface areas. _____ 2. Map the topography. _____ 3. Determine your critical fire weather frequency. _____ 4. Determine your fire hazard severity. _____	1. Draw the boundaries of your wildfire hazard areas onto your base map.
Other 1. Map the hazard. _____	1. Record hazard event info on your base map.

JCOUNTY-WIDE INCLUDES ALL JURISDICTIONS
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire	168	57	52	91	161	0.34	294.74	455.00	5.2	4.55	3.22
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	13	64	3	6	13	4.92	20.31	30.00	0.3	0.3	0.26
Thunderstorm Wind	85	64	27	52	84	0.75	132.81	260.00	2.7	2.6	1.68
Hail	53	64	18	31	41	1.21	82.81	155.00	1.8	1.55	0.82
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	187	64	53	95	170	0.34	292.19	475.00	5.3	4.75	3.4
Dam Failure	1	64	0	0	1	64.00	1.56	0.00	0	0	0.02
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a ha ard event over a given period of time determines the historic recurrence interval.
For example: If there have been 20 Ha Mat Releases in the County in the past 5 years,
statistically you could expect that there will be 4 releases a year.
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By updating and reviewing this table over time, it may be possible to see if certain types of ha ard events are increasing in the past 10-20 years.

COUNTY UNICORPORATED AREAS
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire	168	57	52	91	161	0.34	294.74	455.00	5.2	4.55	3.22
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	13	64	3	6	13	4.92	20.31	30.00	0.3	0.3	0.26
Thunderstorm Wind	56	64	8	23	55	1.14	87.50	115.00	0.8	1.15	1.1
Hail	26	64	4	4	14	0.15	650.00	20.00	0.4	0.2	0.28
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	185	64	52	93	168	0.35	289.06	465.00	5.2	4.65	3.36
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

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For example: If there have been 20 Ha Mat Releases in the County in the past 5 years,
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Avera
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	1	1	1	64.00	1.56	5.00	0.1	0.05	0.02
Thunderstorm Wind	57	64	8	23	56	1.12	89.06	115.00	0.8	1.15	1.12
Hail	26	64	3	4	14	2.46	40.63	20.00	0.3	0.2	0.28
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	15	64	0	0	5	4.27	23.44	75.00	0	0	0.1
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

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Bartow
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	0	1	1	64.00	1.56	5.00	0	0.05	0.02
Thunderstorm Wind	57	64	9	23	56	1.12	89.06	115.00	0.9	1.15	1.12
Hail	27	64	4	5	15	2.37	42.19	25.00	0.4	0.25	0.3
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	15	64	0	0	5	4.27	23.44	75.00	0	0	0.1
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

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Bartow
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Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	0	1	1	64.00	1.56	5.00	0	0.05	0.02
Thunderstorm Wind	57	64	9	23	56	1.12	89.06	115.00	0.9	1.15	1.12
Hail	27	64	4	5	15	2.37	42.19	25.00	0.4	0.25	0.3
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	15	64	0	0	5	4.27	23.44	75.00	0	0	0.1
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

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Louisville

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	1	1	1	64.00	1.56	5.00	0.1	0.05	0.02
Thunderstorm Wind	66	64	14	33	65	0.97	103.13	165.00	1.4	1.65	1.3
Hail	40	64	10	18	28	1.60	62.50	90.00	1	0.9	0.56
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	16	64	0	1	6	4.00	25.00	80.00	0	0.05	0.12
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

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Stapleton
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	1	1	1	64.00	1.56	5.00	0.1	0.05	0.02
Thunderstorm Wind	58	64	9	25	57	1.10	90.63	125.00	0.9	1.25	1.14
Hail	26	64	4	5	14	2.46	40.63	25.00	0.4	0.25	0.28
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	15	64	0	0	5	4.27	23.44	75.00	0	0	0.1
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a ha ard event over a given period of time determines the historic recurrence interval.
For example: If there have been 20 Ha Mat Releases in the County in the past 5 years,
statistically you could expect that there will be 4 releases a year.
Reali e that from a statistical standpoint, there are several variables to consider. 1) Accurate ha ard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuarcy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded ha ard events which will include periodic updates to this table.
By updating and reviewing this table over time, it may be possible to see if certain types of ha ard events are increasing in the past 10-20 years.

Wadley
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	64	1	1	1	64.00	1.56	5.00	0.1	0.05	0.02
Thunderstorm Wind	62	64	10	29	61	1.03	96.88	145.00	1	1.45	1.22
Hail	28	64	5	6	16	2.29	43.75	30.00	0.5	0.3	0.32
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	15	64	0	0	5	4.27	23.44	75.00	0	0	0.1
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a ha ard event over a given period of time determines the historic recurrence interval.
For example: If there have been 20 Ha Mat Releases in the County in the past 5 years,
statistically you could expect that there will be 4 releases a year.
Reali e that from a statistical standpoint, there are several variables to consider. 1) Accurate ha ard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuarcy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded ha ard events which will include periodic updates to this table.
By updating and reviewing this table over time, it may be possible to see if certain types of ha ard events are increasing in the past 10-20 years.

Wrens

HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	10	85	3	4	9	8.50	11.76	20.00	0.3	0.2	0.18
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	2	64	1	2	2	32.00	3.13	10.00	0.1	0.1	0.04
Thunderstorm Wind	59	64	11	26	58	1.08	92.19	130.00	1.1	1.3	1.16
Hail	30	64	6	8	18	1.21	82.81	40.00	1.8	1.55	0.82
Drought	25	64	8	24	25	2.56	39.06	120.00	0.8	1.2	0.5
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	41	122	7	16	25	2.98	33.61	80.00	0.7	0.8	0.5
Lightning	16	64	0	1	6	4.00	25.00	80.00	0	0.05	0.12
Landslide						#DIV/0!	#DIV/0!	0.00	0	0	0
Dam Failure	0	0	0	0	0	#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	64	10	13	18	3.56	28.13	65.00	1	0.65	0.36
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a ha ard event over a given period of time determines the historic recurrence interval.
For example: If there have been 20 Ha Mat Releases in the County in the past 5 years,
statistically you could expect that there will be 4 releases a year.
Reali e that from a statistical standpoint, there are several variables to consider. 1) Accurate ha ard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuarcy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded ha ard events which will include periodic updates to this table.
By updating and reviewing this table over time, it may be possible to see if certain types of ha ard events are increasing in the past 10-20 years.

Facility Name

Location

Longitude | Latitude

Location Method: [ ] Geocode [ ] GPS [ ] GPS-closed [ ] GPS - dnr [ ] Manual add

Address 1:

Address 2: (PO BOX)

City: Zip:

Jurisdiction:

Daytime Occupancy: Night Occupancy:

Building Value

Number of Stories: Functional Use Value:

Year Constructed: Displacement Cost Per Day:

Area Sq Ft: Contents Value:

Bldg Value: Contents Value Year:

Valuation Year: Contents Description:

*Mark any or all that apply. See back of page for details.

- [ ] Essential Facility
- [ ] Transportation Facility
- [ ] Lifeline System
- [ ] High Potential Loss
- [ ] HazMat Facility
- [ ] Important Facility
- [ ] Vulnerable Population
- [ ] Economic Asset
- [ ] Special Consideration
- [ ] Historical Consideration
- [ ] Other Facility

Other Details:

See back of page for codes.

Building Type Code:

Occupancy Code:

*Choose Only One Faciltiy Type

Facility Type:

- [ ] Pre-kindergarten
- [ ] Kindergarten
- [ ] Primary School
- [ ] Elementary School
- [ ] Middle School
- [ ] Middle/High School
- [ ] High School, Public
- [ ] Private School
- [ ] Other School
- [ ] Alternative Division
- [ ] Alternative School
- [ ] Private Two-Year College
- [ ] Public Two-Year College
- [ ] Private Four-Year College
- [ ] Public Four-Year College
- [ ] Private University
- [ ] Public University
- [ ] Public Vocational Technical School
- [ ] Psychoeducational
- [ ] Adult Edu. Center
- [ ] Airport
- [ ] City Hall
- [ ] City Jail
- [ ] County Correctional Institution
- [ ] County Jail
- [ ] Courthouse
- [ ] Federal Penitentiary
- [ ] Fire Station
- [ ] Wastewater Treatment Plant
- [ ] Water System
- [ ] C and D Construction and Demolition Landfill
- [ ] L (Dry Trash) Landfill
- [ ] MSWL (Municipal Solid Waste Landfill)
- [ ] SL (Sanitary Waste) Landfill
- [ ] Recycling Center
- [ ] Transfer Station
- [ ] Hospital, Admissions Entrance
- [ ] Hospital, Emergency Entrance
- [ ] Library
- [ ] Marshals Office
- [ ] Police Station
- [ ] Sheriffs Office
- [ ] Emergency Services
- [ ] State Prison
- [ ] Other

Building Valuation Type: [ ] 0 = Unknown [ ] 1 = Market Value [ ] 2 = Assessed Value [ ] 3 = Replacement Value [ ] 99 = Other

Building Type Code:

[ ] C1 = Concrete Moment Frame
[ ] C2 = Concrete Shear Walls
[ ] C3 = Concrete Frame with Unreinforced Masonry Infill Walls
[ ] MH = Manufactured Housings
[ ] O = Other Building Type
[ ] P1 = Precast Concrete Tilt-Up Walls
[ ] P2 = Precast Concrete Frames with Cast-in-Place Concrete Shear Walls
[ ] RM1 = Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms
[ ] RM2 = Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms
[ ] S1 = Steel Moment Frame
[ ] S2 = Steel Braced Frame
[ ] S3 = Steel Light Frame
[ ] S4 = Steel Frame with Cast-in-Place Concrete Shear Walls
[ ] S5 = Steel Frame with Unreinforced Masonry Infill Walls
[ ] URM = Unreinforced Masonry Bearing Walls
[ ] UNK = Unknown Building Type

Occupancy Code:

[ ] AGR1 = Agriculture Facilities and Offices
[ ] COM1 = Retail Trade
[ ] COM2 = Wholesale Trade
[ ] COM3 = Personal and Repair Services
[ ] COM4 = Professional/Technical Services
[ ] COM5 = Banks
[ ] COM6 = Hospital
[ ] COM7 = Medical Office and Clinic
[ ] COM8 = Entertainment _Recreation
[ ] COM9 = Theaters
[ ] COM10 = Parking Garages
[ ] EDU1 = Grade Schools and Admin. Offices
[ ] EDU2 = Colleges and Universities
[ ] GOV1 = Government - General Services
[ ] GOV2 = Government - Emergency Response
[ ] UNK = Unknown
[ ] IND1 = Heavy Industrial
[ ] IND2 = Light Industrial
[ ] IND3 = Food/Drugs/Chemicals
[ ] IND4 = Metals/Minerals Processing
[ ] IND5 = High Technology
[ ] IND6 = Construction Facilities and Offices
[ ] REL1 = Churches and Non-Profit Organizations
[ ] RES1 = Single Family Dwellings
[ ] RES2 = Manufactured Housing
[ ] RES3A = Duplex
[ ] RES3B = 3 to 4 Units
[ ] RES3C = 5 to 9 Units
[ ] RES3D = 10 to 19 Units
[ ] RES3E = 20 to 49 Units
[ ] RES3F = > 50 Units
[ ] RES4 = Temporary Lodging
[ ] RES5 = Institutional Dormitories
[ ] RES6 = Nursing Homes

Definitions:

Essential Facility
An essential facility is a critical facility that is essential to the health and welfare of the population. The potential consequences of losing functions or services from this type of facility are higher than any other type of structures. Interruption or loss of function from these types of facilities would jeopardize human life and public safety. Essential facilities include: hospitals and other medical facilities, police and fire stations, emergency operations centers, evacuation shelters and schools, and other structures that house first responder equipment or personnel.

Transportation Systems
Transportation infrastructure or facilities. Examples include:
Airways: airports, heliports,
Highways: bridges, tunnels, roadbeds, overpasses, transfer stations.
Railways: tracks, tunnels, bridges, rail yards, depots, switching stations.
Waterways: canals, locks, ports, ferries, dry-docks, piers.

Lifeline System
Corridors of flow for equipment, supplies and services. Transportation systems can also be Lifeline Systems. The best physical example of a lifeline would be a bridge and right-of-way that could include utilities and communication. Examples include: potable water, wastewater, oil, natural gas, electric power, and communication.

High Potential Loss Facility
Facilities that would have a high human loss associated with their damage or failure. Examples include: nuclear power plants, dams and military installations.

Hazardous Materials Facility
Facilities that produce or house industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins. Check to see if your county has a Local Emergency Planning Committee (LEPC) and an existing Hazardous Material listing.

Important Facility
These types of facilities are vital for overall day to day community functions, and ensure full recovery in the wake of a hazard or disaster event. Examples include: government buildings and functions, major employers in the area, bank and financial institutions, non-nuclear power generators, certain commercial establishments such as grocery stores, hardware stores and gas stations, technical schools, colleges, and universities.

Vulnerable Population
Is there a vulnerable human population that occupies the structure that would need special assistance, medical care or other actions before, during or after a hazard event or disaster? Examples include: elderly people, jail populations, people with mental, physical or mobility problems, and non-English speaking populations.

Economic Assets
Larger economic assets that are vital to the prosperity of the community. Examples include major employers and financial centers in your community or area that impact the local or regional economy if significantly disrupted.

Special Considerations
High-density areas (residential or commercial development), if damaged or impacted in a hazard event or disaster, could result in high death tolls or injury rates. Examples include: larger factories or industries, large vertical apartment or housing complexes.

Historic Considerations
Historic, cultural or natural resources, including structures and areas that are identified and protected under state or federal law. Examples include: state parks, federal parks, museums and historic districts.

Other Facilities
Any other significant locally identified facility that does not fit into another category of those listed above.

Comments:

JEFFERSON COUNTY
HAZARD MITIGATION PLAN UPDATE

Documentation of Labor Match

NAME (Please Print): _____

ORGANIZATION: _____

DATE(S): _____

EVENT: __Hazard Mitigation Plan Update_____

HOURS CONTRIBUTED (Include travel time): _____

HOURLY SALARY: _____

TOTAL LABOR MATCH (Hours Contributed X Hourly Salary):_____

SIGNATURE: _____

(FORM IS NOT VALID WITHOUT SIGNATURE)

STAPLEE Criteria	S		T			A			P			L			E				E						
	(Social)		(Technical)			(Administrative			(Political)			(Legal)			(Economic)				(Environmental)						
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
FLOODING																									
Update floodplain maps																									Costly expenditure all jurisdictions need to participate
Jefferson County, all muncipalities: Continue to assess stormwater runoff.																									Funding needs to be allocated is quite costly but long term benefit
Jefferson County, all muncipalities: Assess and construct as needed, more storm water retention facilities, storm drain improvements and channel improvements to protect existing and new developments.																									
Jefferson County: Review set back requirements from top of banks of creeks and from top of banks of major rivers.																									
Jefferson County, all muncipalities: Clear run-off and water retention ditches.																									
Jefferson County, all muncipalities: Seek funding for communication towers and voter repeater systems																									
Jefferson County: Install flood alarms and measuring devices in creeks, ponds, etc. to provide a warning when water levels become dangerously high.																									
Jefferson County, all muncipalities: Determine the elevation of all critical facilities in known flood areas and mitigate if necessary.																									completed
Jefferson County, all muncipalities: Identify property owners who are located in areas continually subject to flooding and relocate or mitigate.														x											
Jefferson County, all muncipalities:Review existing comprehensive, development and land use plans to address flood prone areas.																									completed
Jefferson County, all muncipalities:Adopt ordinances to control building and development in known flood prone areas.										None															
Jefferson County: Promote the preservation of areas in and around watercourses.	x			x	x								x		x		x		x			x	x		
Jefferson County: add greenspace to known flood prone areas.				x	x								x		x		x		x			x	x		
Jefferson County: Cap wells not in use and increase wellhead waterproofing.						x																			

STAPLEE Criteria	S		T			A			P			L			E				E						
	(Social)		(Technical)			(Administrative			(Political)			(Legal)			(Economic)				(Environmental)						
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
Jefferson County: Ensure well head elevations are above known flooding levels.						x																			
Jefferson County, all muncipalities: Evaluate existing water systems.	x	x	x		x	x		x		x		x	x	x	x				x						Ongoing
Jefferson County, all muncipalities: Investigate methods to reduce non-point source pollution.																									
DAM FAILURE																									
Jefferson County: Conduct dam breach analysis to identify assets and population at risk in the event of a failure.																									
Jefferson County: Draft ordinance prohibiting development in dam breach zone.									X		X		X									X			
Jefferson County: Perform field survey including dams, spillways, downstream cross section, and downstream structures within dam breach zone.															x	x	x	x							
Jefferson County: Install dam failure alert systems.															x	x	x	x							remove state function
Jefferson County: Update inventory of dams, record GPS coordinates, and conduct initial assessment of dam safety.												x			x	x	x	x							remove state function
Jefferson County: Inspect all dams and document any deficiencies to include taking photographs, taking field measurements, and fill out a visual inspection checklist of key items.												x													
DROUGHT																									
Jefferson County: Identify and inventory all vulnerable agricultural properties to include livestock and develops a protective action plan.																									
Jefferson County: Conduct a study on the range of federal support programs available to assist Jefferson County's agriculture.																									
Jefferson County: Promote increased surface water usage and surface artesian flow for irrigation.																									
Jefferson County: Conduct a study of proactive measures for Jefferson County's agriculture to include livestock watering ponds and capturing storm water runoff.	X		X	X					X		X														

STAPLEE Criteria	S		T			A			P			L			E				E						
	(Social)		(Technical)			(Administrative			(Political)			(Legal)			(Economic)				(Environmental)						
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
Jefferson County: Seek funding for private wells that have gone dry.																									
Jefferson County, all muncipalities:Enact a program to educate residents about water conservation.	X					X		X	X	X		X					X		X						
Jefferson County, all muncipalities: Increase public awareness of watering restrictions and bans.	X					X		X	X	X		X					X		X						
WILDFIRE																									
Jefferson County, Waynesboro:Review previous firefighter training and implements a schedule for the ongoing training of all firefighters to include wildland fire training.	X					X		X	X	X		X			X	X		x							
Jefferson County, Waynesboro: seek funding for better firefighting equipment.	X					X		X	X	X		X			X	X		x							
Jefferson County, all muncipalities: Inventory and install more fire hydrants as needed.	X					X		X	X	X		X			X	X		x							
Jefferson County the Cities of Waynesboro: Seek funding for more fire tankers (2000 to 3000 gallons) for local fire departments.	X					X		X	X	X		X			X	X		x							
Jefferson County, all muncipalities: Ensure that a defensible space (30-ft minimum setbacks) between buildings and flammable brush and forestland.	X					X		X	X	X		X			X	X		x							
Jefferson County, all muncipalities:Strictly follows Georgia Forestry Commission's (GFC) guidelines for control burns and permits.	X					X		X	X	X		X			X	X		x							
Jefferson County: Continue following GFC service of construction and maintenance of firebreaks around forests and structures, along abandoned roadbeds.	X					X		X	X	X		X			X	X		x							
Jefferson County, all muncipalities:Seek funding for communication towers and voter repeater systems.	X					X		X	X	X		X			X	X		x							
Jefferson County: Seek funding for a reverse 911 or Voice-Over-Internet Protocol system.																									removed have CODE RED
Jefferson County, all muncipalities: Implement the Firewise Community Initiative.	X					X		X	X	X		X			X	X		x							
Jefferson County, all muncipalities:Improve public awareness of wildfire techniques and awareness of wildfire dangers	X					X		X	X	X		X			X	X		x							
SEVERE WEATHER																									
Jefferson County: Seek funding for a reverse 911 or Voice-Over-Internet Protocol system.																									removed have CODE RED

STAPLEE Criteria	S		T			A			P			L			E				E						
	(Social)		(Technical)			(Administrative			(Political)			(Legal)			(Economic)				(Environmental)						
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
Jefferson County, all muncipalities: Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.	X					X		X							x	x		x							
Jefferson County, all muncipalities:Inspect public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed	X					X		X							x	x		x							
Jefferson County, all muncipalities:Seek funding for communication towers and voter repeater systems.	X					X		X							x	x		x							
Jefferson County: Provide weather radios to elderly and handicap populations.	X					X		X							x	x		x							
Jefferson County, all muncipalities:Review and current Emergency Response Plan and update when needed.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Review current evacuation plans paying particular attention to vulnerable populations and update as needed.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Inventory all critical facilities and assess generator needs and install generators where needed.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Seek funding to ensure all emergency shelters have back-up generators.	x					x					x				x	x		x							
Jefferson County: Request that all new education facilities be designed to serve as public shelters for emergency purposes.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Promote and participate in the following American Red Cross Programs	x						x		x		x	x	x		x	x		x							
Jefferson County, all muncipalities:Educate the public on shelter locations and evacuation routes in the event of a natural disaster.	x					x		x			x		x												
Jefferson County, all muncipalities:Develop public education and awareness programs regarding severe weather events (tornadoes, tropical storms, and thunderstorm winds) to include home safety measures, purchase of weather radio and personal safety measures before, during and after an event.	x					x		x			x		x												
WINTER STORMS																									

STAPLEE Criteria	S		T			A			P			L			E				E						
	(Social)		(Technical)			(Administrative			(Political)			(Legal)			(Economic)				(Environmental)						
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
Jefferson County, all muncipalities: Inventory and assess generator needs at critical facilities and install generators where needed.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Seek funding for communication towers and voter repeater systems.	x					x					x				x	x		x							
Jefferson County, all muncipalities:Inspect power lines to determine if trees need to be trimmed or cut down.	x					x					x				x	x		x							Electric Compnaies resposibilty
Jefferson County the Cities of all muncipalities: Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after the winter storm event.	x					x					x				x	x		x							

APPENDIX E

COPIES OF REQUIRED PLANNING DOUCMENTATIONS

The News and Farmer
AND WADLEY HERALD
The Jefferson Reporter

GEORGIA, JEFFERSON COUNTY & GLASCOCK COUNTY

Personally appearing before the undersigned attesting officer, Parish L. Howard, who on oath says that he is the publisher of The News and Farmer and Wadley Herald/The Jefferson Reporter, the Legal Organ for Jefferson County and Glascock County, Georgia and the attached Legal Advertisement for **JC BOC:Disaster Mitigation ad, page 6A** was published in said newspaper in its issue of:

05/09/2013

as provided by law.

This 25th day of August 2014

Parish L. Howard
Publisher

Sworn to and subscribed before me on this

25th day of August, 2014.

Carol McLeod

NOTARY PUBLIC
Notary Public, Jefferson County, Georgia
My Commission Expires June 22, 2016

JEFFERSON COUNTY

MEETING NOTICE

The Jefferson County Board of Elections will hold its regular monthly meeting, May 15, 2013 at 5:15 p.m. The meeting will be held at the Board of Elections office, 415 Green Street, Louisville. The public is invited to attend.

Election Superintendent
Jefferson County, Georgia

PUBLIC MEETING

JEFFERSON COUNTY PRE- DISASTER HAZARD MITIGATION PLAN UPDATE

Jefferson County will begin its five-year update of their FEMA approved Pre-Disaster Hazard Mitigation Plan. As part of the planning process, Jefferson County is holding a public kick-off meeting on May 15, 2013 at 10:00 am at the Senior Citizens Center 209 E. 7th Street, Louisville, Georgia. Civic organizations, local businesses, and citizens of Jefferson County, as well as the cities Louisville, Avera, Bartow, Stapleton, Wadley, and Wrens are encouraged to attend. The purpose of the meeting will be to outline the planning process and gather public input. Please contact Jefferson County EMS Director Jim Anderson at 478-625-7538 if you have any questions.

Persons with special needs relating to disability access may use the Georgia Relay Service for the hearing impaired at 1-800-255-0056 or contact County Clerk, Bonnie Wells at 478-625-3332 prior to May 15, 2013. This person can be reached at the Jefferson County Board of Commissioner's Office, 217 East Broad Street, Louisville between the hours of 8:00 am – 5.00 pm, Monday through Friday, except holidays.

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Henson honored...

(Continued from Page 1A)

He also is the trainer for the Louisville Middle School football team," Cunningham said.

Cunningham said the naming of the concession stand and crow's nest was McGraw's idea.

"I think that was a great idea, a good idea," Cunningham said.

"John, he's a good guy. He's always volunteering to help with the football team, and at the middle school. He's always willing to help with the recreation teams, keeping the score. Everybody loves him and he loves everybody. Everybody respects John. He doesn't mind doing what he can do to help you. There's a lot of good things you can say about John – his good spirit, his attitude," he said.

On Saturday, McGraw welcomed everyone and thanked them for coming to the event.

Isaiah Thomas said a prayer and then said, "John means a lot to me; and, I just thank you for doing this for him."

Jefferson County Commissioner Tommy New introduced John's family and said it was an honor and a privilege to do so. New wore a Louisville Academy polo-style shirt in honor of the day.

New said he had spoken with Tom Brown, who started the county's recreation department and who wanted to attend but could not.

"Tom said John was dependable. If he said he would be there, he would be there," New said. "He would always greet you with a smile. He would always build you up and never tear you down.

"John, this is your day. The people in this community especially those who grew up knowing you, love you." New then thanked John for being who he is.

Louisville Mayor Larry Morgan and Commission Chairman Mitchell McGraw present John Henson with the sign that will hang on the Rec. Dept.'s crows nest.

McGraw read the county's proclamation; and, then Morgan rose.

"We all love John," Morgan said and then read the proclamation.

"When school integrated, that's when I met John," Cunningham said.

"John, I appreciate those years with you. John, I love you. We're just here to show you how much you meant to us. I want to thank you, man, from the bottom of my heart. This day is for John. John, congratulations. I love you."

Coach Mike Cofer said about three months ago, a friend of his came and stayed with him.

"The first thing he said was, 'I want to go see John Henson.'"

Cofer said John represents the heart and soul of Louisville.

"John was always there. He's always there. He's dependable. Some of us are retired; but, John never retired."

"Thank God for John because the program was in ruins," said Ken Hildebrant, principal at Louisville Middle School.

"He helped me put it back together. We love John. We couldn't do it without him. Don't know what we'd do without him," Hildebrant said.

J.B. Arnold, a coach at Jefferson County High School said John is an ambassador.

"I don't know how many people realize what kind of ambassador John is. If someone comes to Jefferson County, you want someone to represent Jefferson County, it is John Henson," Arnold said.

"He's invaluable to me. I really appreciate him; and, I love him like a brother, too, and I want a hug," said Jesse Beard, A.J.M.S coach.

Thomas said John epitomizes something our parents told us – whatever you do, do your best.

"I use you as an example to my grandchild," he told John.

"I tell Thomas to grow up and be just like John Henson."

Day of Prayer...

(Continued from Page 1A)

Alvonia McCoy, associate pastor at New Way Christian Church, prayed.

"Heavenly Father, chil-

from every spirit of calamity and every familiar spirit," McCoy said.

She also prayed that the

aside our differences and that a special love would come down from Heaven.

This was the third annu-

Skills USA team comp

By Megan Johnson
Apprentice

Jefferson County High School's SkillsUSA team has won big and hopes to win bigger.

Earlier this year, the SkillsUSA team went to the SkillsUSA Region 6 competition.

The team made JCHS very proud bringing home two gold medals, two silver medals, one bronze medal, two fourth places and three fifth places.

"The SkillsUSA team cannot just up and go to a competition. We have to raise money to help pay our fees," Jim Borum said.

Borum is the construction and technology teacher at JCHS.

"Earlier this year, Scott Clark, president of R.W. Allen, donated $2,500 worth of lumber to Mr. Borum's SkillsUSA Club and Construction class," SkillsUSA reporter Gabby Timms said.

"This was a huge dona-

JCHS Assistant Principal Stacy Arnold accept a check for the SkillsUSA team.

Brooks, Plumbing; Joe Beggs, Welding; Jeremy Jones, Teamworks; Jacob Layman, Teamworks; Jackson Evans, Teamworks; Michael Thompson, Team-

lyn Goodwin Wiring Const vonte Best, M Joe Beggs, W competed w said

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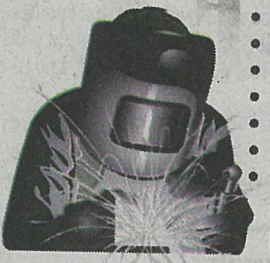

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JEFFERSON COUNTY

PUBLIC MEETING NOTICE

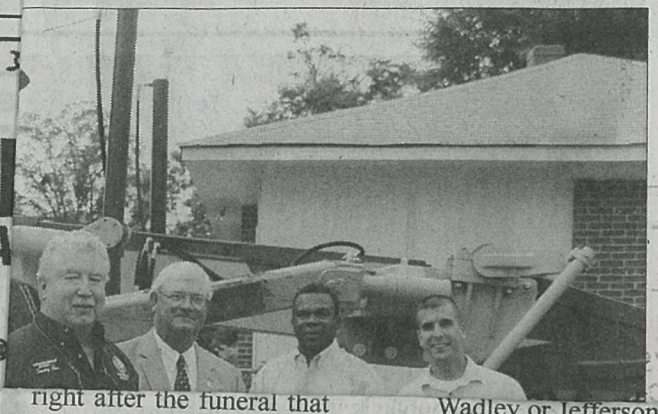
Jefferson County will be holding a Pre-Disaster Mitigation planning meeting on Thursday, August 7, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. Please contact Jefferson County EMA Director Jim Anderson at 478-625-7538 if you have any questions.

The purpose of the meeting is to allow citizens of Jefferson County an opportunity to provide input into the updated plan. This plan is required by FEMA. Citizens, Elected Officials, Business Representatives, School Officials, Public Safety Officials and surrounding counties are invited to attend this meeting.

Persons with special needs relating to disability access may use the Georgia Relay Service for the hearing impaired at 1-800-255-0056 or contact County Clerk, Bonnie Wells at 478-625-3332 prior to August 7, 2014. This person can be reached at the Jefferson County Board of Commissioner's Office, 217 East Broad Street, Louisville between the hours of 8:30 am – 4:30 pm, Monday through Friday, except holidays.

Wrens Dental Center

David M.
PARKI
EXTERMINA
706 547-2003
email: parkerexterminating@



Wadley or Jefferson County Resident

right after the funeral that Saturday evening. If and when we do return for a

The Glascock County School Board does here
Board of Education office at 738 Railroad Ave
Section 48-5-32 does hereby publish the fol
digest and levy for the past five years.

	CURRE
COUNTY SCHOOL	2009
Real & Personal	95,148,
Motor Vehicles	6,708,
Mobile Homes	1,531
Timber - 100%	699
Heavy Duty Equipment	
Gross Digest	104,087
Less M& O Exemptions	28,295
Net M & O Digest	75,791
State Forest Land Assistance Grant Value	2,08
Adjusted Net M&O Digest	77,87
Gross M&O Millage	
Less Rollbacks	
Net M&O Millage	1
Total School Taxes Levied	$1,0
Net Taxes $ Increase	-$
Net Taxes % Increase	

PUBLIC MEETING

JEFFERSON COUNTY PRE- DISASTER HAZARD MITIGATION PLAN UPDATE

Jefferson County has completed work on the five-year update of the FEMA approved Pre-Disaster Hazard Mitigation Plan of 2009. As part of the planning process Jefferson County is inviting the public to review the plan before submission to GEMA and FEMA for approval. On August 8, 2014 copies of the plan will be made available for review at the Jefferson County EOC, Jefferson County Board of Commissioners Office and the city halls of Avera, Bartow, Louisville, Stapleton, Wrens, and Wadley.

After the review period, a public meeting will be held on August 18, 2014 at 10:00 am in the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville, Georgia 30434. Please contact Jefferson County EMA Director Jim Anderson at 478-625-7538 if you have any questions. The purpose of the meeting is to allow citizens of Jefferson County an opportunity to provide input into the updated plan before submission.

Persons with special needs relating to disability access may use the Georgia Relay Service for the hearing impaired at 1-800-255-0056 or contact County Clerk, Bonnie Wells at 478-625-3332 prior to August 18, 2014. This person can be reached at the Jefferson County Board of Commissioner's Office, 217 East Broad Street, Louisville between the hours of 8:30 am – 4:30 pm, Monday through Friday, except holidays.

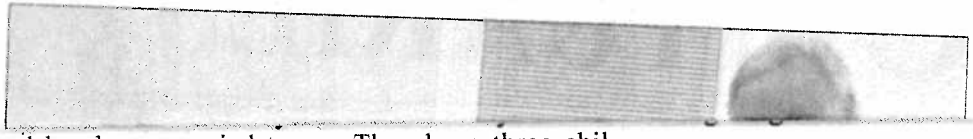
• I would like to thank Mr. Tom Armistead. He is a wonderful person. He makes a difference in peoples' lives, especially mine. He is always helping

• If you hear a rumor you know would be damaging to someone and you repeat it without any real knowledge of its legitimacy, well then

ISTRY—
by Appointment
17-3148
Drive • Wrens

County recognizes Battle

Jefferson County Commission Chairman Mitchell McGraw began a policy of recognizing area residents



The proclamation states Battle, 84, is a lifelong resi- and has been married to his high school sweetheart They have three children, 10 grandchildren and

FISH DAY
STOCK YOUR POND NOW
MAY 28, 2014 – 12:00
W.B. Miller General Store – Louisville

Pre-disaster meeting set

By Carol McLeod
Staff writer

Jefferson County and its cities have been working on updates to a pre-disaster mitigation plan required for the area to be eligible for certain FEMA funds after a disaster.

Linda Grijalva, the director of community development for the CSRA Regional Commission, has been working with representatives to help ensure the plan meets FEMA requirements.

"Every time we have a federal disaster declaration, as we did for the recent ice storm, funds become available for mitigation," Grijalva said last week.

Although FEMA has not announced guidelines for the funds, Grijalva said an updated plan must be finished by mid-August for Jefferson County to be eligible.

She has scheduled a meeting to discuss the plan for Wednesday, May 28, at 10 a.m. at the Jefferson EOC located at 1841 Highway 24 W Suite A in Louisville. This building is also known as the old armory.

"It is imperative that a representative from each agency involved attend this meeting," she said. "A representative from each city as well as from the county, the police departments, fire departments, the sheriff's office, health department, public works, roads and bridges, the hospital and the Board of Education should attend this important meeting.

"Please remember that upon completion of the plan update, the county and all cities will have to adopt the plan by resolution."

Grijalva said this is a requirement that must be completed by August to qualify for the grant funds.

The cities and county may apply together; but, that depends on specifics of the application.

"You cannot apply unless the plan update is complete," she said.

"It is imperative that someone from each agency attends this meeting."

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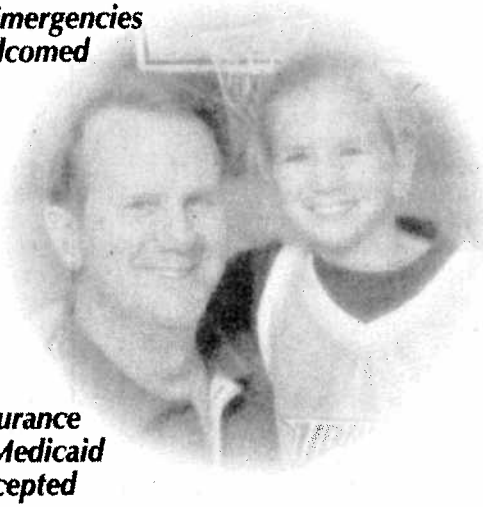

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McLeod...

(Continued from Page 4A)

no idea.

There are all kinds of human forms used as lawn

I would have never guessed the name for those.

in her yard. Yes, flamingos, plural. She liked to dress them up for the holidays. Pilgrim outfits for Thanks-

THE NEWS AND FARMER// THE JEFFERSON RE

Woman

John Templeton

PUBLIC MEETING

JEFFERSON COUNTY PRE-DISASTER HAZARD MITIGATION PLAN UPDATE

Jefferson County's five-year update of the FEMA-approved Multi-Hazard Mitigation Plan was adopted by resolution by the Jefferson County Board of Commissioners on December 18, 2014. This plan update is required by FEMA in order for Jefferson County to be eligible for certain FEMA disaster assistance funds.

The public is invited to review the draft plan which will be available for review at the Jefferson County Courthouse, 1 Courthouse Square, Louisville, Georgia 30434 and the Jefferson County Administrative Offices, 1482 Hwy 24W, Suite A, Louisville, Georgia 30434 beginning December 18, 2014 at 10:00 am. The public meeting will be held in the Jefferson County Commission Chambers, 1 Courthouse Square, Louisville, Georgia 30434 at 10:00 am on January 8, 2015. The purpose of the meeting is to allow citizens or jurisdictions to provide comments on the draft plan prior to its submission to FEMA Region IV for approval. Comments may be submitted in writing to Anderson Pilgrim, Jefferson County Administrator, 1482 Hwy 24W, Suite A, Louisville, Georgia 30434 or by telephone at 478-625-7538. Written comments will be accepted until January 8, 2015.

Persons with special needs requiring assistance to attend the meeting should contact Jamie Mullins, Jefferson County Clerk, at 478-625-3255 or 255-0056 or contact the Georgia Relay Service for the hearing impaired at 1-800-33332 prior to December 18, 2014. This person can also be contacted at the Jefferson County Board of Commissioners Office, 1482 East Broad Street, Louisville between the hours of 8:30am and 5:00pm Monday through Friday except holidays.

SCHEDULE OF APPROVED LOCAL PROJECTS FOR FISCAL YEAR ENDED June 30, 2015

PROJECT	ORIGINAL ESTIMATED COST (1)	Current Estimate (2)	Estimated Completion Date
SPLOST III			
Roofing on a current basis of previously incurred general obligation debt of the School District	$ 2,317,000.00	$ 2,317,000.00	Complete
Adding to, remodeling, renovating, improving and supporting existing educational buildings and facilities and acquiring any necessary real and personal property and equipment relating thereto, including school buses, computers and related technology, copiers, energy management systems, heating and air conditioning systems, lighting and similar equipment	$ 8,000,000.00	$ 8,000,000.00	2015
SPLOST IV			
Retiring on a current basis previously incurred general obligation debt of the School District	$ 2,183,000.00	$ 2,183,000.00	Complete
Adding to, remodeling, renovating, improving, building and equipping existing and new educational buildings, properties and facilities of the School District	$ 2,350,000.00	$ 2,350,000.00	2015
Acquiring any necessary real and personal property and equipment relating thereto, including school buses, computers and related technology, copiers, energy management systems, heating and air conditioning systems, lighting and similar equipment	$ 10,150,000.00	$ 10,150,000.00	2015
	$ 2,000,000.00	$ 2,000,000.00	2015
	$27,000,000.00	$27,000,000.00	

(1) The School District's original cost estimate as specified in the resolution ca
(2) The School District's current estimate of total cost for the project including
(3) The voters of Jefferson County approved the imposition of a 1% sales tax i
Include sales tax proceeds, state, local property taxes and/or other funds

April 30, 2013

«First_Name» «Last_Name», «Title»
«Organization»
«Address_2»
«Address_1»
«City», «State» «Zip»

Dear «SUR» «Last_Name»:

Protecting the health, safety and welfare of residents in our community is a critical task for public officials. Natural disasters cost billions of dollars annually throughout the United States. The loss of life, injury, and damage to homes and businesses causes incalculable hardships and emotional suffering. One way we can help our community become more disaster-resistant is by planning for disasters before they occur. A proven, successful tool to help in that effort is through Pre-Disaster Mitigation (PDM) Planning. Hazard Mitigation Planning is the process of determining how to reduce or eliminate risk of loss of life and property damage resulting from natural or human-caused hazards in advance of the event.

We now have an opportunity to participate in the Hazard Mitigation Planning Program to update our current PDM Plan. This opportunity is funded by the Federal Emergency Management Agency. A local kick-off meeting will be held on May 15, 2013 at 10:00 am at the Senior Citizens Center 209 E. 7th Street, Louisville Georgia. By our participation in this planning process and update of our Hazard Mitigation Plan, we will continue to meet Federal guidelines for future disaster funding. An approved Hazard Mitigation Plan will also allow our community to compete favorably for other funding opportunities.

The kick-off meeting will provide participants with an overview of the Hazard Mitigation Planning Program and will begin the process of updating our plan. This invitation is in accordance with FEMA requirements. We need you or someone you designate to represent your organization to participate in the planning process. Expected time commitment will be one meeting every two months for six-eight months and a review of the draft plan. Important to the process will be the attendance of the same appointed member to most meetings. If you have any questions please feel free to contact me at 706-650-5694 or EMA Director Jim Anderson at 478-625-7538.

Sincerely,

Linda D. Grijalva
Director of Community Development

AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
May 15, 2013 10:00 AM

1. Introductions and Welcome by Jim Anderson

2. Presentation by Brain Laughlin, Hazard Mitigation Planner, Georgia Emergency Management Agency

3. Overview by Linda D. Grijalva, CSRA Regional Commission
    a. Identify Hazards
    b. Critical Facilities
    c. STAPLEE
    d. New Hazards
    e. New Equipment
    f. Projects Completed
        i. Flood and drainage
        ii. Water
    g. In-kind contribution forms.

4. Next meeting

Jefferson County PDM Planning Team Meeting
Wednesday ~~March~~ May 15, 2013 10:00 AM

NAME	ORGANIZATION	PHONE	EMAIL
Robert Morris	Bartow VFD	706-214-0696	lteng99@Yahoo.com
Susan Scarboro	Town of Bartow	478-364-3300	townbartow@hotmail
Joey May	Jefferson Hospital	478-625-7000 EXT: 214	Jmay@ip.JeffersonHo
Larry Cheely	Wrens F.D.	706-547-3800	Wrensfd@city of
FRANK PARRISH	CITY OF STAPLETON	706-833-0057	PFRANK257@BELLSOUTH.n
Robert A. Chalker	Jefferson Co. 5/0	Cell 706-466-7615 office 478-625-7538	rchalker@jeffersoncountyga.g
Janet Pilcher	Jefferson Co Health Dept	478-625-3714	jrpilcher@dhr.state.c
Garry A. McCord	(chief) Wrens Police Dept.	7065513787	McCordwrens@Hotmail.com

Jefferson County PDM Planning Team Meeting
Wednesday ~~March~~ May 15, 2013 10:00 AM

NAME	ORGANIZATION	PHONE	EMAIL
Laurisa Pennington	Jefferson County Assessors	478-625-8209	lpennington@jeffersoncounty
Leah Lumley	Jefferson Co E911	478-625-4015	llumley@jeffersoncounty
Anna Anderson	Jefferson Co EMA	912-661-1145	anna.anderson@jeffcoe
Shane Barrow	GA Forestry Commission	706-699-2412	sbarrow@gfc.state.ga.us

Jefferson County PDM Planning Team Meeting
Wednesday ~~March~~ May 15, 2013 10:00 AM

NAME	ORGANIZATION	PHONE	EMAIL
Marc Peebles	City of Wrens	706-547-7000	Peeblesfire@yahoo.com
Robert Hoffman	City of Stapleton Police Dept.	706-339-2077	Robert.Hoffmans1@gmail.com
James O Anderson	Jefferson Co EMA	478-206-2316	janderson@JeffersonCountyga.

From:	Linda Grijalva
Bcc:	Adam Mestres (amestres@jeffersoncountyga.gov); Anna Anderson (anna.anderson@airmethods.com); Arty Thrift (athrift@cityofwrens.com); Avera; Bartow (townbartow@hotmail.com); carol.mcleod@thenewsandfarmer.com; clerk30823@bellsouth.net; Dr. Molly Howard (HOWARDMP@jefferson.k12.ga.us); Eric L. Mosley (emosley@gfc.state.ga.us); Frank Parrish (pfrank257@bellsouth.net); Garry A. McCord (mccordwrens@hotmail.com); Janet Pilcher (jrpilcher@dhr.state.ga.us); Jim Anderson; Joey May (jmay@jeffersonhosp.com); Larry Cheely (wrensfd@cityofwrens.com); Leah Lumley (llumley@jeffersoncountyga.gov); Louisa Pennington (lpennington@jeffersoncountyga.gov); Marc Peebles (peeblesfire@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Robert Chalker (rchalker@jeffersoncountyga.gov); Robert Hoffman (Robert.Hoffmans1@gmail.com); Robert Morris (Lteng99@yahoo.com); Sallie Adams (sacitywadley@bellsouth.net); Shane Barrow (sbarrow@gfc.state.ga.us)
Subject:	Jefferson County PDM
Date:	Wednesday, November 27, 2013 8:17:42 AM

Please make plans to attend the pre-disaster mitigation meeting on December 9, 2013 at 2:00 pm at the Jefferson EOC 1841 Hwy 24 W Suite A Louisville Georgia 30434

Please remember that upon completion of the plan update the county and all cities will have to adopt by resolution. Please ensure someone attends this meeting from your agency. If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 River Watch Parkway, Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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From:	Linda Grijalva
Bcc:	Rusty Sanders; warrenoes@classicsouth.net; Jim Anderson; Casey Broom (cbroom@lincolncountyga.com); firechief@sandersville.net; Mario Chapple (mariochapple@yahoo.com); Mike Lyons (mike.lyons@gapac.com); Robert "Bob" Fields, III (jfields@jchs.com); Blake Thompson (wilkescountyems@lycos.com); Divenskil@yahoo.com; Bruce Tanner (btanner@thomson-mcduffie.net); Mie Lucas (dlucas@augustaga.gov); ptucker@columbiacountyga.gov
Subject:	Jefferson County
Date:	Wednesday, November 27, 2013 8:28:41 AM

Jefferson County has received a grant from the FEMA to update the 2009 Pre-Disaster Mitigation Plan (PDM). The plan is required to be updated every five years. One of the plan requirements is to invite neighboring communities to provide input into the planning process. The Jefferson County PDM Committee would like to extend an invitation to your agency to participate in our planning process. The second planning meeting will be held on December 9, 2013 at 2:00 pm at the Jefferson EOC 1841 Hwy 24 W Suite A Louisville Georgia 30434. If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
December 9, 2013 10:00 AM

1. Items:
    a. STAPLEE was reviewed and discussed by strategy.
    b. New hazard events
    c. Critical Facility Updates
    d. In-kind contribution forms.

2. Next meeting

Jefferson County PDM Planning Team Meeting Wednesday December 9, 2013 10:00 AM		
NAME	TITLE	EMAIL
Joey May	Safety officer	jm@ip.jeffersonhosp.com
Andrew Rooks	Georgia Forestry Commission	
Frank Parrish	Mayor Stapleton	pfrank257@bellsouth.net
Joshua Guy	Georgia Forestry Commission	
Leah D. Lumley	Jefferson Co 911/EMA	llumley@jeffersoncountyga.gov
Carol McLeod	The News and Farmer (media)	carol.mcleod@morris.com

From:	Linda Grijalva
To:	Adam Mestres (amestres@jeffersoncountyga.gov); Anna Anderson (anna.anderson@airmethods.com); Arty Thrift (athrift@cityofwrens.com); Avera; Bartow (townbartow@hotmail.com); carol.mcleod@thenewsandfarmer.com; clerk30823@bellsouth.net; Dr. Molly Howard (HOWARDMP@jefferson.k12.ga.us); Eric L. Mosley (emosley@gfc.state.ga.us); Frank Parrish (pfrank257@bellsouth.net); Garry A. McCord (mccordwrens@hotmail.com); Janet Pilcher (jrpilcher@dhr.state.ga.us); Jim Anderson; Joey May (jmay@jeffersonhosp.com); Larry Cheely (wrensfd@cityofwrens.com); Leah Lumley (llumley@jeffersoncountyga.gov); Louisa Pennington (lpennington@jeffersoncountyga.gov); Marc Peebles (peeblesfire@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Robert Chalker (rchalker@jeffersoncountyga.gov); Robert Hoffman (Robert.Hoffmans1@gmail.com); Robert Morris (Lteng99@yahoo.com); Sallie Adams (sacitywadley@bellsouth.net); Shane Barrow (sbarrow@gfc.state.ga.us)
Subject:	Jefferson County PDM
Date:	Wednesday, May 14, 2014 10:43:00 AM

Please make plans to attend the pre-disaster mitigation meeting on May 28, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. Please remember that upon completion of the plan update the county and all cities will have to adopt by resolution.

AS YOU ARE AWARE FROM MY PREVIOUS EMAILS THE PLAN MUST BE COMPLETED BY AUGUST 2014 TO QUALIFY FOR THE GRANT FUNDS THAT WILL BE MADE AVAILABLE AS A RESULT OF THE ICE STORM. IT IS IMPERATIVE THAT SOMEONE FROM YOUR AGENCY ATTENDS THIS MEETING.

If you have any questions please feel free to contact me.
Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006

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From:	Linda Grijalva
Bcc:	Blake Thompson (wilkescountyems@lycos.com); Bruce Tanner (btanner@thomson-mcduffie.net); Casey Broom (cbroom@lincolncountyga.com); Divenskil@yahoo.com; Jim Anderson (janderson@jeffersoncountyga.gov); Mario Chapple (mariochapple@yahoo.com); Mie Lucas (dlucas@augustaga.gov); Mike Lyons (Mike.Lyons@gapac.com); ptucker@columbiacountyga.gov; Robert "Bob" Fields, III (jfields@jchs.com); Russell Riner (firechief@sandersville.net); Rusty Sanders; Taliaferro County (taliaferro@nu-z.net); Tommy Wolfe (warrenoes@classicsouth.net)
Subject:	Jefferson County PDM
Date:	Wednesday, May 14, 2014 10:55:00 AM

Jefferson County has received a grant from the FEMA to update the 2009 Pre-Disaster Mitigation Plan (PDM). The plan is required to be updated every five years. One of the plan requirements is to invite neighboring communities to provide input into the planning process. The Jefferson County PDM Committee would like to extend an invitation to your agency to participate in our planning process. The second planning meeting will be held May 28, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
May 28, 2014 10:00 PM

1. Items:
    a. The ice storm was discussed in great detail.
    b. Critical Facilities Review
    c. In-kind contribution forms.

2. Next meeting

Jefferson County PDM Planning Team Meeting
Wednesday May 28, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
Janet Pilcher	Jefferson Co H Dept	on 6/3/14 janet.pilcher@gdph.ga.gov
Leah Lumley	Jefferson Co E-911	llumley@jeffersoncountyga.gov
Sam Dasher	Jefferson Co. BOE	dashers@jefferson.k12.ga.us
Tony May	Jefferson Hosp	jmay@ip.JeffersonHosp.com
Jim Anderson	Jefferson County EMA	janderson@jeffersoncountyga.gov
Laman Baxley	City of Louisville FD	louisvilleFD2010@Yahoo.com
Amy Hadden	City of Avera	haddenavera@bellsouth.net
LARRY McGRAW	CITY OF AVERA	
FRANK PARRISH	CITY of STAPLETON	FRANK257@BELLSOUTH.net
WAYNE DAVIS	City of Wrens / County Comm	WDAVIS1055@GMAIL.COM

Jefferson County PDM Planning Team Meeting Wednesday May 28, 2014 10:00 AM		
NAME	AGENCY OR CITY	EMAIL
Garry A. McCord	Wrens P.D	WrensPD@cityofwrens.com mccordwrens@Hotmail.com
Carol McLeod	The News and Farmer	carol.mcleod@morris.com
Robert Morris	Bartow, GA	townbartow@Hotmail.com
Larry Anderson	Wrens	landerson@cityofwrens.com
Ricky Sapp	Louisville	richard-sapp@att.net
Sallie Adams	Wadley	sacityclerk@bellsouth.net
Bruce Lowe	Wadley	Buster081470@yahoo.com
Harold Moore	Wadley	HaroldMoore75@gmail.com
Wesley Lewis	Wadley P.D.	wadleydept@Bellsouth.Net
Jimmy Mullen	Louisville PD	CPD101@BellSouth.Net

From: Linda Grijalva
To: Adam Mestres (amestres@jeffersoncountyga.gov); Anna Anderson (anna.anderson@airmethods.com); Arty Thrift (athrift@cityofwrens.com); "Avera"; "Bartow (townbartow@hotmail.com)"; "carol.mcleod@thenewsandfarmer.com"; "clerk30823@bellsouth.net"; Dr. Molly Howard (HOWARDMP@jefferson.k12.ga.us); Eric L. Mosley (emosley@gfc.state.ga.us); Frank Parrish (pfrank257@bellsouth.net); Garry A. McCord (mccordwrens@hotmail.com); "Janet Pilcher (jrpilcher@dhr.state.ga.us)"; Jim Anderson (janderson@jeffersoncountyga.gov); Joey May (jmay@jeffersonhosp.com); Larry Cheely (wrensfd@cityofwrens.com); Leah Lumley (llumley@jeffersoncountyga.gov); Louisa Pennington (lpennington@jeffersoncountyga.gov); Marc Peebles (peeblesfire@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Robert Chalker (rchalker@jeffersoncountyga.gov); Robert Hoffman (Robert.Hoffmans1@gmail.com); Robert Morris (Lteng99@yahoo.com); "Sallie Adams (sacitywadley@bellsouth.net)"; Shane Barrow (sbarrow@gfc.state.ga.us)
Subject: FW: Jefferson County PDM
Date: Tuesday, June 24, 2014 10:59:00 AM

Please make plans to attend the pre-disaster mitigation meeting on June 26, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. Please remember that upon completion of the plan update the county and all cities will have to adopt by resolution.

AS YOU ARE AWARE FROM MY PREVIOUS EMAILS THE PLAN MUST BE COMPLETED BY AUGUST 2014 TO QUALIFY FOR THE GRANT FUNDS THAT WILL BE MADE AVAILABLE AS A RESULT OF THE ICE STORM. IT IS IMPERATIVE THAT SOMEONE FROM YOUR AGENCY ATTENDS THIS MEETING.

If you have any questions please feel free to contact me.
Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006

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From: Linda Grijalva

Bcc: Blake Thompson (wilkescountyems@lycos.com); Bruce Tanner (btanner@thomson-mcduffie.net); Casey Broom (cbroom@lincolncountyga.com); Divenskil@yahoo.com; Jim Anderson (janderson@jeffersoncountyga.gov); Mario Chapple (mariochapple@yahoo.com); Mie Lucas (dlucas@augustaga.gov); Mike Lyons (Mike.Lyons@gapac.com); ptucker@columbiacountyga.gov; Robert "Bob" Fields III (jfields@jchs.com); Russell Riner (firechief@sandersville.net); Rusty Sanders; Taliaferro County (taliaferro@nu-z.net); Tommy Wolfe (warrenoes@classicsouth.net); "(jccomm@bellsouth.net)"; Adam Mestres (amestres@jeffersoncountyga.gov); Amy Cochran (tennille@tennille-ga.gov); Arty Thrift (athrift@cityofwrens.com); Audrey Chalker; Avera; Bartow (townbartow@hotmail.com); Brent Weir (blythesmayor@gmail.com); Camak (cityofcamak@bellsouth.net); Carter Crawford (craw@washingtonwilkes.org); Chris Hutchings (cghutchings@washingtoncountyga.gov); City of Edgehill (cityofedgehill@gmail.com); City of Grovetown (clerk@grovetownga.us); City of Hephzibah (cityofhephzibah@bellsouth.net); "City of Norwood (mccord32659@bellsouth.net)"; "City of Rayle (jechols72@aol.com)"; City of Sardis (Sardis@burke.net); cityofblythe@comcast.net; Crawfordville; Darrell Adams (dakotachico@nu-z.net); "David L. Tyler"; Dearing (townofdearing@bellsouth.net); dnorton@thomson-mcduffie.net; Don Powers (Don.Powers@thomson-mcduffie.net); Dorenda Smith (deepstep@outlook.com); Eunice Seigel (ckeysville@aol.com); Gibson, City of ; Glascock County; Grady Saxon (gsaxon01@yahoo.com); Hancock County (Bod00@att.net); Harrison, Town of (townofharrison@bellsouth.net); "Jason M. Rizner (jrizner@harlemga.org)"; Jerry Coalson (jcoalson@waynesboroga.com); Jerry Henry (jhen5@att.net); John Graham (warrencoboc@classicsouth.net); Judy McCorkle (jmccorkle@sandersville.net); Ken Westbrook (westbrookken@yahoo.com); Lincolnton (citylinc@nu-z.net); Lori Boyen (lboyen@glascockcountyga.com); merv.waldrop@burkecounty-ga.gov; Michael Felts (michael.felts.cityofmillen@gmail.com); Midville (cityofmidville@pineland.net); Regina Freeman (cityofoconee@NLAmerica.com); Renee Brown (reneeparzenbrown@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Rosemary Baughman (dhbdhb3610@gmail.com); Roxanne Ashmore (rbashmore@lincolncountyga.com); "Sallie Adams (sacitywadley@bellsouth.net)"; Sean Kelley (kbprintinc@gmail.com); Shirley Beasley (ShirleyBeasley@grovetownga.us); Sistie Hudson (sistiehudson@aol.com); spartacity@bellsouth.net; "Town of Davisboro (dboroclerk@pineland.net)"; Town of Girard (kreddick.townofgirard@gmail.com); Town of Mitchell (mitchelltownof@bellsouth.net); Town of Tignall (cityoftignal@nu-z.net); Warrenton (cityofw1@bellsouth.net)

Subject: FW: Jefferson County PDM June 26, 2014 meeting

Date: Tuesday, June 24, 2014 10:58:00 AM

Jefferson County has received a grant from the FEMA to update the 2009 Pre-Disaster Mitigation Plan (PDM). The plan is required to be updated every five years. One of the plan requirements is to invite neighboring communities to provide input into the planning process. The Jefferson County PDM Committee would like to extend an invitation to your agency to participate in our planning process. The second planning meeting will be held June 26, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
June 26, 2014 10:00 AM

1. Items:
    a. The ice storm discussion was continued from last meeting.
    b. In-kind contribution forms.

2. Next meeting

Jefferson County PDM Planning Team Meeting
June 26, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
Kimberly Clark-Brake	Jefferson Co. Health Dept	Janet.Pilcher@dph.gov
Sallie Adams	City of Wadley	~~Sacity~~ sacitywadley@bellsouth.net
LEISA Haddon	City of AUBURN	
Sam Dasher	BOE	dashers@jefferson.k12.ga.us

Jefferson County PDM Planning Team Meeting
June 26, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
Wayne Davis	City of Wrens / Jeff. Com.	@thrift@gmail.com
Ricky Sapp	City of Louisville	richand-sapp @ att. net
Frank Parrish	Mayor City of Stapleton	Pfrank257@bellsouth.net
Robert Hoffman	Chief Stapleton Police Dept.	Robert.hoffmans1@gmail.com
Susan Scarboro	Town of Bartow	townbartow@hotmail.com
Joey May	Jefferson Hosp	jmay@ip.JeffersonHosp.com
Larry Anderson	City of Wrens	LANDERSON @ CITY OF WRENS.com
Jim Anderson	Jefferson County EMA	janderson@jeffersoncountyga.gov

From: Linda Grijalva
To: "Joe.Edenfield@gema.ga.gov"; "gordon.lowe@gema.ga.gov"
Subject: HMGP Meeting
Date: Thursday, July 3, 2014 11:07:00 AM

Joe and Gordon

Jefferson County and all six municipalities will be meeting at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434 at 10:00 am on Thursday July 10, 2014 to discuss the upcoming 4165 DR HMGP opportunities. We would like for you to attend if at all possible. The purpose of the meeting is to ensure that we get the biggest bang for our buck.

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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From: Joe Edenfield
To: Linda Grijalva
Subject: RE: HMGP Meeting
Date: Thursday, July 10, 2014 8:32:35 AM

Linda,
I will be attending.

Joe Edenfield
Risk Reduction Specialist
Hazard Mitigation Division
Georgia Emergency Management Agency
P.O. Box 12666
Statesboro, GA 30460
Phone (912) 486-7736
Fax (912) 486-7944
joe.edenfield@gema.ga.gov

From: Linda Grijalva [mailto:lgrijalva@csrarc.ga.gov]
Sent: Thursday, July 03, 2014 11:07 AM
To: Joe Edenfield; Gordon Lowe
Subject: HMGP Meeting

Joe and Gordon

Jefferson County and all six municipalities will be meeting at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434 at 10:00 am on Thursday July 10, 2014 to discuss the upcoming 4165 DR HMGP opportunities. We would like for you to attend if at all possible. The purpose of the meeting is to ensure that we get the biggest bang for our buck.

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
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Direct: 706-650-5694
Fax: 706-210-2006
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From:	Linda Grijalva
To:	Arty Thrift (athrift@cityofwrens.com); City of Sardis (Sardis@burke.net); Avera; Sallie Adams (sacitywadley@bellsouth.net); Richard T. Sapp (richard-sapp@att.net); Joey May (jmay@jeffersonhosp.com); Adam Mestres (amestres@jeffersoncountyga.gov); Town of Bartow
Cc:	Jim Anderson (janderson@jeffersoncountyga.gov)
Subject:	Grant Meeting
Date:	Thursday, July 3, 2014 11:16:00 AM

Please make plans to attend the meeting at 10:00 am on July 10, 2014 at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434 meeting to discuss the upcoming 4165 DR HMGP opportunities available as a result of the ice storm. The purpose of the meeting is to ensure that we get the biggest bang for the buck and to ensure we order the correct equipment and that all equipment applied for is compatible. This way, if during our next disaster one jurisdiction does not need their equipment they can loan to another. GEMA has been invited to attend. If you have any questions, please call.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
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From:	Linda Grijalva
To:	Arty Thrift (athrift@cityofwrens.com); Avera; Sallie Adams (sacitywadley@bellsouth.net); Richard T. Sapp (richard-sapp@att.net); Joey May (jmay@jeffersonhosp.com); Adam Mestres (amestres@jeffersoncountyga.gov); Town of Bartow; Stapleton (clerk30823@bellsouth.net)
Cc:	Jim Anderson (janderson@jeffersoncountyga.gov)
Subject:	RE: Grant Meeting
Date:	Thursday, July 10, 2014 8:37:00 AM

Remember our meeting this morning at 10:00. Joe Edenfield from GEMA will be attending to help us with the grant process. I will see everyone shortly.
Linda

From: Linda Grijalva
Sent: Thursday, July 3, 2014 11:17 AM
To: Arty Thrift (athrift@cityofwrens.com); City of Sardis (Sardis@burke.net); Avera; Sallie Adams (sacitywadley@bellsouth.net); Richard T. Sapp (richard-sapp@att.net); Joey May (jmay@jeffersonhosp.com); Adam Mestres (amestres@jeffersoncountyga.gov); 'Town of Bartow'
Cc: Jim Anderson (janderson@jeffersoncountyga.gov)
Subject: Grant Meeting

Please make plans to attend the meeting at 10:00 am on July 10, 2014 at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434 meeting to discuss the upcoming 4165 DR HMGP opportunities available as a result of the ice storm. The purpose of the meeting is to ensure that we get the biggest bang for the buck and to ensure we order the correct equipment and that all equipment applied for is compatible. This way, if during our next disaster one jurisdiction does not need their equipment they can loan to another. GEMA has been invited to attend. If you have any questions, please call.

Linda

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From:	Linda Grijalva
To:	Stapleton (clerk30823@bellsouth.net)
Subject:	FW: Grant Meeting
Date:	Thursday, July 3, 2014 12:21:00 PM

I left you off the email.
Linda

From: Linda Grijalva
Sent: Thursday, July 3, 2014 11:17 AM
To: Arty Thrift (athrift@cityofwrens.com); Avera; Sallie Adams (sacitywadley@bellsouth.net); Richard T. Sapp (richard-sapp@att.net); Joey May (jmay@jeffersonhosp.com); Adam Mestres (amestres@jeffersoncountyga.gov); 'Town of Bartow'
Cc: Jim Anderson (janderson@jeffersoncountyga.gov)
Subject: Grant Meeting

Please make plans to attend the meeting at 10:00 am on July 10, 2014 at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434 meeting to discuss the upcoming 4165 DR HMGP opportunities available as a result of the ice storm. The purpose of the meeting is to ensure that we get the biggest bang for the buck and to ensure we order the correct equipment and that all equipment applied for is compatible. This way, if during our next disaster one jurisdiction does not need their equipment they can loan to another. GEMA has been invited to attend. If you have any questions, please call.

Linda

Linda D. Grijalva
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CSRA Regional Commission
3023 Riverwatch Parkway Suite A
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AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
July 10, 2014 10:00 AM

1. Items:
    a. HMGP with GEMA
    b. In-kind contribution forms.

2. Next meeting

Pre-Disaster Mitigation
July 10, 2014
10:00 AM.

Dallie Adams	Wadley.
Robert Hoffman	Stapleton PD.
Jody May	Jefferson Hosp
LARRY ANDERSON	CITY OF WRENS
FRANK PARRISH	CITY of STAPLETON
Tommy SHEPPARD	City of AUERA
Lanny Morgan	city of Dublin
Ricky Sapp	city of Louisville

From: Linda Grijalva

To: Adam Mestres (amestres@jeffersoncountyga.gov); Anna Anderson (anna.anderson@airmethods.com); Arty Thrift (athrift@cityofwrens.com); "Avera"; "Bartow (townbartow@hotmail.com)"; "carol.mcleod@thenewsandfarmer.com"; "clerk30823@bellsouth.net"; Dr. Molly Howard (HOWARDMP@jefferson.k12.ga.us); Eric L. Mosley (emosley@gfc.state.ga.us); Frank Parrish (pfrank257@bellsouth.net); Garry A. McCord (mccordwrens@hotmail.com); "Janet Pilcher (jrpilcher@dhr.state.ga.us)"; Jim Anderson (janderson@jeffersoncountyga.gov); Joey May (jmay@jeffersonhosp.com); Larry Anderson (landerson@cityofwrens.com); Larry Cheely (wrensfd@cityofwrens.com); Leah Lumley (llumley@jeffersoncountyga.gov); Louisa Pennington (lpennington@jeffersoncountyga.gov); Marc Peebles (peeblesfire@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Robert Chalker (rchalker@jeffersoncountyga.gov); Robert Hoffman (Robert.Hoffmans1@gmail.com); Robert Morris (Lteng99@yahoo.com); "Sallie Adams (sacitywadley@bellsouth.net)"; Sam Dasher (dashers@jefferson.k12.ga.us); Shane Barrow (sbarrow@gfc.state.ga.us)

Subject: FW: Jefferson County PDM

Date: Wednesday, August 6, 2014 1:01:00 PM

Just a reminder about our meeting tomorrow. **Please ensure someone from your jurisdiction is there to pick up a copy of the draft plan.**

Please make plans to attend the pre-disaster mitigation meeting on August 7, 2014 at 10:00 am at the Jefferson EOC located at 1841 Hwy 24 W Suite A Louisville Georgia 30434. Please remember that upon completion of the plan update the county and all cities will have to adopt by resolution.

If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006

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AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
August 7, 2014 10:00 AM

1. Items:
    a. Review Draft Plan.
    b. In-kind contribution forms.

2. Next meeting

Jefferson County PDM Planning Team Meeting
August 7, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
Richard T. Sapp	Louisville	richard-sapp@att.net
Larry Ansarson	WRENS	LANSARSON@CITYOFWRENS.COM
Robert Hoffman	Stapleton P.D.	Robert.hoffman512@gmail.com
Joey May	Jefferson Hosp	Jmay@ip.JeffersonHosp.Com
Garry A. McCord	Wrens Police Dept	MCCORDWRENS@Hotmail.com
FRANK PARRISH	City of STAPLETON	PFRANK257@bellsouth.net
Janet Pilcher	Jefferson Co H Dept	Janet.Pilcher@dph.ga.gov
Sallie Adams	City of Wadley	sacitywadley@bellsouth.Net

AGENDA
Jefferson County Pre-Disaster Mitigation Meeting
August 18, 2014 10:00 AM

1. Items:
    a. Review Plan to submit to GEMA.
    b. Discussed Review Period and Resolution Adoption Process
    c. In-kind contribution forms.

2. Next meeting

Jefferson County PDM Planning Team Meeting
August 18, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
James O. Anderson	Jefferson Co EMA	janderson@jeffersoncountyga.gov
Richard T. Sapp	City of Louisville	richard-sapp@att.net
Chris Cawley	GA. Gas Authority	CCawley@gasauthority

Linda Grijalva

From: Linda Grijalva
Sent: Wednesday, December 17, 2014 1:27 PM
Subject: FW: Jefferson County PDM final Meeting

Just a reminder about the meeting tomorrow. December 18, 2014 at 10:00 am in the Jefferson EOC located at 1841 Hwy 24 W Suite A, Louisville, Georgia

The link below is the final plan. Signed resolutions will be added once completed. It is 587 pages. Do not print out. Read at your leisure.

https://www.dropbox.com/s/wff0tjlbsnv4jzv/JC%20PDM%2012-15-2014.pdf?dl=0

Linda

From: Linda Grijalva
Sent: Sunday, December 7, 2014 12:04 PM
To: Adam Mestres (amestres@jeffersoncountyga.gov); Anna Anderson (anna.anderson@airmethods.com); Arty Thrift (athrift@cityofwrens.com); 'Avera'; 'Bartow (townbartow@hotmail.com)'; 'carol.mcleod@thenewsandfarmer.com'; 'clerk30823@bellsouth.net'; Dr. Molly Howard (HOWARDMP@jefferson.k12.ga.us); Eric L. Mosley (emosley@gfc.state.ga.us); Frank Parrish (pfrank257@bellsouth.net); Garry A. McCord (mccordwrens@hotmail.com); 'Janet Pilcher (jrpilcher@dhr.state.ga.us)'; Jim Anderson (janderson@jeffersoncountyga.gov); Joey May (jmay@jeffersonhosp.com); Larry Anderson (landerson@cityofwrens.com); Larry Cheely (wrensfd@cityofwrens.com); Leah Lumley (llumley@jeffersoncountyga.gov); Louisa Pennington (lpennington@jeffersoncountyga.gov); Marc Peebles (peeblesfire@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Robert Chalker (rchalker@jeffersoncountyga.gov); Robert Hoffman (Robert.Hoffmans1@gmail.com); Robert Morris (Lteng99@yahoo.com); 'Sallie Adams (sacitywadley@bellsouth.net)'; Sam Dasher (dashers@jefferson.k12.ga.us); Shane Barrow (sbarrow@gfc.state.ga.us)
Subject: Jefferson County PDM final Meeting

FEMA has Approved Pending Adoption by all jurisdictions the Pre-Disaster Mitigation Plan Update. Please ensure that the hard copy I provided you earlier is available for review. The Pre-disaster Committee will hold its final meeting on December 18, 2014 at 10:00 am in the Jefferson EOC located at 1841 Hwy 24 W Suite A, Louisville, Georgia 30434 Please ensure that someone is there to represent your agency or jurisdiction.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 River Watch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
Fax: 706-210-2006
lgrijalva@csrarc.ga.gov

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From: Linda Grijalva

Bcc: Blake Thompson (wilkescountyems@lycos.com); Bruce Tanner (btanner@thomson-mcduffie.net); Casey Broom (cbroom@lincolncountyga.com); Divenskil@yahoo.com; Jim Anderson (janderson@jeffersoncountyga.gov); Mario Chapple (mariochapple@yahoo.com); Mie Lucas (dlucas@augustaga.gov); Mike Lyons (Mike.Lyons@gapac.com); ptucker@columbiacountyga.gov; Robert "Bob" Fields III (jfields@jchs.com); Russell Riner (firechief@sandersville.net); Rusty Sanders; Taliaferro County (taliaferro@nu-z.net); Tommy Wolfe (warrenoes@classicsouth.net); "(jccomm@bellsouth.net)"; Adam Mestres (amestres@jeffersoncountyga.gov); Amy Cochran (tennille@tennille-ga.gov); Arty Thrift (athrift@cityofwrens.com); Audrey Chalker; Avera; Bartow (townbartow@hotmail.com); Brent Weir (blythesmayor@gmail.com); Camak (cityofcamak@bellsouth.net); Chris Hutchings (cghutchings@washingtoncountyga.gov); City of Edgehill (cityofedgehill@gmail.com); City of Grovetown (clerk@grovetownga.us); City of Hephzibah (cityofhephzibah@bellsouth.net); "City of Norwood (mccord32659@bellsouth.net)"; "City of Rayle (jechols72@aol.com)"; City Of Sardis - New; City of Vidette (cityofvidette@gmail.com); cityofblythe@comcast.net; countyclerk@hancockcountyga.gov; Crawfordville; Darrell Adams (dakotachico@nu-z.net); David Crawley (dcrawley@thomson-mcduffie.net); "David L. Tyler"; Dearing (townofdearing@bellsouth.net); Don Powers (Don.Powers@thomson-mcduffie.net); Dorenda Smith (deepstep@outlook.com); Gibson, City of ; Glascock County; Grady Saxon (gsaxon01@yahoo.com); Harold Moore; Harrison, Town of (townofharrison@bellsouth.net); "Jason M. Rizner (jrizner@harlemga.org)"; Jerry Coalson (jcoalson@waynesboroga.com); Jerry Henry (jhen5@att.net); John Graham (warrencoboc@classicsouth.net); Judy McCorkle (jmccorkle@sandersville.net); Ken Westbrook (westbrookken@yahoo.com); Lajuana Givens (lajuanagivens@att.net); Lincolnton (citylinc@nu-z.net); Lori Boyen (lboyen@glascockcountyga.com); merv.waldrop@burkecounty-ga.gov; Michael Felts (michael.felts.cityofmillen@gmail.com); Midville (cityofmidville@pineland.net); Regina Freeman (cityofoconee@NLAmerica.com); Renee Brown (reneeparzenbrown@yahoo.com); Richard T. Sapp (richard-sapp@att.net); Rosemary Baughman (dhbdhb3610@gmail.com); Roxanne Ashmore (rbashmore@lincolncountyga.com); "Sallie Adams (sacitywadley@bellsouth.net)"; Sean Kelley (kbprintinc@gmail.com); Sherri Bailey (sbailey@washingtonwilkes.org); Shirley Beasley (ShirleyBeasley@grovetownga.us); Sistie Hudson (sistiehudson@aol.com); spartacity@bellsouth.net; Tameka Allen (allen@augustaga.gov); "Town of Davisboro (dboroclerk@pineland.net)"; Town of Girard (kreddick.townofgirard@gmail.com); Town of Mitchell (mitchelltownof@bellsouth.net); Town of Tignall (cityoftignal@nu-z.net); Warrenton (cityofw1@bellsouth.net)

Subject: Jefferson County PDM

Date: Sunday, December 7, 2014 12:06:00 PM

Jefferson County has received a grant from the FEMA to update the 2009 Pre-Disaster Mitigation Plan (PDM). The plan is required to be updated every five years. FEMA has Approved Pending Adoption by all jurisdictions of the Pre-Disaster Mitigation Plan Update. The Jefferson County PDM Committee would like to extend an invitation to your agency to review the plan before all jurisdictions adopt. The final meeting will be held on December 18, 2014 at 10:00 am in the Jefferson EOC located at 1841 Hwy 24 W Suite A, Louisville, Georgia. If you have any questions please feel free to contact me.

Linda

Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 River Watch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000
Direct: 706-650-5694
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Jefferson County PDM Planning Team Meeting
December 18, 2014 10:00 AM

NAME	AGENCY OR CITY	EMAIL
Tripp Rooks	Georgia Forestry Commission	ARooks@GFC.State.GA.US
Justin Prescott	Georgia Forestry Commission	JPrescott@GFC.State.GA.US
Cheryl Kitchens	Jefferson C. Health Dept.	Cheryl.Kitchens@dph.ga.gov
J Larry Morgan	City of Louisville	FLYERS03vet@HotMail.com
FRANK PARRISH	CITY OF STAPLETON	pfrank257@bellsouth.net
Ricky Sapp	City of Louisville	richard-sapp@att.net
Robert Morris	Town of Bartow	Lteng99@Yahoo.com
LARRY ANDERSON	CITY OF WRENS	LANDERSON@CITYOFWRENS.COM
Garry A. McCord	Wrens P.D	MCCORDWRENS@hotmail.com
Carol McLeod	The News and Farmer	carol.mcleod@morris.com

Jefferson County PDM Planning Team Meeting December 18, 2014 10:00 AM		
NAME	AGENCY OR CITY	EMAIL
Anna Andersa	Jefferson EMA	annamaria_anderson@yahoo.com
Jim Anderson	Jefferson EMA	janderson@jeffersoncountyga.gov

From: Linda Grijalva
To: "Jon.Janowicz@fema.dhs.gov"
Subject: HAZUS
Date: Monday, August 4, 2014 9:47:00 AM

Jon

WE have been trying to install HASUZ to use with our regions mitigation plans. WE can download and unzip but we cannot install. The error message we get is that it must be used with GIS 10.0 SP2. We are running GIS 10.2. Is this our problem?

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From:	Janowicz, Jon
To:	Linda Grijalva; helpdesk@support.hazus.us
Cc:	Berman, Eric; Mccoy, Cynthia
Subject:	RE: HAZUS
Date:	Monday, August 4, 2014 10:15:31 AM

Hi Linda:

I have added the Hazus help desk to this email.

Hopefully, you'll hear from them soon.

Thanks and good luck.

Jon

From: Linda Grijalva [mailto:lgrijalva@csrarc.ga.gov]
Sent: Monday, August 04, 2014 9:47 AM
To: Janowicz, Jon
Subject: HAZUS

Jon
WE have been trying to install HASUZ to use with our regions mitigation plans. WE can download and unzip but we cannot install. The error message we get is that it must be used with GIS 10.0 SP2. We are running GIS 10.2. Is this our problem?
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Please consider the environment before printing this email

From: helpdesk@support.hazus.us
To: Jon.Janowicz@fema.dhs.gov
Cc: cynthia.mccoy@fema.dhs.gov; eric.berman@fema.dhs.gov; Linda Grijalva
Subject: Re: [Request ID :##9841##] : RE: HAZUS
Date: Monday, August 4, 2014 10:39:01 AM

Hello Jon,

Thank you for submitting this request.

Your request has been assigned to a technician.

We will contact soon.

Please let us know if you have any questions.

Thanks,

Waise Sekander
Hazus Support Team
wsekander@us.ibm.com

Category :
Description :
Hi Linda:

I have added the Hazus help desk to this email.

Hopefully, you'll hear from them soon.

Thanks and good luck.

Jon

From: Linda Grijalva [mailto:lgrijalva@csrarc.ga.gov]
Sent: Monday, August 04, 2014 9:47 AM
To: Janowicz, Jon
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Linda D. Grijalva
Director of Community Development
CSRA Regional Commission
3023 Riverwatch Parkway Suite A
Augusta, GA 30907
Main: 706-210-2000

From: Mccoy, Cynthia
To: Janowicz, Jon; Linda Grijalva; helpdesk@support.hazus.us
Cc: Berman, Eric
Subject: RE: HAZUS
Date: Monday, August 4, 2014 10:24:58 AM

Linda,
The problem is that you are running Arc 10.2 .
HAZUS currently operates on 10.0 only.
You will either need to install the older version of Arc, or wait for the next release of HAZUS which will operate on 10.2. I am currently at the annual HAZUS conference and I can provide you with more details about the next release when I return.

Thank you,
Cynthia

Sent from my iFEMA mobile device.

From: Janowicz, Jon
Sent: Monday, August 04, 2014 2:10:11 PM
To: Linda Grijalva; helpdesk@support.hazus.us
Cc: Berman, Eric; Mccoy, Cynthia
Subject: RE: HAZUS

Hi Linda:

I have added the Hazus help desk to this email.

Hopefully, you'll hear from them soon.

Thanks and good luck.

Jon

From: Linda Grijalva [mailto:lgrijalva@csrarc.ga.gov]
Sent: Monday, August 04, 2014 9:47 AM
To: Janowicz, Jon
Subject: HAZUS

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Linda

Linda D. Grijalva
Director of Community Development

From: Linda Grijalva
To: Mccoy, Cynthia
Subject: Re: HAZUS
Date: Monday, August 4, 2014 11:05:53 AM

We will wait for the next release. We really cannot go backwards. Thanks.

Sent from my Verizon Wireless 4G LTE DROID

"Mccoy, Cynthia" <Cynthia.Mccoy@fema.dhs.gov> wrote:

Linda,
The problem is that you are running Arc 10.2 .
HAZUS currently operates on 10.0 only.
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Cynthia

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From: Janowicz, Jon
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Cc: Berman, Eric; Mccoy, Cynthia
Subject: RE: HAZUS

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Sent: Monday, August 04, 2014 9:47 AM
To: Janowicz, Jon
Subject: HAZUS

Jon
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Jefferson County Local Hazard Mitigation Plan Update	
Project ID: HMGP-1973-0029	**Local Contact**: James Anderson
Grant Expiration: 9/11/2015	**GEMA Planner**: Brian Laughlin
Local Match Contribution: 25%	**Consultant**: Central Savannah River RC
Primary Jurisdiction: Jefferson County	**Current Plan Approval Date**: 3/28/2009
Participating Jurisdictions: Cities of Louisville, Avera, Bartow, Stapleton, Wadley and Wrens	**Current Plan Expiration**: 3/24/2014

What is Hazard Mitigation?

Hazard mitigation is defined by FEMA as any sustained actions taken to reduce or eliminate the long-term risk to human life and property from hazards. This largely involves modifying the natural and built environment so that when hazardous events occur, the impact will be alleviated and minimal damage will occur. Hazard mitigation is a long-term, continuous process and related activities can occur at any phase in the emergency management cycle (see Recovery Continuum handout). Some activities can be easily implemented in a short timeframe, while others require significant time and resources to complete.

The following are just a few examples of hazard mitigation activities/projects for common natural hazards in Georgia:

Flood:

- Elevating or relocating structures out of floodplains
- Floodplain ordinances and regulations
- Improving storm drainage and waterways
- Levees and floodwalls
- Flood insurance

Storms:

- Building codes
- Safe rooms
- Infrastructure improvements
- Tree management

Wildfire:

- GIS mapping
- Defensible space/property maintenance
- Building codes

For additional information on strategies and projects to reduce long-term risk and vulnerability, please visit our website or contact your GEMA mitigation planner.

Why are we doing this?

Long Term Goal:

The long term goal of hazard mitigation is to reduce disaster losses. This includes loss of life and damage to property, critical infrastructure or other structures. Other impacts can include social disconnection from displaced residents and economic impacts from businesses closing and tax revenues decreasing. History has shown that it can sometimes take several years for a community to recover from these losses.

Benefits:

The benefits to hazard mitigation are enormous and far-reaching. First and foremost, by offsetting the impacts of hazardous events, we are breaking the cycle of damage and repair. If a community has successfully mitigated most of its hazards, then when one of these events occurs, there will be no significant impact. This means that the community is not only safer to live in but also more resilient from hazard events which means the disaster recovery process will be much shorter and less involved. In addition, research has shown that for every $1 invested in mitigation activities, society will benefit with an average return in $4 saved (see handout Mitigation's Value to Society).

Federal Grant Eligibility:

With an approved Local Hazard Mitigation Plan, the community becomes eligible for certain types of Federal grant programs to assist in mitigation projects and related activities. One of the first questions asked by FEMA when reviewing project applications is: "Do you have an approved plan?"

There are two categories of Federal hazard mitigation grants which are **annual** and **post-disaster**. For annual grant programs, the community competes with other projects from around the country for a slice of money that is allocated for the entire nation. Post-disaster grant programs occur after a state has received a disaster declaration from the Federal government. With this declaration, the Federal government will allocate a certain amount of money that is used for just that state. Specific counties that were declared have first priority to that money, but

sometimes there are additional funds available for counties that were not declared. The amount of post-disaster funds allocated to states is typically much larger than annual allocation for the entire nation; therefore, this is the most common source of funding for mitigation projects and activities.

Annual programs:

Pre-Disaster Mitigation Competitive (PDM-C)

Flood Mitigation Assistance (FMA)

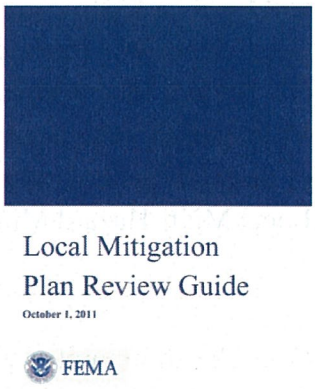
Post Disaster programs:

Hazard Mitigation Grant Program (HMGP)

Federal Regulations

The requirement that local communities must have an approved hazard mitigation plan extends from the Disaster Mitigation Act of 2000 (DMA). Also under this law, once these plans are approved, the plan must be updated every five years in order to maintain its status of an approved plan. The regulations under DMA include specific requirements for local hazard mitigation plans. Interpretations of these regulations as well as guidance on compliance can be found in the FEMA document Local Multi-Hazard Mitigation Planning Guidance (2008). The guidance utilizes a tool called the Crosswalk which is how the plan will be reviewed to determine if the requirements are met. This document is available online or you can contact your GEMA planner for a copy.

Note: In October 2011, FEMA released a new guidance called the Local Mitigation Plan Review Guide. This document is intended to replace the 2008 guidance and is designed to be easier to follow and clarify the intent of the regulations. While there are no new regulations under this guide, there are some new interpretations of the regulations. The guide also features a new plan review tool which replaces the previous crosswalk. This new guide goes into effect starting October 1, 2012; therefore, all plans submitted after this date will be reviewed based on this guide. Up until that date, the use of the new guide is optional.



What does this plan do?

There are four main items that the hazard mitigation plan accomplishes:

1. Identify and profile the Hazards

Identifying the hazards involves determining which natural hazards will have an impact on the planning area. Only natural hazards are required in Local Hazard Mitigation Plans, but communities are welcome to include technological or man-made hazards. Plan reviews will only affect the natural hazard sections of the plan. For a complete listing of natural hazards that may have an impact on your community, please see the Georgia State Hazard Mitigation Strategy.

Once the hazards are identified for the planning area, then each must have a profile. The profile describes the location, extent and probability of the hazard event in the community. Location is the specific locations in the planning area that the hazard will impact. Examples include floodplains or wildland-urban interface fire zones. Some hazards may not have a specific location and affect the entire planning area. Extent is the potential magnitude or severity of the hazard event. In other words, the worst-case scenario the community is likely to experience. Probability is rate of return or frequency of the hazard event in the planning area. This needs to be a real, quantifiable number and is often this is determined based on hazard history or advanced statistical modeling.

2. Determine the Vulnerability

There are two key components to vulnerability. First, the plan needs to provide a description of the types of structures that can be affected by the hazard. Examples include, but not limited to, buildings, infrastructure, critical facilities, structures for housing the elderly or disabled, and areas where low-income populations reside. The second part of vulnerability is describing how the hazard will impact the identified structures such as the likely damage that will occur. Vulnerability impact can also be described in terms of structure loss (dollar value or percentage of damage) or functional loss. For additional information on vulnerability, please see the FEMA Local Multi-Hazard Mitigation Planning Guidance.

3. Determine the Risk

Once the community has an understanding of the hazards and vulnerabilities, this can be used to determine the overall risk for the planning area. While not required, it is suggested to develop an objective hazard ranking score that can be used to identify the hazards that impose the greatest risks and appropriately inform prioritization of mitigation actions.

4. Develop a Mitigation Strategy

The mitigation strategy includes goals and mitigation actions aimed at reducing long-term risk and vulnerabilities in the community. The community's hazard reduction goals are broad policy statements that explain what is to be achieved and guide the development and implementation of mitigation actions.

How do we do this?

Getting Started

The first step in the planning process is "preparing to plan" by organizing resources which will be used throughout the process. This involves building support from stakeholders, determining the technical and financial resources available, establishing the planning team and obtaining public participation.

Building the Planning Team

Hazard mitigation is more than just an emergency management function and requires commitment from the entire community to be successful. The best plans are the ones with a diverse group of stakeholder participation to bring in various expertise and community knowledge into the plan. Each unique stakeholder has an important role in the planning process. The following is a short list of suggested participants:

- Local government (Planning and Development, Public Works, Floodplain Manager, etc.)
- Non-government organizations
- Businesses and private sector
- Special districts and authorities
- Schools and colleges/universities
- Residents and community groups
- Neighboring jurisdictions
- Others

Related Documents

Among the technical resources available to communities are plans and other documents with information that can be integrated into the Local Hazard Mitigation Plan. The following is a brief summary of a few resources that are recommended to incorporate into the planning process.

Georgia State Hazard Mitigation Strategy (SHMS)

The Georgia SHMS is updated every three years and provides the natural hazard risk assessment and mitigation strategy for the state. When developing or updating a local hazard mitigation plan,

it is encouraged to review the state plan for information such as hazard data that can assist the planning process.

Local Comprehensive Plan

Comprehensive plans are developed for counties and cities for the purpose of guiding development and land use. These plans include a community vision for the future and strategies for achieving the vision. The community description in these plans provides details on community development issues and areas of opportunity. It is recommended to include land use maps in hazard mitigation plans to describe land use and development trends. Ensuring that future development is concentrated outside of hazard areas will reduce future risk to disasters. Adopting hazard mitigation plans into comprehensive plans is recommended to enhance the importance of natural hazard risk reduction as a part of the community's future.

Community Wildfire Protection Plan (CWPP)

The Georgia Forestry Commission (GFC) is actively involved in preparing CWPPs for communities in Georgia. These contain wildfire risk assessments and mitigation strategies for the community to reduce fire risks. Adding this information into the Local Hazard Mitigation Plan will strengthen the risk assessment and enhance the fire mitigation strategies.

Flood Insurance Study (FIS)

A Flood Insurance Study is a book that contains information regarding flooding in a community and is developed in conjunction with the Flood Insurance Rate Map (FIRM). The FIS, also known as a flood elevation study, frequently contains a narrative of the flood history of a community and discusses the engineering methods used to develop the FIRMs. The study also contains flood profiles for studied flooding sources and can be used to determine Base Flood Elevations for some areas. It is recommended to include FIS and DFIRM maps in hazard mitigation plans to provide detailed data on flood risks to the community.

Floodplain Ordinances

Once FEMA provides a community with the flood hazard information upon which floodplain management regulations are based, the community is required to adopt a floodplain management ordinance that meets or exceeds the minimum National Flood Insurance Program (NFIP) requirements. The overriding purpose of the floodplain management regulations is to ensure that participating communities take into account flood hazards, to the extent that they are known, in all official actions relating to land management and use. It is recommended for communities to review and update the floodplain ordinance as a flood mitigation action.

Other Resources

Other documents and policies that should be considered include, but not limited to, building codes, capital improvement plans, local government financial plans, transportation plans, continuity of operations plans, and emergency operations plans.

The Plan Update Process

The following is an overview of activities in the plan update process.

1. Update Risk Assessment
    a. How have the hazards changed?
    b. Has development increased, decreased or remained the same?
    c. Are there any changes in your critical facilities?
2. Update Goals & Objectives
    a. What projects have been accomplished?
    b. Are there some that have not been accomplished? Why?
    c. Are there new and better ideas?
3. Update the Planning Process
    a. Describe the process used to update the plan.
    b. Who was involved?
    c. Describe how each section was reviewed and how was it determined if revisions were necessary.
4. Update the intended plan maintenance process
    a. What process and criteria will be used for evaluation and monitoring?

Once the plan update process is completed, the plan will be sent to GEMA for an initial review. Under this review, the GEMA planner will use a plan review tool to determine if the plan meets the requirements and provide comments on required and recommended revisions. GEMA will work with the planning team to make appropriate changes. Once the plan has been revised, it will be submitted by GEMA to FEMA where it will undergo a formal review. If FEMA determines the plan meets all the requirements sufficiently, then the plan will be approved. Formal approval is not granted until each of the participating jurisdictions has formally adopted the plan by resolution of the governing body.

Changes

The following is a summary of some of the changes in requirements that must be met in the plan update.

- Must include two documentable opportunities for public participation during drafting stage & to comment on final draft prior to adoption
  - Can be public hearings, website, etc.
- Risk Assessment
  - National Flood Insurance Program (NFIP) repetitive loss structures vulnerability must be described in terms of types and numbers of structures.
- Goals & Objectives
  - Must have strategy for NFIP compliance spelled out, or a specific statement of why jurisdiction is not going to participate in program
- All plans submitted after October 1, 2012 must be in compliance with new FEMA Plan Review Guide.

What is my part?

County Point of Contact

- Submit quarterly reports on time
- Submit for reimbursement as needed
- Coordinate with GEMA, consultant, participants

County, Cities & Towns

- Participate in planning process
- Adopt plan
- Implement plan

Everyone

- Will ensure your input into the planning process
- Will help the County meet the 25% grant match requirement

Related Links:

http://www.fema.gov/government/mitigation.shtm

http://www.gema.state.ga.us/ Click on Mitigation ➡ Hazard Mitigation

FEMA

Mitigation Planning

Hazard mitigation is sustained action taken to reduce or eliminate long-term risk to people and their property from hazards. Hazard mitigation planning is the process State, Tribal, and local governments use to identify risks and vulnerabilities associated with natural disasters, and to develop long-term strategies for protecting people and property from future hazard events.

www.fema.gov/plan/mitplanning

FLOOD

INSURANCE

HAZUS

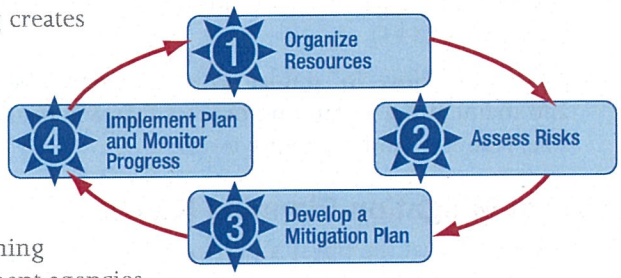
DAMS/LEVEES

PLANNING

Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended, State, Tribal, and local governments are required to develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects.

Mitigation Planning Process

The planning process promoted by Federal Emergency Management Agency (FEMA) is as important as the resulting plan because it creates a framework for governments to reduce the negative impacts from future disasters on lives, property, and the economy. Mitigation planning includes the following elements:



Public Involvement – Planning creates a way to solicit and consider input from diverse interests. Involving stakeholders is essential to building community-wide support for the plan. In addition to emergency managers, the planning process involves other government agencies (e.g., zoning, floodplain management, public works, community and economic development), businesses, civic groups, environmental groups, and schools.

Risk Assessment – Mitigation plans identify natural hazards and risks based on history, estimate the potential frequency and magnitude of disasters, and assess the potential losses of life and property. The assessment considers the built environment, including the type and numbers of existing and future buildings, infrastructure, and critical facilities located in or near identified hazard areas.

Mitigation Strategy – Based on the risk assessment, communities develop mitigation goals and objectives, as part of a strategy for mitigating disaster losses. The strategy is a community's approach for implementing mitigation activities that are cost-effective, technically feasible, and environmentally sound as well as allowing strategic investment of limited resources.

Benefits of Mitigation Planning

- Increases public awareness and understanding of vulnerabilities as well as support for specific actions to reduce losses from future natural disasters.
- Builds partnerships with diverse stakeholders, thereby maximizing opportunities to leverage data and resources, which can help reduce workloads and achieve shared community objectives. For example, managing floodplain development may not only reduce flood losses, but also protect water quality by restoring natural functions.

- Expands understanding of potential risk reduction measures to include structural and regulatory tools, where available, such as ordinances and building codes. Implementation of local floodplain ordinances prevents an estimated $1.1 billion in flood damages annually.
- Informs development, prioritization, and implementation of mitigation projects. Benefits accrue over the life of the project as losses are avoided from each subsequent hazard event.

Planning Guidance, Tools, and Training

To assist with mitigation planning, FEMA and its partners offer a variety of guidance, training, and informative publications, such as:

- Multi-Hazard Mitigation Planning Guidance, or "Blue Books," designed to increase State, Tribal, and local governments' understanding of the requirements for developing new or updated mitigation plans. They also help Federal and State reviewers fairly and consistently evaluate mitigation plans from different jurisdictions.
- Training sessions, including the following courses: Mitigation Planning Workshop for Local Governments (G318), HAZUS Multi-Hazard/DMA 2000 Risk Assessment (E296), and Protecting Tribal Communities and Acquiring Resources (E344).
- A series of "How-To" guides with information beyond FEMA's basic requirements. The guides focus on initiating and maintaining a planning process that will result in safer communities and are applicable to jurisdictions of all size, resource, and capability levels.

Hazard Mitigation Planning Results

History shows that the physical, financial, and emotional losses caused by disasters can be reduced significantly through hazard mitigation planning. A broad range of activities designed to reduce risk can result from the mitigation planning process. The examples listed below illustrate a range of possible long-term mitigation actions; however, they are not necessarily intended to serve as examples of eligible activities under the FEMA Hazard Mitigation Assistance programs:

- Consider adopting and enforcing regulatory tools, including ordinances, regulations, and building codes to guide and inform land use, development, and construction decisions in areas affected by hazards. Where authorized, adopt more stringent criteria to provide greater protection for citizens, as conditions may change over time. For example, consider:
    - Exceeding the National Flood Insurance Program (NFIP) floodplain management regulations by elevating structures above the Base Flood Elevation (BFE) in high-risk areas.
    - Creating a buffer area by protecting natural resources, such as floodplains, wetlands, or sensitive habitats. Additional benefits to the community may include improved water quality and recreational opportunities.
- Develop mitigation projects to acquire and demolish flood damaged structures, such as homes or businesses, or to retrofit public buildings, schools, and critical facilities to withstand extreme wind events or ground shaking from earthquakes.

Hazard Mitigation Assistance (HMA)

FEMA's HMA programs fund eligible mitigation activities that reduce future disaster losses and protect life and property. Funding is available for mitigation plan development and updates as well as mitigation projects. For more information on FEMA's HMA programs, visit www.fema.gov/government/grant/hma/index.shtm.

FEDERAL INSURANCE AND MITIGATION ADMINISTRATION

Mitigation's Value to Society

BUILDING SAFER AND STRONGER

Mitigation is the effort to reduce the loss of life and property by lessening the impact of disasters. A recent study by the Multihazard Mitigation Council (MMC) shows that each dollar spent on mitigation saves an average of $4.00.*

VALUE TO SOCIETY

Mitigation yields benefits to society and therefore:

- It creates safer communities by reducing loss of life and property;
- It enables individuals to recover more rapidly from floods and other disasters; and
- It lessens the financial impact on the Federal Treasury, States, Tribes, and communities.

FEMA's Federal Insurance and Mitigation Administration implements numerous Congressionally-authorized programs that address the effects of natural hazards through mitigation activities.

MITIGATION CREATES SAFER COMMUNITIES

In any disaster, buildings constructed to a higher standard not only reduce property damage but can also save lives. Homes constructed to National Flood Insurance Program (NFIP) standards incur 80 percent less damage from floods than structures not built to those standards.

MITIGATION SPEEDS RECOVERY

Mitigation is key to decreasing the time it takes to rebuild and recover after a disaster. By using existing, proven plans and building standards, mitigation allows individuals and communities to lessen post-disaster disruption and rebuild more quickly. Long-term hazard mitigation planning and projects enable communities and individuals to break the cycle of disaster damage, reconstruction, and repeated loss.

MITIGATION SAVES MONEY

Mitigation activities have been proven to lessen the financial impact on individuals, communities, and society as a whole. Floodplain management actions save the country more than $1 billion in prevented damages each year.

MITIGATION IS COST-EFFECTIVE

In December 2005, the MMC of the National Institute of Building Sciences (NIBS) released *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities*. The report was the culmination of a 3-year, Congressionally-mandated independent study.

CASE STUDY: GRAND FORKS, NORTH DAKOTA

In 1997, the Red River flooded 8,600 homes in Grand Forks, North Dakota, causing $3.7 billion in flood losses. Following the disaster, the State of North Dakota, local governments, and FEMA worked together to buy out almost 700 of the most vulnerable homes in the State with FEMA mitigation grant program funds. The Red River flooded again in 2006, yet losses were kept to $6.5 million as a result of the mitigation projects and studies. Demonstrating mitigation's cost-effectiveness is critical to the continued success of FEMA mitigation programs.

Key findings included:

- A dollar spent on mitigation saves society an average of $4.00, with positive benefit-cost ratios for all hazard types studied.
- In addition to savings to society, the Federal Treasury can redirect an average of $3.65 for each dollar spent on mitigation resulting from disaster relief costs and tax losses avoided.
- In each of the eight communities studied in-depth, FEMA mitigation grants were a significant part of the community's mitigation history and often led to additional loss reduction activities.
- Mitigation is sufficiently cost-effective to warrant Federal funding both before disasters occur and during post-disaster recovery.

MMC REPORT RECOMMENDATIONS

The MMC report demonstrated through statistical and community analyses that positive net benefits result from hazard mitigation. In addition, the MMC report included three basic recommendations:

- Mitigation should continue to be Federally funded on an ongoing basis. It should encompass projects that relate to enforcing strong building codes and land use measures, and promote development of comprehensive plans to limit damage and reduce losses.
- Mitigation is most effective when carried out on a comprehensive, community-wide, and long-term basis. Implementing coordinated mitigation activities over time is the best way to ensure that communities will be physically, socially, and economically resilient to future hazard impacts.
- The effectiveness of mitigation activities must continue to be studied and analyzed. Systematic data collection and assessment of various mitigation approaches are required to ensure that lessons learned are incorporated into disaster public policy.

FOR MORE INFORMATION

The two-volume study report is available for free download at: http://www.nibs.org/index.php/mmc/projects/nhms.

* The purpose of the Multihazard Mitigation Council (MMC) is to reduce the total costs associated with natural and other related hazards to buildings by fostering and promoting consistent and improved multihazard risk mitigation strategies, guidelines, practices, and related efforts. The Council was established in 1997 as a voluntary advisory, facilitative body of the National Institute of Building Sciences (NIBS), a non-profit corporation incorporated in the District of Columbia.

FIGURE 1. RECOVERY CONTINUUM – DESCRIPTION OF ACTIVITIES BY PHASE

This recovery continuum describes overlapping recovery activities by phase.

Jefferson County Board of Commissioners
Resolution # 2015-01

RESOLUTION OF THE BOARD OF COMMISSIONERS OF JEFFERSON COUNTY, GEORGIA ADOPTING A JOINT PRE-DISASTER MITIGATION PLAN AS THE OFFICIAL PLAN OF JEFFERSON COUNTY, GA

WHEREAS, Jefferson County has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Hail, Flood, Drought, Dam Failure and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

WHEREAS, a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

WHEREAS, the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing Jefferson County;

WHEREAS, two public meetings were held to review the Plan as required by law;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners and hereby resolved by authority of same as follows:

Section 1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of Jefferson County;

Section 2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

Section 3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Jefferson County Board of Commissioners.

Adopted this 13 day of Jan, 2015

M. Mitchell McGraw, Chairman

Gonice Davis, Vice-Chairman

H. G. Thomas New, Commissioner

Johnny Davis, Commissioner

Charles W. Davis, Commissioner

ATTEST:

Bonnie Wells, County Clerk

Resolution # _____

Whereas the City of Avera has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

Whereas a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

Whereas the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Avera;

Whereas two public meetings were held to review the Plan as required by law;

Now therefore be it resolved by Mayor & Council of the City of Avera that

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Avera;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Avera.

PASSED by the Mayor and City Council of Avera, this 19 **day of** December

Tony Hyland
Mayor

ATTESTED and FILED in my office this 19 **day of** December

Amy D. Hadden
City Clerk

SEAL

Resolution # 2014-12

Whereas the City of Bartow has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

Whereas a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

Whereas the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Bartow;

Whereas two public meetings were held to review the Plan as required by law;

Now therefore be it resolved by The Governing Body of the City of Bartow that

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Bartow;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Bartow.

PASSED by the Mayor and City Council of Bartow, this 18th day of December, 2014.

Mayor Robert D. Morris

Mayor, Robert D. Morris

ATTESTED and FILED in my office this 18th day of December, 2014.

Susan C Scarboro

City Clerk, Susan C. Scarboro

SEAL

attn: linda

Resolution # 12192014

Whereas the City of Louisville has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

Whereas a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

Whereas the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Louisville;

Whereas two public meetings were held to review the Plan as required by law;

Now therefore be it resolved by unanimous of the Louisville City Council that

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Louisville;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Louisville.

PASSED by the Mayor and City Council of Louisville, this 19th day of 2014

Mayor

ATTESTED and FILED in my office this 19th day of 2014

City Clerk

SEAL

Resolution # **14-12-18**

Whereas the City of Stapleton has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

Whereas a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

Whereas the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Stapleton;

Whereas two public meetings were held to review the Plan as required by law;

Now therefore be it resolved by the **City Council** of the **City of Stapleton** that

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Stapleton;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Stapleton.

PASSED by the Mayor and City of Stapleton, this 18th **day of** December, 2014

Frank Smith
Mayor

ATTESTED and FILED in my office this 18th **day of** December 2014

Gail J. Barry
City Clerk

SEAL CITY OF STAPLETON SEAL STAPLETON, GA

Resolution # 0-1-001-15

Whereas the City of Wadley has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

Whereas a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

Whereas the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Wadley;

Whereas two public meetings were held to review the Plan as required by law;

Now therefore be it resolved by THE Governing Body of the City of Wadley that

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Wadley;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Wadley.

PASSED by the Mayor and City Council of Wadley, this 12 **day of** Jan. 2015

Harold Moody Jr.
Mayor

ATTESTED and FILED in my office this 12th **day of** January

Sallie Adams
City Clerk

SEAL

CITY OF WRENS
RESOLUTION TO ADOPT THE JEFFERSON COUNTY JOINT PRE-DISASTER MITIGATION PLAN
RESOLUTION NO._2014-012-001

A RESOLUTION TO ADOPT A PLAN THAT WILL PROTECT THE PEOPLE AND PROPERTY OF THE CITY OF WRENS AFFECTED BY NATURAL HAZZARDS.

WHEREAS, the City of Wrens has experienced damage from Wildfire, Thunderstorm Winds, Tornados, Tropical Storms, Lightning, Hail, Flood, Drought, and Winter Storms, on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety; on many occasions in the past, resulting in property loss, loss of life, economic hardship and threats to public health and safety;

WHEREAS, a Jefferson County Joint Pre-Disaster Mitigation Plan has been developed after approximately one year of research and work by the Jefferson County Joint Pre-Disaster Mitigation Planning Committee and the people of the community;

WHEREAS, the Plan recommends mitigation goals, objectives and action steps that will protect the people and property affected by natural hazards facing the City of Wrens;

WHEREAS, two public meetings were held to review the Plan as required by law;

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING AUTHORITY OF THE CITY OF WRENS, GEORGIA, AS FOLLOWS:

1. The Jefferson County Joint Pre-Disaster Mitigation Plan is hereby adopted as the official Plan of the City of Wrens;

2. The respective officials identified in the strategy of the Plan are hereby directed to implement the recommended actions assigned to them in the Plan. These officials will report as directed in this Plan on their activities;

3. The Jefferson County Joint Pre-Disaster Mitigation Planning Committee will provide progress reports (as directed in the Plan) on the status of the implementation of the Plan to the Mayor and City Council of Wrens.

IN WITNESS WHEREOF, this resolution has been duly adopted by the Mayor and City Council of the City of Wrens, Georgia on this _18th day of _December, 2014.

Mayor and City Council of Wrens, Jefferson County, Georgia.

William L. Hadden
WILLIAM L. HADDEN, Mayor

Wayne Favors
WAYNE FAVORS, Councilmember

MELVIN FARMER, Councilmember

John Rabun
JOHNNY RABUN, Councilmember

absent
ERSKINE LANE, Councilmember

JACK TEMPLETON, Councilmember

Attest:
JANEE HODGE, City Clerk