Local Mitigation Strategy (LMS)



2025

Primary Point of Contact:

The point of contact listed below is the Director of Madison County Emergency Management and the Chairperson of the LMS Working Group:

Leigh Basford
Madison County Emergency Management
1083 SW Harvey Greene Drive
Madison, FL 32340
(850) 973-3698 (Office)
(850) 973-4026 (Fax)
madisonem@madisoncountyfl.com

Participating Jurisdictions:

The jurisdictions represented in the Madison County Local Mitigation Strategy (LMS) are:

Madison County, Florida
City of Madison
Town of Greenville
Town of Lee
Tri-County Electric
Madison County School District
Madison County Memorial Hospital

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Executive Summary

Madison County and its jurisdictions face a variety of natural and man-made hazards that could affect the lives and property of residents and visitors. The development and implementation of the Madison County Local Mitigation Strategy (LMS) provides a mechanism for the County, municipalities (Greenville, Lee, & Madison), and partners to address issues that will reduce or eliminate exposure and the impacts of hazards. The 2025 update of the LMS is a result of a coordinated, cooperative effort of local government and partners who make up the Madison County Local Mitigation Strategy Working Group (LMSWG).

Hazard mitigation is any action taken to permanently reduce or eliminate long-term risk to people and their property from the effects of hazards. Some examples of hazard mitigation include land use planning techniques that limit infrastructure in high hazard areas and programs for retrofitting existing structures to meet new building codes and standards. Ideally, a community can minimize the effects of future hazards through a mix of code enforcement, planning, and responsible development. The LMSWG identified and prioritized project-planning goals for the LMS following the completion of an updated hazard identification and risk assessment.

Mitigation occurs in many ways through various activities of governmental and non-governmental agencies and stakeholders. Together, these activities establish mitigation goals for the community and provide the framework for effective hazard mitigation. Existing plans, programs, policies, and ordinances should be reviewed to identify mitigation activities already occurring in a jurisdiction. These activities are combined and contained in the LMS resulting in a Mitigation Action Plan for all participating jurisdictions.

The LMS includes the best available information at the time the document was prepared. As new information becomes available, the LMS Working Group intends to provide ongoing updates to ensure this document remains current.

2025 What's New

The What's New Section outlines updates and changes between and during local mitigation strategy updates by cataloging changes to the overall document.

Over the last 5 years Madison County, including the City of Madison, Town of Greenville, and Town of Lee, has not seen a significant increase in residential or commercial growth. According to the Florida Bureau of Economic and Business Research (BEBR), from 2020 to 2024, the population increased slightly by 681 people. However, Madison County continues to move forward with mitigation.

Priorities of the 2025 LMS remain the same as previous versions of this plan: identify hazards, continue planning/regulations to protect lives & property, continue to secure grant funding for mitigation projects. No changes in priorities by Madison County, the City of Madison, Town of Greenville, and Town of Lee, were identified during the update of the LMS.

2025 Data & Analysis Updates

Overall population and housing stock have not changed significantly over the last 5 years. For the 2025 LMS revision MEMPHIS data continues to be a large source of data for Madison County. MEMPHIS data will continue to be phased out as additional data becomes available. Data from the FEMA National Risk Index was included for the first time in the LMS in this update. Other data and assessments were incorporated into the LMS from a variety of sources including:

- FEMA National Risk Index
- Florida Bureau of Economic and Business Research
- Southern Wildfire Risk Assessment
- SHELDUS
- National Climatic Data Center
- 2020 US Census Data
- Public Input

The Madison County Property Appraisers office updated the maps in the LMS with the most current data. The latest Community Rating System (CRS) field verification report dated November 25, 2024, maintains Madison County rating as CRS Class 8.

In 2023 and 2024 Madison County was impacted by three hurricanes as well as other hazards identified in the LMS. Nine hazard mitigation projects utilizing funding from the FEMA Hazard Mitigation Grant Program (HMGP), DR-4734 Hurricane Idalia are underway. The 2024 Florida Legislature appropriated $33,000,000 in state funds for the full amount of the required HMGP non-federal match for local governments within fiscally constrained counties including Madison County.

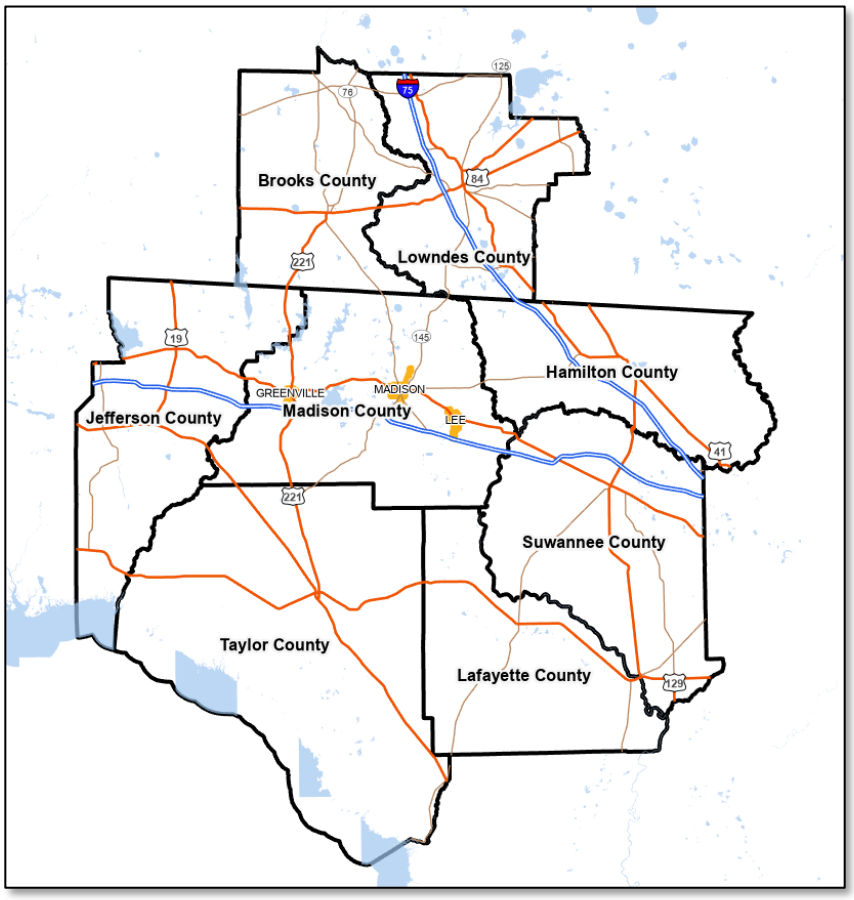
Section 1 Jurisdiction Profile

History and Community Information

Madison County was named in 1827 in honor of Founding Father James Madison, the fourth President of the United States and Father of the United States Constitution. It was chartered as Florida's largest county. That was before Florida was admitted to the Union, in 1845. Since then, Madison County has "surrendered" Taylor, Lafayette and Dixie Counties, but there are still 716 square miles of forests, rivers, lakes and gently rolling hills to enjoy. Madison County played an influential role in Florida's subsequent statehood in 1845. The area was settled by cotton planters and their labor force who hailed from the South Carolina low country near Charleston.

Madison County is in the north central region of the Florida panhandle. It is bordered on the north by the State of Georgia (Brooks County), on the south by Taylor and Lafayette Counties, on the east by Hamilton and Suwannee Counties, and on the west by Jefferson County. Figure 1 illustrates Madison County and the counties that border it in north central Florida.

Figure 1: Madison County and Neighboring Counties



The county consists of 696 square miles of predominantly rural land, with much of the area dominated by agricultural and forest land use. By area, Madison is the 34th largest county in Florida. Croplands and pastures account for 131,577 acres of land area and forestland covers 326,400 acres of the county's total area. Urban growth and homestead development make up only five percent of Madison County's land area. As of 2019, the average county-wide population density was 28 people per square mile, which ranked 59th out of the 67 counties in Florida.

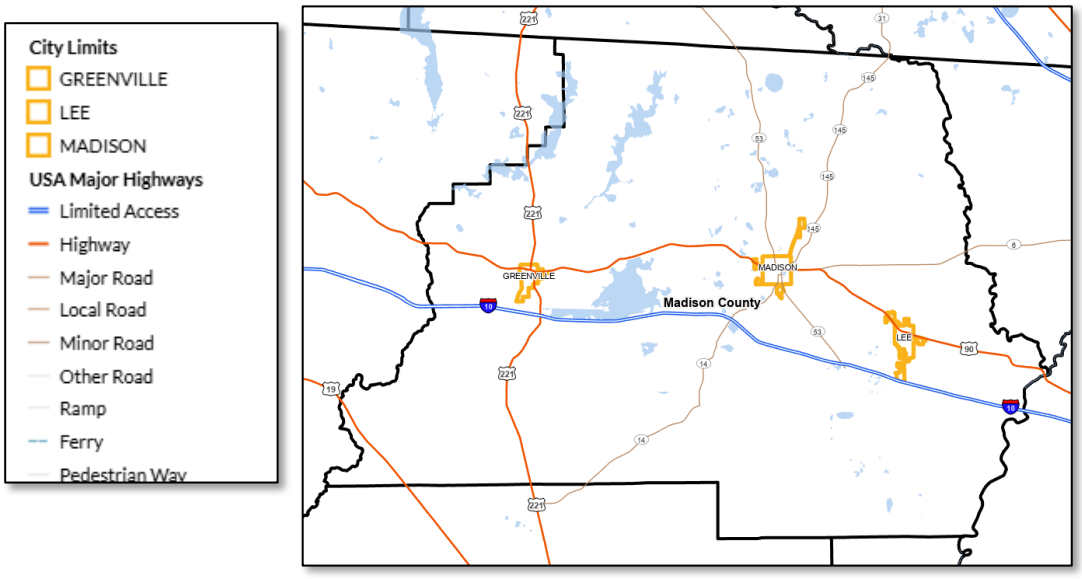
The US Census Bureau estimates there are approximately 8,497 total housing units, including 3,534 mobile homes scattered throughout the county, with 1,899 vacant housing units. Within the total mobile home population, there are 33 mobile home parks with a total population of approximately 1,000.

Madison County is a single-member voting district, which means that residents living in a particular district elect a County Commissioner from that district to represent them. There are five districts, and each district is represented by one County Commissioner.

The City of Madison and the Towns of Greenville and Lee are the three incorporated jurisdictions in the county. Madison County (unincorporated) is the fourth jurisdiction (Fig. 2).

Population estimates from the Florida Bureau of Economic and Business Research (BEBR) as of April 1, 2024, total 18,649. This includes the incorporated municipalities of Greenville, Lee and Madison. The City of Madison (pop. 2,880), is by far the most populated community and contains 15.4% of the total county population. Greenville (pop. 754) contains 4.04%, and Lee (pop. 395) contains 2.11% of the total county population.

Figure 2: Madison County Jurisdictions



Source: Madison County Property Appraiser

The City of Madison

Founded in 1838, it is the largest incorporated jurisdiction in Madison County, population of 2,880, and is home to the Madison County Courthouse. The City of Madison is also the County Seat and was named for Madison C. Livingston, who donated the first parcel of land to create the city on May 2, 1838. The oldest house in town, still occupied, was built in 1849 and a small wooden Episcopal church, built in 1843, is still in use.

In the heart of downtown Madison is the Four Freedoms Park. The park is a beautifully landscaped city-block area containing a large gazebo, and the Four Freedoms monument. This famous monument honors Colin P. Kelley, a former Madison County resident who was recognized as the first U. S. hero of World War II and who was awarded the Distinguished Service Cross for his bravery and valor in combat.

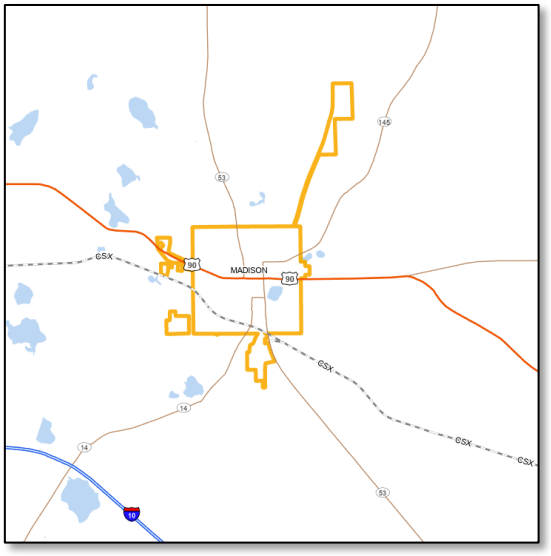
Four Freedoms Monument



Photo Courtesy of Matt Preston

Freedom of speech and expression
Freedom of worship
Freedom from want
Freedom from fear

The City of Madison downtown area features restored historic buildings that show Antebellum and Victorian architecture at their finest. Carriage lights, brick sidewalks, and additional landscaping add to its charm.



Source: Madison County Property Appraiser

The Town of Greenville

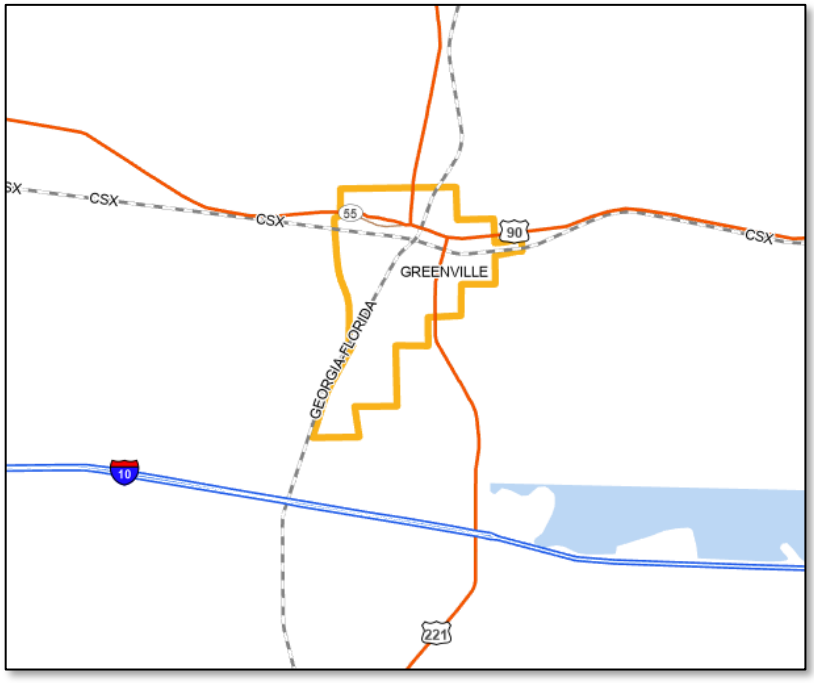
A small southern town, population 754, located on the western side of Madison County, Greenville was originally known as Sandy Ford. When the railroad came through from Jacksonville to Pensacola the town became known as Station Five, as it was the fifth stop on the line from Jacksonville.

Incorporated in 1907, Greenville's history dates to its founding in 1850 and its role as "Station Five" during the Civil War, where it served as the fifth stop on the railroad from Tallahassee. Named in honor of local leader Mrs. U.M. Roberts, the town is steeped in Southern tradition and pride. Its most famous resident, legendary musician Ray Charles, grew up here, leaving a lasting legacy that continues to resonate.

Haffye Hays Park in Greenville



Photo Courtesy of Matt Preston



Source: Madison County Property Appraiser

The Town of Lee

The Town of Lee has a slogan that sums it up, "Small but Proud". With a population of 395 residents, Lee is the least populated incorporated jurisdiction in Madison County. It is also one of the smallest incorporated jurisdictions in the State. Chartered in 1909, the Town of Lee is said to have originated in the mind of Greenberry Haven, a pioneer of the pre-civil war era.

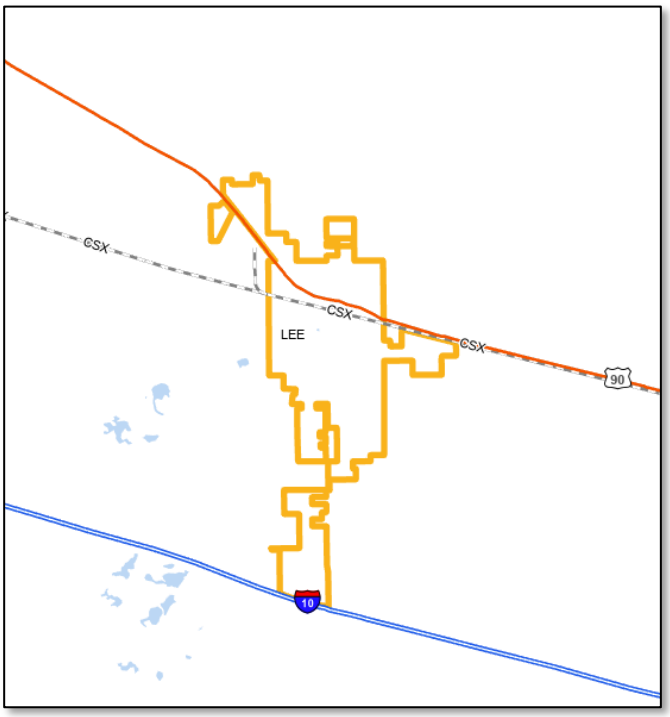
The Town of Lee is governed by a Town Council and a Mayor, all elected by the town's citizens. The City Manager and Deputy Clerk help manage the day-to-day affairs of the community.

In an effort to encourage economic development, the Lee Town Council obtained the vacated Lee School building to establish a business incubator. The intent of this project is to assist with the development of small businesses by providing office space at a reduced rate, assisting with tax incentive applications, providing direction and support to obtain small business loans and to assist with the promotion of their product. The building has 9,928 square feet of office space, which has been divided into 19 available offices ranging from 110 square feet to 1,300. The complex has been divided into two sections, one area for the development of a small business incubator and the other to provide services to the community. A new emerging business occupied 7,336 square feet of this facility. After occupying the facility for the first two years, sales have doubled. This business has created additional jobs in the community and has become an economic stimulus. A daycare moved

into 3400 sq. ft. of the facility, increasing its size from an occupancy of 27 children to one of 84. The lack of daycare facilities in the county was an area of concern as 80 children were on a waiting list. This facility grew in the first six months to 65 children and 8 new employees. This has provided parents with the ability to obtain jobs and provided new jobs for the area.

Lee Town Hall





Source: Madison County Property Appraiser

Located only two miles from Interstate10, five miles west of the Suwanee River, and thirty miles from Valdosta, Georgia, Lee is an easy drive from anything one wants or needs to do.

Major Rivers and Watersheds

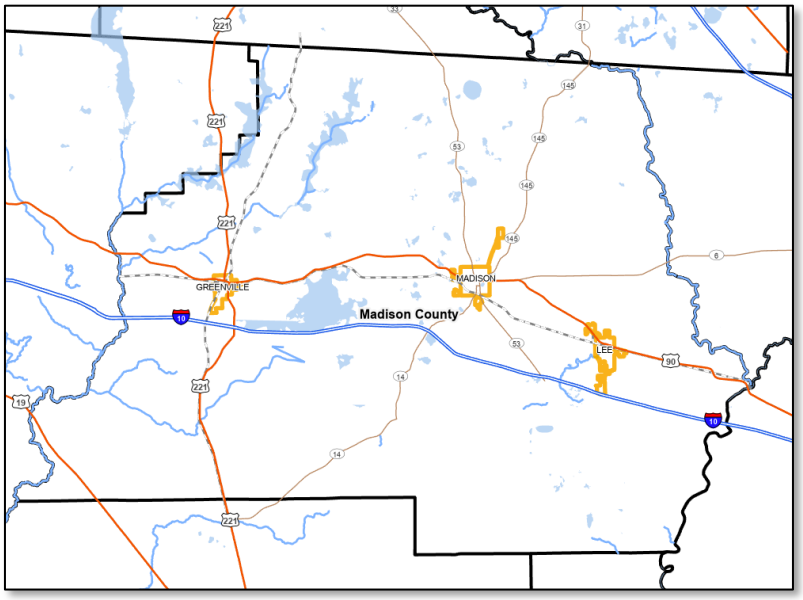
The Aucilla, Suwanee, and Withlacoochee Rivers are the primary rivers in Madison County and along with their tributaries provide a natural drainage system. Major lakes in the county include Cherry Lake, Indian Lake and Sampala Lake. Large wetland areas, namely San Pedro Bay, exist in the western and southern portions of the county.

The Suwannee and Withlacoochee Rivers form the eastern boundary of the county, while the Aucilla River runs along the western boundary. The total water area in Madison County, including rivers, lakes, ponds and streams, is estimated to be approximately 58,689 acres, or 24 square miles. The average elevation in the county varies from approximately 77 feet in the south to 114 feet in the north.

Transportation and Infrastructure

Critical highway links in and near the county include U.S. Highway 90, Interstate 10 and Interstate 75. U.S. 90 and I-10 accommodate east/west travel and connect the county with the major cities of Jacksonville and Tallahassee. I-75 (north/south) is only twenty miles east of the Madison County border. In addition, two rail lines traverse the county, the CSX Transportation Railroad and the Southern Railway systems.

Figure 3: Madison County Major Transportation Routes and Hydrology

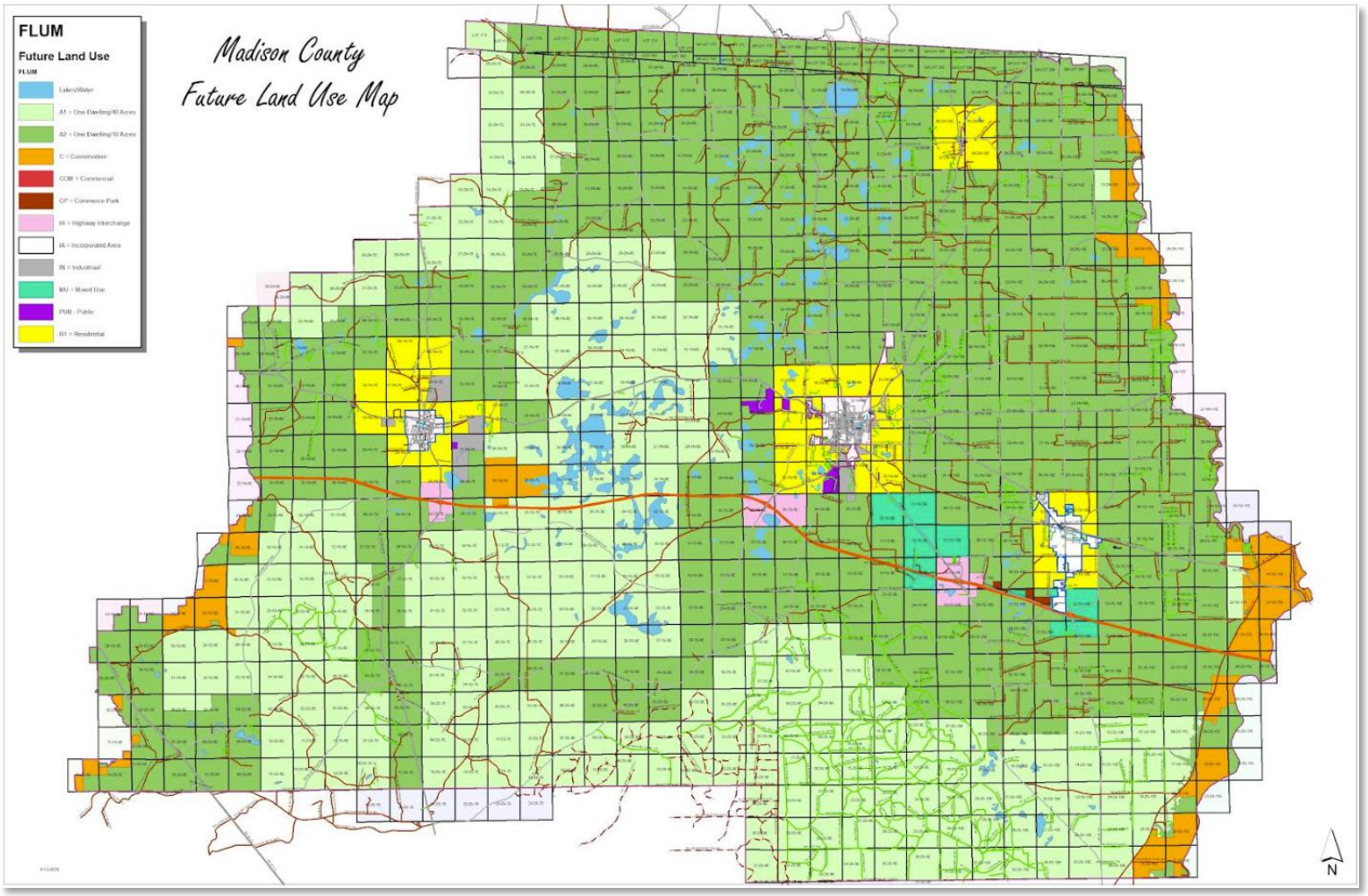


Source: Madison County Property Appraiser

Future Land Use

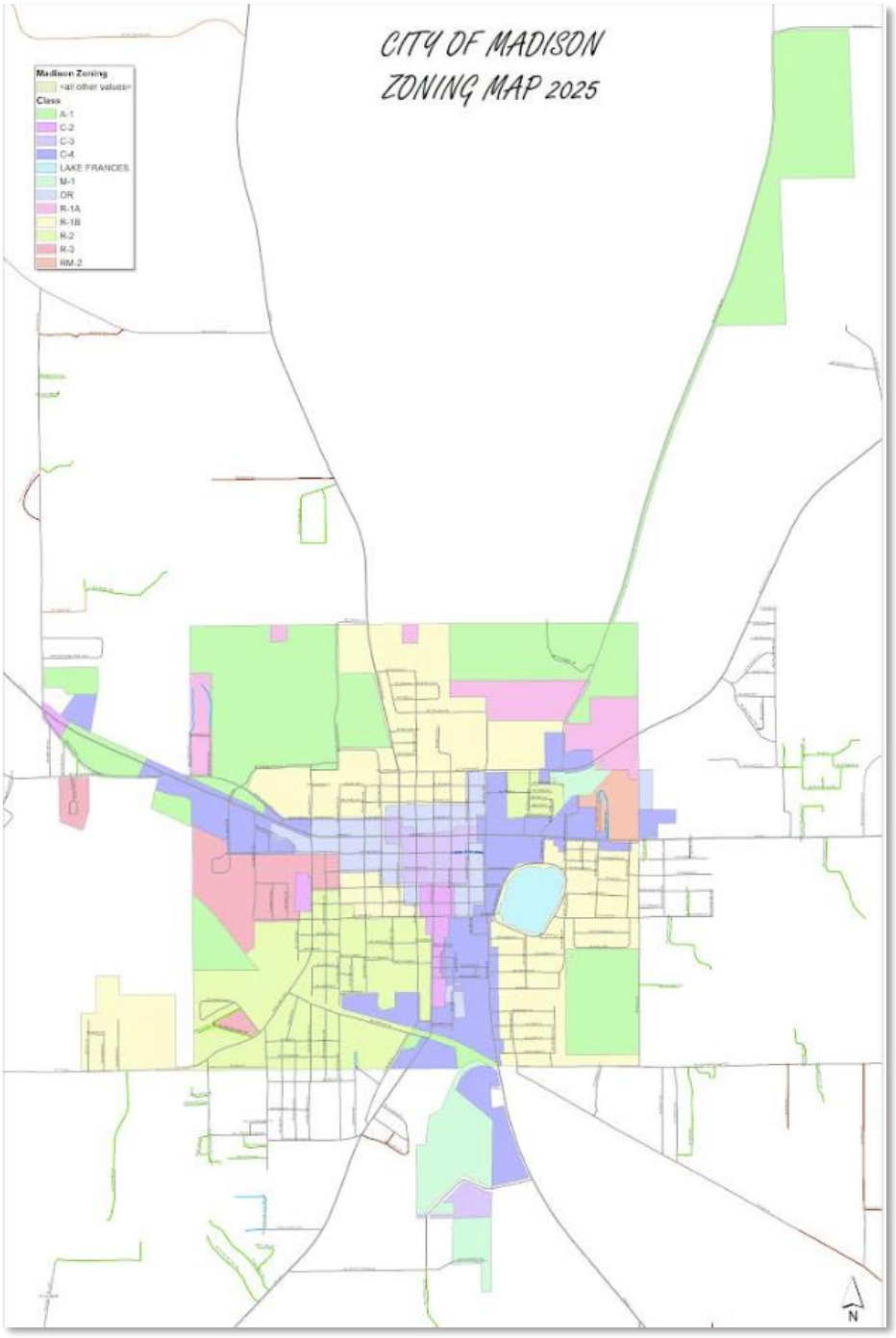
The Future Land Use Maps (Figures 4-7) seen below indicate the various land use designations throughout the jurisdictions of Madison County. Most of the land immediately adjacent to the Aucilla, Suwannee and Withlacoochee Rivers are designated as either Agriculture or Conservation. These designations prohibit or severely limit development in the areas, and indicate a natural or environmentally sensitive nature, which could be flood prone at times.

Figure 4: Current Future Land Use Map (FLUM) for Madison County



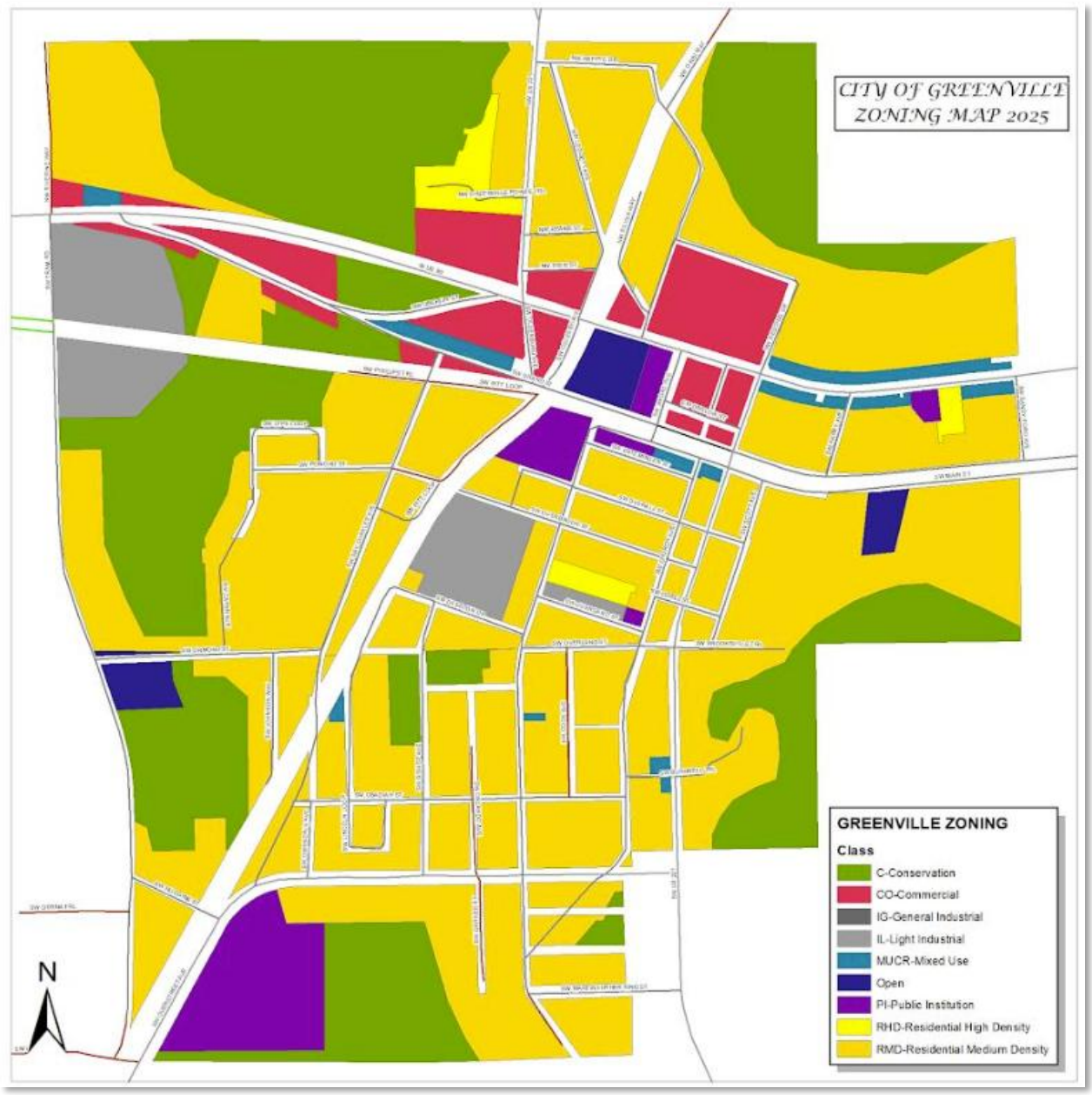
Source: Madison County Property Appraiser

Figure 5: Current Future Land Use Map for City of Madison



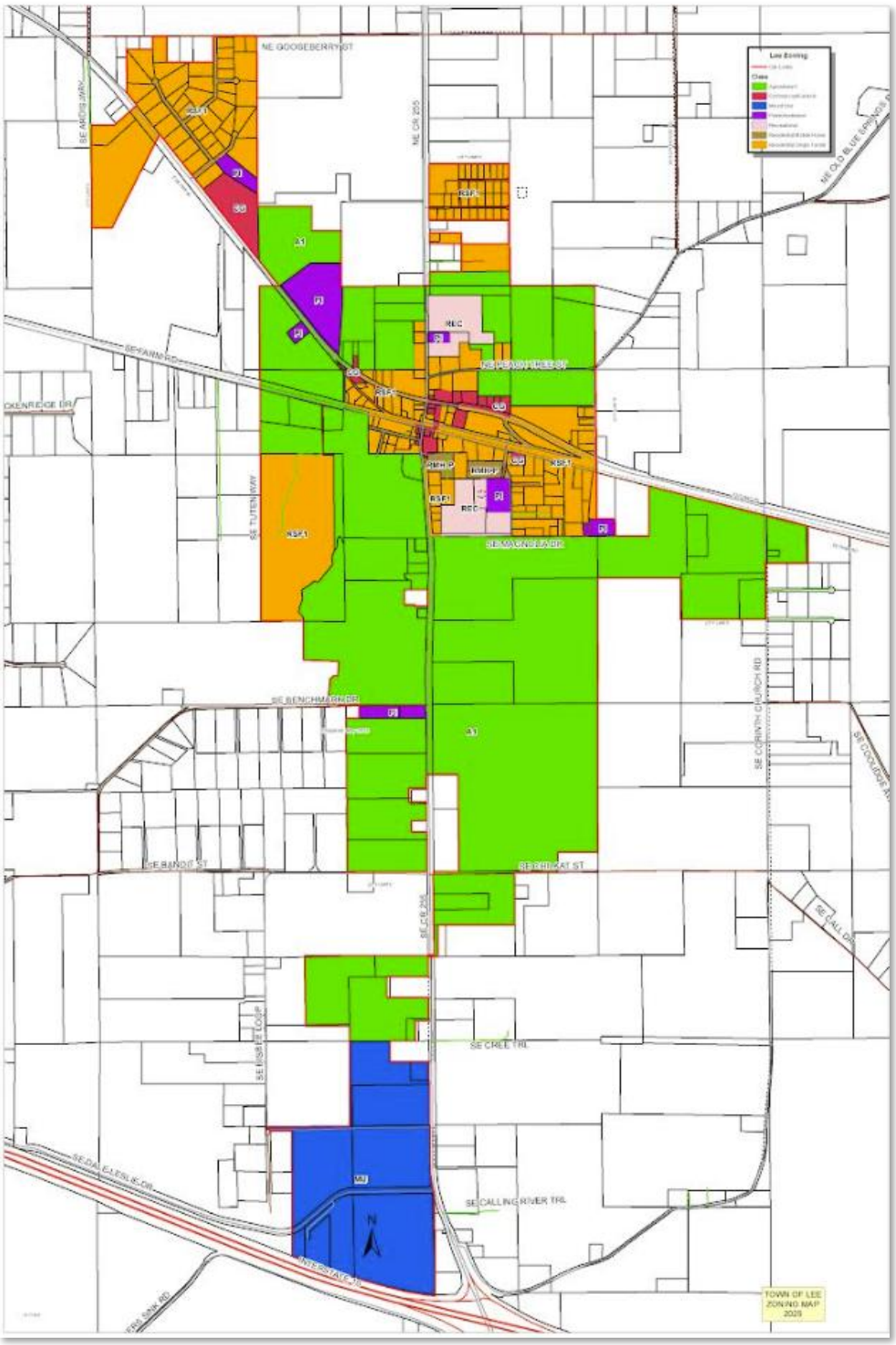
Source: Madison County Property Appraiser

Figure 6: Land Use Map for Town of Greenville



Source: Madison County Property Appraiser

Figure 7: Land Use Map for Town of Lee



Source: Madison County Property Appraiser

Vulnerability in the Types and Number of Future Structures:

Vulnerability in terms of the types and numbers of current and future structures for Madison County, City of Madison, Town of Greenville and the Town of Lee has not had any noticeable in the last five years. The reason for this is because that over the past 20 years, the US Census Bureau and the Bureau of Economic and Business Research have shown that Madison County and its incorporated jurisdictions are growing at a very slow rate of speed. Due to minimal projected future growth of buildings and infrastructure the LMS Working Group could not analyze future structures over the next 5-10 years. The Florida Bureau of Economic and Business Research (BEBR) only projects population growth from 18,698 in 2024 to 19,000 in 2050.[1]

Demographics

Population estimates from the Florida Bureau of Economic and Business Research (BEBR) as of April 1, 2024, total 18,649. This includes the incorporated municipalities of Greenville, Lee and Madison. The City of Madison (pop. 2,880), is by far the most populated community and contains 15.4% of the total county population. Greenville (pop. 754) contains 4.04%, and Lee (pop. 395) contains 2.11% of the total county population. Madison County ranked 56th in Florida counties by population change between 2020 and 2024.

Madison County Population	18,649
Greenville	754
Lee	395
Madison	2880
Unincorporated	14620

Population Change 2020-2024	681
Greenville	8
Lee	20
Madison	-32
Unincorporated	685

Source: Florida Bureau of Economic and Business Research (BEBR)[2]

Language	Value
English only	94.60%
Spanish	3.80%
Other Indo-European languages	0.60%
Asian and Pacific Islander languages	0.10%
Other languages	0.90%

Race	
White	58.90%
Black or African American	35.60%
Hispanic	4.97%
Other Race	1.84%
American Indian and Alaska Native	0.33%
Asian	0.25%

Source: US Census[3]

[1] https://bebr.ufl.edu/wp-content/uploads/2024/01/projections_2024.pdf
[2] https://www.bebr.ufl.edu/wp-content/uploads/2024/12/estimates_2024.pdf
[3] https://data.census.gov/profile/Madison_County,_Florida?g=050XX00US12079

Currently, there are approximately 4,850 conventional residential dwellings, with an additional 3,400 mobile homes scattered throughout the county. Within the total mobile home population, there are 34 mobile home parks with a total population of approximately 1,000. Countywide there are 7,217 households with average size of 2.35.

There are 30 people registered with Madison County for special needs for evacuation assistance throughout the county. In addition, the 2023 elderly population (65 and over) was estimated to be 4,249 (22.7%).

Economy

The combined non-farming manufacturing, retail trade and services sectors provide the greatest source of income/employment and dominate most of the economy of Madison County. In 2024, approximately 3,500 people were engaged in this livelihood with combined earnings of approximately $100 million from these activities. By comparison, in 1999 only 2.21 percent of the total county work force was wage and salary workers in farming. The total farm labor and farm proprietor's income was $10 million.

Employment	
Employee of private company workers	66.40%
Self-employed in own incorporated business workers	4.80%
Private not-for-profit wage and salary workers	5.70%
Local, state, and federal government workers	19.00%
Self-employed in own not incorporated business workers and unpaid family workers	4.10%

Industry Employed Age 16 Years and Over	
Educational services, health care and social assistance	21.00%
Manufacturing	12.10%
Retail trade	11.40%
Arts, entertainment, recreation, and accommodation and food services	9.30%
Public administration	8.80%
Construction	7.60%
Transportation and warehousing, and utilities	6.80%
Wholesale trade	5.70%
Other services, except public administration	5.20%
Professional, scientific, and management, and administrative and waste management services	4.90%

Source: US Census[4]

One of the largest employers in Madison County is Nestle Waters. Nestle Waters is a bottled water company that employs 200 people and has estimates to grow that number to 500 employees in the next few years. Another major contributor to the economy is the

[4] https://data.census.gov/profile/Madison_County,_Florida?g=050XX00US12079

government sector, which provides one of the largest single sources of employment. The government sector provided approximately 19% of the population are employed by local, state or federal government agencies.

Income	
Median Household Income	$48,176
Per capita income, 2019-2023	$23,670
Persons in poverty	19.80%
Median value of owner-occupied housing	$105,900

Source: US Census[5]

Section 2 – Planning Process and Public Involvement

In order to develop a cohesive LMS Plan, Madison County has developed a working LMS Committee. The Madison County LMS Working Group is established pursuant to authorization by the Madison County Board of County Commissioners (BOCC). It is through this Committee that the necessary tasks will be formulated that allow the development of strategies on guiding principles, hazard identification and vulnerability assessment and mitigation initiatives in an on-going basis. The LMS Working Group holds routine and special meetings to ensure that documents and projects continue to move forward. From time to time, new projects are added, and old projects are deleted when completed. It should also be noted that the three municipalities and Madison County's agencies and departments participate in mitigation strategy planning and are part of the LMS team. Stakeholders are invited through email and other Emergency Management meetings.

The Madison County Emergency Management Director, as the LMS Working Group Chair, is responsible for coordinating the efforts and input of the Madison County LMS Working Group. The LMS Working Group consists of more than 15 local and state agency representatives. Due to Hazard Mitigation Grant Program (HMGP) funding allocated to Madison County in 2024 following Hurricane Idalia, the LMS Working Group met several times to update the membership roster and the Prioritized Project List (PPL). During the five-year update process local information and input from participating agencies was incorporated to ensure that there is "community-wide" representation in the LMS and its contents. The LMS Working Group discussed many areas during this revision, including but not limited to, the LMS of 2020 for which this revision is based, recent hazards that have occurred, and new mitigation projects identified or in progress. LMS Working Group members, neighboring communities and other agencies were notified via email and the Madison County website of the LMS update and of meetings.

The 2025 revision of the Madison County Local Mitigation Strategy has been assembled with guidance and input from the Local Mitigation Strategy Working Group members from County and State Agencies, the private sector, and the three incorporated jurisdictions. These agencies have united to identify hazards, discuss the effects that hazards have on the

[5] https://www.census.gov/quickfacts/fact/table/madisoncountyflorida/HSG495223#HSG495223

Madison County community, and ways to mitigate these effects regarding life safety and property. The previous versions of the LMS are the base plans from which this revision will reference.

Madison County recognizes the need to involve its neighboring communities and agencies in the LMS plan development. The LMS strategy in Madison County follows a multi-jurisdictional approach. As part of this continued effort, the following are examples of the continuing effort to invite and encourage participation from neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, businesses, academia and other private and non-profit interests. Neighboring communities, local, and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, as well as other interested parties are invited to be involved in the planning process through email meeting notices, social media posts, and this year's online LMS survey.

History of Mitigation Planning in Madison County

As documented in the 1999 LMS, on October 12, 1998, Madison County held its first meeting of the Local Mitigation Strategy Working Group. This began an intensive process that resulted in an adopted Local Mitigation Strategy (LMS), an Inter-local Agreement between Madison County and the Cities of Madison, Greenville, and Lee, and a Working Group Resolution for the on-going maintenance of this plan.

In 2002, The American Red Cross was contracted to assist Madison County with the update of their LMS in order to meet the new FEMA requirements. This process continued for some time, but eventually, it was decided by Madison County to seek another solution to complete this complicated process. In February of 2005, Bold Planning Solutions, LLC in partnership with Disaster, Strategies and Ideas Group, completed the DMA2000 compliant plan within a three-month deadline.

In the summer of 2009, a graduate research assistant from Florida State University was contracted to assist in updating the Madison County LMS Plan for its most recent scheduled update.

For the 2015, 2020, and 2025 LMS, Blue Skies Professional Services was contracted to assist Madison County with the required plan update.

Description of Process

The LMS Working Group, with the assistance of Blue Skies Professional Services, followed a pre-determined process for the preparation of this Local Mitigation Strategy based on the Disaster Mitigation Act of 2000 and FDEM Florida Review Tool and Crosswalk. The process consisted of four major stages:

- Research and Data Collection – The LMS Working group gathered all relevant, existing data from various sources including the 2020 LMS, internet sources, State and Federal resources, and an online survey of Madison County residents.

- Data Collation and Plan Writing – After the initial phase of data collection, all these documents and notes were analyzed and related information was collated. Using all this information, the initial drafts of the Plan were written and submitted to the LMS Working group for review and comments.

- Review and Comments – As each section was completed, they were reviewed by the LMS Working Group. All comments and ideas are then incorporated into a finalized edition. As review comments from the State were delivered, these requested revisions have also been considered and added into the plan.

- Finalization, Adoption and Delivery – After all suggested revisions have been incorporated, an initial draft 2025 LMS the plan was submitted to the Florida Division of Emergency Management for review and approval. See FDEM approval letter once the LMS is approved.

- The 2025 LMS was adopted by the Madison County BoCC, and the three incorporated jurisdictions of Madison, Greenville, and Lee to ensure compliance with the Disaster Mitigation Act of 2000. See adoption resolutions following FDEM approval and BoCC adoption.

LMS Working Group members are listed in Appendix B.

The specific internal planning processes by which the LMS revision is being conducted falls in line with those identified in the previous LMS activities:

1. Identify hazards to which Madison County is vulnerable.
2. Determine where the county is most vulnerable to these hazards
3. Assess the facilities most vulnerable to these hazards
4. Prepare a prioritized list of mitigation projects to take advantage of available funding.
5. Identify funding sources and tie mitigation projects to these sources.
6. Make hazard awareness and education a community goal.

The LMS Working Group collected various plans, reports and technical information to incorporate into the 2025 Madison County LMS. Each individual resource is a useful tool when identifying hazards and impacts on Madison County, as well as developing mitigation strategies to combat these hazards. By utilizing their local information, Madison County is achieving their DMA2000 requirements in a more cost effective and timely manner. The following list details the existing resources being incorporated into this plan.

Current Comprehensive Emergency Management Plan (CEMP)

GIS Databases: Tax Parcel Information, Other Hazard Data
National Flood Insurance Program (NFIP) Repetitive Loss Locations and Data
Critical Facilities List
Flood Mitigation Assistance (FMA) and Community Rating System (CRS)
FEMA National Risk Index

Madison County Comprehensive Emergency Management Plan (CEMP)

The CEMP incorporates the LMS by reference and utilizes the LMS as the plan's mitigation section. Contained in the CEMP are annexes individually addressing each of the hazards that affect Madison County. With each annex, the CEMP outlines the primary agencies responsible for mitigation efforts pertaining to that hazard and the duties they hold. This data will be invaluable in the revision of the LMS as a baseline for coordinating mitigation efforts and policies.

GIS Databases: Maps, Tax Parcel Information, and Other Hazard Data

The Madison County Property Appraisers office is a member of the LMS Working Group and contributed Geographic Information System (GIS) data and maps for the county and participating jurisdictions. This GIS information will be used to evaluate the effects that selected hazards have on the Madison County community. It will be used to meet the requirements of the DMA2000, displaying areas of high risk and critical facility locations.

Critical Facilities List

The information provided in Table 2 has been developed by Madison County Emergency Management as a comprehensive list of all identified facilities in the county deemed "critical" for the continuing operations of Madison County. This list, which contains the latitude and longitude coordinates, is used in the development of the hazard analysis. These critical facility locations will be overlapped with high-risk hazard areas to determine the vulnerability to unique hazard events.

The LMS Working Group has identified 52 structures that are deemed "Critical Facilities". Facilities selected as critical have been chosen due to the critical role they play in the continuing of the standards of the Madison County community standard of living.

Table 1: Madison County Critical Facilities

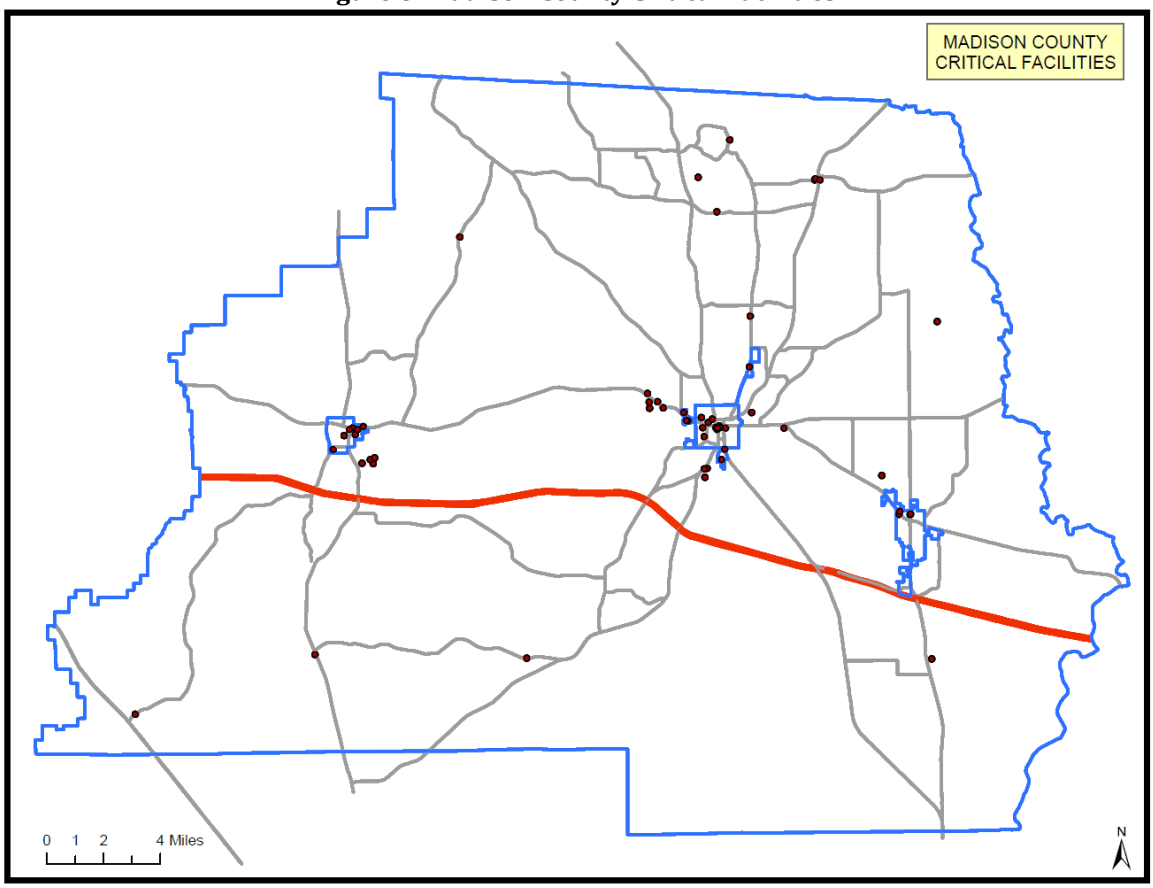
FACILITY	LATTITUDE	LONGITUDE
CHERRY LAKE WATER TREATMENT PLANT	30 35 47.37	-83 25 24.96
GREENVILLE CARE CENTER	30 28 7.79	-83 37 35.94
DUKE ENERGY SUBSTATION	30 31 30.23	-83 23 36.77
EMBARQ COMMUNICATIONS	30 28 6.02	-83 24 52.74
GAS TRANSMISSION STATION # 37134	30 27 25.49	-83 24 34.68
GREENVILLE CITY HALL	30 28 7.75	-83 37 52.56

GREENVILLE ELEMENTARY SCHOOL	30 27 30.74	-83 38 28.11
GREENVILLE FIRE DEPT	30 27 56.93	-83 38 4.1
GREENVILLE POST OFFICE	30 28 10.6	-83 37 45.82
GREENVILLE WASTE WATER TREATMENT PLANT	30 27 5.1	-83 37 26.68
GREENVILLE WATER TREATMENT PLANT	30 27 58.5	-83 37 40.33
JAMES MADISON PREPATORY HIGH SCHOOL	30.469924	-83.418289
JOANN BRIDGES ACADEMY	30 27 15.37	-83 36 59.48
LAKE PARK OF MADISON	30 28 18.18	-83 25 51.26
LEE CITY HALL	30 25 20.99	-83 17 59.97
LEE ELEMENTARY SCHOOL	30 25 27.44	-83 18 22.57
LEE POST OFFICE	30 25 22.09	-83 18 24.28
MADISON CREATIVE ARTS ACADEMY	30 29 9.64	-83 27-17.03
MADISON BARRS FIELD WELL AND WATER TOWER	30 25 21.63	-83 24 58.98
MADISON CHASON WELL	30 26 49.08	-83 25 17.77
MADISON CITY HALL	30 28 3.3	-83 24 49.52
MADISON COODY WELL	30 28 18.94	-83 25 54.91
MADISON CORRECTIONAL INSTITUTE	30-26-34.34	-83 25 16.28
MADISON COUNTY AIR STRIP	30 26 33.94	-83 18 59.63
MADISON COUNTY CENTRAL SCHOOL	30 28 42.72	-83 26 43.96
MADISON COUNTY COMMUNICATIONS CENTER	30 28 5.82	-83 25 19.74
MADISON COUNTY COURTHOUSE	30 28 8.47	-83 24 44.88
MADISON COUNTY COURTHOUSE ANNEX	30 28 6.3	-83 24 43.98
MADISON COUNTY FIRE RESCUE	30 28 4.22	-83 25 17.54
MADISON EMERGENCY OPERATIONS CENTER	30 26 50.76	-83 25 12.05
MADISON COUNTY HEALTH DEPT	30 27 49.3	-83 25 16.9
MADISON COUNTY HIGH SCHOOL	30 28 53.42	-83 27 13.83
MADISON COUNTY MEMORIAL HOSPITAL	30 28 14.02	-83 24 41.13
MADISON COUNTY ROAD DEPT	30 29 57.17	-83 23 39.26
MADISON COUNTY SHERIFF'S OFFICE	30 28 54.37	-83 26 56.04
MADISON COUNTY SUPERVISOR OF ELECTIONS	30 46 82 42	-83412386
MADISON FIRE DEPT	30 28 1.92	-83 24 49.54
MADISON HEALTH AND REHABILITATION CENTER	30 28 42.38	-83 27 13.1
MADISON POLICE DEPT	30 28 4.6	-83 24 48.93
MADISON POST OFFICE	30 28 6	-83 24 42.03
MADISON WASTEWATER TREATMENT PLANT	30 27 6.57	-83 24 41.23
MADISON WATER DEPT/GARAGE	30 28 4.77	-83 24 31.96
NEW TESTAMENT CHRISTIAN CENTER (SHELTER)	30 28 3.24	-83 22 26.92
NORTH FLORIDA COMMUNITY COLLEGE	30 28 24.15	-83 25 23.3
PINETTA ELEMENTARY SCHOOL	30 35 40.7	-83 21 4.92
PINETTA POST OFFICE	30 35 40.53	-83 21 16.81
TRI COUNTY ELECTRIC CHERRY LAKE SUBSTATION	30 34 43.14	-83 24 45.74
TRI COUNTY ELECTRIC OVERSTREET SUBSTATION	30 19 25.07	-83 45 32.92
TRI COUNTY ELECTRIC SUBSTATION	30 31 16.99	-83 16 58.55

TRI COUNTY ELECTRIC SUBSTATION	30 20 55.01	-83 17 17.64
TRI COUNTY ELECTRIC MADISON SUBSTATION	30 28 32.84	-83 23 35.57
TRI COUNTY SUBSTATION GRNVLLE	30 28 12.67	-83 32 23.43

Source: Madison County Property Appraiser and Madison County Emergency Management

Figure 8: Madison County Critical Facilities



Source: Madison County Property Appraiser

National Flood Insurance Program & Community Rating System

Madison County is an active participant in the National Flood Insurance Program (NFIP), joining on June 4, 1987, and the LMS Working Group has reviewed and incorporated these standards and guidance in the development of the LMS. The City of Madison, Town of Lee and Town of Greenville also participate in the NFIP.

Madison County participates in the Community Rating System (CRS) and holds a class 8 classification. This provides a 10% flood insurance policyholder premium discount.

As of April 2, 2025, there are 100 flood insurance policies in the community with a total coverage of $22,003,400.[6] There are a total of eleven residential properties identified by the NFIP as repetitive loss properties, all located in unincorporated Madison County.

Community Name (Number)	Policies in Force	Total Coverage	Total Written Premium	Total Annual Payment
Town of Greenville (120150)	1	$168,000	$811.00	$974.00
City of Madison (120152)	5	$1,502,000	$3,450.00	$4,378.00
Madison County (120149)	94	$20,333,400	$73,351.00	$92,388.00
Totals	**100**	**$22,003,400**	**$77,612.00**	**$97,740.00**

Copies of flood maps are maintained in the building department, as well as in the planning/zoning department; the date on the current maps is September 4, 2020. [7] In the last five years, only one Letter of Map Amendment (removal) has been approved in Madison County.[8] The County has a flood insurance study, courtesy of Suwannee River Water Management and FEMA that was completed in September of 2010. An online flood risk assessment tool can be accessed through Suwannee River Water Management by visiting their website www.srwmdfloodreport.com. This tool provides access to the 2010 flood study as well as flood risk searches by address or parcel ID.

The Madison County Building Official is designated as the Floodplain Administrator and is responsible for responsible for substantial improvement/substantial damage after a flood event occurs; however, determinations of flood zones are completed by the Planning & Zoning Department at the time a development permit is issued. As a participant in the National Flood Insurance Program, Madison County has adopted two ordinances that reflect the requirements of the NFIP. Additionally, the County has a Land Development Code which includes in chapter 6 a provision for flood hazard reduction. The Town of Lee and Town of Greenville fall under the Madison County building department.

City of Madison: The City Manager is designated as the floodplain administrator. The floodplain administrator in coordination with the City Building Official are responsible for substantial improvement/substantial damage after a flood event occurs.

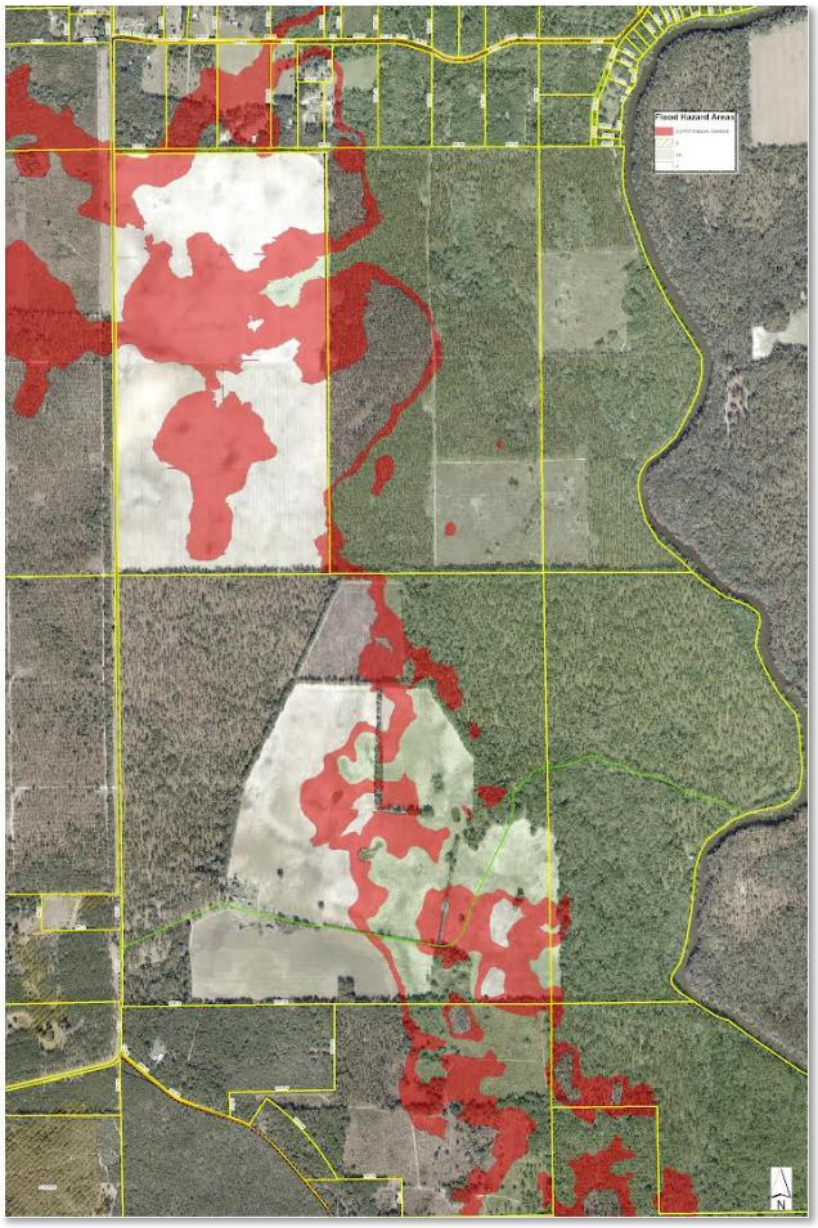
National Flood Insurance Program Repetitive Loss Locations and Data

[6] https://nfipservices.floodsmart.gov/reports-flood-insurance-data
[7] https://map1.msc.fema.gov/data/12/S/PDF/12079CV000C.pdf?LOC=5251d7e14627dd571f8f7ef6d20aa14b
[8] FEMA Flood Map Service Center

According to the latest NFIP data a total of eleven residential properties are identified by the NFIP as repetitive loss (RL = 2, residential) or severe repetitive loss (SRL = 9, residential) properties, all located in unincorporated Madison County.

The repetitive loss inventory above was merged into a GIS format and mapped to illustrate where the properties are located in the county. Most of the properties are located along the Suwannee and Withlacoochee rivers and have been prone to flooding in the past. The approximate locations of the repetitive loss properties are illustrated in Figure 9.

Figure 9: Madison County Repetitive Loss Properties



Source: Madison County Property Appraiser

Madison County has been a participant in the CRS program since September 1, 1994. The last verification cycle visit (5 year) took place on July 12, 2024. Madison County met all class perquisites to remain a CRS Class 8. Listed below are the county's activities and points awarded:

Community Rating System Program Activities

Activity	Category	Points Accrued
310	Elevation Certificates	38
330	Outreach Projects	102
340	Hazard Disclosure	5
350	Flood Protection Information	42
420	Open Space Preservation	605
430	Higher Regulatory Standards	227
440	Flood Data Maintenance	142
450	Stormwater Management	10
510	Floodplain Management Planning	119

Source: CRS Verification Report November 25, 2024

Floodplain management provisions are integrated in the Land Development Code, the County's Comprehensive Plan, as well as in ordinances adopted by the County. Furthermore, the Building Department references the Florida Building Code to ensure the proper construction of buildings and provides additional information to customers on ways of protecting their home against flood waters. Elevation certificates are obtained prior to authorizing occupancy showing the proper elevations of the structure.

Changes are constantly being made to improve the Floodplain Management Program in Madison County. A process is followed for permitting, requiring customers to report to the Planning/Zoning Department for an overview of the property on which a structure will be placed. The overview includes zoning of the property, determination of flood zones, wetlands, etc. At this point in the process, property owners are made aware of the condition of the property and if an elevation certificate is required. The building department's application requires identification of FEMA map reference number and flood zone determination. Additionally, continuing education is ongoing amongst the Building Department as well as Planning/Zoning Department when training is available. Flood maps are maintained as required and kept for review in the Building Department. Flood information is made available for citizens in the local libraries, governmental offices, and in the Building Department. Additional methods of obtaining credit through the CRS program are currently being examined and presented to the ISO/CRS Specialist for review.

To ensure continued compliance with the NFIP, each participating community will:

1. Enforce their adopted Floodplain Management Ordinance requirements, which include regulating all new development and substantial improvements in Special Flood Hazard Areas (SFHA).

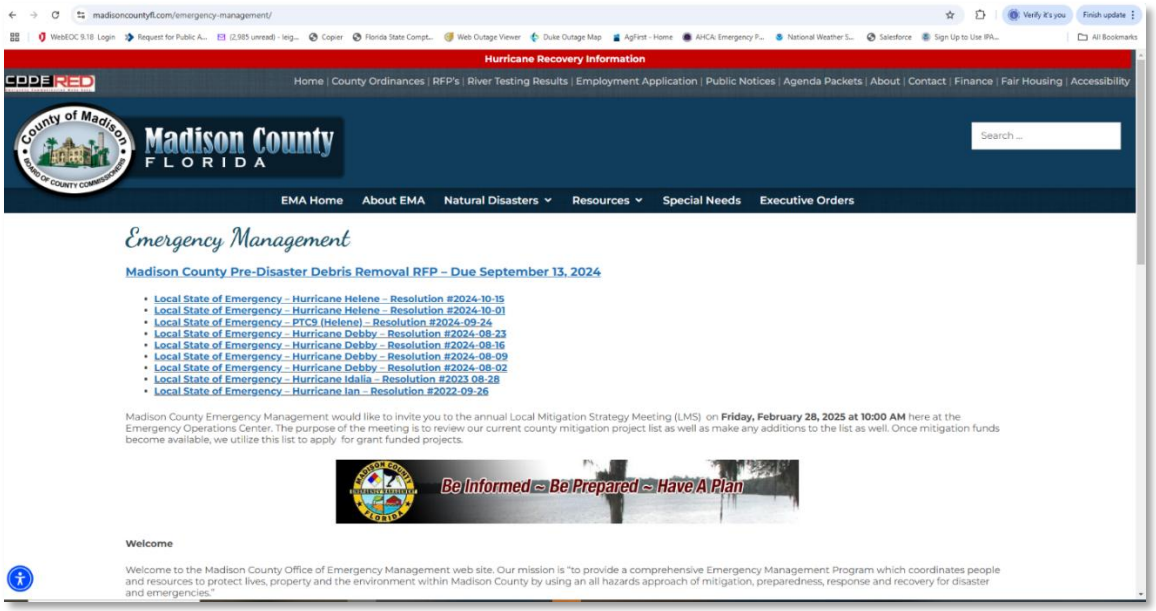
2. Maintain all records pertaining to floodplain development, which shall be available for public inspection.
3. Notify the public when there are proposed changes to the floodplain ordinance or Flood Insurance Rate Maps.
4. Maintain the map and Letter of Map Change repositories.
5. Promote Flood Insurance for all properties.
6. Establish Community Rating System outreach programs.

Public Meetings and Involvement in the Planning Process

As part of the planning process, the LMS Working Group has organized and performed public meetings, to encourage the public to review and comment on the Madison County Mitigation Plan. Updates to the LMS were publicized on the County website and social media. An online survey was utilized to obtain input from the public on hazards and mitigation actions.

The members of the Madison County LMS Working Group understand the importance of including the public in this hazard mitigation planning process. Several opportunities have been, and will be given, to allow the public of Madison County to comment on the LMS Plan throughout the drafting process. The public will also be provided with an opportunity to review and comment on the final LMS at the Board of County Commissioners' meeting before it is formally adopted. Input from the public was used to update hazard vulnerability and occurrences, provide input on mitigation activities, and help determine public education and outreach activities.

Public Notice Posted on the Madison County Website



Source: https://madisoncountyfl.com/emergency-management/

Supporting documentation for public input is found in Appendix C.

Public involvement will continue to be improved during the next update cycle. The LMS Working Group will continue to use surveys and host public meetings. In addition, local advertisements and social media posts will be utilized to keep the public and all applicable agencies informed.

Section 3 – Risk Assessment and Vulnerability Analysis

The 2025 update process involved identifying additional hazards, updating the risk assessment using the most recent and best data available, and evaluating existing mitigation goals, projects, and programs for overall effectiveness. The hazard analysis includes the hazards from the 2020 LMS hazard profile, FEMA National Risk Index, information from the SHELDUS database, National Climatic Data Center, adding the Southern Wildfire Risk Assessment, and hazards identified in other emergency management plans for Madison County. The 2025 Madison County LMS utilizes the best and most current data available.

As part of the Madison County LMS, the following hazards have been identified as events that could impact Madison County. In addition, the hazards have been ranked in severity by the LMS Working Group based on the "overall" impact they pose on the Madison County community:

Madison County Hazards and Priority Rankings

Hazard	Priority Ranking
Tornado	Very High
Hurricanes	High
Extreme Heat	High
Floods	High
Severe Storms	High
Wildfires	High
Winter Storms	Medium
Droughts	Medium
Biological	Medium
Sinkholes	Medium
Earthquakes	Low
Mass Migration	Low
Technological	Low
Terrorism	Low

Hazards Not Addressed in the LMS and Reasons for Omission:

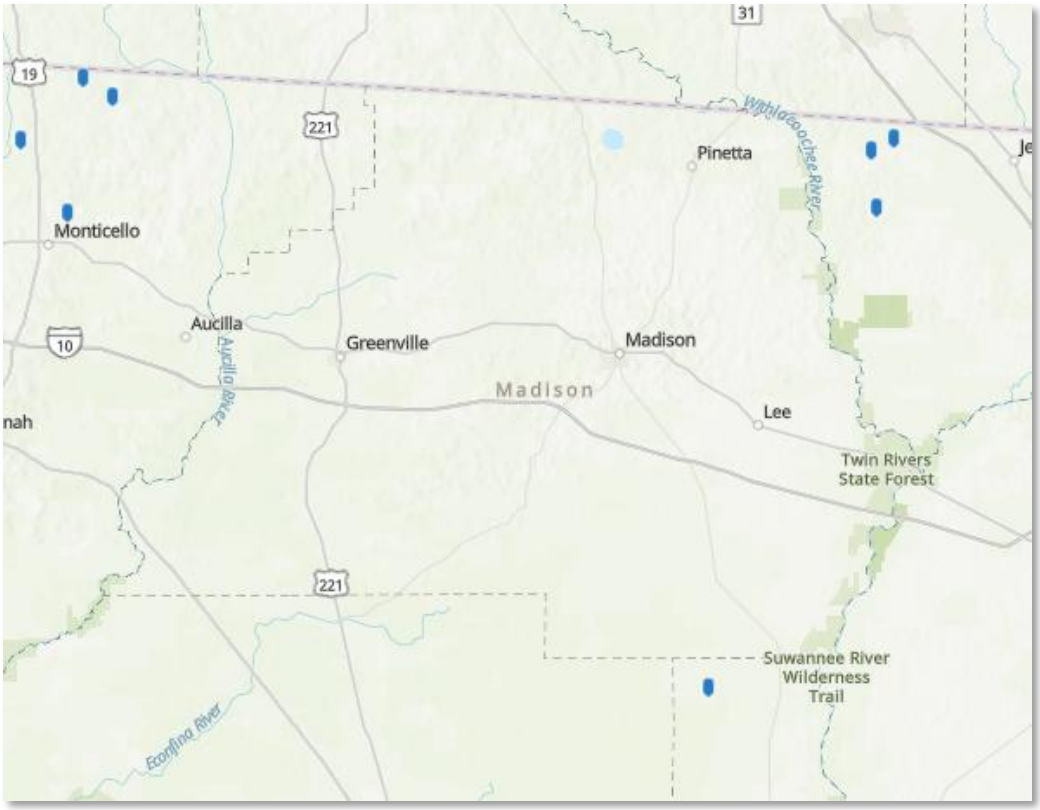
Coastal Erosion - The effects and occurrence of coastal erosion will not be included in the Madison County LMS. The primary reason for this hazard's omission is the fact that Madison County is not a coastal county but rather a landlocked community. This hazard was reviewed by the LMS Working Group members for the update, and it was agreed that it would continue

to be excluded from the plan. However, during yearly revisions, the LMS Working Group will review this decision for possible admittance.

Riverine Erosion - The effects and occurrence of riverine erosion will not be included in the Madison County LMS. Although Madison County does have 3 rivers within its boundaries, the LMS Working Group felt that no erosion effects were experienced by the community, and it did not cost the community any financial hardships. The LMS Working Group has had previous discussion about this hazard. No one could recall any past events of riverine erosion or damages incurred in previous flooding events. Also, during the discussion, the group pointed out that no money had been spent on projects attributed to the hazard. The group therefore decided to keep this hazard out of the plan. However, during yearly revisions, the LMS Working Group will review this decision for possible admittance.

Dam/Levee Failure - The effects and occurrence of this hazard will not be included in the Madison County LMS. Madison County does not contain any dams or levees within its boundaries. Furthermore, a study has been conducted regarding surrounding counties having dams and found that dams in their jurisdictions were small in nature and any event caused by its failure would not be felt by the Madison County community. However, during yearly revisions, the LMS Working Group will review this decision for possible admittance.

Figure 10: Dams Located in the Vicinity of Madison County



Source: https://geodata.dep.state.fl.us/datasets/florida-dams/about

Tsunamis - The effects and occurrence of a tsunami hazard will not be included in the Madison County LMS. The primary reason for this hazard's omission is the fact that Madison County does not have coastal borders and is a landlocked community. The nearest point of the Gulf of Mexico from the Madison County borders is 18 miles, with the incorporated jurisdictions ranging in distance from 40-45 miles. The LMS Working Group decided to keep it removed from the LMS plan. However, during yearly revisions, the LMS Working Group will review this decision for possible admittance.

Vulnerability Analysis and Methodology

Madison County is affected by a variety of natural hazards. The State of Florida has compiled significant data about some of these hazards and the potential economic impact for each county and city. The data has been used to develop a modeling and reporting system called MEMPHIS that has been used by Madison County to estimate its vulnerability. Tables 6-8 below show a high-level vulnerability analysis for both Madison County and the towns of Greenville and Lee, for the hazards included in the MEMPHIS system. The Memphis system did not include an ELVIS for the City of Madison.

These tables represent ELVIS - the Economic Loss Vulnerability Index System. ELVIS allows a comparison of the relative risk of various hazards through the use of loss costs. A loss cost is the long-term average of the damage a hazard causes. They are usually expressed in terms of loss per $1000 of exposure per year.

An example will help explain the use of loss costs. Take a $100,000 house. Over 100 years, the house suffer 40% wind damage once ($40,000 loss), 10% damage twice ($10,000 each), and 5% damage three times ($5000 each), for a total loss over the time frame of $40,000 + $20000 + $15,000 = $75,000.

So over the 100 year period the house cost $750 per year ($75,000/100), or $0.75 per $1000 of the value of the house. The same house might flood only once in 100 years, but be a total loss, for a loss cost of $100,000/100 = $1000 per year = $1.00 per thousand per year. Therefore, even though floods don't occur as often, they cost more in the long run, therefore mitigation of flooding might be more cost effective in the long run for this site than wind.

Economic Loss Vulnerability Index System (ELVIS)

Madison County Losses per $1000 by Department of Revenue Use Code

Hazard	Structure					
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution
Wind	0.4626	0.6032	0.4626	0.4626	0.4626	0.4626
Wind (5 mph)	0.2802	0.3727	0.2802	0.2802	0.2802	0.2802
Flood	0.0299	0.0284	0.0273	0.0299	0.0299	0.0308
Flood (1 ft)	0.0024	0.0023	0.0022	0.0024	0.0024	0.0025

Earthquake	0.0077	0.0073	0.0079	0.0079	0.0066	0.0079
Sinkhole	0.0056	0.0053	0.0060	0.0056	0.0061	0.0058
Wildfire	0.0201	0.0201	0.0201	0.0201	0.0201	0.0201
Exposure	**$504.98M**	**$110.33M**	**$31.15M**	**$160.14M**	**$299.92M**	**$1.28B**

Source: MEMPHIS

Town of Greenville Losses per $1000 by Department of Revenue Use Code

Hazard	Structure					
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution
Wind	0.4376	0.5720	0.4376	0.4376	0.4376	0.4376
Wind (5 mph)	0.2614	0.3492	0.2614	0.2614	0.2614	0.2614
Flood	0.0327	0.0311	0.0298	0.0237	0.0327	0.0337
Flood (1 ft)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Earthquake	0.0069	0.0066	0.0071	0.0071	0.0059	0.0071
Sinkhole	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wildfire	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069
Exposure	**$26.67M**	**$3.79M**	**$3.14M**	**$5.50M**	**$5.85M**	**$6.60M**

Source: MEMPHIS

Town of Lee Losses per $1000 by Department of Revenue Use Code

Hazard	Structure					
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution
Wind	0.4324	0.5655	0.4324	0.4324	0.4324	0.4324
Wind (5 mph)	0.2632	0.3516	0.2632	0.2632	0.2632	0.2632
Flood	0.0200	0.0190	0.0182	0.0200	0.0200	0.0206
Flood (1 ft)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Earthquake	0.0069	0.0066	0.0071	0.0071	0.0059	0.0071
Sinkhole	0.0133	0.0126	0.0141	0.0133	0.0145	0.0137
Wildfire	0.0174	0.0174	0.0174	0.0174	0.0174	0.0174
Exposure	**$6.90M**	**$1.37M**	**$83.61M**	**$2.33M**	**$2.19M**	**$7.25M**

Source: MEMPHIS

An ELVIS Vulnerability Analysis for the City of Madison was not supplied by the MEMPHIS system.

Vulnerability of Types and Number of Future Structures

The vulnerability in terms of the types and numbers of future structures for Madison County, City of Madison, Town of Greenville and the Town of Lee are found to be the same as current analyses for each hazard in the vulnerability analysis. The reason for this is because that over the past 20 years, the US Census Bureau and the Bureau of Economic and Business

Research have shown that Madison County and its incorporated jurisdictions are growing at a slow rate of speed. The LMS Working Group cannot identify any future buildings and infrastructure that could be accurately analyzed in the next 5-10 years. Madison County is only projected to grow by 436 residents by the year 2030. [9]

Vulnerability of Future Development Patterns

The number one goal established in the Madison County Comprehensive Plan – Future Land Use Element is to direct future commercial, manufacturing and industrial growth to areas around highway interchanges. These are areas that have the necessary infrastructure elements to support and accommodate growth in an environmentally acceptable manner. Madison County does not encourage any growth in environmentally sensitive areas. Residential growth in the unincorporated areas of the County is encouraged only in upland areas. Any structure built in a designated floodplain area is required to be elevated 2 feet above the base flood elevation level, which is an additional 1 foot more than is required by the Suwannee River Water Management District.

1. Tornadoes

Hazard Description:

Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long. Every state is at some risk from this hazard. Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.

Before a tornado hits, the wind may die down and the air may become very still. A cloud of debris can mark the location of a tornado even if a funnel is not visible. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

The following are facts about tornadoes:

- They may strike quickly, with little or no warning.
- They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- The average tornado moves Southwest to Northeast, but tornadoes have been known to move in any direction.
- The average forward speed of a tornado is 30 MPH, but may vary from stationary to 70 MPH.

[9] https://bebr.ufl.edu/wp-content/uploads/2024/01/projections_2024.pdf

- Tornadoes can accompany tropical storms and hurricanes as they move onto land.
- Waterspouts are tornadoes that form over water.
- Tornadoes are most frequently reported east of the Rocky Mountains during spring and summer months.
- Peak tornado season in the southern states is March through May; in the northern states, it is late spring through early summer.
- Tornadoes are most likely to occur between 3 p.m. and 9 p.m., but can occur at any time.

Tornadoes extent is based on the Enhanced Fujita Scale. Madison County, City of Madison, Town of Lee, and Town of Greenville could potentially be impacted by any intensity of tornadoes with EF0 to EF3 being the most likely.

Enhanced Fujita Scale

Classification	3-second gust MPH
EF0	65-85
EF1	86-110
EF2	111-135
EF3	136-165
EF4	166-200
EF5	Over 200

The Enhanced F-scale still is a set of wind estimates (not measurements) based on damage. Its uses three-second gusts estimated at the point of damage based on a judgment of 8 levels of damage to 28 indicators. These estimates vary with height and exposure. **Important**: The 3 second gust is not the same wind as in standard surface observations.

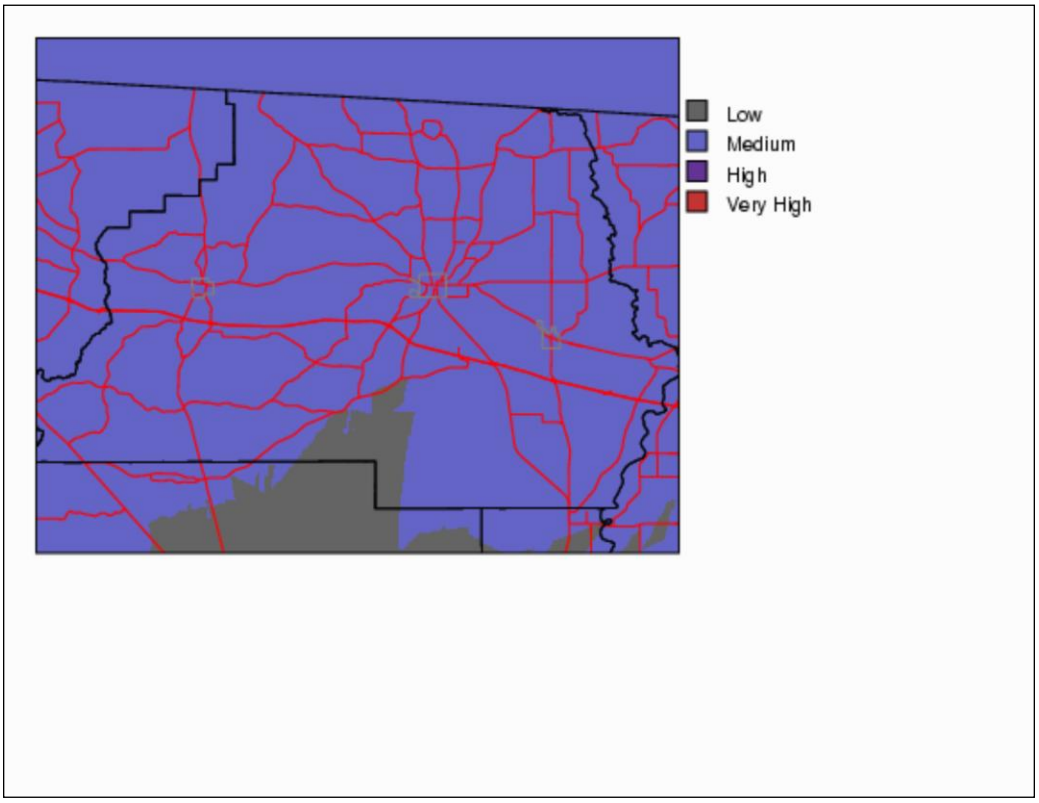
Source: http://www.spc.noaa.gov/efscale/ef-scale.html

Hazard Profile:

Madison County experiences severe thunderstorms that occasionally result in tornadoes. Madison County has experienced property damage and fatalities from tornadoes. Because of their speed of onset and unpredictable paths, immediate warning must be disseminated to inform residents to seek protective sheltering. There are approximately thirty-five hundred (3,400) mobile homes housing an estimated 7,500 people in Madison County, which are particularly susceptible to tornado-related damage. Residents living in mobile homes make up almost forty percent of Madison County's total population. The greatest areas of vulnerability lie within the municipalities of Lee, Greenville, and Madison, although the rural areas of the county are also vulnerable because of the difficulty of warning the residents. The mobile home residents that are within or are in close proximity to the municipalities can be warned quicker due to the more densely populated areas and because some residents are located in mobile home parks. Madison County has a limited number of resources available to respond to and recover from the effects of damaging hazards, therefore the county would require outside resources in a large-scale emergency.

Hazard Impact Analysis:

Figure 11: Madison County Tornado Risk



Source: MEMPHIS

Madison County Population at Risk for KAC Tornado

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Medium (1 in 250)	8,772	3,060	9,180	4,284	204	1,632	**20,400**

Source: MEMPHIS

Madison County Structures at Risk for KAC Tornado

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Low (1 in 500)	0	2	0	0	1	74	**77**
Medium (1 in 250)	3,112	1,121	258	463	401	4,863	**10,218**

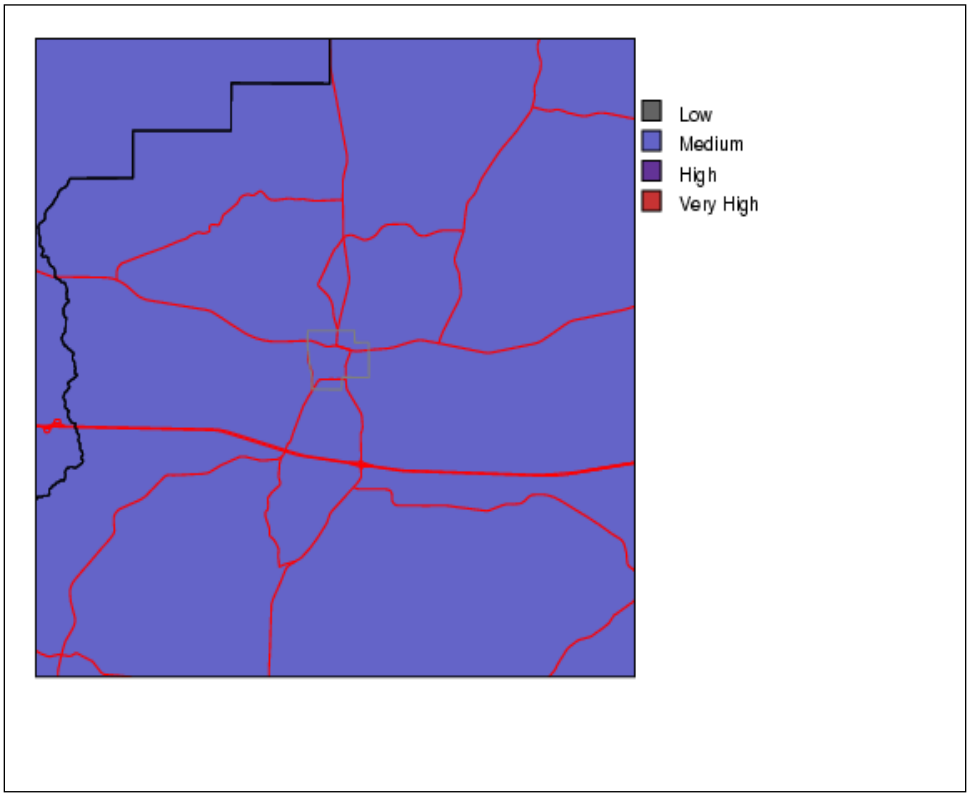
Source: MEMPHIS

Madison County Structure Value by Department of Revenue Use for KAC Tornado Risk

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Low (1 in 500)	$0.00	$63.66T	$0.00	$0.00	$49.31T	$18.10M	**$18.21M**
Medium (1 in 250)	$504.98M	$110.27M	$31.15M	$160.14M	$299.87M	$1.26B	**$2.37B**

Source: MEMPHIS

Figure 12: Town of Greenville Tornado Risk



Source: MEMPHIS

Town of Greenville Population at Risk for KAC Tornado

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Medium (1 in 250)	605	187	507	294	71	125	**890**

Source: MEMPHIS

Town of Greenville Structures at Risk for KAC Tornado

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Medium (1 in 250)	237	50	15	32	21	47	**402**

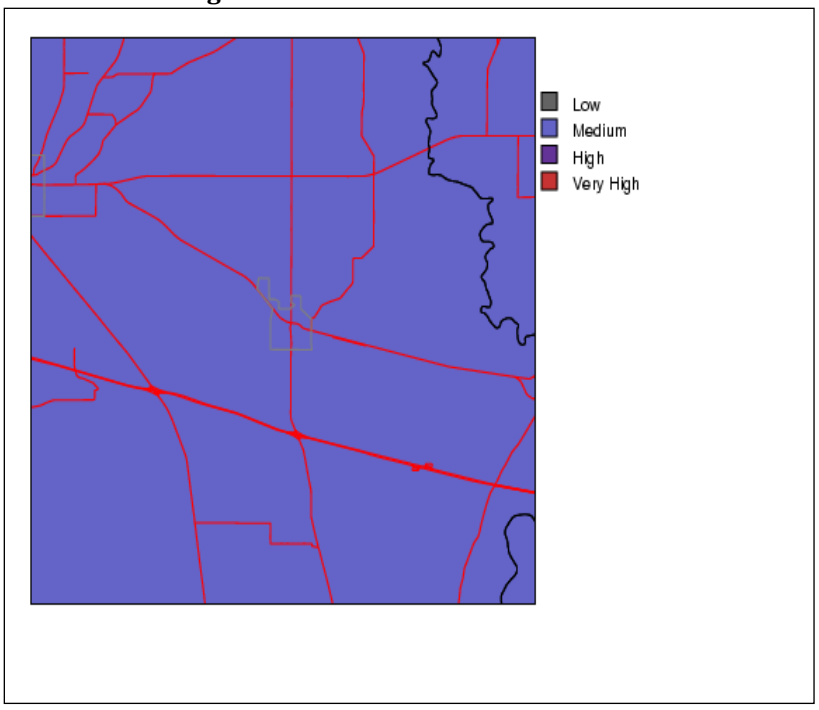
Source: MEMPHIS

Town of Greenville Structure Value by Department of Revenue Use for KAC Tornado Risk

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Medium (1 in 250)	$26.67M	$3.79M	$3.14M	$5.50M	$5.85M	$6.60M	**$51.56M**

Source: MEMPHIS

Figure 13: Town of Lee Tornado Risk



Source: MEMPHIS

Town of Lee Population at Risk for KAC Tornado

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Medium (1 in 250)	34	47	228	112	22	39	**430**

Source: MEMPHIS

Town of Lee Structures at Risk for KAC Tornado

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Medium (1 in 250)	60	19	4	15	8	34	**140**

Source: MEMPHIS

Town of Lee Structure Value by Department of Revenue Use for KAC Tornado Risk

Zone	Structure						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Gov/Institution	**Total**
Medium (1 in 250)	$6.90M	$1.37M	$83.61T	$2.33M	$2.19M	$7.25M	**$20.12M**

Source: MEMPHIS

The City of Madison was not a jurisdiction included in the analysis by MEMPHIS and there is no data available to accurately support a vulnerability estimate related to this hazard.

Hazard Probability:

Severe storms and tornadoes have the potential to cause significant damage to Madison County. The probability of a tornado affecting Madison County and the incorporated jurisdictions of Madison, Greenville and Lee are High, based on the views of the LMS Working Group.

Historically, the county has endured tornado events that have killed residents and caused large amounts of damage resulting in costly expenses. The City of Madison suffered a deadly tornado in 1988 that killed four people. The town of Greenville has never been struck directly by a tornado. However, tornadoes have occurred regularly in the immediate area which shows that it is highly probable. Tornado warnings are issued several times a year and are evenly distributed throughout the county.

The probability of a Severe Storm affecting Madison County and the cities of Madison, Greenville and Lee are also High, based on the views of the LMS Working Group. Historically, devastating storms have occurred in Madison County. The damage is primarily caused by wind damage to roofs, and tree debris impacting transportation and power services. Another significant impact is related to the subsequent flooding. These storm systems are frequent in nature. As stated with Tornadoes, the events affect the entire region the same regarding frequency, but an event occurring within a city is estimated to be more costly due to the increased population and larger number of structures.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: The majority of Madison County is identified by the MEMPHIS system to be in a "Medium" risk area to Tornadoes, except for one "Low" risk area consisting of about 24 square miles on the southern border to Taylor County. Using the Memphis data and analysis, it was found that all three incorporated jurisdictions, Madison, Greenville, and Lee are all located in a "Medium" risk area to Tornadoes. Because of these two factors, the vulnerability to a Tornado event affects Madison County, and the jurisdictions of Madison, Greenville, and Lee in the same respect. Since each of the incorporated cities contains a denser population of people, homes, and businesses, the vulnerability of their jurisdictions is viewed to be higher. It is estimated that a tornado striking any one of the cities would create more damage and deaths than if it were to occur in an unincorporated area of Madison County.

Madison County Historical Tornadoes

County	Location	Date	Time	Extent	Deaths	Injuries	Property Damage
Madison Co.	Madison Co.	7/1/1959	1600	F1	0	0	$250
Madison Co.	Madison Co.	12/3/1968	1400	F1	0	0	$2,500
Madison Co.	Madison Co.	12/25/1969	1830	F2	0	1	$2,500
Madison Co.	Madison Co.	9/9/1971	1445	F0	0	0	0
Madison Co.	Madison Co.	10/20/1976	1200	F1	0	0	$2,5000
Madison Co.	Madison Co.	12/29/1983	0045	F1	0	0	$2,5000
Madison Co.	Madison Co.	4/3/1987	1015	F0	0	0	$2,500
Madison Co.	Madison Co.	4/19/1988	0230	F3	4	18	$25,000,000
Madison Co.	Madison Co.	11/5/1988	0015	F2	1	3	$25,000
Madison Co.	Madison Co.	7/3/1990	1700	F0	0	0	0
Madison Co.	Hopewell	9/29/1998	1900	F0	0	0	$25,000
Madison Co.	Greenville	9/22/2000	1355	F0	0	0	$1,000
Madison Co.	Greenville	6/12/2001	0050	F1	0	1	$200,000
Madison Co.	Lovett	11/12/2004	1240	F1	0	0	$5,000
Madison Co.	Cherry Lake	3/2/2007	0236	EF1	0	0	$5,000
Madison Co.	Lee	3/31/2009	1940	EF1	0	0	0
Madison Co.	Hamburg	12/03/2018	0234	EF1	0	0	$25,000
Madison Co.	Sirmans	03/31/2020	1516	EF1	0	0	0
Madison Co.	Greenville	03/31/2020	1517	EF1	0	0	0
Madison Co.	Madison	03/31/2020	1533	EF0	0	0	$50,000

Madison Co.	Hamburg	11/30/2020	0310	EF1	0	0	$100,000
Madison Co.	Sirmans	04/27/2023	1742	EF1	0	0	0
Madison Co.	Sirmans	05/10/2024	0632	EF1	0	0	$200,000

Source: National Climatic Data Center Storm Events Database https://www.ncdc.noaa.gov/stormevents/

City of Madison: The City of Madison is affected by tornadoes in the same respect to Madison County. The vulnerability of Madison is higher than the county due to the larger concentration of people and structures found within the city. The risks of a Tornado affecting the City of Madison are equally high for all areas of the city. A tornado event in the City of Madison would probably cause severe damage to homes and structures. There would be a short-term economic impact due to businesses having to recover from any damage sustained and employee absenteeism at work. The loss of life is estimated to be below 10 people based on past historical events.

Town of Greenville: The Town of Greenville is affected by Tornadoes in the same respect to Madison County. The vulnerability of Greenville is higher than the county due to the larger concentration of people and structures found within the city. The risks of a Tornado affecting the Town of Greenville are equally high for all areas of the town. A tornado event in the Town of Greenville would probably cause severe damage to homes and structures. The loss of life is estimated to be below 10 people based on past historical events. There would be a short-term economic impact due to businesses recovering from any damage sustained and employee absenteeism at work.

Town of Lee: The Town of Lee is affected by Tornadoes in the same respect to Madison County. The vulnerability of Lee is higher than in the county due to the concentration of people and structures found within the city. The risks of a Tornado affecting the Town of Lee are equally high for all areas of the town. A tornado event in the Town of Lee would probably cause severe damage to homes and structures. The loss of life is estimated to be below 10 people based on past historical events. There would be a short-term economic impact due to businesses having to recover from any damage sustained and employee absenteeism at work.

Hazard History:

December 12, 2018 - An EF1 tornado with 100 mph winds touched down in Madison County with a path length of 2.17 miles. One mobile home was shifted off its blocks. A small outbuilding was swept off its foundation and rolled several feet. Another mobile home nearby was shifted slightly, and the blocks underneath are now tilted. Considerable tree damage was present throughout the path. There were no injuries or fatalities.

March 31, 2020 – A strengthening surface low pressure area moved across the Tri-State region. A warm front lifted northward through the area, and a cold front moved through during the afternoon hours. Scattered thunderstorms moved across the area, some of which were severe. Three separate tornadoes were reported.

Initial damage was noted in far eastern Jefferson County along HWY 257 near its intersection with Walker Spring Rd. Damage consisting of many hundreds of snapped and uprooted trees continued east northeast into Madison County eventually crossing HWY 19. There was also at least one wooden power pole snapped.

Initial damage, consisting of a few dozen trees uprooted and snapped, was noted on a farm on the west side of HWY 221 just south of I-10. Damage, consisting of hundreds of snapped and uprooted trees, continued to the east-northeast crossing Sundown Creek Rd. and eventually I-10. After the tornado crossed I-10 it moved into inaccessible areas of the Hixton Swamp Conservation Area. Based on radar, the tornado remained on the ground continuously until damage became accessible again along HWY 360A just south of the intersection with CR 35. Damage to several trees at this location was the last damage evident from this tornado. Damage further northeast in Madison was from a separate brief spin up after this tornado lifted. This tornado was rated EF1 with max winds estimated at 90 mph.

A business suffered roof uplift and had a window blown in. There was significant water damage inside the business. There was an outbuilding damaged at the south Duval Street location as well. There was also scattered minor tree damage in the area. This tornado was rated EF0 with max winds estimated at 75 mph.

April 27, 2023 - A tornado touched down in a rural area of far western Madison County, snapping and uprooting numerous trees. No structures were impacted. The tornado is rated EF1 with max winds estimated at 95 mph based on the tree damage.



Source: Madison County EM



May 10, 2024 – The tornado began over Jefferson County, rated EF0. The tornado would first reach EF1 intensity as it crossed SW Mount Olive Church Road in Madison County where numerous trees were uprooted and a trailer was damaged. The tornado would then begin a more easterly trajectory where trees were snapped along the Madison-Taylor County line. It would continue east-northeast through Madison County mostly through rural areas producing concentrated areas of EF1 damage to pine and oak trees throughout the duration. The tornado would continue its path over farmland just south of state route 8, tipping and twisting many irrigation spickets

as well as snapping and uprooting adjacent trees. The tornado would dissipate over a field just west of the Madison-Suwannee County border. This tornado was rated as an EF1 with maximum winds of 100 mph and a maximum width of 1300 yards.

Future Development and Tornadoes:

If the County grows through larger population and added infrastructure, there will be more vulnerability to tornadoes.

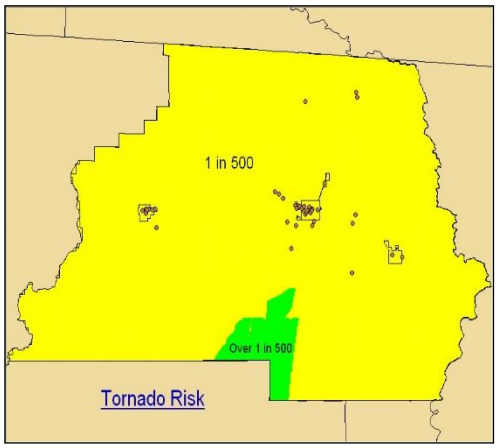
Hazard in Relation to Critical Facilities:

Based on the GIS data as provided by the MEMPHIS system and cross referencing a GIS list of critical facilities in Madison County, there are:

59 Critical Facilities Located in the "1 in 500" Tornado Risk Area.

0 Critical Facilities Located in the "Over 1 in 500" Tornado Risk Area.

Figure 14: Madison County Critical Facilities in Relation to Tornado Risk Areas



2. Hurricanes

Hazard Description:

A hurricane is a type of tropical cyclone, the generic term for a low-pressure system that generally forms in the tropics. A typical cyclone is accompanied by thunderstorms, and in the Northern Hemisphere, a counterclockwise circulation of winds near the earth's surface.

All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes or tropical storms. Parts of the Southwest United States and the Pacific Coast experience heavy rains and floods each year from hurricanes spawned off Mexico. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October.

Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. Winds can exceed 155 miles per hour. Hurricanes and tropical storms can also spawn tornadoes and microbursts, create storm surges along the coast, and cause extensive damage from heavy rainfall.

Hurricanes are classified into five categories based on their wind speed, central pressure, and potential damage (see chart). Category Three and higher hurricanes are considered major hurricanes, though Categories One and Two are still extremely dangerous and warrant your full attention.

Saffir-Simpson Hurricane Scale

Scale Number (Category)	Sustained Winds (MPH)	Damage
1	74-95	Minimal: Unanchored mobile homes, vegetation and signs.
2	96-110	Moderate: All mobile homes, roofs, small crafts, flooding.
3	111-129	Extensive: Small buildings, low-lying roads cut off.
4	130-156	Extreme: Roofs destroyed, trees down, roads cut off, mobile homes destroyed. Beach homes flooded.
5	More than 157	Catastrophic: Most buildings destroyed. Vegetation destroyed. Major roads cut off. Homes flooded.

Source: National Hurricane Center http://www.nhc.noaa.gov/aboutsshws.php

Hurricanes can produce widespread torrential rains. Floods are the deadly and destructive result. Slow moving storms and tropical storms moving into mountainous regions tend to produce especially heavy rain. Excessive rain can trigger landslides or mud slides, especially in mountainous regions. Flash flooding can occur due to intense rainfall. Flooding on rivers and streams may persist for several days or more after the storm.

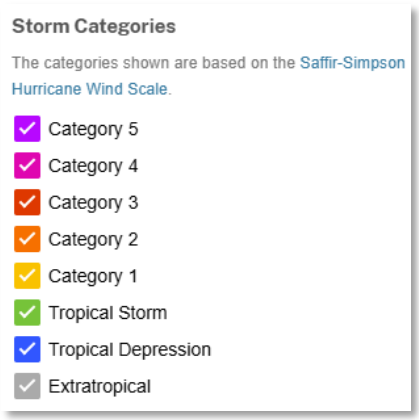
Hazard Profile:

Over the past 125 years of meteorological study, it's estimated that 30 or more hurricanes passed within 100 nautical miles of Madison County, averaging approximately one storm every 4 years. The potential damage from high winds and flooding would be the most pressing problems for the residents of Madison County. There are approximately thirty-seven hundred (3,400) mobile homes housing an estimated 7,500 people in Madison County which are particularly susceptible to hurricane-related damage. Those living in mobile homes and poorly constructed wood frame houses would be most vulnerable to wind and flood damage. The number of people affected in this situation would be considerable and

could be as high as 40% of the population. Flooding caused by above normal amounts of rain in short periods of time may make roads impassable and may damage field crops.

Figure 15: Madison County Hurricane Tracks from 1842-2023



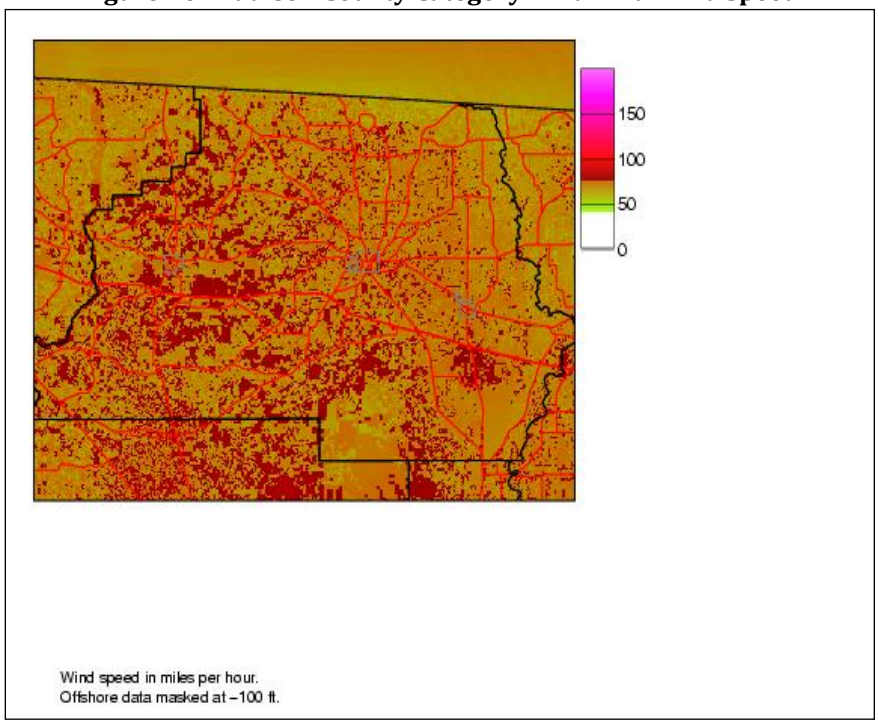


Source: NOAA Historical Hurricane Tracks coast.noaa.gov/hurricanes

The other vulnerable consideration for the county is the vast amount of timber that grows along most of the main highways. The high winds could cause a considerable amount of debris to clog some of the major emergency routes from the downed trees and limbs. The entire planning area is equally at risk to the hazards of a hurricane.

Hazard Impact Analysis:

Figure 16: Madison County Category 1 Maxima Wind Speed



Source: MEMPHIS

Impact Summary

Peak winds 81 mph. Peak water depth 0.0 ft.

Category 1 Maxima Damage Summary:

Tax Parcel based Wind Damage: $ 31.09 Million
DOR based Flood Damage: $ 0.00 dollars
DOR Structures in Flood Zone: 0
Census based Wind Damage: $ 30.99 Million
Census based Flood .Damage: $ 0.00 dollars
Uninhabitable Housing Units: 41 - 0.5% of total HU.

Madison County Population at Risk for Category 1 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
Total	20,400	20,400	6,409	0	0
Minority	8,772	8,772	2,293	0	0
Over 65	3,060	3,060	942	0	0
Disabled	9,180	9,180	2,861	0	0
Poverty	4,284	4,284	1,349	0	0
Lang. Isolated	204	204	91	0	0
Single Parent	1,632	1,632	622	0	0

Source: MEMPHIS

Madison County Structures at Risk for Category 1 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
SF Residential	3,112	3,112	771	0	0
Mobile Home	1,123	1,123	231	0	0
MF Residential	258	258	52	0	0
Commercial	463	463	151	0	0
Agriculture	4,937	4,937	1,373	0	0
Gov/Institution	402	402	103	0	0

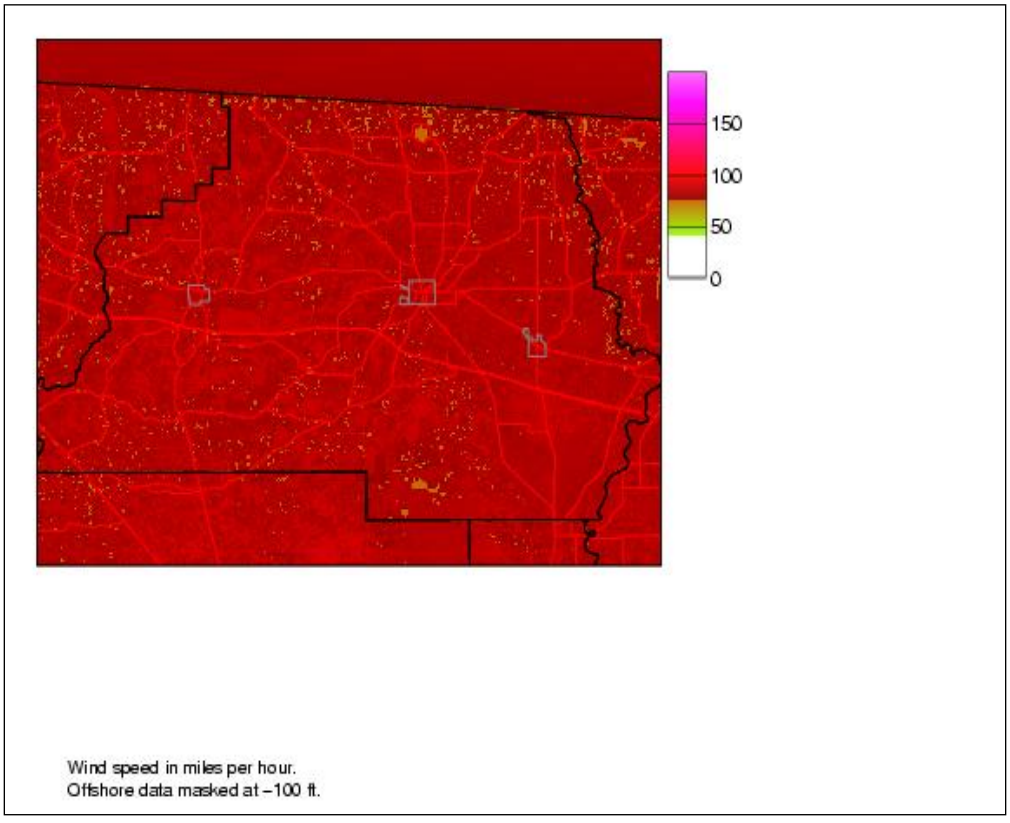
Source: MEMPHIS

Madison County Loss by DOR Use for Category 1 Maxima

	Exposure	Loss	Percent Loss
SF Residential	$504.98M	5.48M	1.1%
Mobile Home	$110.33M	6.42M	5.8%
MF Residential	$31.15M	318.31T	1.0%
Commercial	$160.14M	1.92M	1.2%
Agriculture	$299.92M	2.87M	1.0%
Gov/Institution	$1.28B	14.09M	1.1%

Source: MEMPHIS

Figure 17: Madison County Category 2 Maxima Wind Speed



Source: MEMPHIS

Impact Summary

Peak winds 97 mph. Peak water depth 0.0 ft.

Category 2 Maxima Damage Summary:

Tax Parcel based Wind Damage: $ 100.16 Million
DOR based Flood Damage: $ 0.00 dollars
DOR Structures in Flood Zone: 0
Census based Wind Damage: $ 87.02 Million
Census based Flood .Damage: $ 0.00 dollars
Uninhabitable Housing Units: 142 - 1.8% of total HU.

Madison County Population at Risk for Category 2 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
Total	20,400	20,400	20,400	0	0
Minority	8,772	8,772	8,772	0	0
Over 65	3,060	3,060	3,060	0	0
Disabled	9,180	9,180	9,180	0	0
Poverty	4,284	4,284	4,284	0	0
Lang. Isolated	204	204	204	0	0
Single Parent	1,632	1,632	1,632	0	0

Source: MEMPHIS

Madison County Structures at Risk for Category 2 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
SF Residential	3,112	3,112	3,069	0	0
Mobile Home	1,123	1,123	1,102	0	0
MF Residential	258	258	247	0	0
Commercial	463	463	462	0	0
Agriculture	4,937	4,937	4,865	0	0
Gov/Institution	402	402	398	0	0

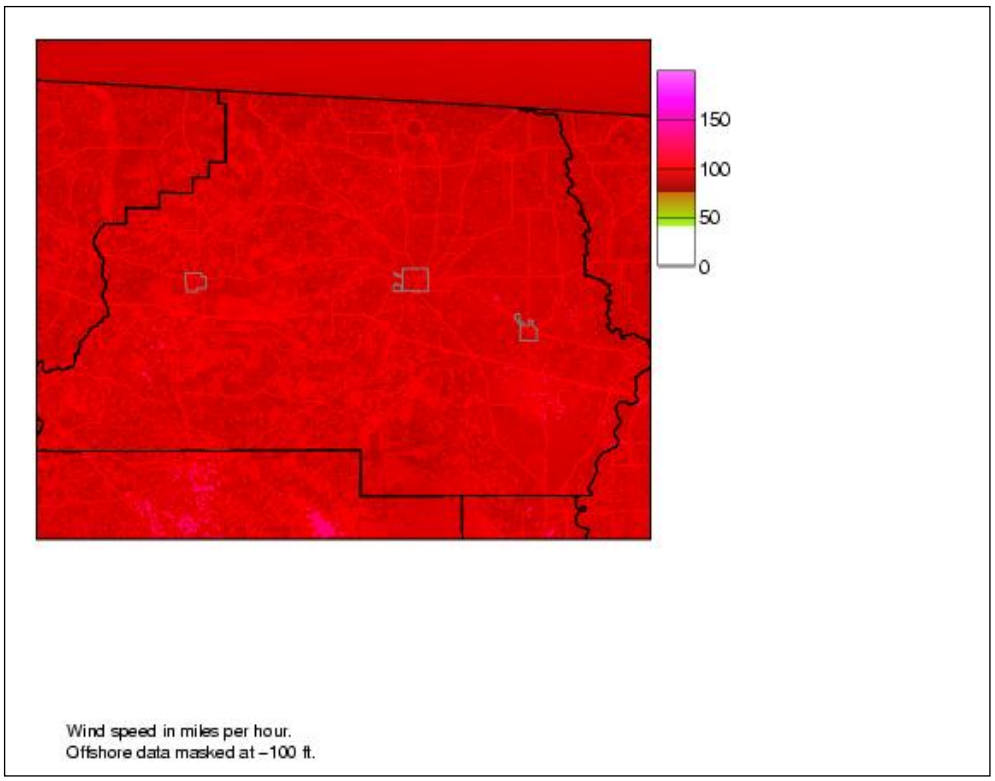
Source: MEMPHIS

Madison County Loss by DOR Use for Category 2 Maxima

	Exposure	Loss	Percent Loss
SF Residential	$504.98M	18.34M	3.6%
Mobile Home	$110.33M	16.67M	15.1%
MF Residential	$31.15M	1.05M	3.4%
Commercial	$160.14M	6.11M	3.8%
Agriculture	$299.92M	10.18M	3.4%
Gov/Institution	$1.28B	47.81M	3.7%

Source: MEMPHIS

Figure 18: Madison County Category 3 Maxima Wind Speed



Source: MEMPHIS

Impact Summary

Peak winds 116 mph. Peak water depth 0.0 ft.

Category 3 Maxima Damage Summary:

Tax Parcel based Wind Damage: $ 250.77 Million
DOR based Flood Damage: $ 0.00 dollars
DOR Structures in Flood Zone: 0
Census based Wind Damage: $ 202.37 Million
Census based Flood .Damage: $ 0.00 dollars
Uninhabitable Housing Units: 366 - 4.7% of total HU.

Madison County Population at Risk for Category 3 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
Total	20,400	20,400	20,400	359	0
Minority	8,772	8,772	8,772	149	0
Over 65	3,060	3,060	3,060	21	0
Disabled	9,180	9,180	9,180	56	0
Poverty	4,284	4,284	4,284	35	0
Lang. Isolated	204	204	204	0	0
Single Parent	1,632	1,632	1,632	17	0

Source: MEMPHIS

Madison County Structures at Risk for Category 3 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
SF Residential	3,112	3,112	3,112	53	0
Mobile Home	1,123	1,123	1,123	18	0
MF Residential	258	258	258	3	0
Commercial	463	463	463	2	0
Agriculture	4,937	4,937	4,937	254	0
Gov/Institution	402	402	402	13	0

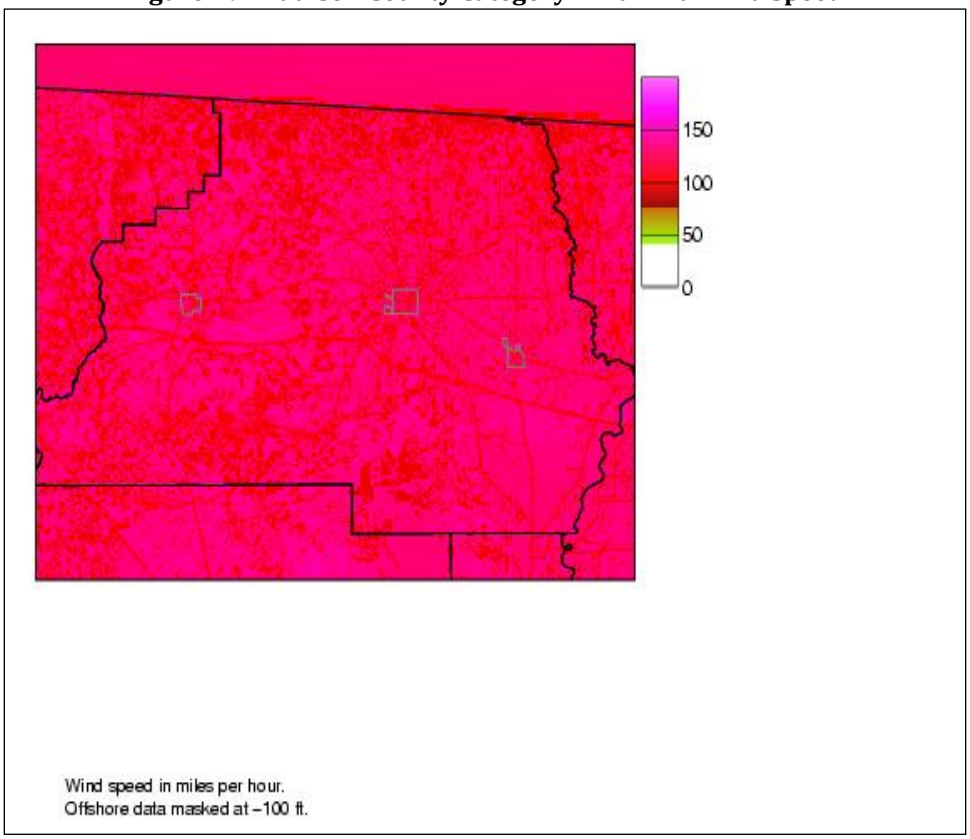
Source: MEMPHIS

Madison County Loss by DOR Use for Category 3 Maxima

	Exposure	Loss	Percent Loss
SF Residential	$504.98M	$46.55M	9.2%
Mobile Home	$110.33M	$37.19M	33.7%
MF Residential	$31.15M	$2.66M	8.5%
Commercial	$160.14M	$15.73M	9.8%
Agriculture	$299.92M	$25.62M	8.5%
Gov/Institution	$1.28B	$123.02M	9.6%

Source: MEMPHIS

Figure 19: Madison County Category 4 Maxima Wind Speed



Source: MEMPHIS

Impact Summary

Peak winds 141 mph. Peak water depth 0.0 ft.

Category 4 Maxima Damage Summary:

Tax Parcel based Wind Damage: $ 602.62 Million
DOR based Flood Damage: $ 586.35 Thousand
DOR Structures in Flood Zone: 2
Census based Wind Damage: $ 460.01 Million
Census based Flood .Damage: $ 0.00 dollars
Uninhabitable Housing Units: 874 - 11.2% of total HU.

Madison County Population at Risk for Category 4 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
Total	20,400	20,400	20,400	17,001	0
Minority	8,772	8,772	8,772	7,504	0
Over 65	3,060	3,060	3,060	2,553	0
Disabled	9,180	9,180	9,180	7,713	0
Poverty	4,284	4,284	4,284	3,524	0
Lang. Isolated	204	204	204	191	0
Single Parent	1,632	1,632	1,632	1,456	0

Source: MEMPHIS

Madison County Structures at Risk for Category 4 Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
SF Residential	3,112	3,112	3,112	2,873	0
Mobile Home	1,123	1,123	1,123	1,018	0
MF Residential	258	258	258	228	0
Commercial	463	463	463	433	0
Agriculture	4,937	4,937	4,937	4,504	0
Gov/Institution	402	402	402	361	0

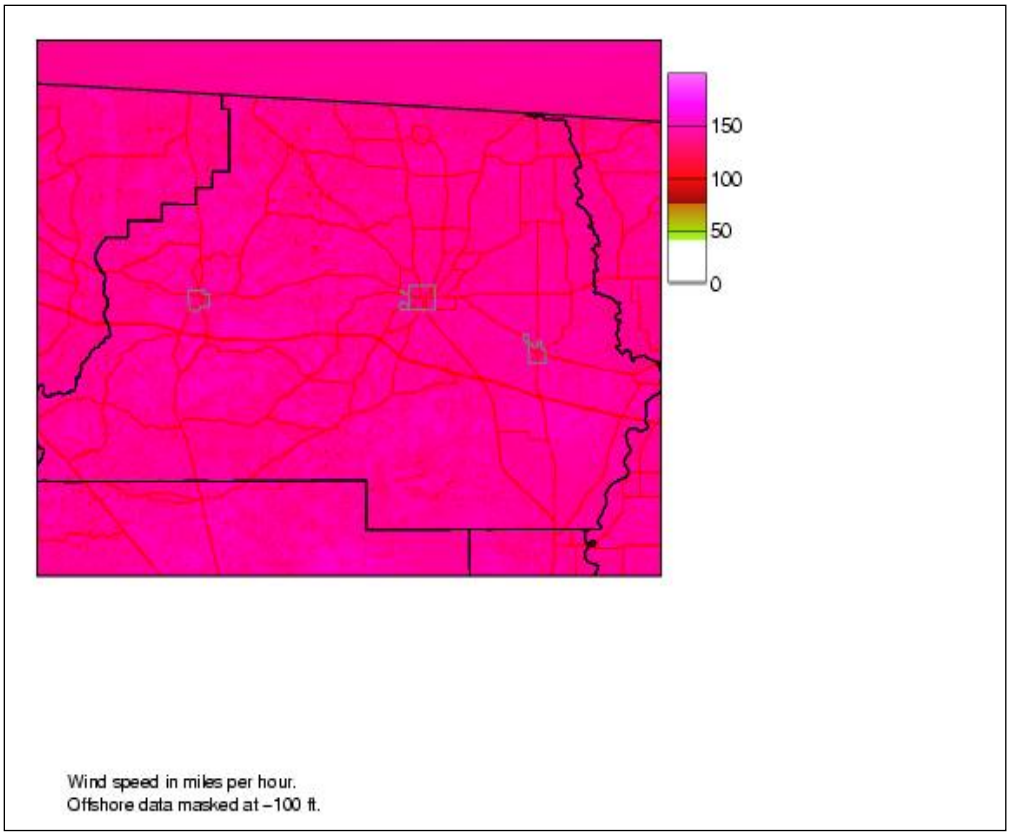
Source: MEMPHIS

Madison County Loss by DOR Use for Category 4 Maxima

	Exposure	Loss	Percent Loss
SF Residential	$504.98M	$113.72M	22.5%
Mobile Home	$110.33M	$81.13M	73.5%
MF Residential	$31.15M	$6.42M	20.6%
Commercial	$160.14M	$37.97M	23.7%
Agriculture	$299.92M	$63.21M	21.1%
Gov/Institution	$1.28B	$300.18M	23.4%

Source: MEMPHIS

Figure 20: Madison County Category 5 Maxima Wind Speed



Source: MEMPHIS

Impact Summary

Peak winds 167 mph. Peak water depth 0.0 ft.

Category 5 Maxima Damage Summary:

Tax Parcel based Wind Damage: $ 1.08 Billion
DOR based Flood Damage: $ 701.01 Thousand
DOR Structures in Flood Zone: 2
Census based Wind Damage: $ 708.67 Million
Census based Flood .Damage: $ 0.00 dollars
Uninhabitable Housing Units: 1591- 20.3% of total HU.

Madison County Population at Risk for Category Five Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
Total	20,400	20,400	20,400	20,400	0
Minority	8,772	8,772	8,772	8,772	0
Over 65	3,060	3,060	3,060	3,060	0
Disabled	9,180	9,180	9,180	9,180	0
Poverty	4,284	4,284	4,284	4,284	0
Lang. Isolated	204	204	204	204	0
Single Parent	1,632	1,632	1,632	1,632	0

Source: MEMPHIS

Madison County Structures at Risk for Category Five Maxima

	Total	TS Wind	Hurricane Wind	Ext. Wind	Flooded
SF Residential	3,112	3,112	3,112	3,112	0
Mobile Home	1,123	1,123	1,123	1,123	0
MF Residential	258	258	258	258	0
Commercial	463	463	463	463	0
Agriculture	4,937	4,937	4,937	4,937	2
Gov/Institution	402	402	402	402	0

Source: MEMPHIS

Madison County Loss by DOR Use for Category Five Maxima

	Exposure	Loss	Percent Loss
SF Residential	$504.98M	$213.58M	42.3%
Mobile Home	$110.33M	$108.65M	98.5%
MF Residential	$31.15M	$12.15M	39.0%
Commercial	$160.14M	$70.05M	43.7%
Agriculture	$299.92M	$118.92M	39.7%
Gov/Institution	$1.28B	$554.54	43.2%

Source: MEMPHIS

Hazard Probability:

Hurricane season is an annual event that produces a series of storms that randomly impact locations throughout the Caribbean, the Gulf of Mexico and the entire eastern seaboard of the United States. The probability of a hurricane occurring and causing damage is high. Eventually a storm will impact Madison County either directly by force or indirectly through evacuation migration. It is difficult to predict when a storm will hit, where exactly it will strike, the intensity, or the duration, however it is very important for Madison County to prepare for Hurricanes and adopt responsible mitigation measures to lessen the potential damages.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: Hurricanes can be a costly hazard to Madison County overall. Even though Madison County does not reside on a coastline, the community is still in a highly prone area for Hurricanes to strike from both the Atlantic Ocean and Gulf of Mexico. The county stands to suffer great damages due to the high winds and flooding impacting the farms and agriculture. Based on historical record, the Madison County area can expect a hurricane every four years. The effects of a hurricane will include flooding and wind damage. The number of people who would be possibly affected by a hurricane is based on the various factors including the intensity, closeness and direction of the storm. In the event of a hurricane (any category) Madison County would have to evacuate approximately 7,500 mobile home residents, including 34 mobile home parks. Evacuation times could be as high as 24 hours. This time would be necessary to clear any pre-hurricane landfall hazards such as gale force winds and road flooding and to get evacuees into shelter. With every hurricane event, 100% percent of the population and 100% of the Critical Facilities is vulnerable to the effects of a hurricane as well as all buildings and facilities within Madison County. Due to the sheer size of Hurricanes, the regional damage they produce, and the proximity of the jurisdictions of Madison, Greenville, and Lee within Madison County, a county-wide analysis is found to be sufficient and representative with regards to the impacts of this hazard.

City of Madison, Towns of Greenville and Lee: Based on the hurricane's category, strength, and landfall position the effects of the vulnerable areas, facilities and populations will vary. Obviously, the stronger the Hurricane, the higher level of damage can be expected to Madison County and surrounding jurisdictions. But with every hurricane event, 100% percent of the population and 100% of the Critical Facilities is vulnerable to the effects of a hurricane.

Hurricanes can affect the cities economically, before and after the event. Because Hurricanes are slow moving, many residents take the opportunity to evacuate the area. These evacuations can disrupt local businesses and times of operations, thereby reducing revenue and creating a loss in wages. The communities within Lee and Greenville are also susceptible to the effects of hurricanes through Flooding. Even when hurricanes do not impact the local area directly, their effects can be felt over time. Hurricanes that move North into Georgia can dump large amounts of rainfall into the rivers. In some cases, these overflowing rivers flow through Madison County and more specifically can affect the Towns of Lee and Greenville. Again, based on the facts that Madison County is not a coastal community as well as the sheer size of Hurricanes in general, the risks and vulnerability for the incorporated cities is not substantially different from the risks to the unincorporated county.

Hazard History:

Hurricane Irma – September 10, 2017

Hurricane Irma was the most powerful Atlantic hurricane in recorded history. It was a Category 5 storm when it made landfall on Barbuda on September 6, 2017. Its winds were 185 miles per hour for 37 hours. An unofficial wind gust was clocked at 199 miles per hour. These winds extended 50 miles from the center.

Tropical storm-force winds extended 185 miles from the center. Its coastal storm surges were 20 feet above normal tide levels. Above-average ocean temperatures of 86 degrees Fahrenheit sustained the storm. These temperatures are worsening due to global warming.

Irma held 7 trillion watts of energy. That's twice as much as all bombs used in World War II. Its force was so powerful that earthquake seismometers recorded it. It generated the most accumulated cyclone energy in a 24-hour period.

Irma's attack was the first time in 100 years that two storms Category 4 or larger hit the U.S. mainland in the same year. Hurricane Harvey devastated Houston on August 25, 2017.

In Madison County, residents began experiencing the effects of Hurricane Irma's outer bands as early as the late morning hours of Sunday, September 10. These bands brought occasional heavy rains and gusting winds. Throughout the afternoon and evening of September 10th the wind speeds and rainfall continued to increase. Weather stations at Terry Farm, Madison Central School, and Greenville Elementary began recording maximum wind gusts exceeding 30 MPH as early as 2100. The wind gusts would not taper below 30 MPH until 0900 on Monday, September 11. The strongest portion of, now Tropical Storm Irma crossed Madison County in the early morning of Monday, September 11th. The weather station at Terry Farm recorded the maximum sustained wind speed of 36.85 MPH at 0120 am on Monday, September 11th and the maximum wind gust of 49.52 MPH at 0744. The storm produced as much as 1.5 inches of rain and in some areas the rain fell at rates as high as 0.25 inches/hour. Tropical Storm Irma exited Madison County in the late morning hours of Monday, September 11th with most weather stations reporting significant decline in wind speeds and rainfall around 1000.

Madison County residents and response agencies reported significant impacts from storm generated debris. A total of 12 homes were damaged with 3 sustaining major damage and 2 homes reporting damage to roofs. Debris blocked traffic on interstate 10 at mile marker 253 and 246. At peak, 67% of residents had lost power.

During the height of the storm, emergency personnel responded to a structure fire on River Road. The home was ingulfed and a complete loss. To date, Hurricane Irma has been Madison County's largest sheltering event hosting over 623 people.

Tropical Storm Cristobel – June 7, 2020

Madison County was forecast to receive 4-6 inches of rainfall associated with TS Cristobel. However, TS Cristobel brought significantly more rain to the area. Parts of Madison County and the Cherry Lake area received up to 13 inches of rainfall. There were 20-23 downed tree calls, 14 vehicle accidents (weather related/debris/hydroplane) and 5 roads with water over them. A small trailer park on Corinth Church Rd was affected by holding a significant amount of water with water breaching at least one home. Another yard on Juniper Rd. was submerged due to run off from an agricultural field.



Source: Madison County EM

Hurricane Idalia - August 30, 2023

Idalia formed in the Gulf of Mexico on Sunday, August 27th and became Tropical Storm Idalia later that day. It reached hurricane strength on Tuesday, August 29th and rapidly intensified into a major Category 3 hurricane with an increase in wind speeds of 55 mph in less than 24 hours. Idalia briefly reached Category 4 strength but weakened slightly just before landfall.

Hurricane Idalia made landfall on the morning of August 30th along the coast of Taylor County Florida near Keaton Beach at approximately 745 am EDT. The hurricane made landfall with estimated sustained winds of 125 mph, making it a Category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale, the first major hurricane on record to make landfall in this portion of Florida. Idalia moved inland across the eastern Florida Big Bend and into South Central Georgia during the morning hours. Strong winds caused extensive damage to trees, buildings, and infrastructure along a broad swath stretching west to Tallahassee and east beyond the Suwannee River.

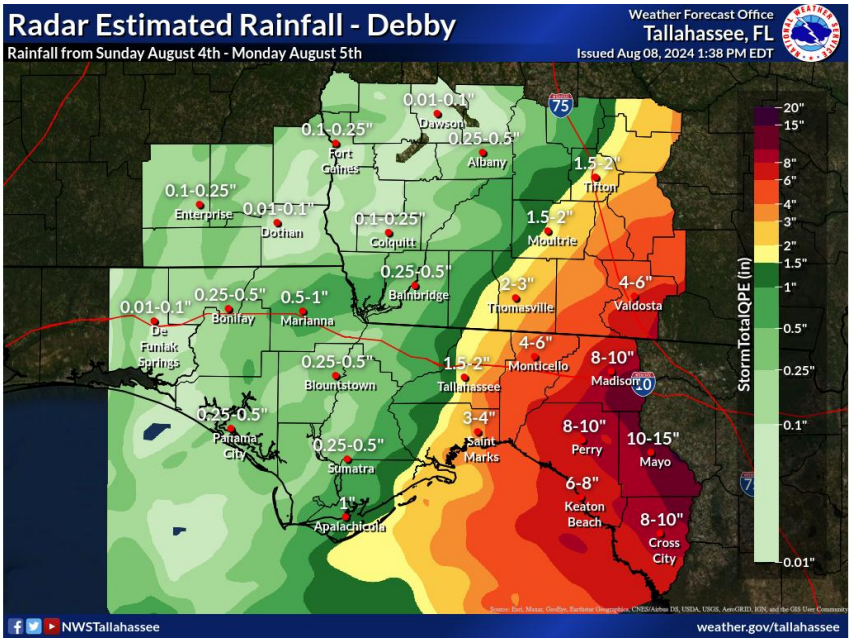
Freshwater flooding from Idalia was not widespread due to the relatively fast forward motion of the storm. Idalia began to wobble to the left of its northeast track which allowed the northwestern eyewall, where rainfall rates were highest, to linger over Madison County. The greatest impacts from rain were generally felt along and southwest of the I-75 corridor including Madison County.

Madison County experienced significant wind because of Idalia, with sustained winds of 50 mph and gusts up to 85-90 mph occurring over Wednesday August 30th. One hundred percent of the county experienced power outages. The storm left behind significant vegetative debris that damaged residential and commercial structures and blocked most transportation routes throughout the County. One direct fatality occurred in Madison County during Hurricane Idalia due to a falling tree.

Hurricane Debby - August 5, 2024

The National Hurricane Center initiated advisories on Potential Tropical Cyclone Four on August 2nd at 11am as the system continued to organize and observational and model trends increased confidence that a tropical storm would develop. Debby would become a tropical depression that evening, and then a tropical storm on Saturday afternoon on August 3rd as it exited the northwest coast of Cuba. Debby would remain a tropical storm for most of its life as it lifted north into the eastern Gulf of Mexico and moved towards the Apalachee Bay. Debby strengthened into a category 1 hurricane less than 12 hours before landfall with the 11 pm ET August 4th advisory. After Debby made landfall Monday morning near Steinhatchee, Florida around 7am ET on August 5, its forward motion would slow, and it was during this period that most of the significant impacts from storm surge and flooding rains were felt. Debby would continue to move northeast across the eastern Florida Big Bend and into southeast Georgia into Tuesday taking most of the impacts away from the forecast area. While the winds and rain had moved on by Tuesday, a new impact was developing as the heavy rains across the southeast Big Bend, north Florida, and southern Georgia began to work their way through the river/aquifer system.

Rainfall of 8 to 12 inches across the heaviest hit regions caused widespread flooding in southeast Madison County. Areal flooding continued for at least 2 weeks post landfall across southeast Madison County as high ground water levels and the heavy rainfall totals put pressure on the groundwater system. In southeast Madison County the pressure on the groundwater system caused new flooding to develop and persist for several weeks as water was coming up from the ground.



Flooding across southeast portions of the county corresponded with a 500-year flood event. Some water rescues resulted. Numerous roads were closed in the southeastern portion of the county due to flooding. Homes were inundated with flood waters on St. Augustine Rd and Kayak St. Several businesses were affected by the flooding, including Ragans Campground and Madison Country Club. More than 100 homes were damaged by either wind or flooding.

Madison County experienced significant wind because of Debby, with sustained winds of 50 mph and gusts up to 60-65 mph. Downed trees and power lines resulted in temporary road closures and extended power outages. Power outages lasted up to 3 to 4 days in some sections of the county.

Hurricane Helene – September 26, 2024

Helene made landfall along the mouth of the Aucilla River, as a Category-4 hurricane on the night of the 26th with max sustained winds of 140 mph, surpassing Hurricane Idalia, just a year ago, as the strongest hurricane on record observed over Apalachee Bay. Helene quickly moved inland across Taylor and Madison Counties before moving into Lowndes County in South Central Georgia. A large area of damaging winds extended from the Big Bend coast well-inland into Georgia along the I-75 corridor, causing significant damage. Wind gusts of at least 90 to 100 mph spread inland through Taylor, Madison, Lafayette Counties in Florida, and into Lowndes County in Georgia. Widespread power outages, structural damage, and severe tree damage occurred throughout this area. Significant rainfall also fell with the hurricane, with a maximum of 12 to 14 inches falling west of Tallahassee in the Apalachicola River Basin.

Wind gusts of at least 90-100 mph spread inland through Madison County. Widespread power outages, structural damage, and severe tree damage occurred throughout this area. On September 26th, the National Weather Service issued an Extreme Wind Warning at 9pm until 12am for Madison County. Extreme winds are to be treated as if a tornado was approaching and move immediately into an interior room or shelter.



On September 25th, Madison County issued a mandatory evacuation order for mobile homes, RV's, compromised structures and flood prone areas. Citizens were notified that once conditions deteriorate, emergency service personnel/law enforcement would be pulled from the roadways and response delayed until safe to do so.

Following Helene, 100% of Madison County was without power. Restoration efforts by Duke Energy and Tri-County would take up to 9 days. This was the third major hurricane to impact electrical systems in 13 months.

Future Development and Hurricanes:

If the County grows through larger population and added infrastructure, there will be more vulnerability to hurricanes.

Hazard in Relation to Critical Facilities:

All of Madison County's critical facilities are in a Hurricane risk area.

3. Floods

Hazard Description:

Floods are the most common and widespread of all natural disasters--except fire. Most communities in the United States have experienced some kind of flooding, after spring rains, heavy thunderstorms, or winter snow thaws.

A flood, as defined by the National Flood Insurance Program is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from:

- Overflow of inland or tidal waters
- Unusual or rapid accumulation or runoff of surface waters from any source
- A mudflow

The collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood."

Floods can be slow or fast rising but generally develop over a period of days. Mitigation includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in mitigation steps now, such as engaging in floodplain management activities, constructing barriers, such as levees, and purchasing flood insurance will help reduce the amount of structural damage to your home and financial loss from building and crop damage should a flood or flash flood occur.

Florida is affected by many tropical weather systems. Although storm surge has the greatest potential for loss of life, recent research indicates that inland flooding was responsible for the greatest number of fatalities over the last 30 years. Studies show that 59 percent of the tropical cyclone deaths in the United States resulted from severe inland flooding. Flood or flooding refers to the general or temporary conditions of partial or complete inundation of normally dry land areas of surface water runoff from any source. Floodplains are defined as any land areas susceptible to being inundated by water from any flooding source. In Florida, several variations of flooding occur due to the different effects of severe thunderstorms, hurricanes, seasonal rain and other weather-related conditions and is a natural part of the earth's hydrologic system. Based on frequency, floods are the most destructive category of

natural hazards in the United States. The loss of life, personal property, crops, business facilities, utilities, and transportation are major impacts of flooding. Additional losses and economic hardships ensue when supplies or supply routes are damaged or destroyed. Flood waters present an additional hazard as a public health problem when they inundate drinking water facilities, chemical and waste storage facilities, wastewater treatment facilities and solid waste disposal sites. In general, flooding can be divided into two major categories: Coastal and Riverine. In Florida the same hazard, such as a hurricane or severe storm, can result in both types of flooding, sometimes in different areas, but many areas of Florida are susceptible to flooding from both storm surge and watershed runoff.

Coastal flooding is usually the result of a severe weather system such as a tropical cyclone, hurricane, tropical storm or "northeaster" which contains the element of high winds. The extent and nature of coastal flooding is related to physiographic features of the terrain and the characteristics of the adjoining body of water. The damaging effects of coastal floods are caused by a combination of higher water levels of the storm surge, the winds, rains, erosion and battering by debris. Flood waters are usually driven ashore by the wind, an event known as storm surge. Loss of life and property damage are often more severe since it involves velocity wave action and accompanying winds. The velocity and range of coastal floods vary in part with the severity of the storm that induces them.

Florida's low-lying topography combined with its subtropical climate makes it highly vulnerable to inland or riverine flooding. Riverine flooding is associated with a river's watershed, which is the natural drainage basin that conveys water runoff from rain.

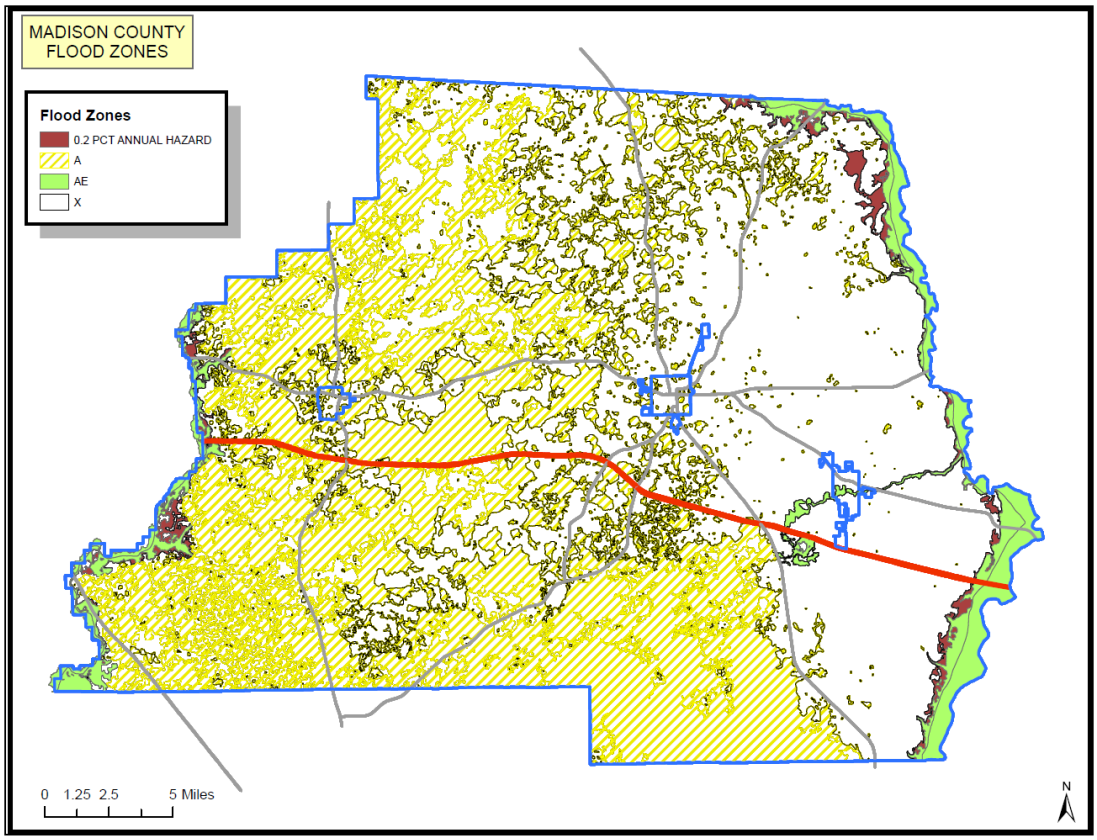
Riverine flooding occurs when the flow of runoff is greater than the carrying capacities of the natural drainage systems. Rainwaters that are not absorbed by soil or vegetation seek surface drainage lines following natural topography lines. These lines merge to form hierarchical systems of rills, creeks, streams, and rivers. Generally, floods can be slow or fast rising, depending on the size of the river or stream. The rivers in north Florida drain portions of Alabama and Georgia, and excessive rainfall in those states often cause flood conditions in Florida. One of the consequences of flooding is repetitive loss properties. A repetitive loss property is one for which two or more NFIP losses of at least $1000 each have been paid since over a rolling 10-year period. Madison County currently has seven Repetitive Loss Properties identified and located in the county.

Hazard Profile:

Although Madison County historically experiences only moderate rainfall, its three major rivers (Suwannee, Withlacoochee and Aucilla) originate in Georgia and are affected by the heavy rains characteristic of South Georgia. The major population centers of the county are relatively high and free from flooding, but portions of many of the county's roads are prone to inundation. Flooding occurred with El Nino in 1998, causing considerable property and public road damage, but no loss of life. Floodwater can adversely affect crops and farming activity, which provide a major source of income for the county. Population potentially affected by flooding would be minimal.

Hazard Impact Analysis:

Figure 26: Madison County Flood Zones



Source: Madison County Property Appraisers Office

Hazard Probability:

The probability of flooding occurring in Madison County is high. One of the most prone areas to flood is in the southeastern part of the county where the Withlacoochee and Suwannee Rivers merge together. On many past occurrences, the river has breached its capacity and flooded out into surrounding fields and marshes. Many homes and properties located in this flood area have been purchased by Suwannee River Water Management and turned into a conservation area in an effort to reduce the recurring damage to residents.

The probability of flooding in the City of Madison is Low to Medium. Although the city does receive the same level of precipitation as the rest of the county, the maintenance and upkeep of the storm water drainage system allows the water to move out of the city efficiently. When the city is aware of major storms approaching, the city public works department performs a check on the drainage network to clear any debris that may cause flooding problems. This alleviates much of the flooding concerns in the City of Madison. The City of Madison is also not located next to any of the three major Rivers which inhabit Madison County.
The Town of Lee also has a high probability of flooding. The southeastern portion of the county contains a marshy wetland area known as San Pedro Bay. In past events, the Bay has

filled to capacity with water through precipitation and then flooded over into surrounding creeks. The creeks flow through the Town of Lee and overwhelm their capacity to handle the drainage. The streets within the downtown area flood-out with each of these events. Many residents and businesses are vulnerable to these events and their damage. When the streets flood, the economic impact is felt because the stores lose business, and people can't get to work.

The probability of a flooding event in the Town of Greenville is high. The town's storm water drainage system was built in the 1930's. Over the past 75 years, the system has become clogged through collected debris and has deteriorated to the point that even when there is minimal precipitation, many of the street's flood. One of the main thoroughfares in Greenville is Tram Road where many businesses reside. This area is one of the most affected in Greenville by flooding. It is not uncommon for Tram Street to contain 6-8 inches of water after a storm. As in Lee, the businesses and economy feel the impact as people cannot go to work, and businesses cannot open.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: Madison County as a whole is very vulnerable to the effects of flooding. The three main rivers, the Suwannee, Withlacoochee and Aucilla flow through the county and have all caused problems to varying degrees in the past. As delineated by the Future Land Use maps, most of the land immediately adjacent to the Suwannee, Withlacoochee and Aucilla Rivers are designated as either Agriculture or Conservation. These designations prohibit or severely limit development in the areas and indicate a natural or environmentally sensitive nature, which could be flood prone at times.

San Pedro Bay has been known to flood and cause damage historically. Economically, the county is challenged by flooding and has seven known repetitive loss properties. Areas of the Suwannee River are known to flood frequently and cause damage to homes as well.

City of Madison: The City of Madison is less vulnerable to floods and their impacts due to the upkeep and maintenance of their storm water system. Because of the maintenance, the storm water system can efficiently channel water away from the city and keep streets clear of flooding. Because of this, the city's residence and businesses are not as impacted compared to the two other towns. The Public Works Department points out the fact that only 5-6 homes within the city have flood insurance because of the lack of need.

Town of Greenville: The vulnerability of flooding faced by the town of Greenville is very high. The current storm water drainage is old and challenged when it comes to large rain events. The economy is heavily impacted and vulnerable because the main road, Tram Road, is one of the worst effected streets but is also one of the most important business areas. When Tram Road floods, people cannot get to and from work and businesses are not able to operate under normal conditions.

Figure 27: Tram Road and Flood Prone Areas in Blue



The Town of Greenville is frequently impacted by flooding associated with weather systems that produce large amounts of rain or severe storm events. Historically, streets and yards flood on the North and Eastern parts of town during any heavy rainfall events. The town is surrounded on three sides by low lying land. Since about 2/3 of the Greenville residents are served by individual septic tank systems, many septic tanks back up during these events, creating potential health hazards. The backup of these septic systems causes financial strain on the residents when they must have a company come and pump out their septic following each event. The water in the area stays for relatively long periods, making it difficult for people to get into and out of their homes due to street and yard flooding. Fortunately, no homes have been destroyed due to Flooding in recent years.

A CDBG grant in 2005 was used to elevate SW Tram Rd and install more and larger culverts to lessen the flooding along this road. The Town of Greenville, in conjunction with the Department of Transportation, also obtained a CDBG grant in 2009-2010 to install larger culverts, open ditches and generally work on the drainage system. These projects have done a lot to lessen some flooding in the city; however they will always have problems due to the low elevation and surrounding wetlands.

Town of Lee: The Town of Lee and its residents are vulnerable to Flooding when storm systems produce heavy amounts of rain. These systems occur about every 5-6 years on average. The flooding in Lee is a result of several events that occur. The "Bays" or San Pedro Bay is located Southeast of SW CR 14 and East of S CR 53. Once these bays are filled to capacity with water, the excess water runoff is spilled into several of the smaller surrounding creeks. These creeks eventually run together into Norton Creek. The Norton Creek area is located between County Road 53 and County Road 413 in Madison County. This watershed is approximately 47 square miles located just west of the Withlacoochee River. Land use within the watershed is a mixture of open land, wetlands, and residential areas. There are large ponding areas,

as well as sinkholes, including the Lee Sink Hole, within the watershed. Flooding of the low-lying areas within the Town of Lee, and backwater from the Withlacoochee River has been reported.

In addition, San Pedro Bay consists of slow-moving water mixed with vegetation which is constantly decaying and building up contaminants including Tannic Acid. When San Pedro Bay overflows due to flooding; much of this rotting and decaying vegetation along with its contaminants is flushed out of the bay and into the local water table, impacting the Town of Lees water quality.

Hazard History:

In June 2020, Outer bands from Tropical Storm Cristobal produced very heavy rainfall across portions of the Florida big bend and south-central Georgia. Rainfall amounts in excess of 13 inches were measured in Madison County with flash flooding reported. The Florida Highway Patrol reported that Interstate 10 eastbound was closed from Mile Marker 262 to Mile Marker 273 due to flooding.

In August 2024, Hurricane Debby caused rainfall of 8 to 12 inches across the heaviest hit regions which caused widespread flooding in southeast Madison County. Areal flooding continued for at least 2 weeks post landfall across southeast Madison County as high ground water levels and the heavy rainfall totals put pressure on the groundwater system. In southeast Madison County the pressure on the groundwater system caused new flooding to develop and persist for several weeks as water was coming up from the ground.



Source: Madison County EM

Flooding across southeast portions of the county corresponded with a 500-year flood event. Some water rescues resulted. Numerous roads were closed in the southeastern portion of the county due to flooding. Homes were inundated with flood waters on St. Augustine Rd and Kayak St. Several businesses were affected by the flooding including Ragans Campground and Madison Country Club. More than 100 homes were damaged by either wind or flooding.

Future Development and Floods:

If the County grows through larger population and added infrastructure, there will be more vulnerability to floods.

Hazard in Relation to Critical Facilities:

All of the Critical Facilities in Madison County are located in Flood Zone X.

4. Wildfires

Hazard Description:

There are three different classes of wild land or wildfires. 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 present a significant potential for disaster in the southwest, a region of relatively high temperatures, low humidity, and low precipitation during the summer, and during the spring, moderately strong daytime winds. Combine these severe burning conditions with people or lightning and the stage is set for the occurrence of large, destructive wildfires.

Hazard Profile:

Madison County has experienced many small to moderate scale forest fires, 90% of which involved five acres or less. An exception is the 1986 fire in the San Pedro Bay wetland that burned over 26,000 acres of timber. Over half of the county is planted in pine, and much of the county is always vulnerable to forest fires, although the threat to the population at large is small.

Unlike most of the United States, where most of the wildfires occur in the summer (July through September); Florida's *"wildfire season"* normally runs from December to June.

With this in mind, you would think that most of the acreage burned would also be during the winter. That is not the case. The number of acres burned due to wildfire peaks in May. Why do you think that is? The answer is that most of the fires that occur during the winter are caused by people and are usually easy to get to by road. Also, the winter months are cooler and compared to April and May they are normally wetter. In April and May Florida has a "dry spell". This is because the frontal passages from the north and west are no longer moving through the state, and the summer thunderstorm activity has not started yet. That is not to say that there are not some thunderstorms around, there are, and that is a big part of the problem. Even though it would seem that all those summer lighting fires would be responsible for more acres burned, again that is not the case, those few lightning fires in April and May burn a great deal more on average than do the summer fires.

These Lightning fires are often not as easy to get to as the winter man caused fires. For these two reasons 1. The drier weather, and 2. the difficulty of getting to the fires, they often have built to a size that makes them much more difficult to control. Just as the number of fires and acres burned changes through the year from month to month, the number of fires and acres burned changes from year to year. Some years Florida gets more rain, and people help by being more careful with fire in the wildlands. Other years the weather does not cooperate, and that is when the Florida Forest Service really needs the help of the people in Florida.

Madison County Wildfire Causes 1/1/2020 – 7/1/2025

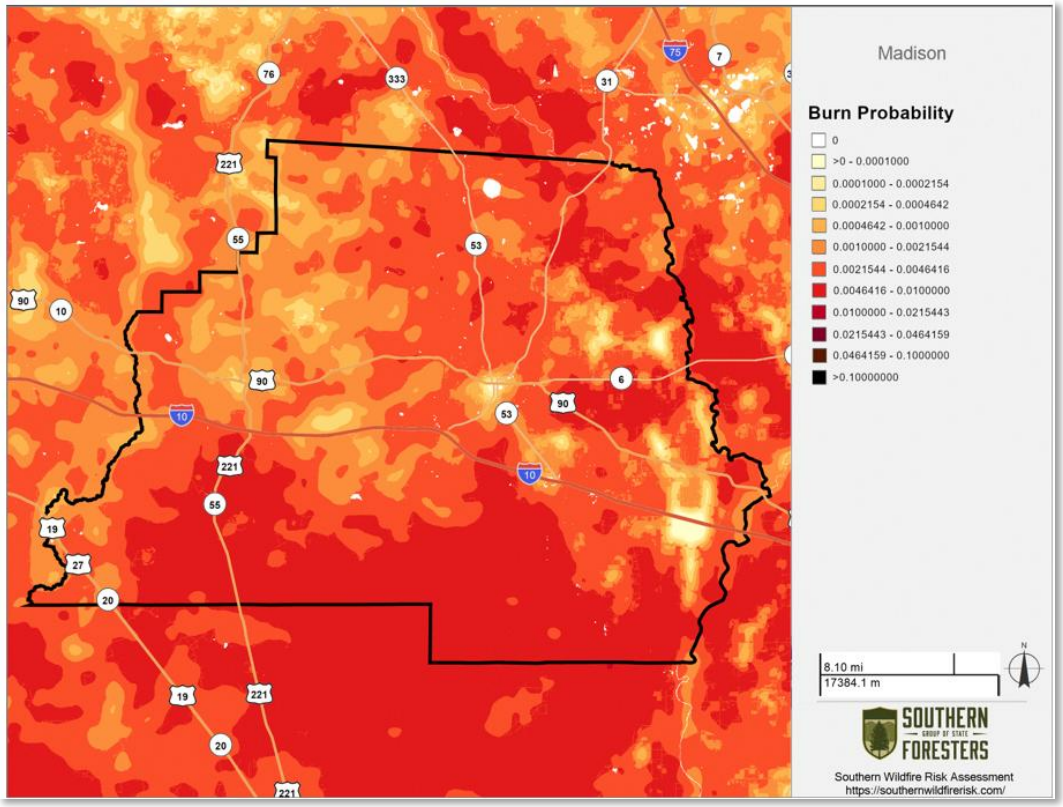
Cause	Fires	Percent	Acres	Percent
Campfire	8	3.07	11.2	1.11
Children	3	1.15	5.2	0.52
Debris Burn*	0	0	0.0	0
Debris Burn--Auth--Broadcast/Acreage	11	4.21	102.0	10.11
Debris Burn--Auth--Piles	15	5.75	41.8	4.14
Debris Burn--Auth--Yard Trash	45	17.24	74.6	7.39
Debris Burn--Nonauth--Broadcast/Acreage	7	2.68	19.6	1.94
Debris Burn--Nonauth--Piles	10	3.83	18.6	1.84
Debris Burn--Nonauth--Yard Trash	21	8.05	26.6	2.64
Equipment use*	0	0	0.0	0
Equipment--Agriculture	11	4.21	8.2	0.81
Equipment--Logging	2	0.77	0.2	0.02
Equipment--Recreation	5	1.92	5.4	0.54
Equipment--Transportation	55	21.07	33.6	3.33
Incendiary	9	3.45	548.8	54.39
Lightning	9	3.45	74.5	7.38
Miscellaneous --Breakout	0	0	0.0	0
Miscellaneous --Electric Fence	0	0	0.0	0
Miscellaneous --Fireworks	1	0.38	0.1	0.01
Miscellaneous --Power Lines	18	6.90	8.3	0.82
Miscellaneous --Structure	4	1.53	0.4	0.04
Miscellaneous--Other	9	3.45	10.3	1.02
Railroad	0	0	0.0	0
Smoking	0	0	0.0	0
Unknown	18	6.90	19.6	1.94
Total	261		1,009.1	

Source: Florida Forest Service https://fireinfo.fdacs.gov/fmis.publicReports/FiresByCause.aspx

Hazard Probability:

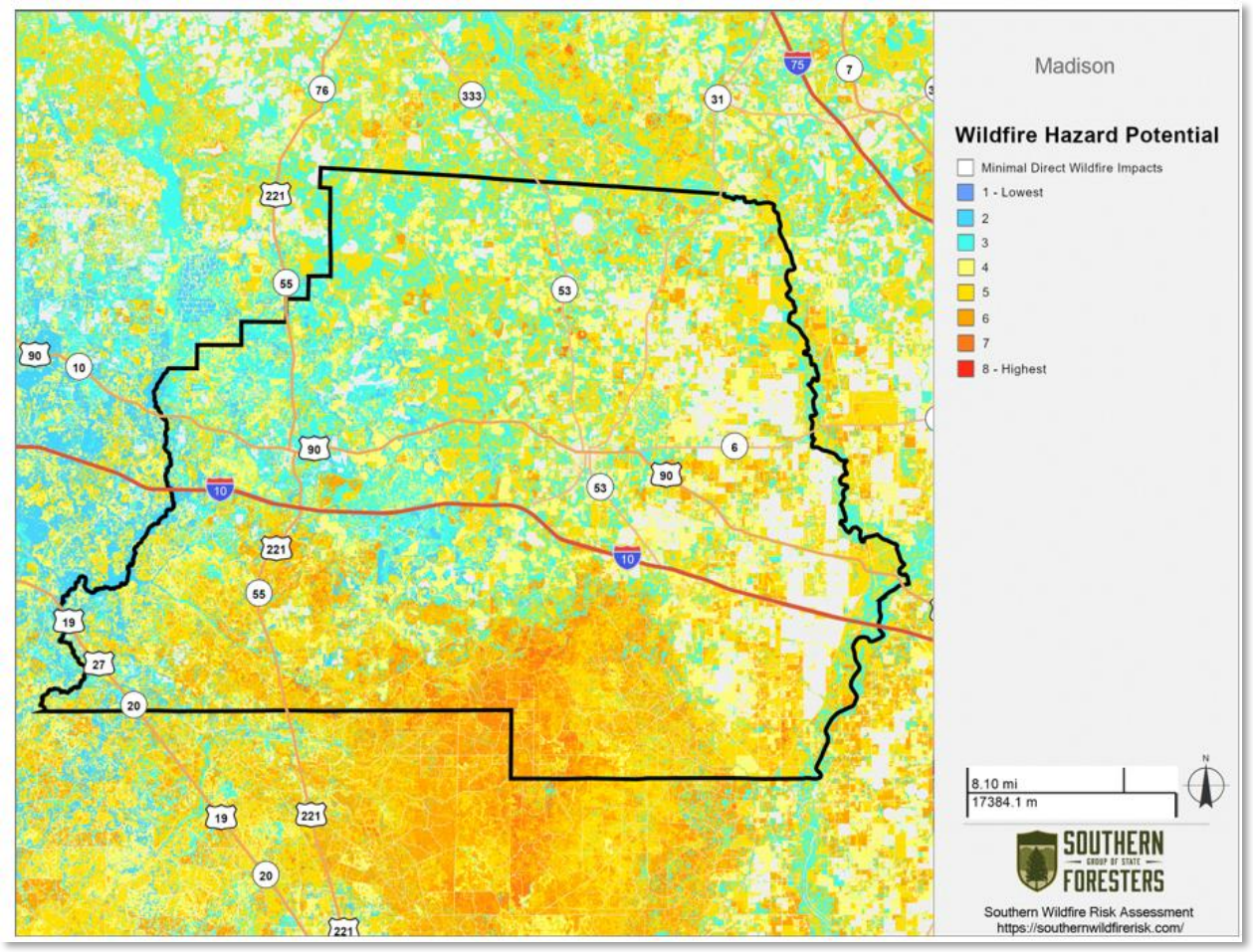
The probability of a wildfire in Madison County is High, while the probability of it occurring within the cities of Madison, Greenville, and Lee are all low. Within the county during the summer, it is common for wildfires to occur and be responded to daily. The cities conduct citizen education to help keep wildfires from occurring in the jurisdictions. The cities also have a better response capability within their jurisdictions to extinguish a fire before it escalates into a wildfire.

Figure 27: Wildfire Probability



Source: Southern Wildfire Risk Assessment

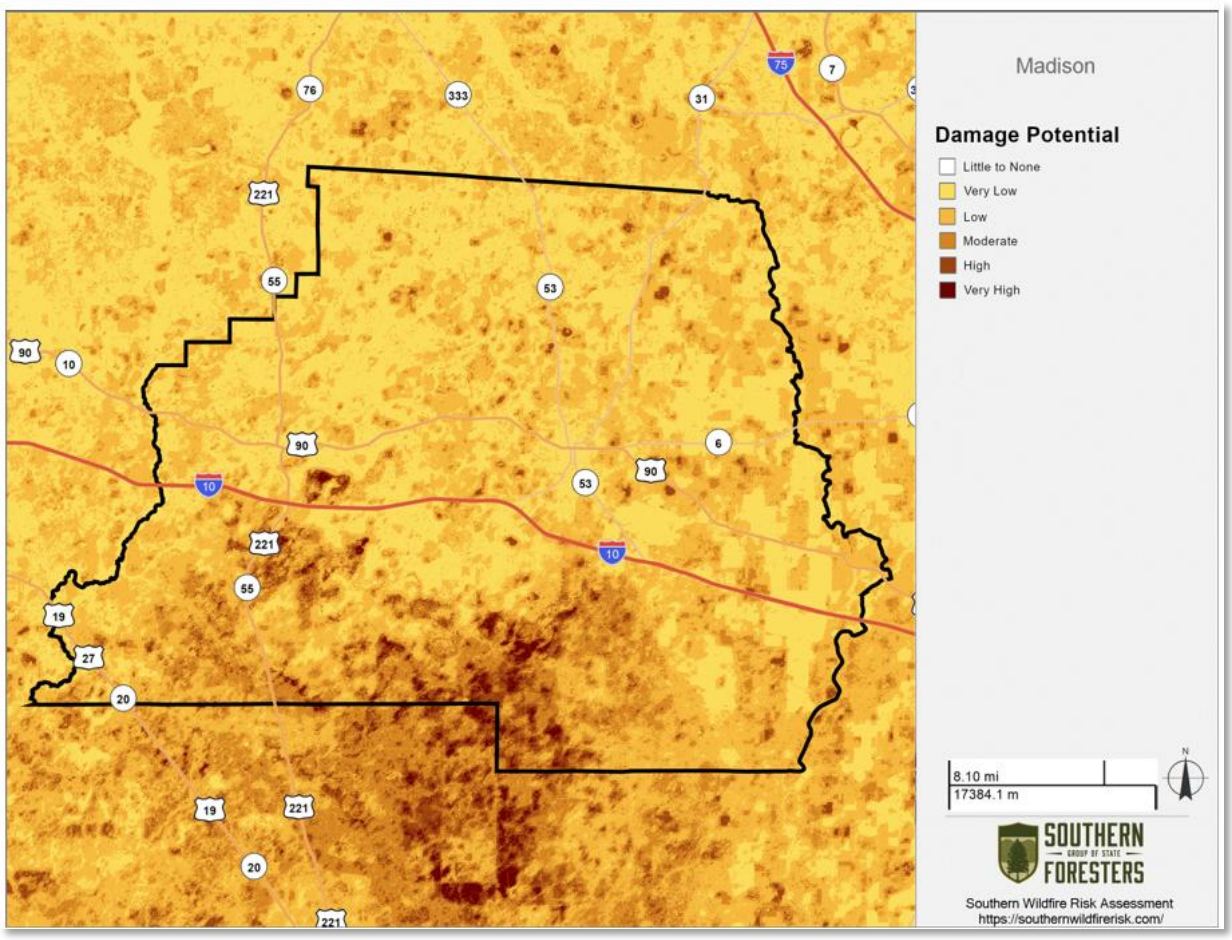
Figure 28: Wildfire Hazard Potential



Source: Southern Wildfire Risk Assessment

Hazard Vulnerability Analysis by Jurisdiction:

Figure 29: Wildfire Damage Potential



Source: Southern Wildfire Risk Assessment

Madison County: Since most of the County wooded forest, the area is extremely susceptible to fires. Whether the fire is caused by lightning or by human interaction, the resulting danger and damage is the same. Though loss of life is possible with fires, there is usually enough warning time to evacuate the impacted populations. Therefore, the primary vulnerability is buildings and structures and the related economic impact. Another potential impact is the economic losses to the timber industry in the area. Large timber farms are located within Madison County. During hot summers these farms can become vulnerable to a wildfire thereby damaging the local economy. San Pedro Bay is extremely vulnerable to wildfires. Historically, the Bay has caught fire and burned for weeks on end.

City of Madison, Towns of Greenville and Lee: The City of Madison is not very vulnerable to wildfires. The City of Madison has noted, however, that to the south of the city is an area with a higher vulnerability to wildfires and does pose a risk for fires to approach from that direction.

Greenville at one time was an important timber and sawmill community. A wildfire could significantly impact the economics of the community if a wildfire were to damage surrounding timber farms.

Lee is surrounded by areas of crops, farmland and the San Pedro Bay. Every summer, the local fire department is called on average to respond to 1-2 wildfires a month. The amount of damage and vulnerability to the town of Lee is related to the locations where these wildfires are ignited and how long they burn in relation to the arrival of first responders.

Hazard History:

March 20, 2007 – The Madison/Jefferson Fire was an incendiary fire which spotted across Highway 221 near the Madison/Jefferson County line and burned 45 acres. The fire involved road closure and participation from both Madison and Jefferson County fire departments.

March 22, 2007 – The Hill Lake Fire escaped from a campfire in the northern part of San Pedro Bay and burned 77 acres. The fire burned young, planted pines and swamp material before being suppressed by Division of Forestry crews.

April 16, 2007 – The Mill Creek Fire burned 50 acres near the Twin Rivers State Forest. It was a lightning fire that burned through the night and was discovered creeping around the following day by a Division of Forestry airplane. It was suppressed by Division of Forestry crews.

May 15, 2007 – The Kelly Fire burned 46 acres in San Pedro Bay. It was a lightning fire that burned through the night and was found creeping around the next day by a Division of Forestry helicopter. It burned planted pines and swamp material. The fire was suppressed by crews from the Division of Forestry.

May 11, 2008 – The Aucilla Plantation Fire burned 30 acres in the Open Sand Loop Road area. The fire was caused by downed power lines from high winds. It burned planted pines and swamp fuels in a vacant sub-division. The Greenville Volunteer Fire Department and Division of Forestry crews extinguished the blaze.

March 6, 2009 – The Rutherford 2 Fire burned 4 acres off of Rutherford Road. It escaped from a controlled burn and threatened one home before spotting across a dirt road. The fire was extinguished by the Lee Volunteer Fire Department, Madison Fire Rescue, and Division of Forestry crews.

May 26, 2012 – The Madison 911 Center received a report of a brush fire in the vicinity of 6216 NE Colin Kelly Highway (also known as Highway 145 or the Valdosta Highway). As fire units were being dispatched the call was upgraded to a structure fire and brush fire with one home ablaze and two more in danger.



Photo: WCTV Tallahassee

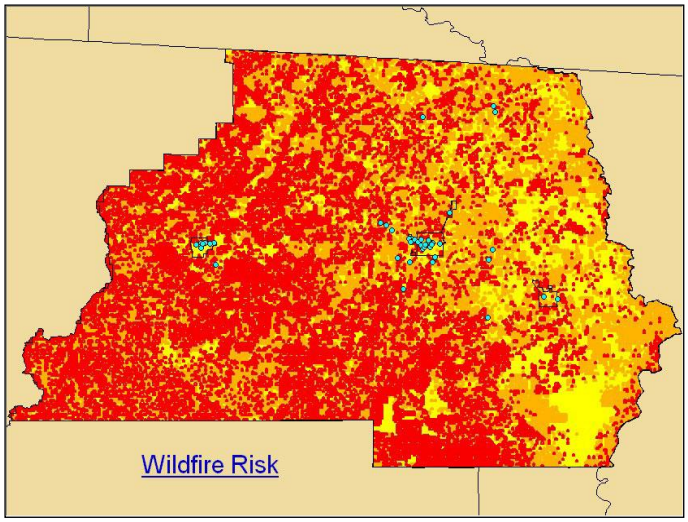
May 2-3, 2017 - Madison Mainline Fire. The fire was south of Madison on SR 14 off Main Bay Canal Rd in San Pedro Bay. The fire burned 482 acres of forest with a 5+ mph forward speed. The cause was incendiary. Plows, dozers, engines, helicopters and a fixed wing plane were all dispatched for response. The local forestry agency as well as the City of Madison, all 8 volunteer fire departments and Emergency Management responded. It was reported on 4/2/17 and after 13 plus inches or rain the following day, it was contained on 4/3/17.

Future Development and Wildfire:

If the County grows through larger population and added infrastructure, there will be more vulnerability to wildfire.

Hazard in Relation to Critical Facilities:

Figure 30: Critical Facilities in Relation to Wildfire Risk



Source: MEMPHIS

Based on the GIS data provided by the MEMPHIS system, and cross referencing a GIS list of critical facilities in Madison County, there are

Critical Facilities Located in Low Wildfire Risk Area

Gas Transmission Station #37134
Greenville City Hall
Greenville Elementary
Greenville Fire Department
Greenville Hills Academy
Greenville Hills Academy
Greenville Post Office
Joann Bridges Academy
Madison City Hall
Madison Coody Well
Madison Correctional Institute
Madison County Comm. Center
Madison County Courthouse
Madison County Courthouse Annex
Madison County EMS
Madison County EOC
Madison County Health Department
Madison County High School
Madison County Hospital
Madison Fire Department
Madison Police Department
Madison Post Office
Madison Water Dept./Garage
New Testament Christian Center

North Florida Comm. College
Pinetta Elementary
Pinetta Post Office
Progress Energy Substation
Tri County Electric – C. Lake
Tri County Electric Substation 2

Critical Facilities Located in MEDIUM Wildfire Risk Areas:

C. Lake Waste Water Plant
Embarq Communications
Florida Highway Patrol
Greenville Water Treatment Plant
Lee City Hall
Lee Elementary
Madison Academy
Madison Barrs Field Well
Madison Chason Well
Madison County Airstrip
Madison Co. Road Dept.
Madison Co. Waste Water Plant
Pine Lake Nursing Home
Tri County Electric - Madison
Tri County Electric - Overstreet
Tri County Electric Substation

Critical Facilities Located in HIGH Wildfire Risk Areas:

Greenville Waste Water Treatment Plant
Lake Park of Madison
Lee Post Office
Madison Central School
Madison Nursing Center
Tri-County Electric – Greenville

5. Winter Storms

Hazard Description:

A winter storm can range from moderate snow over a few hours to blizzard conditions with high winds, freezing rain or sleet, heavy snowfall with blinding wind-driven snow and extremely cold temperatures that lasts several days. Some winter storms may be large enough to affect several states while others may affect only a single community. All winter storms are accompanied by cold temperatures and blowing snow, which can severely reduce visibility. A severe winter storm is one that drops 4 or more inches of snow during a 12 – hour period, or 6 or more inches during a 24-hour span. An ice storm occurs when freezing rain falls from clouds and freezes immediately on impact.

All winter storms make driving and walking extremely hazardous. The aftermath of a winter storm can impact a community or region for days, weeks, and even months. Storm effects such as extreme cold, flooding, and snow accumulation can cause hazardous conditions and hidden problems for people in the affected area. People can become stranded on the road or trapped at home, without utilities or other services. Residents, travelers and livestock may

become isolated or stranded without adequate food, water and fuel supplies. The conditions may overwhelm the capabilities of a local jurisdiction. Winter storms are considered deceptive killers as they indirectly cause transportation accidents, and injury and death resulting from exhaustion/overexertion, hypothermia and frostbite from wind chill, and asphyxiation; house fires occur more frequently in the winter due to lack of proper safety precautions. "Wind chill" is a calculation of how cold it feels outside when the effects of temperature and wind speed are combined. On November 1, 2001, the National Weather Service (NWS) implemented a replacement Wind Chill Temperature (WCT) index for the 2001/2002 winter season. The reason for the change was to improve upon the current WCT Index, which was based on the 1945 Siple and Passel Index. A winter storm watch indicates that severe winter weather may affect your area. A winter storm warning indicates that severe winter weather conditions are definitely on the way. A blizzard warning means that large amounts of falling or blowing snow and sustained winds of at least 35 miles per hour are expected for several hours.

1991-2020 Temperature Normals

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max	63.0	67.0	73.4	79.2	85.8	89.7	90.9	90.6	87.0	80.5	71.7	65.5	78.7
Mean	51.6	55.3	60.9	67.0	74.1	79.6	81.2	81.1	77.5	69.3	60.1	54.3	67.7
Min	40.2	43.6	48.4	54.8	62.4	69.5	71.5	71.6	67.9	58.1	48.6	43.0	56.7

Source: http:// https://climatecenter.fsu.edu/products-services/data/1991-2020-normals/madison

Winter Storms on average occur once every three years, or a probability of 33.3%.

Hazard Impact Analysis:

Madison County structures are not at risk from a winter storm.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: Winter Storms are more common in Madison County than most counties in Florida due to its geographic location in Northern Florida. Past events have caused widespread damage from falling trees and power lines, leading to power outages and the activation of emergency shelters. In some cases, Interstate 10, the major transportation route between Tallahassee and Jacksonville has been shut down due to these storms leaving motorists stranded and emergency responders scrambling to provide assistance. Vulnerability in Madison County due to winter storms and freezing conditions can be characterized in three categories:

Human health issues due to exposure. In severe conditions many Floridians will be unprepared for extreme cold. The geographic location of Florida creates warm, tropical temperatures most of the year. Therefore, some residents will not have sufficient heating capabilities and could be exposed to the elements. Residents have also been known to cause themselves injury or death by using dangerous heating practices, including the indoor use of electric and propane heaters designed for the outdoors.

Agricultural and livestock issues due to exposure. Much of Madison County's economy is based on agriculture and livestock, so extreme cold conditions will severely impact this sector. Prolonged periods of cold will result in financial loss to farmers from damaged crops and animals further endangering the businesses of many small and medium sized farms.

Transportation issues due to icy driving conditions. Interstate 10 is the major transportation corridor through Madison County. With winter storms, this and other roads have become icy causing dangerous conditions for commercial and residential traffic throughout the county. Accidents are a high probability with the subsequent injuries and economic impact. Also, an increase in costs to the county will be felt for providing services such as police for accident reporting and road/traffic control, public works for debris removal and road repairs, and emergency services for managing the event.

Madison County is more economically vulnerable to the effects of a Winter Storm due to the risks faced by the agriculture and livestock industry. Cold temperatures can drastically affect the crops and growth for that season. Many crops can die off and leave an economic burden for farmers. Madison County is less vulnerable than the cities to injuries and deaths from a Winter Storm/Freeze because of a lower concentration of people.

City of Madison, Towns of Greenville and Lee: The overall vulnerability to Winter Storms is the same for each of the cities but slightly different than the vulnerability faced by the county. The major differences being the Cities are more vulnerable to transportation and traffic issues due to the greater number of roads and local population density. Also, the larger number of people will increase the probability of injuries, illnesses or deaths related to the cold. The city of Madison has pointed out that many of the problems faced by the County are related to transportation issues and limbs falling. However, the City of Madison faces a different issue with the water system since they run the Water service for the county. In many cases, pipes can freeze and burst. This creates more work and overtime for the Public Works department.

The health risks associated with Winter Storms are also a considerable problem. With Florida being so hot in the summer many people have their gas pumps and pilot lights turned off. When a fast-moving freeze develops in the area, everyone wants their pilot lights reignited simultaneously causing a backup of service calls and overtime. The city is trying to combat these issues by offering free propane water heaters to the public. It is an effort to make propane a useful product year-round and eliminating many of the customers who discontinue their service each summer season.

From a historical/economic standpoint, the city and county residents were heavy into the Tobacco industry for much of the 1900's. It's questioned whether some of the hard winter freeze events felt during the 1980's and 90's led to the demise of the once prospering industry. During the winter storm of 1980 there was widespread crop damage to tobacco. Most of the farmers in the area lost their crops that year and were plagued financially; many went out of business. Those who did not, fell fate to the winter storms to come.

Hazard History:

January 2014 – A winter storm impacted Northern Florida in January 2014. Icy roads caused major transportation issues and low temperatures were dangerous to people and animals. County and city government offices were closed 1/28 – 1/29, 2015. Schools were closed 1/28 – 1/30 2015.

January 2, 2018 - A cold air mass moved into the southeastern US affecting Madison County and the entire Big Bend area. Lows were recorded in the upper 20's and lower 30's. Madison County took protective actions to secure ARC warming stations in several churches. I-10 E and W bound lanes were closed by FHP from MM 209-258 which included Madison County on 1/3/20 from 06:40 to 14:42.

January 21-22, 2025 - The area received a mix of wintery precipitation including freezing rain, sleet, and snow flurries. Road conditions deteriorated due to ice and freezing temperatures, with bridges and overpasses freezing over. The hazardous conditions prompted officials to strongly discourage travel unless absolutely necessary. Emergency responders faced difficulties reaching those who needed help due to the icy roads. Ice accumulation on trees and powerlines led to downed trees, limbs, and power outages. The Madison County BOCC & Sheriff's Office administrative offices closed due to the weather. Local small businesses and restaurants had to close unexpectedly. Widespread hard freezes after the storm caused temperatures to fall into the upper teens and low 20s, impacting roadways for several mornings. A warming center opened at the Madison County Extension office for 2 nights.





Future Development and Winter Storms:

If the County grows through larger population and added infrastructure, there will be more vulnerability to winter storms.

Hazard in Relation to Critical Facilities:

The impact to critical facilities is minimal. Closure of government services due to a winter storm impacts services provided to citizens.

6. Droughts

Hazard Description:

A drought is a period of drier-than-normal conditions that results in water-related problems. Precipitation falls in uneven patterns across the country. When there is no rain or only a small amount of rain falls, soils can dry out and plants can die. When rainfall is less than normal for several weeks, months, or years, the flow of streams and rivers declines. Water levels in lakes and reservoirs fall, and the depth of water in wells decreases. If dry weather persists and water supply problems develop, the dry period can become a drought. The first evidence of drought usually is seen in records of rain fall. Within a short period of time, the amount of moisture in soils can begin to decrease. The effects of a drought on flow in streams and rivers or on water levels in lakes and reservoirs may not be noticed for several weeks or months. Water levels in wells may not reflect a shortage of rainfall for a year or more after the drought begins. A period of below-normal rainfall does not necessarily result in drought conditions. Some areas of the United States are more likely to have droughts than other areas. In humid, or wet, regions, a drought of a few weeks is quickly reflected in a decrease in soil moisture and in declining flow in streams. In arid, or dry, regions, people rely on ground water and water in reservoirs to supply their needs. They are protected from short-term droughts but may have severe problems during long dry periods because they may have no other water source if wells or reservoirs go dry.

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

The Keetch-Byram drought index (KBDI) is a continuous reference scale for estimating the dryness of the soil and duff layers. The index increases for each day without rain (the amount of increase depends on the daily high temperature) and decreases when it rains. The scale ranges from 0 (no moisture deficit) to 800. The range of the index is determined by assuming that there is 8 inches of moisture in a saturated soil that is readily available to the vegetation.

Drought Emergency Information

1. Heat kills by pushing the human body beyond its limits. Under normal conditions, the body's internal thermostat produces perspiration that evaporates and cools the body. However, in extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature.

2. Most heat disorders occur because the victim has been overexposed to heat or has over exercised for his or her age and physical condition. Other conditions that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality.

3. A prolonged drought can have a serious economic impact on a community. Increased demand for water and electricity may result in shortages of resources. Moreover, food shortages may occur if agricultural production is damaged or destroyed by a loss of crops or livestock.

Hazard Profile:

Periodic droughts have been a problem in Madison County and the potential for one exists each year. Should a prolonged drought occur during the summer months, with temperatures above normal levels, there would be severe losses in all areas of agricultural production. These losses would include poultry production, livestock operations and approximately 35,000 acres of tobacco, soybeans, corn and watermelons.

As stated in the Madison County CEMP, there has been no occurrence of droughts severe enough to threaten the lives of the Madison County residents, although periodic droughts have been a problem in Madison County region. However, there is a secondary risk of forest, grass and muck fires because of drought conditions. This will, therefore, be an added concern for the county, as well as the State Division of Forestry.

In addition, the CEMP hazard assessment outlines that extreme heat is rare and is a minimal threat to human safety as well as to the cattle and agricultural industries in Madison County. Each year, temperatures rise into the high 90's and isolated low 100's.

Droughts on average occur once every two years, or a 50% probability of occurrence.

Hazard Impact Analysis:

Madison County structures are not at risk from a drought event.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: Droughts occur equally and at the same rate across the entire Madison County area, however, the vulnerability to the county versus the cities are quite different. The Madison County economy depends heavily on agricultural business and farming. The County areas with the high level of agriculture, livestock, and timber forest are much more economically vulnerable than the cities. When Droughts occur, the county suffers heavily through reduced crop growth and the onset of wildfires. A severe drought may have an adverse impact on farm crops as well as on the poultry and cattle raising industry. Droughts and heat waves lead to increases in wildfire which can devastate agricultural areas with damages. Additionally, lack of moisture in the soil can severely damage the growth of timber, one of the county's most important industries. As a result, the county is more economically vulnerable than the cities to Droughts.

City of Madison, Towns of Greenville and Lee: All three cities are equally vulnerable to the effects regarding drought. Compared to the county, the cities are less economically vulnerable to droughts but are more vulnerable to loss of life. The urban environment found in the cities and the surrounding areas has a higher population of humans at risk from heat related illnesses and possible deaths. There are more resources available within the cities found to offer aid these problems, but the human risk is higher than the rest of the county in nature.

As mentioned above, economically the cities do not share an equal vulnerability faced by the risks of the county.

Hazard History:

May 2002- Madison County suffered a month-long drought without precipitation as well as high temperatures. The Keetch - Byram Index was at 601, which is nearing "Dangerous Levels". The FDOF and local fire departments were on a heightened level of awareness.

July 2002 – Madison County received daily heat advisories by the National Weather Service during July. Heat indexes were reaching the 110-115 degree range. Warnings were issued to stay indoors. This is following a May/June drought that had Fire responders on high alert the past months.

Drought history 2010-2024

Date	Type	Deaths	Injuries	Damage
11/30/2010	Drought	0	0	0
12/1/2010	Drought	0	0	0
1/1/2011	Drought	0	0	0
2/1/2011	Drought	0	0	0
5/31/2011	Drought	0	0	0
6/1/2011	Drought	0	0	0
7/1/2011	Drought	0	0	0
8/1/2011	Drought	0	0	0
9/1/2011	Drought	0	0	0

10/1/2011	Drought	0	0	0
11/1/2011	Drought	0	0	0
12/1/2011	Drought	0	0	0
1/17/2012	Drought	0	0	0
2/1/2012	Drought	0	0	0
3/1/2012	Drought	0	0	0
4/1/2012	Drought	0	0	0
5/1/2012	Drought	0	0	0
6/1/2012	Drought	0	0	0
1/29/2013	Drought	0	0	0
2/1/2013	Drought	0	0	0
10/08/2019	Drought	0	0	0
11/08/2022	Drought	0	0	0
12/01/2022	Drought	0	0	0
01/01/2023	Drought	0	0	0

Source: http:// https://www.ncdc.noaa.gov/stormevents

These drought events were included in Storm Data when the intensity of the moisture deficiency and other factors resulted in a D2 classification, or higher, as indicated in the US Drought Monitor.

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: ▪ short-term dryness slowing planting, growth of crops or pastures Coming out of drought: ▪ some lingering water deficits ▪ pastures or crops not fully recovered
D1	Moderate Drought	▪ Some damage to crops, pastures ▪ Streams, reservoirs, or wells low, some water shortages developing or imminent ▪ Voluntary water-use restrictions requested
D2	Severe Drought	▪ Crop or pasture losses likely ▪ Water shortages common ▪ Water restrictions imposed
D3	Extreme Drought	▪ Major crop/pasture losses ▪ Widespread water shortages or restrictions
D4	Exceptional Drought	▪ Exceptional and widespread crop/pasture losses ▪ Shortages of water in reservoirs, streams, and wells creating water emergencies

Source: http://droughtmonitor.unl.edu/AboutUs/ClassificationScheme.aspx

Madison County could experience maximum temperatures over 100 degrees Fahrenheit. A record of 105 degrees was set in Tallahassee on June 15, 2011. The average high temperature in Madison County usually occurs in July near 91.4 degrees.

1981-2010 Temperature Normals

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max	63.0	67.0	73.4	79.2	85.8	89.7	90.9	90.6	87.0	80.5	71.7	65.5	78.7
Mean	51.6	55.3	60.9	67.0	74.1	79.6	81.2	81.1	77.5	69.3	60.1	54.3	67.7
Min	40.2	43.6	48.4	54.8	62.4	69.5	71.5	71.6	67.9	58.1	48.6	43.0	56.7

Source: https://climatecenter.fsu.edu/products-services/data/1991-2020-normals/madison

Future Development and Drought:

If the County grows through larger population and added infrastructure, there will be more vulnerability to drought.

Hazard in Relation to Critical Facilities:

There are no critical facilities at risk for a drought event.

7. Sinkholes

Hazard Description:

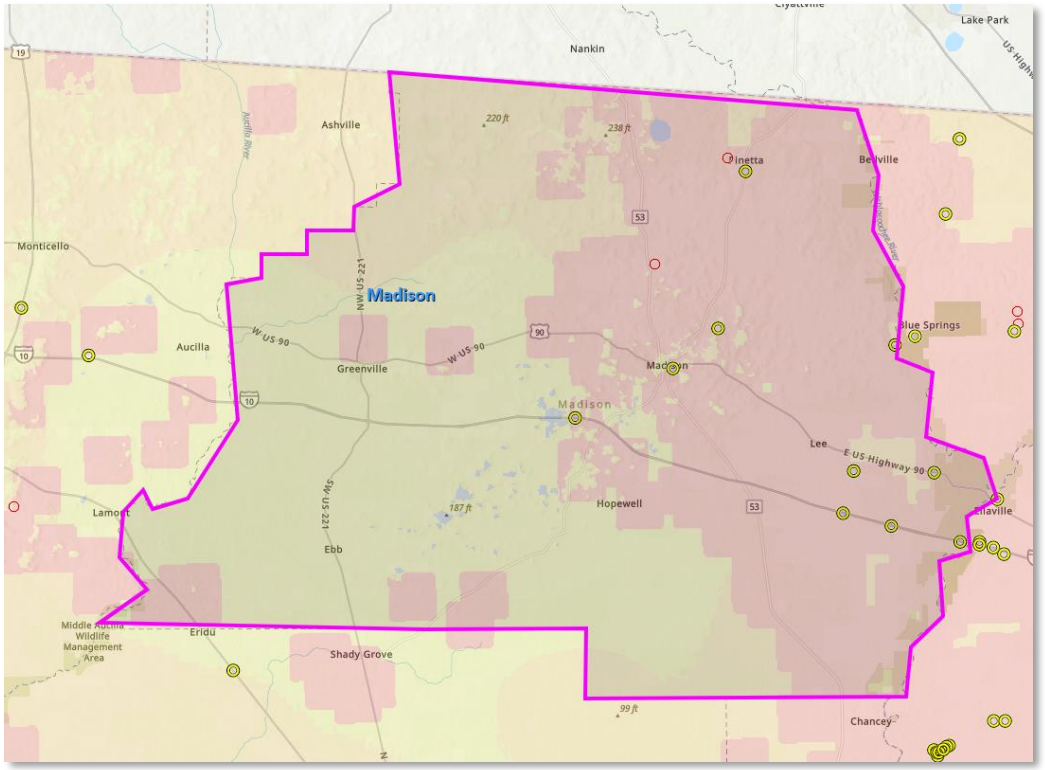
Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that can naturally be dissolved by ground water circulating through them. As the rock dissolves, spaces and caverns develop underground. Sinkholes are dramatic because the land usually stays intact for a while until the underground spaces just get too big. If there is not enough support for the land above the spaces then a sudden collapse of the land surface can occur. These collapses can be small or they can be huge and can occur where a house or road is on top.

The most damage from sinkholes tends to occur in Florida, Texas, Alabama, Missouri, Kentucky, Tennessee, and Pennsylvania.

Hazard Profile:

Based on MEMPHIS, most of Madison County is at a low risk of sinkholes; however, there are three to four identified areas that pose a much higher risk to the community. Two of these identified locations are close in proximity to the townships of Madison and Lee.

Figure 31: Madison County Identified Sinkhole Locations



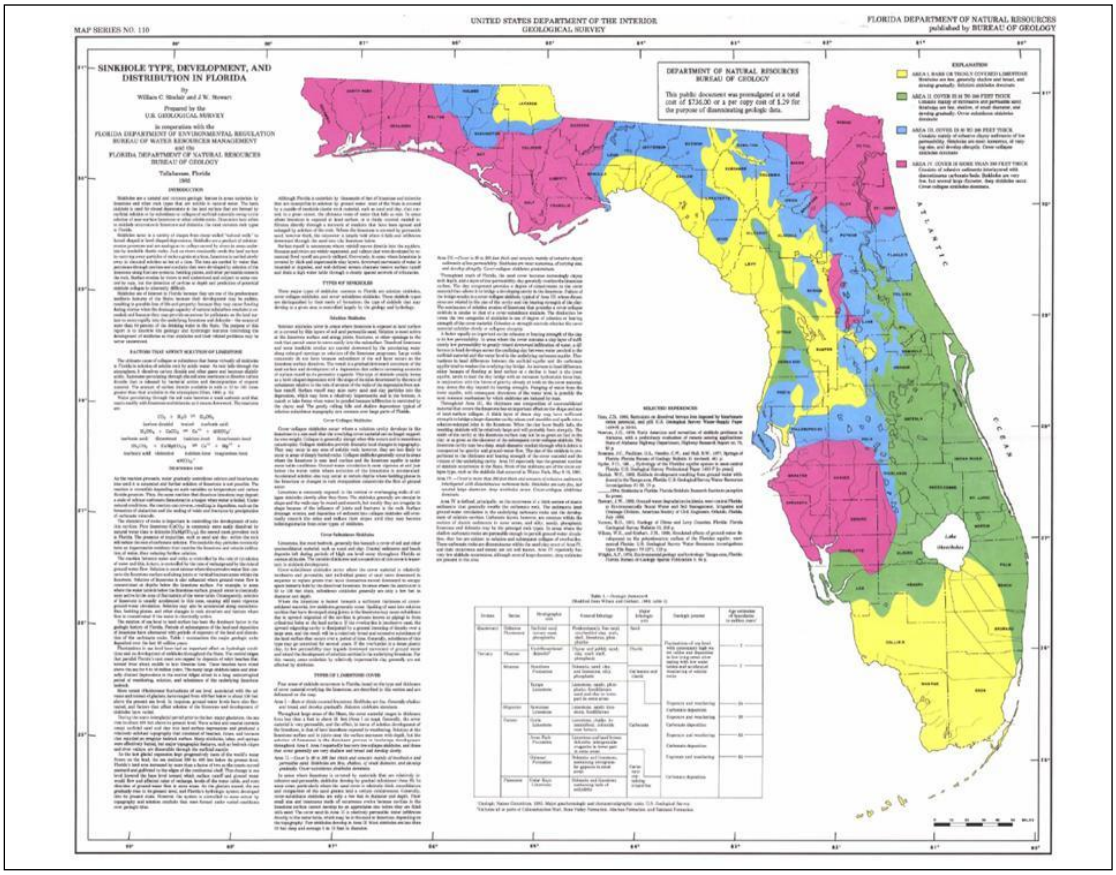
Source: https://ca.dep.state.fl.us/mapdirect/?focus=fgssinkholes

There are as many as 150 sinkholes reported each year in Florida. This is due to the fact that Florida is basically all limestone with a thin layer of sediment covering it, usually very loose sand. But the covering on the porous limestone below is often only temporary. Limestone is very soluble. And as water moves through it, small holes develop and grow into larger holes. The overburdened sediments can cover the hole for a certain amount of time, but once the holes gets larger than their ability to bridge across it, the sediments collapse into it.

There are usually sinkholes common wherever you have limestone terrain. Sinkholes are rare in the southern part of the state, with central Florida and the Big Bend seeing the most.

The Following Map from the Department of the Interior, Geological Survey, shows that Madison County has two distinct risk zones for sinkholes. Most of the County is in the blue area designating it a high risk area with a range of 30-200 feet of earth covering the underlying limestone. The higher risk area on the Eastern side of the county in Yellow identifies it as having a bare or thin cover on the limestone. The Town of Lee is located in this elevated risk area.

Figure 32: Sinkhole Risk Zones in Relation to Madison County



Source: Department of the Interior, Geological Survey

Sinkholes forming from natural causes

Sinkholes have a strong occurring relationship with the years that follow a Drought. When an area has a long-term lack of rain and water levels decrease, there's usually a correlated link to an increase in incidences of sinkholes being reported. Historically, years where dry-weather has been followed by wet-weather, there have been some of the greatest increases in sinkhole occurrences.

Sinkholes forming from man-made causes

Ground water pumping in specific areas when water levels are already low and are forced lower can trigger a more sudden collapse of overburdened sediments and create sinkholes that might not have otherwise happened. Increases in ground water pumping, loading at land surface, retention pond building, and altering a landscape where you're changing the overburdened thickness are all activities that can induce sinkholes.

Hazard Probability:

The probability that a sinkhole will occur in Madison County sometime in the near future is high, but the likelihood of this hazard causing significant damage to the county in general is very low. These events are isolated and can range in size from just a few feet wide to a couple of acres. When sinkholes form in an unpopulated area, they usually go unnoticed and cause little to no damage. However, when they occur in a populated area, the results can be severe. In past cases in Florida, entire homes have been swallowed up due to sinkholes forming under them. When this occurs, there is little that the community can due to prevent it. The probability of a sinkhole affecting the City of Madison is high, based on the MEMPHIS analysis. However, the representatives of the City of Madison have stated that it is a low priority to them because of the infrequent occurrence combined with the minimal expense that it has caused in the past. The probability of a sinkhole in Lee is Medium to High because of the surrounding area historically.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: The vulnerability of Madison County is low regarding sinkholes. There are three locations identified by the USGS within the county. There's a low risk of death or injuries to residents based on the rural surroundings of the county. A sinkhole is most likely going to occur in an area of unpopulated land and will have little to no economic impact.

City of Madison, Towns of Greenville and Lee: Each of the cities face similar vulnerabilities to the impacts of sinkholes. The increased infrastructure and populations heighten the economic vulnerabilities. Of the three cities, Madison and Lee have the highest vulnerability due to past historical sinkhole events, as well as documentation provided by the USGS and the Memphis System. If a sinkhole occurs in one of the cities, the vulnerability to damaging structures is higher than that faced by the county.

Hazard History:

No sinkholes have occurred in the last 5 years. Notable previous occurrences:

In 2000, a sinkhole formed 7 miles south of the City of Madison along County Road 360. Part of the road was damaged due to the event and had to be repaired. The Madison County Public Works Department filled the hole in and repaired the road. There is a sinkhole located in Lee that has existed for more than 50 years. It is roughly the size of 2 acres of land and is located just south of Interstate 10. The sinkhole is 34 feet deep at the center.

In March 2014, a sinkhole formed at the eastern shoreline of Lake Frances. The hole was 12-feet deep and 4-feet wide. City of Madison work crews responded by vacuuming the water out of the hole, then filling the hole with dirt. Additionally, the crews fortified a nearby street

pole with support beams to keep it from falling on Lake Shore Drive. The pole carries electrical power to operate the aerating fountain on Lake Frances.



Source: Madison Florida News

On July 7, 2014, a sinkhole was reported to Madison County Emergency Management. Upon arrival, there was a sinkhole approximately 100 ft across and 20 ft. deep. The sinkhole threatened one unoccupied structure and caused damage to a county road (Celosia Dr.). The road is a connection between Country Kitchen Rd and Hwy 145 and is a residential area.



Source: Madison County EM

Residents in the area were advised of the issue and encouraged to leave the area for safety. Emergency Management reported the sinkhole to the Florida Geological Survey for assessment.

Future Development and Sinkholes:

If the County grows through larger population and added infrastructure, there will be more vulnerability to sinkholes.

Hazard in Relation to Critical Facilities:

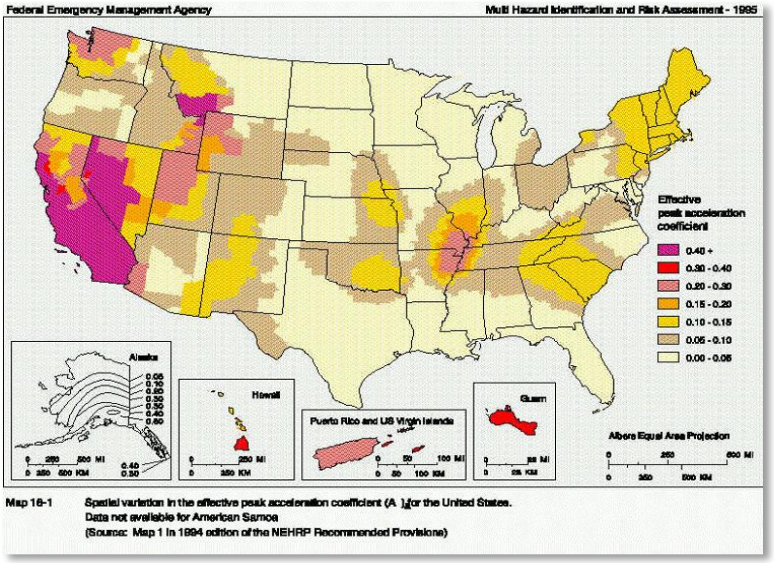
Critical facilities have the same likelihood of being impacted by a sinkhole as any other structure. No critical facilities have been impacted by a sinkhole in Madison County.

8. Earthquakes

Hazard Description:

Most earthquakes are causally related to compressional or tensional stresses built up at the margins of the huge moving lithospheric plates that make up the earth's surface. The immediate cause of most shallow earthquakes is the sudden release of stress along a fault, or fracture in the earth's crust, resulting in movement of the opposing blocks of rock past one another. These movements cause vibrations to pass through and around the earth in wave form, just as ripples are generated when a pebble is dropped into water. Volcanic eruptions, rock-falls, landslides, and explosions can also cause a quake, but most of these are of only local extent.

Figure 33: Tectonic Plate Earthquake Frequency in the United States



According to the theory of plate tectonics, the earth's crust is divided into several major plates, some 50 miles thick, which move slowly and continuously over the 124 interior of the

earth. Most earthquakes are initiated when, due to slowly accumulating pressure, the ground slips abruptly along a geological fault plane on or near a plate boundary. The resulting waves of vibration within the earth create ground motion at the surface that vibrates in a very complex manner. The point where the fault first slips is termed the "focus" or "hypocenter" of the earthquake. A theoretical point on the earth's surface directly above the focus is termed the "epicenter" of the earthquake.

Earthquakes are among the most frightening and devastating natural events. They strike without warning, allowing no time for preparation or evacuation.

Nationwide, at least 39 states are considered at risk from moderate to great earthquakes. Earthquakes have struck many areas of the United States, including Alaska and the Central and East Coast states.

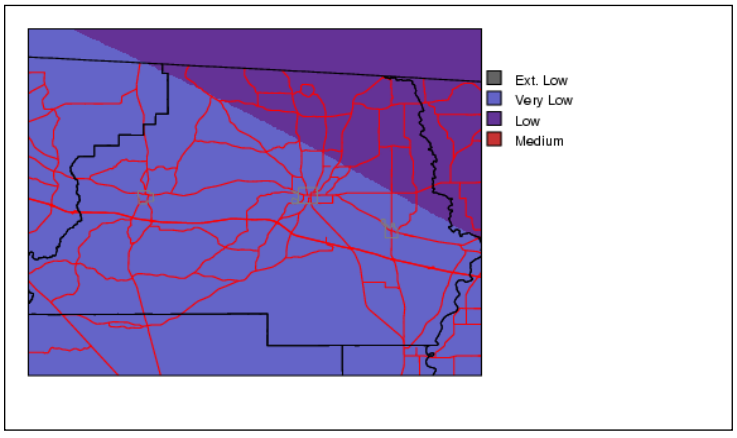
The Richter scale is a scale of numbers used to tell the power (or magnitude) of earthquakes. Earthquakes 4.5 or higher on the Richter scale can be measured all over the world. An earthquake that scores 3.0 is ten times the amplitude of one that scores 2.0. The energy that is released increases by a factor of about 32. Every increase of 1 on the Richter scale corresponds to an increase in amplitude by a factor of 10 so therefore, it is a logarithmic scale.

Hazard Profile:

If an earthquake were to affect Madison County and the cities of Madison, Greenville and Lee, it would most likely not cause significant damage or loss of life. The following maps and reports from the MEMPHIS system estimate the potential damages for the County.

Hazard Impact Analysis:

Figure 34: Madison County Earthquake Risk



Source: MEMPHIS

Madison County Population at Risk for USGS 50 Year Earthquake

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Very Low	7,320	2,154	7,051	3,449	191	1,342	**15,564**
Low	728	575	1,374	470	0	208	**3,169**

Source: MEMPHIS

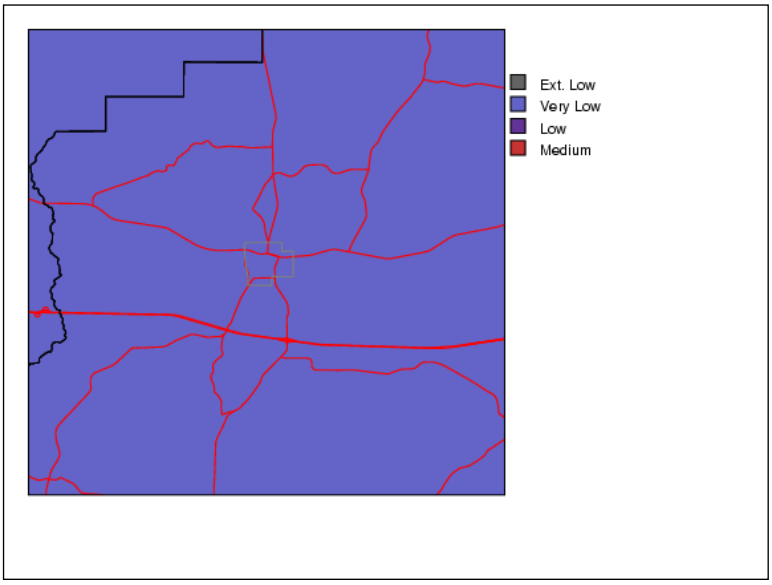
Madison County Value of Structures at Risk for USGS 50 Year Earthquake

Zone	Structures						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Government/ Institution	**Total**
Very Low	$412.62M	$82.42M	$30.59M	$157.77M	$277.85M	$979.54M	**$1.94B**
Low	$92.36M	$27.91M	$556.97T	$2.37M	$22.07M	$302.69M	**$447.97M**

Source: MEMPHIS

The City of Madison was not a jurisdiction included in the analysis by MEMPHIS and there is no data available to accurately support a vulnerability estimate related to this hazard.

Figure 35: Town of Greenville Earthquake Risk



Source: MEMPHIS

Town of Greenville Population at Risk for USGS 50 Year Earthquake

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Very Low	549	167	464	267	65	113	**812**

Source: MEMPHIS

Town of Greenville Structures at Risk for USGS 50 Year Earthquake

Zone	Structures						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Government/ Institution	**Total**
Very Low	237	50	15	32	21	47	**402**

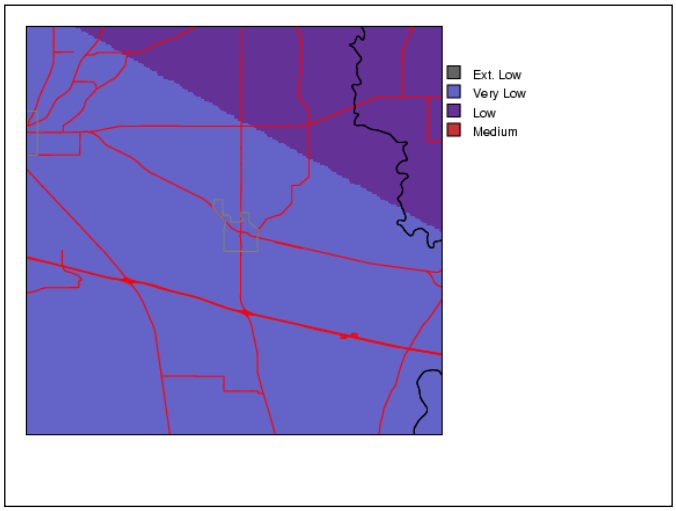
Source: MEMPHIS

Town of Greenville Value of Structures at Risk for USGS 50 Year Earthquake

Zone	Structures						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Government/ Institution	**Total**
Very Low	$26.67M	$3.79M	$3.14M	$5.50M	$5.85M	$6.60M	**$51.56M**

Source: MEMPHIS

Figure 36: Town of Lee Earthquake Risk



Source: MEMPHIS

Town of Lee Population at Risk for USGS 50 Year Earthquake

Zone	Population						
	Minority	Over 65	Disabled	Poverty	Lang. Isolated	Single Parent	**Total**
Very Low	29	39	184	92	17	32	**350**

Source: MEMPHIS

Town of Lee Structures at Risk for USGS 50 Year Earthquake

Zone	Structures						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Government/ Institution	**Total**
Very Low	60	19	4	15	8	34	**140**

Source: MEMPHIS

Town of Lee Value of Structures at Risk for USGS 50 Year Earthquake

Zone	Structures						
	SF Residential	Mobile Home	MF Residential	Commercial	Agriculture	Government/ Institution	**Total**
Very Low	$6.90M	$1.37 M	$83.61T	$2.33M	$2.19M	$7.25M	**$20.12 M**

Source: MEMPHIS

Hazard Probability:

The probability is extremely low that a major earthquake will impact Madison County and cause significant damage. Madison County is in the low-risk category for seismic activity and there are no past local recorded incidents.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: It is understood that the effects of an earthquake event are geographically widespread and affect an entire region when they occur. Using the Memphis data and analysis, it was found that the three incorporated jurisdictions, Madison, Greenville, and Lee are all located in a "Very Low" area of risk to earthquakes. Because of these two factors, the vulnerability to an Earthquake incident affects Madison County, and cities of Madison, Lee, and Greenville in the same respect. Even with the three incorporated cities, each containing more people and infrastructure than the county, the estimated effects felt by these areas should not cause a considerably more damage.

City of Madison: The City of Madison is affected by earthquakes in the same respect as Madison County

Town of Greenville: The Town of Greenville is affected by earthquakes in the same respect to Madison County

Town of Lee: The Town of Lee is affected by earthquakes in the same respect to Madison County

Future Development and Earthquakes:

If the County grows through larger population and added infrastructure, there will be more vulnerability to earthquakes. However, the probability remains very low that this event will impact Madison County.

Hazard History:

Madison County does not sit near a fault line, so the discussion regarding earthquakes is provided more as a regional aspect rather than a local one. For this reason, the historical accounts provided include those occurrences that have been found to affect the State of Florida. Although Florida is not usually considered to be a state subject to earthquakes, several minor shocks have occurred. Only one of these caused damage in the State of Florida.

A shock occurred near St. Augustine, in the northeast part of the State, in January 1879. The Nation's oldest permanent settlement, founded by Spain in 1565, 129 reported that heavy shaking knocked plaster from walls and articles from shelves. Similar effects were noted at Daytona Beach, 50 miles south. At Tampa, the southernmost point of the felt area, the trembling was preceded by a rumbling sound at 11:30 p.m. Two shocks were reported in other areas, at 11:45 p.m. and 11:55 p.m. The tremor was felt through north and central Florida, and at Savannah, Georgia.

The next tremor to be felt by Floridians was centered outside the State. It was the famous Charleston, South Carolina, shock in August 1886. The shock was felt throughout northern Florida, ringing church bells at St. Augustine and severely jolting other towns along that section of Florida's east coast. Jacksonville residents felt many of the strong aftershocks that occurred in September, October, and November 1886.

On June 20, 1893, Jacksonville experienced another slight shock, apparently local, that lasted about 10 seconds. Another minor earthquake shook Jacksonville at 11:15 a.m. October 31, 1900. It caused no damage.

A sudden jar caused doors and windows to rattle at Captiva in November 1948. The apparent earthquake was accompanied by sounds like distant heavy explosions. Captiva is located on Captiva Island, in the Gulf west of Fort Myers.

On November 18, 1952, a slight tremor was felt by many at Quincy, a small town about 20 miles northwest of Tallahassee. Windows and doors rattled, but no serious effects were noted.

There have been no earthquake events in Madison County since the last plan update in 2015.

Hazard in Relation to Critical Facilities:

Based on the GIS data as provided by the MEMPHIS system, and cross referencing a GIS list of critical facilities in Madison County, there are:

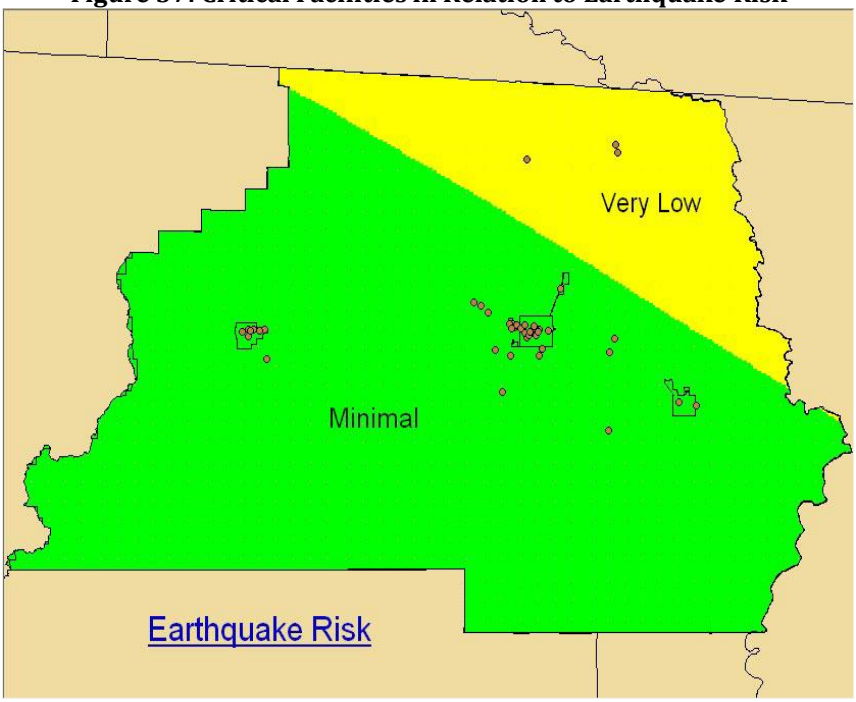
Critical Facilities Located in Minimal Earthquake Risk Areas.

Embarq Communications
Florida Highway Patrol
Gas Transmission Station #37134
Greenville City Hall
Greenville Elementary School
Greenville Fire Department
Greenville Hills Academy
Greenville Hills Academy (R. Program)
Greenville Post Office
Greenville Waste Water Plant
Greenville Water Treatment Plant
Joann Bridges Academy
Lake Park of Madison
Lee City Hall
Lee Post Office
Lee Elementary School
Madison Academy
Madison Barrs Field Well and W. Tower
Madison Chason Well
Madison City Hall
Madison Coody Well
Madison Correctional Institute
Madison County Air Strip
Madison County Central School
Madison County Comm. Center
Madison County Courthouse
Madison County Courthouse Annex
Madison County EMS
Madison County Health Dept.
Madison County High School
Madison County Hospital
Madison County Road Dept.
Madison County EOC
Madison County Fire Department
Madison Nursing Center
Madison Police Department
Madison Post Office
Madison Waste Water Plant
Madison Water Dept./Garage
New Testament Christian Center
North Florida Comm. College
Pine Lake Nursing Home
Progress Energy Substation
Tri County Electric - Greenville
Tri County Electric - Madison
Tri County Electric - Overstreet
Tri County Electric Substation 2

Critical Facilities Located in Very Low Earthquake Risk Areas.

Cherry Lake Water Treatment Plant
Pinetta Elementary
Pinetta Post Office
Tri County Electric – Cherry Lake
Tri County Electric Substation 1

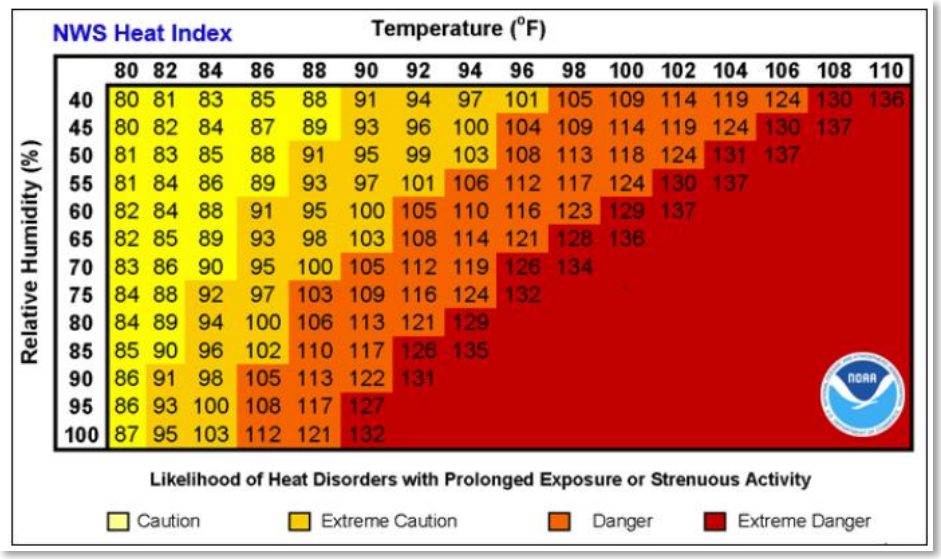
Figure 37: Critical Facilities in Relation to Earthquake Risk



Source: MEMPHIS

9. Extreme Heat

Extreme heat is defined as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. The Heat Index is a measure of how hot the temperature feels when humidity is factored in with the actual temperature. In the Heat Index chart shown below, the red area indicates extreme danger. Alerts will be issued when the heat index is expected to exceed 105-110 degrees Fahrenheit for at least two consecutive days.



Hazard Impact Analysis:

Elderly and youth populations are more vulnerable to extreme heat conditions. Children should be protected when playing outdoors in the summer months, especially from sunburn and overheating. Similarly, the elderly and individuals with disabilities and chronic illnesses should have access to heat relief when temperatures climb. Vulnerable populations, and individuals that have outdoor professions may face greater risk from extreme heat:

- Heat cramps, nausea, and/or sunburn.
- Injury or death from heat-related illness, such as dehydration, heat exhaustion, and stroke.
- First responders may be more at-risk to injury or death from over exertion in heat.

Category	Heat Index	Health Hazards
Extreme Danger	130º F- Higher	Heat stroke/ Sunstroke is likely with continued exposure
Danger	105º F- 129º F	Sunstroke, muscle cramps, and/or heat exhaustion with prolonged exposure and/or physical activity.
Extreme Caution	90º F- 105º F	Sunstroke, muscle cramps, and/or heat exhaustion with prolonged exposure and/or physical activity.
Caution	80º F- 90º F	Fatigue possible with prolonged exposure and/or physical activity.

Source: National Weather Service

Critical Facilities:

Critical facilities will have minimal impacts from extreme heat. Impacts will vary based on the temperature caused by extreme heat but can include temporary loss of facility functionality (e.g., a police station with a power outage causing no air conditioning may be temporarily unable to serve the community).

Hazard Probability:

There were six recorded extreme heat events in Madison County between 2020 and 2025, averaging out to approximately 1.2 events per year. However, the events only occurred in August 2023, so four out of five years had zero events.

Hazard Vulnerability Analysis by Jurisdiction:

Madison County: Extreme heat can occur across all of Madison County.

City of Madison: The City of Madison is affected by extreme heat in the same respect as Madison County

Town of Greenville: The Town of Greenville is affected by extreme heat in the same respect to Madison County

Town of Lee: The Town of Greenville is affected by extreme heat in the same respect to Madison County

Hazard History:

Between January 1, 2020, and September 14, 2025, there were six extreme heat events in Madison County. The combination of above average temperatures and above average dewpoints resulted in high heat index values in excess of 113 over a large portion of northwest Florida during the August 6-9, 2023.

Subject	Excessive Heat
Number of Hazard Events Between Jan. 2020 & Dec. 2025	6
Number of Days with Event	6
Number of Days with Event and Death	0
Number of Days with Event and Death or Injury	0
Number of Days with Event and Property Damage	0
Number of Days with Event and Crop Damage	0
Total Property Damage	0.00 K
Total Crop Damage	0.00 K

Source: NOAA Storm Events Database

Future Development and Extreme Heat:

If the County grows through larger population, there will be more vulnerability to extreme heat. However, the probability remains very low that this event will impact Madison County.

10. Severe Storms

Hazard Impact Analysis:

According to the National Oceanic and Atmospheric Administration (NOAA), a thunderstorm is classified as severe when it contains one or more of the following: hail one inch or greater, winds gusting in excess of 50 knots (57.5 mph), or a tornado. Further, severe storms can have lightning, damaging winds, hail, tornadoes, and flooding. For a thunderstorm to form, there needs to be moisture, unstable air, and lift. Hail and/or damaging wind gusts can produce severe thunderstorms, which in turn can produce some of nature's most destructive and deadly weather. All aspects of severe thunderstorms are life-threatening. NOAA tracks weather related fatalities and lightning alone contributes to the most thunderstorm related deaths in Florida. According to the National Weather Service (NWS), Florida is the lightning capital of the United States.

Because severe storms are categorized as having winds in excess of 58mph, those most at risk from severe storms include people living in mobile homes, campgrounds, and other dwellings without secure foundations. Additionally, residents who are electric dependent are considered to

be vulnerable as severe storms tend to cause power outages. The disabled population are also considered to be most vulnerable because of the lack of mobility to escape the impacted area.

Hail is formed in clouds called thunderheads that contain vast amounts of energy from the updrafts and downdrafts within the storm cloud. Hail develops in the main updraft of the storm where most of the moisture resides at 8,000 to 10,000 feet. The moisture within these storm clouds remains in liquid from even at temperatures ranging from -40 degrees Fahrenheit to 32 degrees Fahrenheit. The liquids does not begin to freeze and collect into a hailstone until the moisture collides with ice crystals, dust, salt, or frozen rain drops from the ocean that are present within the storm cloud structure. The cycling of the water particle between the updrafts and downdrafts develops layers of ice and particles to form hailstones. With each cycle the hailstone adds a layer of ice and particles increasing the size and density of the hail. Hailstones range in size from pea size, ¼ inch in diameter, to softball size, 4 ½ inches in diameter.

Lightning is an imbalance between positive and negative charges resulting in an electrical charge. When particles of rain, ice, or snow during a storm collide they can increase the imbalance, thus increasing the negative charge, attracting the charge to the positively charged objects on the surface below. The connection between the negatively charged particles and the positively charged particles corrects this imbalance with an electrical current between the two charges. The negative charge travels downward toward the positive charge through a series of steps of lengths up to 150 feet. When the charge gets within 150 feet of a positively charged object a current is formed, resulting in a bolt of lightning.

Typical lightning bolts contain 100 million bolts of electricity, reach temperatures of 50,000ºF and can reach over five miles in length. However, lightning can have up to one billion volts of electricity and reach temperatures up to five times the surface of the sun, making it one of the deadliest and most damaging natural phenomena.



Source: National Weather Service

Hazard Vulnerability Analysis by Jurisdiction:

Since severe storms can occur within any area in the county, the entire county population and all buildings are vulnerable to severe storms.

Madison County: Severe storms can occur across all of Madison County.

City of Madison: The City of Madison is affected by severe storms in the same respect as Madison County.

Town of Greenville: The Town of Greenville is affected by severe storms in the same respect to Madison County.

Town of Lee: The Town of Greenville is affected by severe storms in the same respect to Madison County.

Extent:

Thunderstorms are most likely during the spring and summer months, in the afternoon and evening, however they can occur year-round and at all hours. Winter thunderstorms are rare, but they do occur when conditions are right.

Most thunderstorms last around an hour, but some can last for several hours. The duration depends on the type of storm, as described above.

Damage and threats to life from thunderstorms occur because of:

- Flash floods
- Lightning
- Hail (up to softball size and fall at speeds exceeding 100 mph)
- Straight line winds (up to 120 mph)
- Tornadoes (winds up to 300 mph)

Types of thunderstorm alerts include:

- Watch: Weather conditions are favorable for severe thunderstorms
- Warning: Severe weather has been reported by spotters or indicated by radar

Types of thunderstorms:

- Single-cell storm: Grow and die within an hour; brief heavy rain and lightning
- Multi-cell storm: Individual cells last 30-60 minutes, but entire storm may last for hours; may produce hail, strong winds, brief tornadoes, and flooding
- Squall Line: Group of storms in a line that passes quickly, with high winds and heavy rain
- Supercell: Highly organized storm that lasts for more than an hour; produces the most violent tornadoes
- Bow Echo: Squall line that bows outward

- Mesoscale Convective System (MCS): Collection of thunderstorms that act as a system, can last more than 12 hours
- Mesoscale Convective Complex: Long lived cluster of showers and thunderstorms
- Mesoscale Convective Vortex: MCS with low pressure center that pulls winds into vortex pattern
- Derecho: Long lived wind storm with rapidly moving band of showers or thunderstorms; can produce as much damage as a tornado, but the damage is all in one direction (straight line wind damage).

Critical Facilities:

Critical facilities are vulnerable to severe storms. A critical facility may encounter many of the same impacts as any other building within Madison County. These impacts will vary based on the magnitude of the severe storm, but can include damaging debris (trees or limbs), roofs damage, windows broken by debris, hail, high winds, and loss of facility functionality (e.g., a damaged police station will no longer be able to serve the community).

Hazard Probability:

There were 39 recorded thunderstorm wind events between January 2020 and September 2025. This averages 7.8 events per year. There were no lightning events and 3 hail events between January 2020 and September 2025.

Hazard History:

Subject	Thunderstorm Wind	Lightning	Hail
Number of Hazard Events Between Jan. 2020 & Dec. 2025	39	0	3
Number of Days with Event	6	0	2
Number of Days with Event and Death	0	0	0
Number of Days with Event and Death or Injury	0	0	0
Number of Days with Event and Property Damage	14	0	0
Number of Days with Event and Crop Damage	0	0	0
Total Property Damage	81.00 K	0.00 K	0.00 K
Total Crop Damage	0.00 K	0.00 K	0.00 K

Source: NOAA Storm Events Database

Property damage during this period was mostly from flying debris causing very minor damage to structures. On May 10, 2024, a fallen tree damaged a vehicle along Old Logging Trail near the Town of Lee causing $20,000 in damage.

Future Development and Severe Storms:

If the County grows through larger population or increased development, there will be more vulnerability to severe storms.

11. Man-Made Hazards

The following Man-made hazards have been identified by the LMS Committee as a very low threat to Madison County. The committee will review these hazards annually for projects that could mitigate the effects of these hazards and update the plan accordingly.

Mass Migration/Civil Disturbance

Madison County had no history of civil disorder since the 1970's and no mass migration, nor are conditions in place, which could lead to such a scenario today. In the event of a change in the community leading to civil disorder or riots, the Madison County Sheriff's Office would coordinate response including any requests for mutual aid to handle such incidents should coordination with State authorities be required. However, the probability is very low and not considered a planning issue. Mass migration is not anticipated but would be handled in cooperation and with assistance from State and Federal resources.

Biological

Biological hazards are those associated with any insect, animal or pathogen that could pose an economic or health threat. They are a pervasive threat to the agricultural community. The possibility exists for the importation of pathogens that could have a widespread effect on the livestock industries. In addition, there is the remote possibility of an adverse effect to the general population through naturally occurring pathogens (i.e. influenza, emerging infectious diseases or by way of a terrorist action).

Exotic Pest and Diseases – Madison County's large agricultural areas are vulnerable to exotic pests and/or diseases. The Madison County Agricultural Extension Agent will assist in this area.

Disease Outbreaks – Any part of Madison County may be vulnerable to disease outbreaks. The Madison County Health Department will identify and handle any outbreaks with assistance from State resources.

Technological

A technological hazard is one, which is a direct result of the failure of a manmade system or the exposure of the population to a hazardous material. There is the potential for specific technological hazards to affect a segment of the population and/or interfere with critical government, law enforcement, public works and public health/medical functions. There is

an even greater problem when this technological failure results in a direct health and safety risk to the population. A number of things occur daily in Madison County, including a hazardous material spill, or failure of the electrical power grid, which could constitute a threat to the population or produce widespread unmet needs. Each of these potential hazards would require a coordinated and speedy response, as well as attention to the short and long term effects. The primary hazards associated with this category include: hazardous materials spill, mass communication failure, major power disruption, critical infrastructure disruption/failure and release of a radioactive isotope into the environment.

On 8/22/13 a City of Madison WWTP employee reported a Chlorine Leak at the WWTP on Harvey Greene Dr. City of Madison Fire Rescue assessed the scene and contacted Tallahassee Fire Department's HazMat Unit for mutual aid. Due to the extent of the leak, the industrial park located near the WWTP was evacuated immediately. One City of Madison employee was hospitalized due to exposure. The evacuation lasted for approximately 5 hours, and the scene was cleared.

Madison County's level of vulnerability to such an incident is further described below:

Surface transportation spills

The occurrences of railway and highway accidents do pose a major threat to Madison County. Interstate Highway 10, and Highways 221 and 53 are major thoroughfares for interstate commerce and transportation. These roadways pass through populated areas and pose the greatest risk of critical casualty, hazardous materials incidents and disruptions of vital evacuation routes and pose a threat. It is estimated that approximately thirty (30) percent of the residents of the County could be affected by a transportation accident involving hazardous materials. The county has no commercial airport and the CSX railway runs through the county and transports commercial products. Among the hazardous materials transported by road are gasoline, propane, chlorine and ammonia.

Non-commercial Hazardous Materials

Much of Madison County is rural residential or agricultural. Many properties have sheds, barns and storage buildings, which contain a mixed group of chemicals. Paints, insecticides, fertilizers, petroleum products, lubricants and other common household or agricultural products may be found in the possession of many residents. While it can be assumed few people store and dispose of these items in full compliance with the law, most materials are in such small quantity as to minimize concern of a full "hazmat" incident.

Terrorism

Any violent or dangerous act done to intimidate or coerce any segment of the general population (i.e. government or civilian population) for political or social objectives constitutes terrorism. Historically, there have been few successful acts of terrorism committed in the State. However, with the heightened level of national terrorism events, and

because of the number of facilities within the State associated with tourism, the military, government, cultural, academic, and transportation, the potential is considered to be high nationwide. While it is assumed that terrorists would target larger more high-density population areas, there is a possibility of an incident of domestic terrorism. In Madison County, terrorism assessments have identified facilities that have the potential for being targets for terrorist attacks with the intent of causing catastrophic levels of loss of life, injury, and property and environmental damage. Terrorist acts may also take the form of other hazards when the particular action induces such things as the release of hazardous and biological materials.

Hazard Summary Tables:

The following three tables (Tables 47-49) summarize hazard impacts, extent, vulnerability and probability in Madison County.

Impacts on Structures and Infrastructure from Identified Hazards
Madison County, City of Madison, Town of Greenville, Town of Lee

Hazard	All Structures	Mobile Homes	Poorly Constructed Homes	Non-Elevated Homes	Telecommunications	Electrical Utilities	Sewage Systems	Potable Water	Roadways	Waterways	Agriculture	Livestock	Fisheries	Economic Disruptions	Environmental Damage
Tornado	X	X	X	X	X	X			X		X	X	X	X	X
Hurricane	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Flood	X	X	X	X					X	X	X	X	X	X	X
Wildfire	X	X	X	X	X	X			X					X	X
Winter Storm											X	X			X
Drought								X		X	X	X			X
Extreme Heat		X	X			X					X	X			X
Severe Storms	X	X	X		X	X					X	X			
Sinkhole	X	X	X	X	X	X	X	X	X	X					
Earthquake	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mass Migration									X					X	
Biological								X		X	X	X	X	X	X
Technological					X		X		X	X				X	X
Terrorism	X				X	X	X	X	X	X	X	X	X	X	X

Hazard Extent: Madison County, City of Madison, Town of Greenville, Town of Lee

Hazard	Extent
Tornado	According to the National Climatic Database Center, the greatest magnitude tornado to hit Madison County was an F3. It is reasonable to assume that the county could be hit with a similar tornado in the future.
Hurricane	According to the National Climatic Database Center, the greatest magnitude hurricane to hit Madison County was a Category 3. It is reasonable to assume that the county could be hit with a similar hurricane in the future.
Flood	According to the USGS, the greatest height that the Suwannee River reached was 41.34 inches during a flood event. It is reasonable to assume that the county could be hit with a similar flooding event in the future.
Wildfire	According to the county, the greatest acreage ever burned during a wildfire was approximately 32,000 acres. It is reasonable to assume that the county could be hit with a similar wildfire event in the future.
Winter Storm	According to the National Climatic Database Center, the lowest temperature ever recorded in northern Florida was -2 degrees. It is reasonable to assume that the county could encounter similar temperatures in the future.
Drought	A drought hit the region that registered a 700 reading on the Keetch Byram Index. It is reasonable to assume that the county could encounter a similar drought event in the future.
Extreme Heat	The combination of above average temperatures and above average dewpoints resulted in high heat index values in excess of 113 over a large portion of northwest Florida during the August 6-9 time period.
Severe Storms	Property damage was mostly from flying debris causing very minor damage to structures. On May 10, 2024, a fallen tree damaged a vehicle along Old Logging Trail near the Town of Lee causing $20,000 in damage.
Sinkhole	There is a sinkhole in Lee that has existed for more than 50 years. It is approximately 2 acres in size and measures 34 feet deep at the center. Although unlikely, it is possible that a similar sinkhole could form in the county.
Earthquake	There have been no Richter Scale recorded earthquake events in Madison County. It is not expected that Madison County will ever encounter an earthquake event that is large enough to be recorded.
Mass Migration	Madison County had no history of civil disorder since the 1970's and no mass migration, nor are conditions in place, which could lead to such a scenario today.
Biological	Biological hazards are those associated with any insect, animal or pathogen that could pose an economic or health threat. They are a pervasive threat to the agricultural community. The possibility exists for the importation of pathogens that could have a widespread effect on the livestock industries
Technological	There is the potential for specific technological hazards to affect a segment of the population and/or interfere with critical government, law

	enforcement, public works and public health/medical functions. There is an even greater problem when this technological failure results in a direct health and safety risk to the population.
Terrorism	While it is assumed that terrorists would target larger more high-density population areas, there is a possibility of an incident of domestic terrorism in Madison County.

Madison County Hazard Vulnerability and Probability

Hazard	Vulnerability	Likelihood of an event occurring
Tornado	Tornadoes can cause damage to trees, mobile homes, poorly constructed structures and power lines. They are unpredictable and the most vulnerable individuals are those exposed to the outdoors during the event, such as those that are driving.	1-5 years
Hurricane	Areas closer to coastlines are more likely to be affected by the effects of both the wind damage and the storm surge associated with tropical cyclones. Non-elevated and poorly constructed structures are more vulnerable to these effects.	1-5 years
Flood	Non-elevated and structures within flood zones are more susceptible to flooding than other structures.	Less than 1 year
Wildfire	The buildings within areas designated as Wildland-Urban Interface and Wildland-Urban Intermix are considered to have the highest vulnerability to wildfires in comparison to the rest of the county.	5-10 years
Winter Storm	Winter Storms will not cause damage to any structures. Florida's primary vulnerability to this hazard is freezing temperatures that impact agriculture, specifically the citrus industry. The state has agriculture and livestock; however, the citrus industry is very important to the overall economy.	1-3 years
Drought	Drought will not cause damage to any structure in Madison County. Populations more at risk to extreme heat would include elderly populations, the homeless and mobility restricted people. Outside pets and wild animals are vulnerable because they may be constantly exposed to the outside heat.	1-2 years
Extreme Heat		
Severe Storms		Annually
Sinkhole	All structure types are vulnerable to sinkholes.	50-100 years
Earthquake	Buildings with foundations resting on unconsolidated landfills, old waterways or other unstable soil types are most at risk. Buildings or trailers/manufactured homes not tied to a reinforced foundation that is anchored to the ground are also at risk, since they can be shaken off their mountings during an earthquake. The populations residing in these structures would be the most at risk.	100-500 years
Mass Migration	Madison County had no history of civil disorder since the 1970's and no mass migration, nor are conditions in place, which could lead to such a scenario today.	50-100 years
Biological	Madison County had no history of biological incidents, nor are conditions in place, which could lead to such a scenario today.	50-100 years

Technological	Madison County has had technological incidents in the past, primarily of the hazardous material category. These incidents have been handled at the local level and have been minor in nature.	1-2 years
Terrorism	While it is assumed that terrorists would target larger more high-density population areas, there is a possibility of an incident of domestic terrorism in Madison County.	50-100 years

Section 4 – Mitigation Strategy

Disasters, whether natural or man-made, cost billions of dollars and have tragic results: lives are lost, families separated, homes destroyed, and jobs lost. After a disaster, businesses may be in chaos for weeks, and many never recover. Communities must rebuild damaged roads, bridges and public buildings. Although not all disasters can be prevented, Disaster Mitigation can reduce the damage.

Disaster Mitigation is any action or measure that either prevents that occurrence of a disaster or reduces the severity of its effects. The concept of Disaster Mitigation has been around for many years, even though the term may not be familiar to everyone. The only way to break this disaster/recovery/disaster cycle is by identifying vulnerable areas before the disaster and taking appropriate steps to protect against the disaster and minimize the damage. Disaster Mitigation efforts will reduce the human suffering that results from disasters.

The goal of mitigation is to reduce the future impacts of a hazard including property damage, disruption to local and regional economies, and the amount of public and private funds spent to assist with recovery. However, mitigation should be based on risk assessment.

As directed in the Madison County CEMP, the EM Director is designated as the Mitigation Coordinator. The Mitigation Coordinator is responsible for the creation and continuous update of the Local Mitigation Strategy. The Mitigation Coordinator is responsible for the post-disaster mitigation function.

Madison County has a number of responsibilities involving the development and implementation of local Emergency Management Programs. The three (3) municipalities, Madison, Greenville, and Lee are working partners in pre-disaster and post-disaster mitigation. Inherent in these efforts are initiatives which are intended to avoid, reduce and mitigate the effects of the recognized hazards to which the county is recognized as to being vulnerable.

Incorporation into other planning mechanisms

As part of the LMS update process, the LMS Working Group identified current plans, programs, policies, ordinances, studies, and reports to augment and support mitigation planning efforts.

- Madison County Comprehensive Emergency Management Plan (CEMP). The CEMP incorporates the LMS by reference and utilizes the LMS as the plan's mitigation section.
- Floodplain Management Plan. The LMS serves as the floodplain management plan, including the risk assessment, National Flood Insurance Program compliance, and flood related mitigation actions.

Members of the LMS Working Group will work with all participating jurisdictions to incorporate, where applicable, the LMS into other planning mechanisms. Throughout the LMS maintenance cycle, the LMS Working Group will work with appropriate governmental and non-governmental agencies to ensure LMS goals, objectives, and priorities are consistent and cross-referenced with those articulated in other existing plans. The Member organizations of the LMS Working Group will seek opportunities at the regional, County, and municipal levels to:

- Update work plans, policies, regulations, procedures, and other directives to include hazard mitigation concepts and priorities.
- Encourage the adoption of mitigation priorities within capital and operational budgets and grant applications.
- Share information on grant funding opportunities.
- Offer guidance for carrying out mitigation actions.
- Explore opportunities for collaborative mitigation projects and initiatives.
- Incorporate references to the LMS into the comprehensive plans of all outstanding municipalities; and
- Add hazard mitigation elements to redevelopment plans.

The LMS Working Group will invite each local planning director and/or representative planner for each jurisdiction to attend meetings to discuss ways in which hazard mitigation can be best integrated into planning matters.

As enhancements and modifications are made to these various planning situations in the county and propose new initiatives as required. These new initiatives will be considered in conjunction with the other planning mechanisms and their subsequent goals. Capital improvement plans will need to incorporate a study of potential impacts from natural hazards and prioritize any projects that will reduce the vulnerability to these hazards.

Madison County has incorporated the requirements of the LMS into the Madison County Emergency Management Scope of Work (5-year plan): Goal # 4 from the Plan, seen below, pertains to the updating and use of the LMS plan and continuous work within the LMS Working Group.

The LMS Working Group will continue as the lead agency for promotion of mitigation against natural disasters. This group will continually monitor the mechanisms in the future; the Local Mitigation Strategy will be consulted to be sure that these changes consider the impacts of natural disasters and potential mitigation strategies.

GOAL 4:
IDENTIFY THE MOST PARTICULAR HAZARDS TO AFFECT OUR COUNTY AND DEVELOP A HAZARD MITIGATION PROGRAM.

Strategy 1: Identify hazards and work on mitigation/solutions on a continued timetable.

Task 1: To have available or distribute the Hazardous Materials Vulnerability Analysis to other agencies in the county.

Task 2: Distribution of the Hurricane Survival Guide via newspapers and made available at our local Emergency Management office.

Task 3: Continue public speaking on Emergency Management to all local civic clubs, schools, and governmental agencies in Madison County.

Task 4: Distribute coloring books and bookmarks on severe weather to 1st and 2nd grade students in both the public and private schools in Madison County.

Strategy 2: Develop and update the Local Mitigation Strategy.

Task 1: To identify potential mitigation projects for our County and to seek possible funding sources for these projects.

Task 2: To continue to work with our LMS Committee on any future mitigation projects. Committee members, including representatives from all municipalities, will conduct at least one meeting annually to update and exchange information, identify future mitigation projects, and report on other activities. Minutes from these meetings will be included in the LMS.

Strategy 3: Continued improvement of our EM Program, the E.O.C. and the EM storage facility with the purchase of additional EM equipment.

Task 1: Purchase EM equipment that will enhance our disaster response and shelter operation and assist Madison County in becoming self-sufficient.

Task 2: Possibly purchase a new EM vehicle to enhance response capabilities.

Task 3: Maintain Internet/e-mail capability in the local Emergency Operations Center.

The LMS has been incorporated into the **Madison County Comprehensive Emergency Management Plan (CEMP)**. The following guidelines can be found in Annex III of the CEMP.

II. GENERAL

1. The Madison County Emergency Management Director is also designated as the Mitigation Coordinator. This position is responsible for the creation and continuous update of the Local Mitigation Strategy, which was ruled in compliance by DCA/DEM in 1999. The Mitigation Coordinator is responsible for both the pre- and post-disaster functions of mitigation.

2. In order to develop a unified LMS Plan, Madison County has developed a working LMS Committee. The Madison County LMS Committee is established pursuant to

authorization by the Madison County Board of County Commissioners (BOCC). It is through this Committee that the necessary tasks will be formulated that allow the development of strategies on guiding principles, hazard identification and vulnerability assessment and mitigation initiatives on an on-going basis. The LMS Committee holds routine and special meetings to ensure that documents and projects continue to move forward. From time-to-time new projects are added and old projects are deleted when completed. It should also be noted that the three municipalities and Madison County's agencies and departments participate in mitigation strategy planning and are part of the LMS team.

Madison County has developed a mitigation strategy in order to reduce potential future losses due to natural hazards. Existing plans and policies have already been developed by the County that are crucial components to the overall hazard mitigation strategy. The Madison County LMS is incorporated into existing authorities, policies, programs and codes that are adopted official mechanisms for county government and can all be expanded and improved as required. The blueprint for the Madison County Mitigation Strategy can be found throughout a variety of plans within the county including, but not limited to:

Madison County Comprehensive Emergency Management Plan
Madison County Comprehensive Plan
Greenville Comprehensive Plan
City of Madison, Code of Ordinances
Town of Lee, Ordinances
Greenville Ordinances
Town of Lee, Land Development Regulations

The LMS Working Group is the lead agency for proposing new ideas to the county commissioners and city officials for improving overall mitigation efforts. A complete list of authorities, policies, programs and sources which comprise the overall blueprint for reducing potential losses in Madison County can be seen below. As these authorities, policies, and programs change over time, the LMS group will revise the list and implement into the current LMS.

The following guiding principles have been identified in existing County ordinances and existing Plans:

1. Reduce the risk of property damage and loss of life.
2. Provide safe and sanitary housing in suitable environments.
3. Maintain the integrity of natural functions.
4. Protect floodplains and wetlands.
5. Coordinate planning with municipalities, other counties and regional, state and federal entities.

PLAN, POLICY PROGRAM OR ORDINANCE RELATING TO HAZARD MITIGATION	SOURCE	NOTES

Reduce the risk of property damage & loss of life		
The County's land development regulations shall reduce the risk of property damage and loss of life.	Madison County Comprehensive Plan, Policy V.2.2	
It is the responsibility of local government to provide for the health and safety of its residents.	Madison County Comprehensive Emergency Management Plan., Executive Summary	

Objectives of the Flood Damage Prevention Chapter: 1) protect life and health; (2) Minimize expenditure of public money for costly flood control; (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (4) Minimize prolonged business interruptions, (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and hedges located in floodplains; (6) Help maintain a stable tax base by providing for sound use and development of flood-prone areas in such a manner as to minimize future flood height areas, and (7) Ensures that potential home buyers are notified that property is in a flood area.	City of Madison, Code of Ordinances, Section 11. 5, Article 1	
The County's land development regulations shall provide for the regulation of development within 100-year floodplains in order to maintain the flood-carrying and flood storage capacities of the floodplains and reduce the risk of property damage and loss of life.	Madison County Comprehensive Plan, Policy V.2.7	
Carbon bisulphide is prohibited for fumigation.	City of Madison Code of Ordinances: Section 11 -2	

Greenville shall assist the private sector and other state, federal or local agencies in the elimination of five percent of substandard housing annually including the establishment of provisions for the structural and esthetic improvement of housing.	Greenville Comprehensive Plan, Housing Element, Objective 1	Greenville has joined with Madison County to establish minimum mobile home standards. Review zoning enforcement practices and support building inspection.
Greenville shall continue its participation in the National Flood Insurance Program	Greenville Comprehensive Plan, Conservation	
Ensure that the character and location of land uses maximize the potential for economic benefit and enjoyment of natural and man-made resources by citizens while minimizing the threat to health, safety and welfare posed by hazards, nuisances, incompatible land uses and environmental degradation.	Greenville Comprehensive Plan, Ordinance 201: Chapter 1 - Goal Statement	

Provide safe & sanitary housing in suitable environments		
Provide decent, safe housing- in suitable environments...	Madison County Comprehensive Plan, Goal III	1. Conduct public education for SHIP Program. 2. Earmark additional SHIP funding focuses on new construction
Restricts land use that is: dangerous to health, safety and property, vulnerable in flood, alteration of natural flood plains, streams, channels, barrier, use of fill, grading, dredging which may increase erosion.	Town of Lee Ordinance 87-1	
All development and redevelopment occurring in the 100-year floodplain of the Suwannee River system shall meet building & design standards of the National Flood Insurance Program, the County and the Suwannee River Water Management District.	Madison County Comprehensive Plan, Objective S.4	

The Flood Damage Prevention chapter applies only to all areas of special flood hazard as designated by the Federal Emergency Management Agency in its Flood insurance Rate Map #120152$_t$ Further a development permit shall be required prior to the commencement or any development activities in these areas. No structure or land shall be located, or extended, converted or structurally altered without full compliance of this chapter and other applicable regulations.	City of Madison Code of Ordinances, Section 11.5, Division3	
In the special flood area, the building inspector is required to advise permittees where additional federal or state permits are required. The building inspector must verify that a registered professional engineer or architect that structure is designed to be securely anchored to withstand velocity waters and hurricane wave wash.	City of Madison Code of Ordinances, Section 11.5-31	
The County shall include within the land development regulations a hazardous building code which shall require the rehabilitation or demolition and clearance of housing and other structures which pose a threat to public safety.	Madison County Comprehensive Plan, Policy III.5.1	
Adopt and enforce subdivision regulations and housing codes to ensure newly constructed homes are safe and do not adversely impact the environment.	Greenville Comprehensive Plan, Housing Element, Policy 2.5	Effective
Adopts building and fire prevention codes.	Madison County Ordinance 96-78	

Adopts Standard Building Code, Standard Plumbing Code, National Electric Code, CABO One and Two family Dwelling Code, Standard and Unsafe Building Abatement Code, Standard Housing Code.	City of Madison Code of Ordinances: Section 8-1	
Establishes the use of the Southern Standard Building Code.	Lee Ordinance 75	Code in use. Municipality is aware of planned revision by state building codes.
Adopts Stand Building Code, National Electric Code, CABO One and Two Family Dwelling Code, Standard and Unsafe Building Abatement Code, Standard Housing Code.	Greenville Ordinance 198	In use. Municipality is aware of planned revision by state building codes.

Owners of frame building shall not build additional stories.	City of Madison Code of Ordinances: Section 8-4	
No construction shall be performed unless a permit has been obtained.	City of Madison Code of Ordinances: Section 8-4	
Adopts National Electric Code. All electrical wiring, installation, construction and appliances within the city must be done in accordance with the regulations.	City of Madison Code of Ordinances: Section 10-1	
All electric work must be inspected by the designated agent of the City.	City of Madison Code of Ordinances: Section 10-3	
Adoption of the Fire Prevention Code recommended by the American Insurance Association.	City of Madison Code of Ordinances: Section 11-1	
Greenville will target CDBG funds to programs aimed at the conservation, rehabilitation or demolition of housing that has been declared a public threat by the building inspector.	Greenville Comprehensive Plan, Housing Element, Objective 2	
All buildings shall be constructed with outer walls of stone, brick or concrete and not less than 12 inches thick on the first and second floors, not less than 16 inches on higher floors. Any building of more than one story must have a roof of noncombustible material. All awnings must utilize noncombustible materials	City of Madison Code of Ordinances, Section 8-3	

Standards for areas of special flood hazard: (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure. (2) Manufactured homes shall be anchored. Methods of anchoring may include over-the-top frame ties to ground anchors. Standard shall be in addition and consistent with applicable state requirements for resisting wind forces. (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage. (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage. (5) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located as to prevent water from entering or accumulating within the components during conditions of flooding. (6)New and replacement water systems shall be designed to minimize or eliminate infiltration of floodwaters into the system. (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters. (8) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. (9) Any alteration, repair, reconstruction or improvement to a structure which is in compliance with the provisions of this chapter shall meet the requirements of "new construction" as contained in this chapter.	City of Madison, Code of Ordinances, Section 11.5-43	
Specific standards in all areas of special flood hazard where base flood elevation data has been provided as set forth in Section 11.5-17 or Section 11.5-31(11): New residential construction or substantial improvement shall have the lowest floor elevated to above base flood elevation.	City of Madison, Code of Ordinances, Section 11.5-44	

Maintain the integrity of natural Functions		
Conserve through appropriate use and protection, the resource of the County to maintain the integrity of natural functions.	Madison County Comprehensive Plan, Goal V, Conservation Element	
The County shall establish provisions within the site plan review process by 1992 to protect air quality by requiring the appropriate citing of development and associated public facilities.	Madison County Comprehensive Plan, Policy V.I.I	
The County's land development regulations shall prohibit uses within or adjacent to the surface waters of the County which would degrade the present water quality classification, as established by the rules of the Florida Department of Environmental Regulation.	Madison County Comprehensive Plan, Policy V.2.2	
The County shall only allow hazardous or bio-medical waste treatment facilities as special exceptions within areas designated rural development. Further, the County's land development regulations shall include conditions for such approval of a hazardous or bio-medical waste treatment facility as a special exception. In no case shall a hazardous or bio-medical waste treatment facility be located within an Environmentally Sensitive	Madison County Comprehensive Plan, Policy V.2.13	
Development that impacts upon forest and vegetative communities, limestone or limestone dolomite in all land use areas shall be subject to special review requirements. (Note: lengthy and more restrictive than other land use)	Madison County Comprehensive Plan, Policy V.6.1	

Greenville shall adopt a hazardous waste management program for proper storage, recycling, collection and disposal of hazardous waste by 2001.	Greenville Comprehensive Plan, Conservation Element, Objective 7	
Industries and businesses using hazardous materials shall avoid using sites with known underground cavities and sites with potential for sinkhole formation.	Madison County Comprehensive Plan, Policy V.2.18	
Regulations will be developed and adopted by April 1, 1992 which will protect environmentally sensitive land...	Greenville Comprehensive Plan, Future Land Use Element Policy 4.7	Requires update, if still necessary.

Development permits will be issued by Greenville only if the developer demonstrates that either a state or federal air quality permit is not requirement or that the necessary permit has been obtained	Greenville Comprehensive Plan, Conservation Element, Policy 1.1	No industry in Town-
Permits for new development will be issued only if the development contains surface water management plans consistent with policies of the Comprehensive Plan, the Department of Environmental Regulations and Suwannee River Water Management District.	Greenville Comprehensive Plan, Conservation Element, Policy 2.1	
Non-conforming land uses shall not be altered or expanded. If they are destroyed or damaged more than 75 % of their assessed value, any reconstruction shall be in conformity with the Future Land Use Map.	Greenville Comprehensive Plan, Future Land Use Element, Policy 1.6	Effective

Protect floodplains and wetlands		
Floodplains in Madison County will be protected.	Madison County Comprehensive Plan, Objective V.7.	
Purpose of the Flood Damage Prevention Chapter: control the alteration of natural floodplains, stream, channels and natural protective barriers that are involved in the accommodation of floodwaters. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands.	City of Madison Code of Ordinances, Section 11. 5, Article 1	
The County's land development regulations shall require a 35-foot natural buffer around all wetlands and prohibit the location of residential, commercial and industrial land uses within the buffer areas, but allow agriculture, silivculture and resource-based recreational activities within buffer areas subject to best management practices.	Madison County Comprehensive Plan, Policy V.2.4	

Wetland protection shall be provided by a minimum 35 feet natural buffer from wetlands to improved areas... Within the 35 feet, no structure (other than permitted -- docks, piers, walkways elevated on piles) are allowed. Clearing of natural vegetation except for walkway and residential improvements are not allowed.	Town of Lee Land Development Regulation, 4.5.7	
No development will be allowed within the 100-year floodplain as designed by FEMA unless development adheres to all FEMA building regulations and restrictions.	Madison County Comprehensive Plan, Policy III. 1.2	
The County's land development regulations shall require a 75-foot regulated natural buffer adjacent to all perennial rivers, streams and creeks identified as regionally significant areas with the Comprehensive Plan and prohibit the location residential, commercial and industrial land uses.	Madison County Comprehensive Plan, Policy V.2. 14	
Perennial rivers, streams and creeks shall have a 35 feet buffer. Residential improvements shall be prohibited. Agriculture, silviculture, and recreation permitted.	Town of Lee Land Development Regulations, 4.5.7.4	
The County's land development regulations shall require a 50-foot regulated natural buffer adjacent to all other perennial rivers, streams and creeks and prohibit the location of residential, commercial and industrial land uses within the buffer area.	Madison County Comprehensive Plan, Policy V.2. 15	

Development of Industrial areas located in fracture zones, areas of known/sinkhole formation, and Karst Geography features will be required to be checked by ground penetrating radar to identify underground cavities and areas of potential sinkhole formation. Areas containing potential fracture zones, areas of potential sinkholes, will be so identified from the data gathered by Department of Environmental Regulation, or the Suwannee River Water Management District.	Madison County Comprehensive Plan, Policy V.2. 17	
The County's land development regulations shall include provisions which prohibit the construction of structures or landscape alterations which would interrupt natural drainage flows, including sheet flow and flow to isolated wetland systems.	Madison County Comprehensive Plan, Policy IV.2.9	

The County's land development regulations shall include a provision which requires a certification, by the preparer of the permit plans, that all construction activity undertaken shall incorporate erosion and sediment controls during construction.	Madison County Comprehensive Plan, Policy IV.2.10	
The Town of Greenville shall protect the natural functions of the wetlands...	Greenville Comprehensive Plan, Ordinance 201: Policy 4.2	
Development in prime aquifer recharge areas identified the Suwannee River Water Management District --- /ill be restricted by allowing low-density and low intensity development and prohibiting potentially contamination uses...	Greenville Comprehensive Plan, Ordinance 201: Policy 4.3	
The County shall, through the development review process, require that post-development runoff rates and pollutant loads do not exceed pre-development conditions.	Madison County Comprehensive Plan, Policy V.2.5	
Development on sites which include areas within the one-hundred year floodplain shall be required to be located outside of the floodplain wherever possible.	Madison County Comprehensive Plan, PolicyV.7.2	
Subdivisions shall be required to include buildable area outside of the floodplain on each lot, wherever possible.	Madison County Comprehensive Plan, Policy V.7.3	
Fill within floodplains shall be limited to the minimum which is necessary for development and access.	Madison County Comprehensive Plan, Policy V.7.4	
Fill shall be placed and designed so as to minimize interference with natural water flows.	Madison County Comprehensive Plan, Policy V.7.5	

No hazardous materials or hazardous waste shall be stored within the floodplain.	Madison County Comprehensive Plan, Policy V.2.20	
Development on sites which include areas within the one-hundred year floodplain shall be required to be located outside of the floodplain wherever possible	Madison County Comprehensive Plan, Policy V.3. 2	
Subdivisions shall be required to include buildable area outside of the floodplain on each lot, wherever possible.	Madison County Comprehensive Plan,	
Fill within floodplains shall be limited to the minimum which is necessary for development and access.	Madison County Comprehensive Plan, Policy V.3. 4	
Fill shall be placed and designed so as to minimize interference with natural water flows.	Madison County Comprehensive Plan, Policy V.3. 5	
Development that impacts upon forest and vegetative - _ communities, limestone or limestone dolomite in all land use areas shall be subject to special review requirements. (Note: lengthy and more restrictive than other land use)	Madison County Comprehensive Plan, Policy V.6.1	
Development on sites which include areas within the one-hundred year floodplain shall be required to be located outside of the floodplain wherever possible.	Madison County Comprehensive Plan, PolicyV.7.2	
Subdivisions shall be required to include buildable area outside of the floodplain on each lot, wherever possible.	Madison County Comprehensive Plan, Policy V.7.3	
Fill within floodplains shall be limited to the minimum which is necessary for development and access.	Madison County Comprehensive Plan, Policy V.7.4	
Fill shall be placed and designed so as to minimize interference with natural water flows.	Madison County Comprehensive Plan, Policy V.7.5	
No hazardous materials or hazardous waste shall be stored within the floodplain.	Madison County Comprehensive Plan, Policy V.2.20	
No hazardous materials or hazardous waste shall be used, generated or stored within the floodplain.	Madison County Comprehensive Plan, Policy V.7.6	
For all projects not exempted from Chapter 40B-4 and 17-25, F.A.C. within the County, stormwater management systems must be installed such that the peak-rate of post-development runoff will not exceed the peak-rate of pre-development runoff for storm events.	Madison County Comprehensive Plan, Policy VHI.2.1	

The land development code will ensure that for all new development, post-development drainage flows will equal pre-development flows in order to avoid exacerbating existing poor drainage conditions.	Greenville Comprehensive Plan Environmental Element, Policy 3.1	Applied
Greenville shall prepare and adopt a Future Land Use Plan by 10/91 that directs development away from wetland areas and high hazard flood prone areas through 2001.	Greenville Comprehensive Plan, Conservation Element, Objective 6	Dated
The County shall, by 1992, include subdivision improvement standards within the land development regulations which, where required by such regulations the sub-divider shall be required to make improvements such as install stormwater facilities...	Madison County Comprehensive Plan, Objective VIII.3	
Non-conforming land uses shall not be altered or expanded. If they are destroyed or damaged by more *~ than 75% of their assessed value, any reconstruction be in conformity with the Future Land Use Map.	Greenville Comprehensive Plan. Ordinance 201: Policy 1.6	Requires further review. Appears not to be followed in practice.

Madison County Comprehensive Plan, Policy V.3.2 Development on sites which include areas within the one-hundred year floodplain shall be required to be located outside of the floodplain wherever possible.	Madison County Comprehensive Plan, Policy V.2.20	
Subdivisions shall be required to include buildable area outside of the floodplain on each lot, wherever possible	Madison County Comprehensive Plan, Policy V.3. 3	
Fill within floodplains shall be limited to the minimum which is necessary for development and access.	Madison County Comprehensive Plan, Policy V.3. 4	
Greenville shall not allow development which would destroy functional integrity of adjacent water bodies, wetlands and flood prone areas.	Greenville Comprehensive Plan, Conservation Element, Objective 3	Effective
Fill shall be placed and designed so as to minimize interference with natural water flows.	Madison County Comprehensive Plan, Policy V.3. 5	

Coordinate planning with municipalities, other counties and regional, state and federal entities		
The County shall coordinate its comprehensive planning with the School Board, Water Management District, Regional Planning Council, adjacent counties and the municipalities of Madison, Greenville and Lee. The coordination mechanisms shall include, as appropriate, inter-local agreements, written and verbal communications, participation on technical advisory committees, utilization of mediation process and joint meetings with appropriate other local, regional, state and federal governing bodies and agencies of their designated	Madison County Comprehensive Plan, Objective VII.1	
In special flood area the building inspector shall notify adjacent communities and the Suwannee River Water Management District prior to any alteration or relocation of watercourse and submit copy of notification to FEMA.	City of Madison, Code of Ordinances, Section 11.5-31	
Greenville will ensure the equitable and reasonable sharing of authority, responsibility and resources among the different levels of government through the process of intergovernmental coordination.	Greenville Comprehensive Plan, Intergovernmental Coordination, Goal	Effective and on-going
Greenville will adopt land development regulations with administrative procedure requiring that the Town coordinate with State, regional and federal agencies for the purposes of mitigation potential adverse impacts of future development and redevelopment activities.	Greenville Comprehensive Plan, Future Land Use Element, Objective 8	
Requests for redevelopment orders or permits shall be coordinated as appropriate, with adjacent counties, special districts, the Regional Planning Council, Water Management District and state and federal agencies.	Greenville Comprehensive Plan, Future Land Use Element	On-going
Coordinate with Madison County to review building codes and land development regulations to improve efficiency and reduce building costs.	Greenville Comprehensive Plan, Housing Element, Policy 2.5	On-going

County shall participate in acquisition planning process of state and regional agencies for lands and unique natural areas located within the 100-year flood plain of the Suwannee River.	Madison County Comprehensive Plan, Policy S.2.3	
Greenville shall coordinate with Madison County to develop an emergency response plan to handle incidents involving hazardous waste.	Greenville Comprehensive Plan, Conservation Element, Policy 7.1	Inter-local agreements are in place and coordinated training is on-going.
Ordinance establishes County Fire Rescue Board and inter-local agreements for fire protection.	Madison County Ordinance 95-69	

Description of Mitigation Goals

A major part of the Madison County Local Mitigation Strategy is to develop the LMS plan in conjunction with State and Federal guidance. Madison County has developed the following set of five goals.

Goal 1: Enhance and maintain county capability to implement a Comprehensive countywide hazard loss reduction strategy

Objective 1.1: Review existing county agency programs, plans and policies to determine their effectiveness and efficiency in reducing risk and vulnerabilities to natural and manmade hazards, on annual basis.

Objective 1.2: As a means of enhancing intra and inter-governmental coordination, establish and support an on-going liaison between Federal, State, Regional and Local Governments as well as the private sector and general public through the LMS Working Group.

Objective 1.3: Integrate the pre and post disaster mitigation functions with the response and recovery functions detailed in the Madison County Comprehensive Emergency Management Plan (CEMP)

Objective 1.4: Design a process for prioritizing the local projects for mitigation related funding programs.

Objective 1.5: Establish a mediation process to resolve conflicts between County Agencies existing plans, programs and mitigation related policies and integrate them into the Madison County Local Mitigation Strategy.

Objective1.6: Review and recommend at least annual updates of the county's risk and vulnerability assessments; including updates and/or changes to the inventory of critical facilities and infrastructure.

Objective1.7: Coordinate funding resources and opportunities among county agencies.

Objective1.8: Support the development and use of disaster loss reduction related to building codes and standards designed to reduce vulnerability and risk to all hazards.

Goal 2: Increase public and private sectors awareness and support for disaster loss education practices as a means of developing a culture of hazard mitigation in Florida.

Objective 2.1: Create an Education and Outreach Committee of the LMS Working Group to organize and develop a comprehensive countywide mitigation education and outreach strategy.

Objective 2.2: Conduct a summit for education stakeholders to present and promote mitigation education programs.

Objective 2.3: Develop a business continuity awareness program designed to educate the business community on the benefits of mitigation in reducing their vulnerabilities and risk to natural and man-made hazards.

Objective 2.4: Develop and promote outreach strategies designed to educate residents and visitors of Madison County's endemic hazards, their associated risk and vulnerabilities, and the applicable mitigation actions.

Objective 2.5: Identify and incorporate available hazard mitigation education and outreach programs/products into local public school education programs.

Objective 2.6: Establish an ongoing education and outreach effort to educate elected officials on the importance of hazard mitigation to include annual report to the Madison County commissioners and other appropriate officials.

Objective 2.7: Develop a public awareness campaign on the benefits of pre and post disaster mitigation through the dissemination of mitigation success stories.

Objective 2.8: Develop a strategy for working with the print, electronic and broadcast media on the dissemination of mitigation education and outreach material.

Goal 3: Reduce Madison County's hazard vulnerability through the application of scientific research and development.

Objective 3.1: Establish partnerships with public and private research universities and Madison County educational facilities. This scientific partnership will assist in assessing Madison County's vulnerability to natural and anthropogenic hazards in order to develop the means to reduce the potential for damage from their impact on society.

Goal 4: Protect the County's cultural, economic and natural resources.

Objective 4.1: Support mitigation initiatives that are compatible with the protection of the county's cultural, economic and natural resources.

Objective 4.2: Promote land acquisition programs that support mitigation opportunities compatible with the protection of natural and cultural resources.

Objective 4.3: Encourage the development of drainage improvement systems based on their compatibility with the natural environmental system functions.

Goal 5: Reduce the vulnerabilities of county and city owned facilities and infrastructure to natural and man-made hazards

Objective 5.1: Establish hazard mitigation priorities for retrofitting of existing county and city critical facilities and infrastructure based upon risk and vulnerability assessment.

Objective 5.2: Ensure that county and city facilities and infrastructure are located, designed and constructed to complement/support local priorities as defined in the Local Mitigation Strategies.

Section 5 – Mitigation Projects

A project list table is provided in Appendix A and shows the status for each mitigation project including responsible agency, potential funding source, and timeline for completion. The deferred projects have been placed on hold until adequate funding becomes available.

The mitigation actions/projects are prioritized by the LMS Working Group based on several variables: the cost-benefit of each project, each local jurisdiction's individual priority ranking of each project, and the frequency and level of damage sustained from events that each of the individual project's address. The major factor in the ranking of the LMS projects is based on the cost-benefit review as viewed by the LMS Working Group. For each project, the LMS Working Group held discussions regarding the expected estimated dollars lost and structures damaged from past and future events addressed by each project and then used these discussions as a means of prioritizing the projects. An example description of this review process can be seen below:

Example of the LMS Working Group discussions for each Project and the ranking of the B/C:

A street is known to flood on average every 6 months due to heavy rainfall and causes about $10,000 worth of damage per event. Over the next 10 years, the city can expect that the street will flood an average of 20 times based on historical recordings if nothing is done (twice a year x 10 years average), costing the city an expected $ 200,000 in damages. The city recognizes that adding a larger storm water drain project would eliminate the effects of this hazard on the street and would cost an estimated $90,000 to implement. Although the upfront costs of the project would be considerable in the short term, the long-term costs would benefit the city by a 2 to 1 (200%) margin over the next 20 years.

Prior to LMS projects being accepted, all mitigation projects are first brought forward and discussed at open LMS Working Group meetings. The members analyze the cost effectiveness and technical feasibility of each project, as well as ensure that each project is environmentally sound prior to being voted upon for addition to the finalized LMS Project List. All mitigation projects must first be submitted to the LMS Working Group by a member for consideration of acceptance to the LMS Project List. With each project submission, the group votes on whether to add the project to the LMS Project List. Once the feasibility and environmental requirements are found to be met, and a favorable vote among LMS Working Group members is conducted, the project is then added.

Implementation of Mitigation Actions

Each jurisdiction within the Madison County LMS can submit mitigation actions and projects to the LMS Working Group at any time during the calendar year. The project evaluation table on page 127 describes how projects are prioritized. At the time of submission, each jurisdiction is required to complete a Hazard Mitigation Project Evaluation Criteria Worksheet in order for the project to be added to the LMS Working Group Project List. The Hazard Mitigation Project Evaluation Criteria Worksheet includes a wide range of information related to a specific mitigation action or project. This information includes, but is not limited to: the responsible department and project manager, potential financial resources, timeframe of completion and the goals achieved. Also included is a cost/benefit review of each mitigation action or project.

As discussed in the previous section, the cost/benefit review has been performed by each individual jurisdiction and is heavily weighted over all other variables in the ranking of each of the jurisdiction's individual projects. The mitigation actions/projects are prioritized by each jurisdiction based on several variables: the cost-benefit of each project, each local jurisdiction's individual priority ranking of each project, and the frequency and level of damage sustained from events that each of the individual project's addresses. The major factor to the ranking of the LMS projects was based heavily on the cost-benefit analysis as viewed by each jurisdiction. For each project, the jurisdiction estimated dollars lost and structures damaged from events addressed by each project and then used these estimates as a means of ranking the projects for each community.

As a benchmark for progress, completed mitigation actions and projects will be highlighted on the project list. Projects that are deferred will remain on the project list and a description will be listed as to why the project was deferred. A project that is identified to be deleted from the project list will remain on the project list for one reporting cycle along with a description as to why the project will be removed.

Madison County LMS Project Prioritization Table

Criteria	Measure	Points
Supports Public Health and Safety	*Immediate* – Alleviates existing health or safety hazards *Intermediate* – Alleviates potential health or safety hazards *Long-Term* – Promotes or maintains health or safety	Immediate – 100 points Intermediate – 75 points Long-Term – 50 points
Protects People	Number of people protected	1,000+ = 50 points 101 to 1,000 = 40 points 11 to 100 = 30 points 10 or less = 20 points
Protects Property	Residential (including rental) Business (commercial and non-profit) Secondary homes (cabins, retreats, etc.) Vacant lots/acreage	Residential – 4 points per property (maximum of 80) Business – 3 points per property (max. of 60) Secondary – 2 points per property (max. of 40) Vacant – 1 point per property (max. of 20)
Reduces Future Damage	Reduces risk of future damages (e.g. reduces development in 100-year floodplain) and is cost effective	Significant reduction in risk – 60 points Moderate – 30 points Little to none – 0 points
Supports Essential or Critical Services	Essential services provided by local government (e.g. gas, electricity, garbage, sewer, roads, water, fire, police/sheriff, shelters, designated public facilities, and/or emergency operations) Businesses designated as essential services by the City Council or County Commission (through Emergency Management)	Essential public services – 20 points Essential business service – 15 points

Funding Sources for Hazard Mitigation Projects

The following are additional potential funding sources for the LMS Projects

Hazard Mitigation Grant Program (HMGP)

The Hazard Mitigation Grant Program is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 93-288 as amended). It is a partnership that is designed to assist states, local governments, private non-profit organizations and Indian Tribes in implementing long-term hazard mitigation measures following a major disaster declaration.

The objectives of the Hazard Mitigation Grant Program are: 1) To prevent future losses of lives and damage to property due to disasters; 2) To implement state or local hazard mitigation plans; 3) To enable mitigation measures to be implemented during immediate recovery from a disaster; and 4) To provide funding for previously identified mitigation measures that benefit the disaster area.

Flood Mitigation Assistance (FMA) Grant

The Flood Mitigation Assistance Program is a competitive grant program that provides funding to states, local communities, federally recognized tribes and territories. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. FEMA chooses recipients based on the applicant's ranking of the project and the eligibility and cost-effectiveness of the project.

Community Development Block Grant Mitigation Program (CDBG-MIT)

The Community Development Block Grant Mitigation (CDBG-MIT) Program is a unique and significant opportunity for eligible grantees to use this assistance in areas impacted by recent disasters to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. Congress appropriated $12 billion in CDBG funds in February 2018 specifically for mitigation activities for qualifying disasters in 2015, 2016, and 2017, and HUD was able to allocate an additional $3.9 billion, bringing the amount available for mitigation to nearly $16 billion.

Section 6 - Monitoring, Evaluating and Updating the Plan

The Madison County LMS Working Group is committed to maintaining and updating this plan. This finalized adopted plan represents a snapshot in time for Madison County while the overall mitigation strategy is a process that is on-going. As events occur over time, appropriate mitigation actions and strategies will be discussed within the LMS working group to help mitigate the impact to citizens and Madison County. These efforts will be organized by the Madison County Emergency Management Agency. The LMS Working Group chair is responsible for monitoring, evaluating, and updating the LMS including assessing the effectiveness of the plan and LMS goals. However, the LMS Working Group will continue to be the primary agent for further development of the plan and the on-going mitigation process.

This adopted plan can be revised and updated by the LMS Working Group as needed to address new and on-going vulnerabilities. When significant revisions are made to this plan in the future such as this current update to the 2020 LMS, it is the county's decision whether additional resolutions are required.

Monitoring and Evaluation

The LMS Working Group, through the LMS Chair, monitors, maintains, and evaluates the LMS to meet the changing needs of the community and to ensure the LMS achieves its stated purpose and goals. The LMS Chair will monitor the LMS on a continuous basis to ensure that pre-disaster planning and mitigation initiatives are attainable and cost effective. To ensure that implementation continues throughout the duration of the LMS, each agency or jurisdiction responsible for specific mitigation projects will provide status updates to the LMS Chair as project changes occur and on an annual basis.

The criteria used to evaluate the LMS, and activities should include, but not be limited to:

- Federal and State requirements.
- Changes in development trends and land use that could affect infrastructure (water, sewer, stormwater, roads, traffic, etc.).
- Storms, other natural processes, and human-caused events that have altered Madison County's hazard areas (wind damage, flooding, erosion, etc.).
- Completion of existing mitigation projects and introduction of new goals.
- Changes in policy, procedure, or codes.
- Changes in building codes and practices.
- Legislative actions that could affect funding of mitigation efforts; and
- Changes in Flood Insurance Rate Maps, National Flood Insurance Program, etc.

Updating

The LMS Chair (Madison County Emergency Management Director) is responsible for updating the plan within five years from the date of the last FEMA approval. This process includes the following chronological schedule and method:

- Every year within the 5-year update timeframe, the LMS Chair will make notes in the LMS of items that require changes based on the evaluation process.

- During both the second and third year of the 5-year timeframe, the LMS Chair will begin updating the actual document sections with the most recent data available. This will be done with the help and acknowledgement of the LMS Working Group members. After each of these document updates, the Chair will bring forth the changes to the LMS Task Working Group

- Based on the review input from the LMS Working Group, the Chair will make changes where required.

- During the end of the third year and the beginning of the fourth year, the LMS Chair will gather the new FEMA update element requirements so that the updated plan will act in accordance with federal regulations.

- The LMS Chair will then give a presentation about the 5-year update to the LMS Working Group members and describe how they can assist and why they should participate.

- The LMS Chair will update all sections of the LMS with the most recent data and processes available.

- This updated document will then be presented to the LMS Working Group members for review.

- After making the revisions from the review, the LMS Chair will send the document to the FDEM State Hazard Mitigation Officer for initial review. This will be done approximately 6 months before the plan's expiration date.

- Upon FDEM approval, the county and all jurisdictions will adopt the LMS by resolution.

During the five-year cycle, the LMS Working Group will meet on an annual basis to discuss and revise the Madison County LMS. During these meetings, topics of discussion are to include:

1. Review of the contents of the current LMS
2. Updating the list of Critical Facilities

3. Updating the list of Historical Hazards from the previous year
4. Evaluation of current Mitigation Projects
5. Recommendation and group discussion of adding/modifying Mitigation Projects

At the LMS Working Group's discretion, more meetings and initiatives will be advanced to continue monitoring, evaluating and updating this plan.

Madison County LMS and Continued Public Participation

The community is encouraged to participate in the on-going mitigation planning process in Madison County. There will be three primary ways for the public to continue to participate in this LMS process.

- **LMS Working Group Meetings** – The annual LMS Working Group meetings will be open to the public. Each meeting will be publicly advertised through the local media and held in a public location. Agencies, public citizens, and private organizations will be encouraged to attend these meetings and provide their comments and feedback with respect to future developments of the LMS.

- **Internet Correspondence**. – The adopted LMS plan will be posted on the Madison County Emergency Management website *(www.madisoncountyfl.com)*, for review and download by the public and other communities & agencies. Comments and feedback and be emailed to the Emergency Management Agency who will convey the information to the LMS Working Group.

- **LMS Mailing List** – The LMS Working Group will maintain an on-going list of any interested citizens or organizations. Notifications will be sent to this list of people when any actions are taken regarding LMS meetings and events in Madison County.

References and Acknowledgments

State of Florida Enhanced Hazard Mitigation Plan
The Greater Madison County Chamber of Commerce
www.madisonfl.org
Madison County Property Appraisers Office
Madison County Local Mitigation Strategy – 1999, 2005, 2010,2015, 2020
Madison County Comprehensive Emergency Management Plan (CEMP)
NFIP Repetitive Loss List
Critical Facilities List

LMS Adoption and Resolution Documents

The jurisdictions represented in the Madison County LMS are as follows:

Madison County, Florida
City of Madison
Town of Greenville
Town of Lee
Tri-County Electric
Madison County School District
Madison County Memorial Hospital

All of the above jurisdictions anticipate signing resolutions adopting the 2025 LMS Plan update, once it has been approved by the Florida Division of Emergency Management.

Once the 2025 LMS is approved by FDEM, the participating jurisdictions will adopt the plan by resolution.

Plan Integration:

Information and the mitigation strategy from the LMS will be incorporated into Madison County and Municipal (City of Madison, Town of Greenville, Town of Lee) planning mechanisms.

Madison County Comprehensive Emergency Management Plan: This document contains elements which address natural and man-made emergencies which affect Madison County and the three participating jurisdictions. The comprehensive emergency management plan outlines the purpose, organization of, responsible agencies and officials of Madison County in the mitigation of, preparation for, response to, and recovery from emergencies and disasters. During the next update of the plan the risk assessment, goals, and objectives of the LMS will be reviewed and if appropriate information will be added to the mitigation section of the CEMP.

Madison County, City of Madison, Town of Greeneville, Town of Lee Comprehensive Plans: These plans contain goals, objectives and policies to guide the pre-disaster mitigation programs to address natural disasters, hazardous materials and fire.

Florida Statues allow local governments to amend comprehensive plans several ways. The regular amendment cycle is the option most likely to be used to incorporate or implement local mitigation strategy. Amendments to comprehensive plans are usually considered once a year. Deadlines for applications vary by community. During the next update of the plan the risk assessment, goals, and objectives of the LMS will

be reviewed and if appropriate information will be added to the comprehensive plans possibly adding new goals or objectives to these plans.

County and Municipal Land Development Regulations, Zoning Ordinances and Building Codes: Land development regulations or codes usually contain a codification of the land development ordinances of a community. They can be used to carry out actions that mitigate damage to new buildings and structures through design considerations. They also can be used to define type, density and intensity of land uses in identified areas that account for natural and human caused hazards. Low density zoning categories can also be used to reduce the amount and type of land uses exposed to certain types of hazards. This LMS plan makes recommendations to upgrade the building regulations, if followed then this can be considered successful integration of the LMS.

Responsible Party/ies: County and Municipal governments/ planning departments

Current Integration:

The 2025 update of the Madison County Local Mitigation Strategy plan coincided with the Comprehensive Emergency Management Plan update. Madison County Emergency Management officials took advantage of the opportunity to integrate demographic data and vulnerability assessment statistics from the LMS into the CEMP.

Appendix A - Mitigation Projects – Current

Priority	Description of Project or Initiative	Goal for Hazards Mitigated	Mitigation Goals Achieved	Funding Source	Potential Additional Funding	Jurisdiction (Location)	Agency Responsible for Implementation	Estimated Costs	Status	Timeframe to Complete
1	Install Backup Generator for County Officer at Annex	All Hazards	No	Hazard Mitigation Grant Program	(1) Water & Waste Disposal Loan & Grant Program in Florida (2) Water Quality Improvement Grant Program	Madison County	Madison County Board of County Commissioners	$212,534	Ongoing	Within a Five Year Time Frame
2	FDOH Madison Building Hardening	Hurricane, Tornadoes and Floods	No	Pre-Disaster Mitigation Grant Funds	Currently, there are no additional funding opportunities that meet the requirements of this project.	Madison County	Madison County Health Department	$50,600	Ongoing	Within a Two Year Time Frame
3	Power Up Madison County Central School	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County School District	$87,500	Ongoing	Within a Two Year Time Frame
4	Madison County Central Transfer Switch	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County School District	$350,000	Ongoing	Within a Five Year Time Frame
5	Madison County Central Communications	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County School District	$50,600	Ongoing	Within a Five Year Time Frame
6	Senior Center Transfer Switch with Mobile Generator	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Emergency Management	$234,529	Ongoing	Within a Five Year Time Frame
7	Supervisor of Elections Generator Project	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Board of County Commissioners	$44,738	Ongoing	Within a Five Year Time Frame
8	TCEC Underground Anchor Project	All Hazards	No	Hazard Mitigation Grant Program	General Fund and In Kind	Madison County	Tri-County Electric Cooperative	$1,300,000	Ongoing	Within a Five Year Time Frame
9	Simmons Fire Station Hardening Project	All Hazards	No	Hazard Mitigation Grant Program		County of Madison	Madison County Board of County Commissioners	$101,780	Ongoing	Within a Five Year Time Frame
10	Town Of Lee Lift Station Generators	All Hazards	No	Hazard Mitigation Grant Program		Town of Lee	Town of Lee	$321,780	Ongoing	Within a One Year Time Frame
11	Madison County Hospital Code Blue Generator	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Memorial Hospital	$1,590,267	Ongoing	Within a Two Year Time Frame
12	Madison City Hall Hardening Project	All Hazards	No	Hazard Mitigation Grant Program		City of Madison	City of Madison Public Works	$49,430	Ongoing	Within a One Year Time Frame
13	Town of Greenville Fire Department Generator	All Hazards	No	Hazard Mitigation Grant Program		Town of Greenville	Town of Greenville	$165,000	Ongoing	Within a Five Year Time Frame
14	Town of Greenville Master lift Station Bypass Pump	All Hazards	No	Hazard Mitigation Grant Program		Town of Greenville	Town of Greenville	$400,000	Ongoing	Within a Five Year Time Frame
15	Town of Greenville Senior/Youth Community Center Generator	All Hazards	No	Hazard Mitigation Grant Program		Town of Greenville	Town of Greenville	$206,990	Ongoing	Within a Five Year Time Frame
16	Road Department Generator	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Board of County	$165,500	Ongoing	Within a Five Year Time
17	CID Generator	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Board of County	$132,500	Ongoing	Within a Five Year Time
18	Sheriff's Department Office Generato	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Board of County Commissioners	$88,980.00	Ongoing	Within a Five Year Time Frame
19	Solid Waste & Recycling Generator	All Hazards	No	Hazard Mitigation Grant Program		Madison County	Madison County Board of County Commissioners	$158,200	Ongoing	Within a One Year Time Frame
20	Town of Greenville Water Well #3 Generator	All Hazards	No	Hazard Mitigation Grant Program		Town of Greenville	Town of Greenville	$165,000	Ongoing	Within a Five Year Time Frame
21	SE Farm Road Drainage Improvement Project	All Hazards	No	Hazard Mitigation Grant Program	LAP Funding	Madison County	Madison County Public Works	$1,200,000	Ongoing	Within a One Year Time Frame
22	Martin Luther King Ave. Drainage Improvements	All Hazards	No	Hazard Mitigation Grant Program	LAP Funding	Madison County	Madison County Public Works	$300,000	Ongoing	Within a One Year Time Frame

Appendix A - Mitigation Projects - Completed

Description of Project or Initiative	Goal for Hazards Mitigated	Mitigation Goals Achieved	Funding Source	Jurisdiction (Location)	Agency Responsible for Implementation	Estimated Costs	Notes	Status
Renovation of the Martin Luther King Lift Station	Hurricanes, Tornadoes and Floods	Yes	Community Development Block Grant	City of Madison	City of Madison Public Works	$600,000	The Martin Luther King Lift Station was renovated and brought up to code. The project was funded through Community	Completed
Reclamation of the Greenville Landfill	Hurricanes, Tornadoes and Floods	Yes	United States Environmental Protection Agency	Town of Greenville	Greenville Special Projects Consultant	Between $250,000 - $600,000	This project involved excavating and disposal of solid waste from the former 5-acre municipal landfill and reclamation of the land for future use. The town is currently paying $30,000 annually to conduct semi-annual water quality tests. The reclamation will provide mitigation for possible future intrusion into the Florida Aquifer. This project was completed in 2012.	Completed
Centralized Wastewater System	Hurricanes and Floods	Yes	Community Development Block Grant and State Revolving Grant Funds	Town of Lee	Town of Lee Manager	$2,500,000	This project has been completed and included centralizing the wastewater system in the Town of Lee. The goal was to reduce, and eliminate the septic tanks in the town as they could have potentially cause serious health risks during excessive flooding.	Completed
The 911 Dispatch/Communications Center has been Retrofitted to Serve the Entire County, Including Police and Fire Services	All Hazards	Yes	Hazard Mitigation Grant Program	All Jurisdictions in Madison County	Madison County Emergency Management	Information Unavailable	As of November 2013, the Emergency Medical Services portion of the retrofit has been completed. The Dispatch Center will be completed and functioning as of January 2014.	Completed
Greenville Potable Water Wellfield	Hurricanes, Tornadoes and Floods	Yes	Florida Department of Health	Town of Greenville	Greenville Special Projects Consultant	Between $300,000 - $400,000	This project involved the acquisition of suitable land and infrastructure costs with development of a new wellfield. This project was needed as the town's two wells were located at the water treatment plant area which was too close to the CSX Railroad. The project was completed in 2012.	Completed
Demolition of the Old Tobacco Barn Located Next to the Emergency Operations Center	Widfires	Yes	Madison County Emergency Management	City of Madison	Madison County Emergency Management	$15,000	The barn is currently a fire hazard and could potentially be very destructive if not removed.	Completed
Purchase a Reverse 911 System that could be Operated from the Dispatch Center, the Emergency Operations Center, or a Remote Authorized Location	All Hazards	Yes	Office of Disease Prevention Grant Funds	All Jurisdictions in Madison County	Madison County Emergency Management	$25,000	Information Unavailable	Completed
Install Gravity Sewer Lines at CR53 back in Quail Hollow	Hurricanes and Floods	Yes	Madison County Board of County Commissioners	City of Madison	City of Madison Public Works	Information Unavailable	Information Unavailable	Completed
Harden the Police Department and Install a Backup Generator	All Hazards	Yes	United States Department of Agriculture Grant and Loan	City of Madison	Madison Director of Community Development	$500,000	The demolition is complete. Currently, the renovation on the upstairs level is in progress. A loan was obtained for $500,000 and partial payment was received through the United States Department of Agriculture grant. The estimated timeframe for completion is April 2014.	Completed
Update and Expand the Existing Wastewater Treatment Plant	Hurricanes, Tornadoes and Floods	Yes	Florida Department of Health	Town of Greenville	Greenville Special Projects Consultant	Information Unavailable	Information Unavailable	Completed
Install Gravity Sewer Lines from Oak Estates to Martin Luther King	Hurricanes and Floods	Yes	Local	City of Madison	City of Madison Public Works	$1,000,000	Information Unavailable	Completed
Install Gravity Lines Along Martin Luther King	Hurricanes, Tornadoes and Floods	Yes	Local	City of Madison	City of Madison Public Works	$800,000	Installation of the gravity lines along Martin Luther King would enable the electric to continue and provide sewage service for the residents in the area which include the Middle School and Oak Estates.	Completed
Develop a Map that Identifies All Public Utilities throughout the County Including Geographic Informational System Coordinates	All Hazards	Yes	Florida Department of Environmental Protection	All Jurisdictions in Madison County	Madison County Emergency Management	Information Unavailable	Information Unavailable	Completed
Install Backup Generators at Lift Station Locations	Hurricanes and Floods	Yes	State Revolving Fund	City of Madison	City of Madison Public Works	$224,000	The City of Madison has many different elevations in the topography which makes it essential to have several lift stations. There is a maintenance issue when a hazard event occurs and power is lost. There are generators at the sewer plant, at the master lift station, and 1 mobile 80 kw unit for the railroad. However, there are concerns with the other 10 stations with the main one at the College Inn. It is essential to install backup generators so that power could continue.	Completed

Appendix A - Mitigation Projects - Deleted

Install Backup Generator at Madison County Jail for Communications and Jail Backups	Hurricanes, Tropical Storms, Tornadoes	No	Hazard Mitigation Grant Program	All jurisdictions in Madison County	Madison County Sheriff's Office	$150,000	Project Deleted March 2024
Purchase a Mobile 400 Kilowatt	All Hazards	No	Hazard Mitigation Grant Program	All jurisdictions in Madison County	Madison County Emergency Management	$250,000	Project Deleted March 2024
Provide Water Storage Tanks and Generators for Barr Well	All Hazards	No	State Revolving Fund	City of Madison	City of Madison Public Works	64,000	Project Deleted March 2024
Renovate the Pawnee Lift Station	Hurricanes Tornaodes and floods	No	State Revolving Fund	City of Madison	City of Madison Public Works	400,000	Project Deleted March 2024
Harden City of Madison Fire Station	Hurricanes and Tornadoes	No	Madison County Fire Rescue	City of Madison	City of Madison Public Works	Information Unavailable	Project Deleted March 2024
Renovate and Harden the 2nd Floor of the Existing Firehouse	All Hazards	No	Pre-Disaster Mitigation Grant Funds	Town of Lee	Lee Town Manager	20,000	Project Deleted March 2024
Work with the Florida Forest Service on Evaluating the Defensible Space on all the Critical Facilities throughout the County	Wildfires	No	Hazard Mitigation Grant Program	All jurisdictions in Madison County	Madison County Emergency Management	Awaiting Estimate	Project Deleted March 2024
Install Generator at the Solid Waste/Recycling Center	All Hazards	No	Hazard Mitigation Grant Program	All jurisdictions in Madison County	Madison County Solid Waste	27,000	Project Deleted March 2024
Wiring, Installation & Generator at Lee, Pinetta & Greenville Elementary Schools Food Service Sections	All Hazards	No	Madison County School District	Madison County School District	Madison County	Awaiting Estimate	Project Deleted March 2024
Install Fire Hydrants throughout the City & Needed Areas	Wildfires	No	Pre-Disaster Mitigation Grant Funds	City of Madison	City of Madison Public Works	47,500	Projecct Deleted March 2024

Appendix B - 2025 LMS Working Group Members

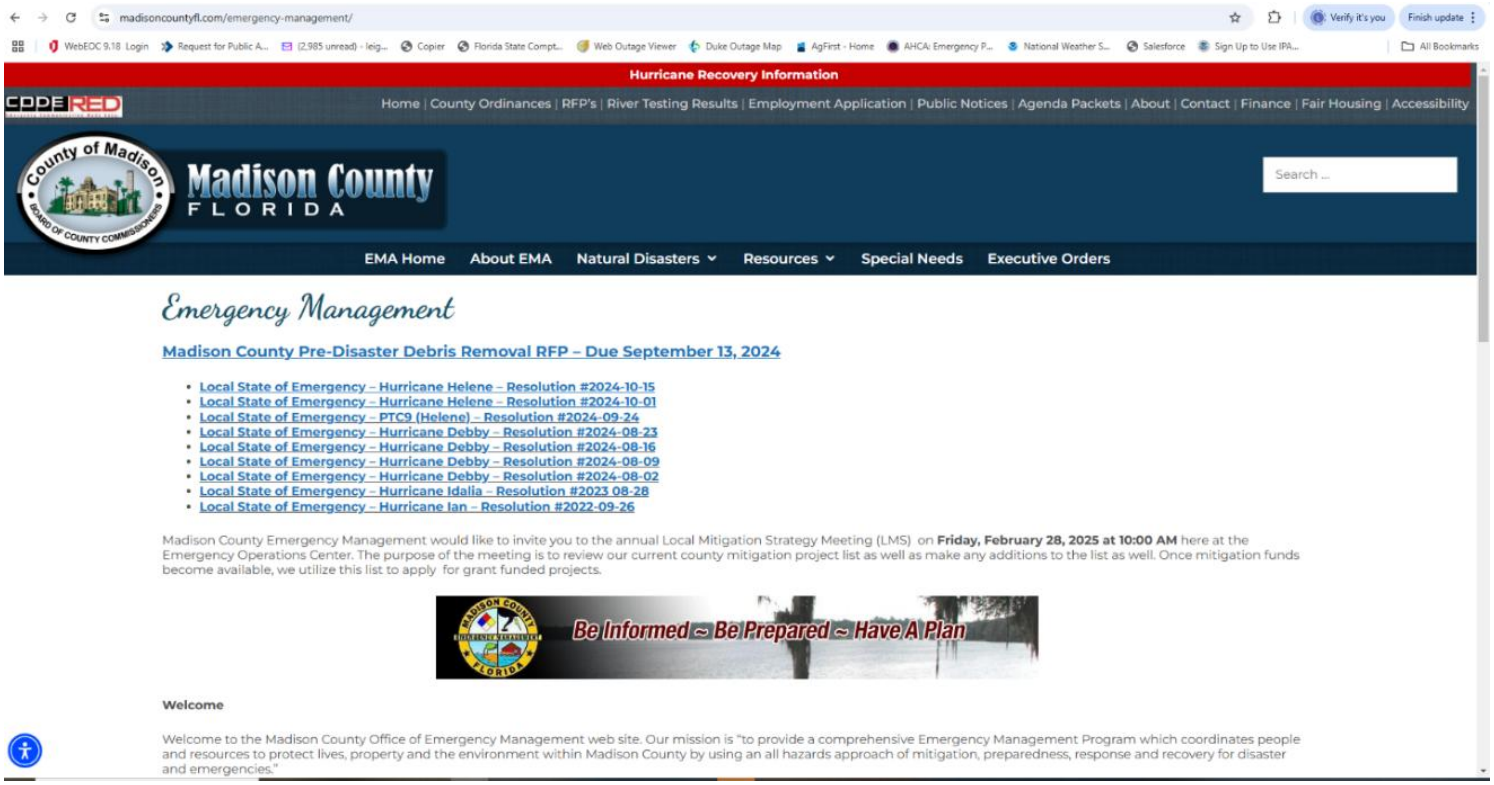
Member	Jurisdiction	Title	Email	Phone	Address
Leigh Basford	*Madison County Emergency Management*	*Director*	*madisoncoem@embarqmail.com*	*(850) 973-3698*	*1083 SW Harvey Greene Drive, Madison, FL 32340*
Doug Brown	*City of Madison*	*City Manager*	*citymanager@cityofmadisonfl.com*	*(850) 973-5081*	*171 SW Rutledge Street, Madison, FL 32340*
Allen Clayton	*Madison County Fire Rescue*	*Fire Chief*	*fireco@madisoncountyfl.com*	*(850) 973-3494*	*1314 West Base Street, Madison, FL 32340*
Marie Smith	*Madison County Property Appraiser*	*Property Appraiser*	*appraiser@madisoncoannex.com*	*(850) 973-6133*	*229 SW Pinckney Street, Madison, FL 32340*
Renee Demps	*Madison County Planning & Zoning*	*Planning Dept Director*	*RDemps@madisoncountyfl.com*	*(850) 973-6785*	*229 SW Pinckney Street, Madison, FL 32340*

Sherilyn Pickels	*Madison County BOCC*	*County Manager*	*mccoord@madisoncountyfl.com*	*(850) 973-3179*	*Courthouse House Annex, Room 219, 229 S W Pinckney Street, Madison, FL 32340*
Tyrone Edwards	*City of Madison Police Department*	*Police Chief*	*etyrone.edwards@cityofmadisonfl.com*	*(850) 973-5077*	*310 SW Rutledge Street, Madison, FL 32340*
David Harper	*Madison County Sheriff's Office*	*Sheriff*	*David.harper@mcso-fl.org*	*(850) 973-4001*	*2364 US 90 West, Madison, FL 32340*
Chris Andrews	*Madison County Sheriff's Office*	*Undersheriff*	*Chris.andrews@mcso-fl.org*	*(850) 973-4001*	*2364 US 90 West, Madison, FL 32340*
Tammy Stevens	*Madison County Hospital*	*Administrator*	*tstevens@mcmh.us*	*(850) 973-2271*	*224 Crane Ave. Madison, FL 32340*
Kaitlynn Culpepper	*Tri-County Electric*	*Safety Manager*	**kculpepper@tcec.com**	*(850) 973-2285*	*W. US Hwy 90 Madison, FL 32340*
Tony Session	*Madison County Building Department*	*Building Official*	*tsessions@madisoncountyfl.com*	*(850) 973-6785*	*229 SW Pinckney Street, Madison, FL 32340*
Cindy Colwell	*Madison County Property Appraiser*	*GIS Manager*	*gis@madisoncoannex.com*	*(850) 973-1454*	*229 SW Pinckney Street, Madison, FL 32340*
Larry Akers	*NFC*	*Director of Safety & Security*	*akersl@nffcc.edu*	*(850)973-0069*	*325 NW Turner Davis Dr. Madison, FL 32340*

Jamie Willoughby	*Madison County Road Dept.*	*Road Department Director*	*mcrdjamie@madisoncountyfl.com*	*(850) 973-2156*	*2060 NE Rocky Ford Rd. Madison, FL 32340*
Victoria Kingston	*Town of Greenville*	*Town Manager*	*clerk@mygreenvillefl.com*	*(850)948-2251*	*154 SW Old Mission Ave. Greenville, FL 32331*
Kimberly Allbritton	*Madison County Health Dept.*	*Health Officer*	*kimberly.allbritton@flhealth.gov*	*(850)973-5000*	*800 3rd St. Madison, FL 32340*
Katie French	*Madison County Health Dept.*	*Preparedness Planner*	*katy.french@flhealth.gov*	*(850)973-5000*	*800 3rd St. Madison, FL 32340*
Llew McDonald	*Madison County Solid Waste*	*Solid Waste Dept Director*	*swcoord@madisoncountyfl.com*	*(850) 973-2611*	*2060 NE Rocky Ford Rd. Madison, FL 32340*
Butch Galbraith	*Florida Forestry Service*	*District Manager*	*leonard.galbraith@freshfromflorida.com*	*(850)973-5100*	*2229 S SR 53 Madison, Fl 32340*
Sona Hayslett	*Town of Lee*	*City Manager*	*leemanager@leeflorida.org*	*(850)971-5867*	*286 NE County Rd. 255 Lee, FL 32059*
Donnie Waldrep	*Madison County BOCC*	*Chairman of the Board*	*district3@madisoncountyfl.com*	*(850) 464-1605*	*6513 NW Lovett Rd. Greenville, FL 32331*
Bruce Jordan	*Madison Fire Rescue*	*Fire Chief*	*madisonfirechief@gmail.com*	*(850) 973-5075*	*253 Horry Ave. Madison, FL 32340*
Scott Mixon	*Duke Energy*	*Government & Community Relations Manager*	*Robert.mixon@duke-energy.com*	*(850) 371-1005*	*Monticello, FL*

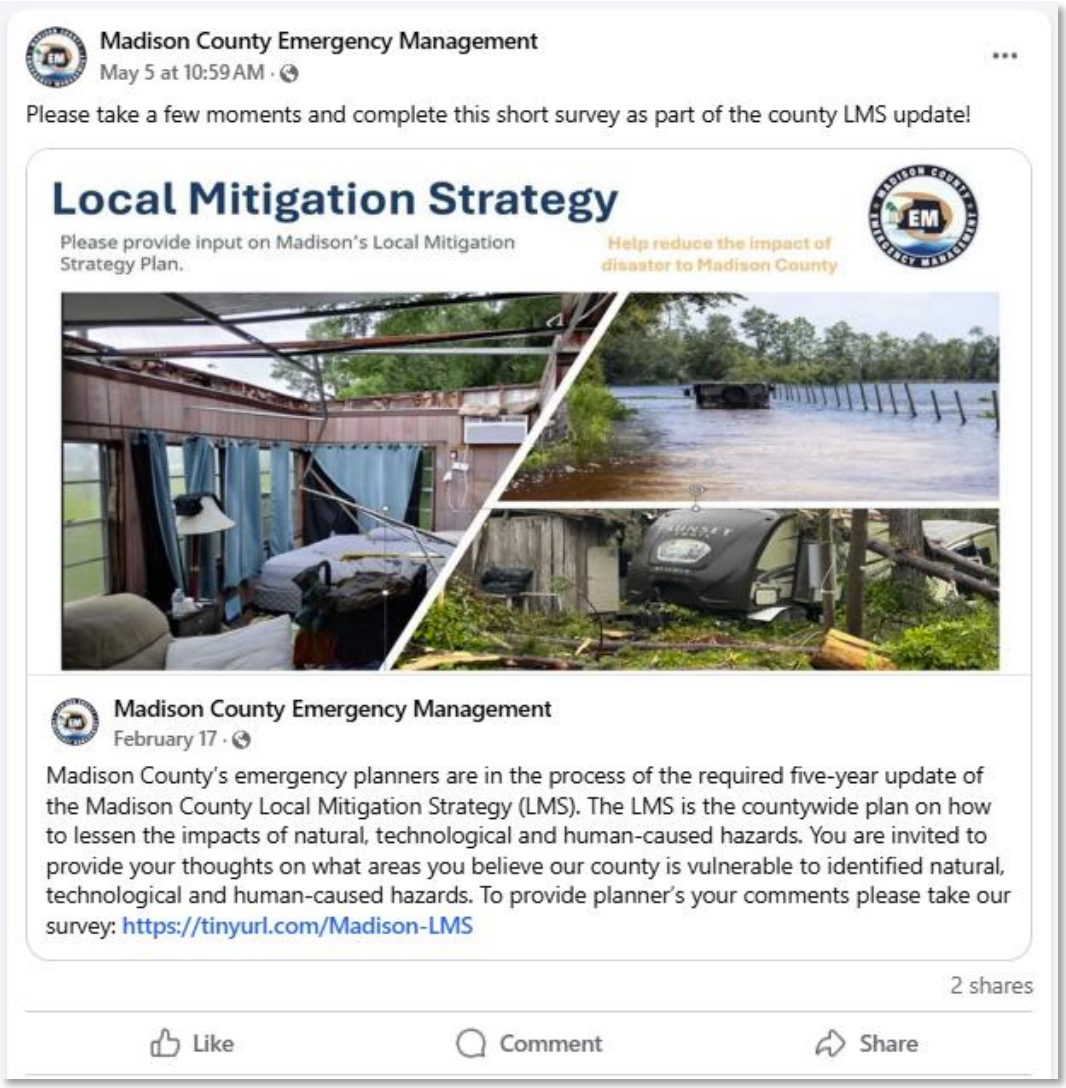
Appendix C - Public Involvement Supporting Documentation

1. Public Notice of LMS update and meeting on County website: https://madisoncountyfl.com/emergency-management/



2. Madison County Emergency Management also utilized social media to provide public notice of LMS update and to solicit public involvement/engagement via an online survey:

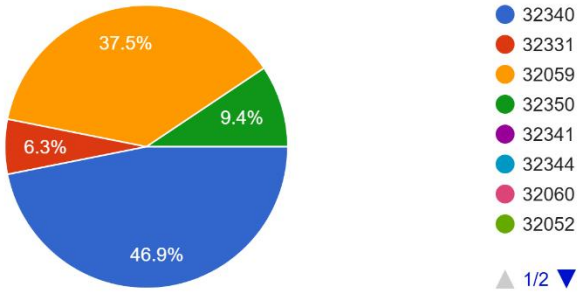



Madison County Emergency Management
May 5 at 10:59 AM ·
Please take a few moments and complete this short survey as part of the county LMS update!
Local Mitigation Strategy
Please provide input on Madison's Local Mitigation Strategy Plan.
Help reduce the impact of disaster to Madison County
Madison County Emergency Management
February 17 ·
Madison County's emergency planners are in the process of the required five-year update of the Madison County Local Mitigation Strategy (LMS). The LMS is the countywide plan on how to lessen the impacts of natural, technological and human-caused hazards. You are invited to provide your thoughts on what areas you believe our county is vulnerable to identified natural, technological and human-caused hazards. To provide planner's your comments please take our survey: https://tinyurl.com/Madison-LMS
2 shares
Like
Comment
Share

3. Online Mitigation Survey

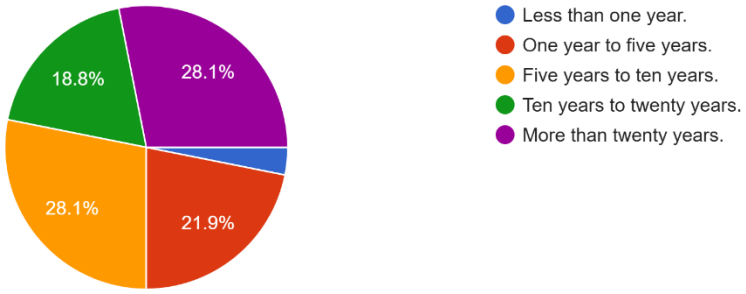
Please enter your Madison County address zip code:

32 responses



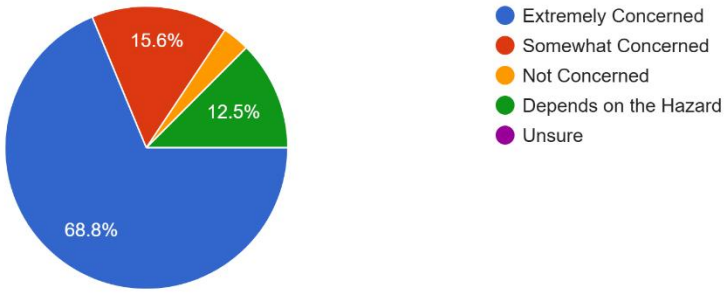
How long have you lived in Madison County?

32 responses



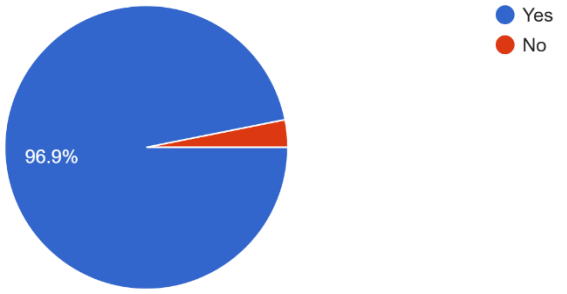
How concerned are you about your community being impacted by a disaster?

32 responses



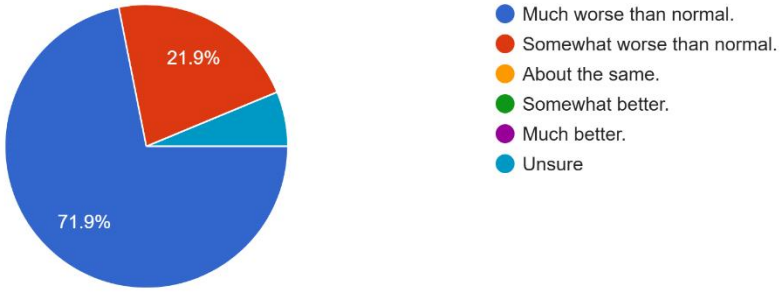
Have you taken any actions to reduce disaster impacts to your home or business?

32 responses



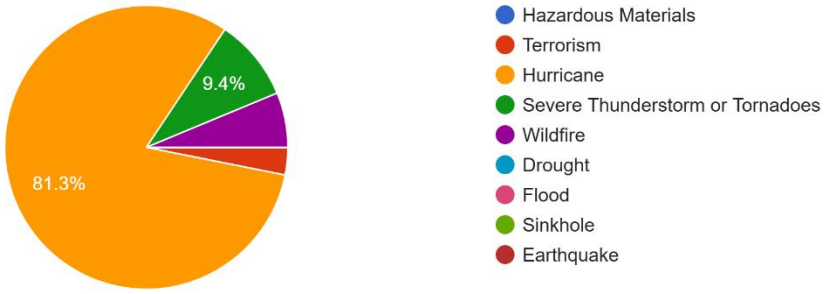
Over the last several years, the weather has been:

32 responses



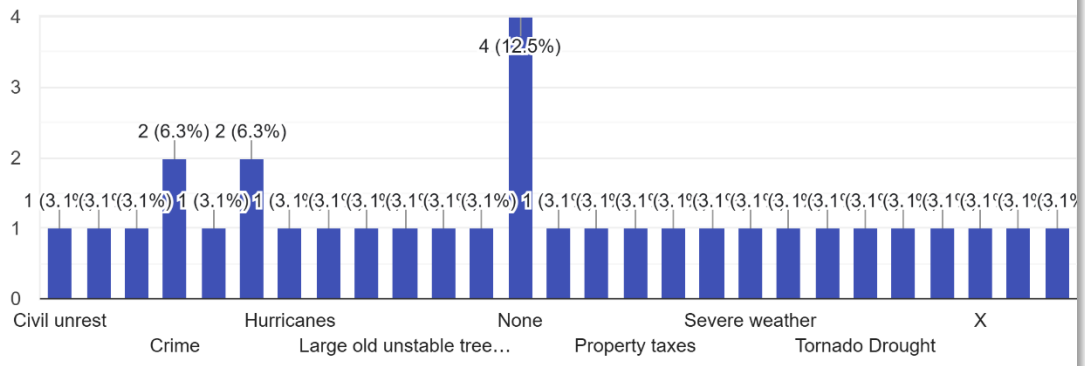
Which hazard poses the highest threat to your home or business?

32 responses

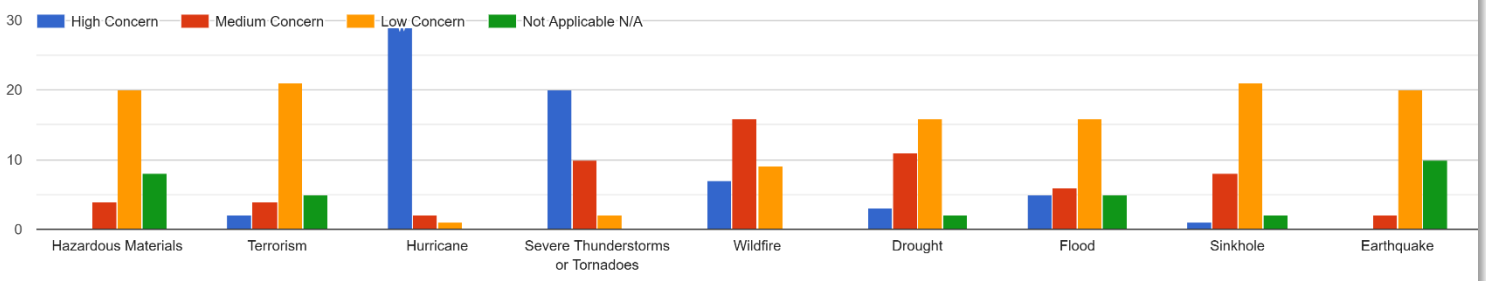


Please list any additional hazards that present a threat to your home or business that may have been missed above.

32 responses



Please rate each of the following hazards on a scale of high concern to Not Applicable (N/A) indicating the level of threat each presents to your home or business.



Appendix D - LMS Working Group Meetings 2020-2025

2020 Annual Meeting

Madison County

Local Mitigation Strategy Working Group

Sept 3, 2020

Agenda:

Welcome/Introductions

Local Mitigation Strategy Update

- Hazards Identification & Analysis
- Mitigation Strategy
- Mitigation Actions
- Public Involvement
- Incorporation into Existing Planning Mechanisms
- Plan Approval & Adoption Process

Comments from the Public

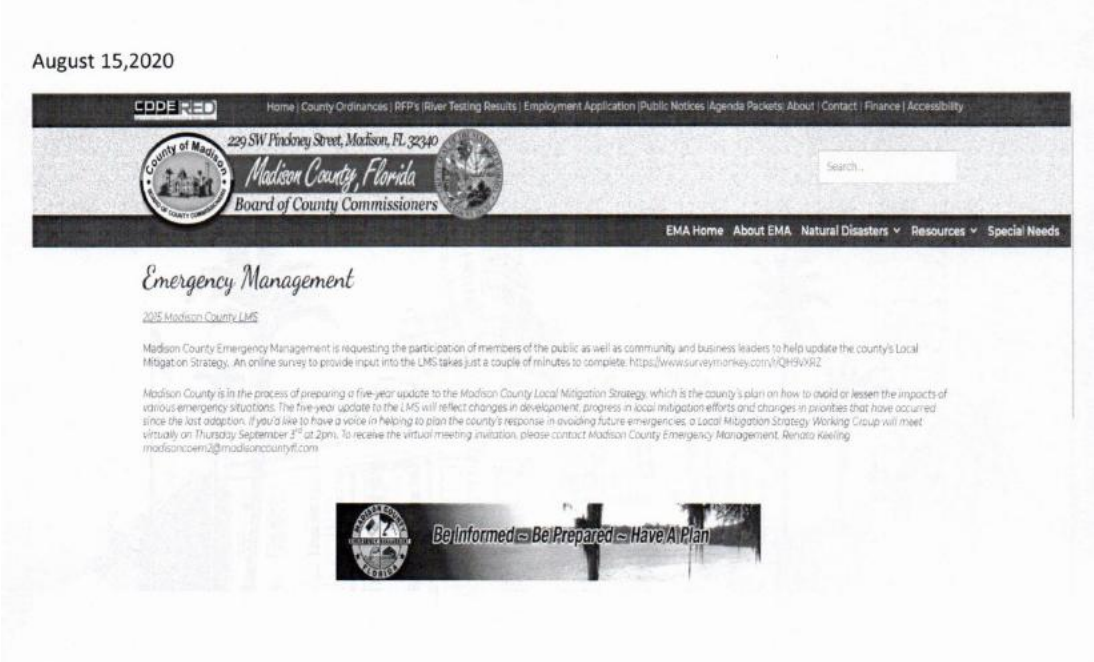
Other business/closing remarks

Madison County LMS Meeting
GoTo Meeting (Call In) September 3, 2020

NAME	ORGANIZATION	EMAIL	ATTENDANCE
Leigh Basford	Emergency Management	madisoncoem@madiosncountyfl.com	
Renata Keeling	Emergency Management	madisocoem2@madisoncountyfl.com	
Jerome Wyche	City of Madison		
Allen Clayton	Madison County Fire & Rescue		
Leigh Barfield	Madison County Property Appraiser		
Renee Demps	Madison County Planning & Zoning		
Sherilyn Pickels	Madison County BOCC		
Reggie Alexander	City of Madison Police Dept.		
Ben Stewart	Madison County Sheriff's Dept.		
Epp Richardson	Madison County Sheriff's Dept.		
Tammy Stevens	Madison County Hospital		
Rusty Smith	Tri-County Electric		
Rick Anderson	Madison County Building Dept.		
Cindy Colwell	Madison County Property Appraiser		
Larry Akers	NFCC		
Lonnie Thigpen	Madison County Road Dept.		
Lee Jones	Town of Greenville		
Kimberly Allbritton	Madison County Health Dept.		
Patricia Day	Madison County Health Dept.		
Clay Blair	Madison County Solid Waste		
Butch Galbraith	Florida Forestry Service		
John Anderson	Town of Lee		
Ronnie Moore	COCC		
Bruce Jordan	Madison Fire Rescue		
Danny Collins	Duke Energy		
Ed Dean	County Grant Writer		

Public Notice of Meeting on County Website

August 15,2020



2021 Annual Meeting

Madison County
Local Mitigation Strategy Meeting
December 15, 2021
10:30 AM

I.	Welcome
II.	Emergency Management Brief Out
III.	Local Mitigation Strategy 1. Annual Update 1. What is LMS? 2. Member Information Update 3. Current Project List Review 4. Additions 5. Ranking
IV.	Agency Brief Outs
V.	Training
VI.	Adjourn

EVENT: LMS Meeting

DATE: December 15, 2021

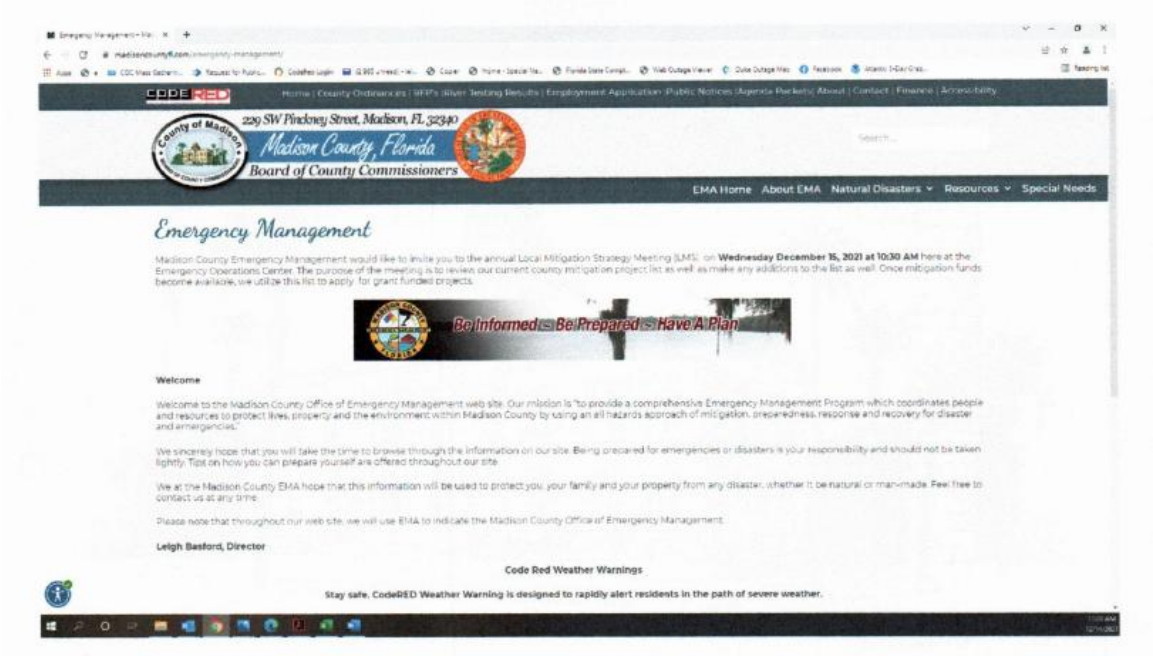
NAME	DEPARTMENT
Gerry Roberts	MCMH
Leigh Basford	Madison Co. EM
Sherilyn Pickels	Madison BOCC
Renata Keeling	Madison Co. EM

EVENT: LMS Meeting

DATE: December 15, 2021

NAME	DEPARTMENT
Willie Bouie	FDEM Region 2
Lonnie Thigpen	Road Department
Shelley Bearden	Madison CI
Cindy Priddy	FL POC Madison CI
David Harper	MCSO
Allen Clayton	MCFR

Public Notice of Meeting on County Website



2022 Annual Meeting

Madison County
Local Mitigation Strategy Meeting
December 13 2022
10:00 AM

I.	Welcome
II.	Introductions
III.	Local Mitigation Strategy 1. Annual Update 1. What is LMS? 2. Member Information Update 3. Current Project List Review 4. Additions 5. Ranking
IV.	Agency Brief Outs
V.	Training
VI.	Adjourn

Madison County
Local Mitigation Strategy Meeting

December 13, 2022

Name	Department	Email
James Ridge	MSW	———
David Floyd	City of Madison	david.floyd@cityofmadisonfl.com
Sherilyn Pickels	BOCC	admin@madisoncountyfl.com
Lonnie Thigpen	Road Department	mcrdlonnie@madisoncountyfl.com
Katie French	Madison CHD	Katie.french@flhealth.gov
Leigh Basford	Madison Co. EM	madisoncem@madisoncountyfl.com
Renata Keeling	Madison Co. EM	madisoncem2@madisoncountyfl.com

Public Notice of Meeting on County Website



2023 Annual Meeting

Madison County
Local Mitigation Strategy Meeting
June 16, 2023
11:30 AM

I.	Welcome
II.	Emergency Management Brief Out
III.	Local Mitigation Strategy 1. Annual Update 1. What is LMS? 2. Member Information Update 3. Current Project List Review 4. Additions 5. Ranking
IV.	Agency Brief Outs
V.	Training
VI.	Adjourn

2023 LMS Working Group Sign In Sheet

Member	6/16/23	Jurisdiction	Title	Email	Phone	Address
Leigh Basford	LB	Madison County Emergency Management	Director	madisoncoem@embarqmail.com	(850) 973-3698	1083 SW Harvey Greene Drive, Madison, FL 32340
Jerome Wyche		City of Madison	City Manager	citymanager@cityofmadisonfl.com	(850) 973-5081	171 SW Rutledge Street, Madison, FL 32340
Allen Clayton		Madison County Fire Rescue	Fire Chief	fireco@madisoncountyfl.com	(850) 973-3494	1314 West Base Street, Madison, FL 32340
Leigh Barfield		Madison County Property Appraiser	Property Appraiser	appraiser@madisoncoannex.com	(850) 973-6133	229 SW Pinckney Street, Madison, FL 32340
Renee Demps	RD	Madison County Planning & Zoning	Planning Dept Director	planner@madisoncountyfl.com	(850) 973-6785	229 SW Pinckney Street, Madison, FL 32340
Sherilyn Pickels		Madison County BOCC	County Manager	mccoord@madisoncountyfl.com	(850) 973-3179	Courthouse House Annex, Room 219, 229 S W Pinckney Street, Madison, FL 32340
Reggie Alexander		City of Madison Police Department	Police Chief	reggie.alexander@cityofmadisonfl.com	(850) 973-5077	310 SW Rutledge Street, Madison, FL 32340
David Harper	DH	Madison County Sheriff's Office	Sheriff	~~ben.stewart~~@mcso-fl.org	(850) 973-4001	2364 US 90 West, Madison, FL 32340
Chris Andrews		Madison County Sheriff's Office	Undersheriff	Chris.andrews@mcso-fl.org	(850) 973-4001	2364 US 90 West, Madison, FL 32340
Tammy Stevens		Madison County Hospital	Administrator	tstevens@mcmh.us	(850) 973-2271	224 Crane Ave. Madison, FL 32340
Kaitlynn Culpepper ~~Jeff Brewer~~		Tri-County Electric	Community Relations ~~Safety Manager~~	kculpepper@tcec.com jbrewer@tcec.com	(850) 973-2285 ext 1206	W. US Hwy 90 Madison, FL 32340
Rick Anderson		Madison County Building Department	Building Official	bldgofficial@madisoncountyfl.com	(850) 973-6785	229 SW Pinckney Street, Madison, FL 32340
DAVID WHEELER Cindy Colwell	DW	Madison County Property Appraiser	GIS Manager	gis@madisoncoannex.com	(850) 973-1454	229 SW Pinckney Street, Madison, FL 32340
Larry Akers		NFC	Director of Safety & Security	akersl@nffcc.edu	(850)973-0069	325 NW Turner Davis Dr. Madison, FL 32340
Jamie Willoughby ~~Lonnie Thigpen~~		Madison County Road Dept.	Road Department Director	mcrdlonnie@madisoncountyfl.com	(850) 973-2156	2060 NE Rocky Ford Rd. Madison, FL 32340

Lee Jones		Town of Greenville	Town Manager	clerk@mygreenvillefl.com	(850)948-2251	154 SW Old Mission Ave, Greenville, FL 32331
Kimberly Allbritton		Madison County Health Dept.	Health Officer	kimberly.allbritton@flhealth.gov	(850)973-5000	800 3rd St. Madison, FL 32340
Katie French	KF	Madison County Health Dept.	Preparedness Planner	katie.french@flhealth.gov	(850)973-5000	800 3rd St. Madison, FL 32340
Clay Blair		Madison County Solid Waste	Solid Waste Dept Director	swcoord@madisoncountyfl.com	(850) 973-2611	2060 NE Rocky Ford Rd. Madison, FL 32340
Butch Galbraith		Florida Forestry Service	District Manager	leonard.galbraith@freshfromflorida.com	(850)973-5100	2229 S SR 53 Madison, Fl 32340
Sona Hayslett		Town of Lee	City Manager	leemanager@leeflorida.org	(850)971-5867	286 NE County Rd. 255 Lee, FL 32059
Ronnie Moore		Madison County BOCC	Chairman of the Board	district3@madisoncountyfl.com	(850) 464-1605	6513 NW Lovett Rd. Greenville, FL 32331
Bruce Jordan	BJ	Madison Fire Rescue	Fire Chief	madisonfirechief@gmail.com	(850) 973-5075	253 Horry Ave. Madison, FL 32340
Danny Collins		Duke Energy	Government & Community Relations Manager	daniel.collins@duke-energy.com	(850)342-2295	Monticello, FL
Matt Lunn	ML	Madison County Fire Rescue	Captain		850-933-7239	1314 W Base St

Abey Cable Second Harvest of the Big Bend
Cindy Priddy (DOC)
Chris Cooks Chris.cooks@cityofmadisonfl.com 850-719-6017
Eric Powell (DOC)
Jim Willoughby MCPA
Gerald Roberts MCMH

Public Notice of Meeting on County Website



2024 Annual Meeting

Madison County Emergency Management
1083 SW Harvey Greene Drive • Madison FL 32340
850–973–3698 • Fax 850–973–4026 • madisoncoem@embarqmail.com

Madison County

Local Mitigation Strategy Meeting

February 16, 2024 – 11:00am

Meeting Agenda

- Introductions
- Prior Meeting reference/review of feedback from that meeting
- What is LMS?
    - Administrative process
    - Project list
    - Prioritization process
    - Meeting cadences
    - What is expected at meetings
    - Communities that have adopted the plan
- Objectives
- Current Condition Assessment and review
- Challenges Ahead
- Discussion on desired support and technical assistance
- Objectives and Actions Review and Summary

County Allocations:

- HMGP funding = $6,946,256.83 ~ 25% Match Requirement =$2,315,4118.94

Madison County
Annual LMS Meeting
February 16, 2024

Name	Agency	Email
Dona Haysleff	Town of Lee	leemanager@leeflorida.org
Tara Reynolds	Anser Advisory	tara.reynolds@anseradvisory.com
Michelle Daschner	Anser Advisory	michelle.daschner@anseradvisory.com
Sherilyn Pickels	Madison BOCC	admin@madisoncountyfl.com
Lonnie Thigpen	Madison Co. Road Dept.	merdlonnie@madisoncountyfl.com
Gerald Roberts	MCMH	groberts@mcmh.us
Renata Keeling	MCEM	madisoncoem2@madisoncountyfl.com
Katie French	Madison CHD	Katie.french@flhealth.gov
Cheyenne Young	Anser Advisory	cheyenne.young@anseradvisory.com
JARED DAVIS	FDEM/FCMC	jared@fawconline.com
Ben Kellingsworth	Madison Co School Bd	ben.kellingsworth@mcsbfl.us
Tim Ginn	Mad. Co School Bd	Timothy.ginn@mcsbfl.us
Renee Demps	Madison BOCC | P32	planner@madisoncountyfl.com
James Sowinski	Liberty Partners	james@libertypartnersfl.com
Keome Wythe	City of Madison	citymanager@cityofmadisonfl.com

Llewellyn McDonald	Solid Waste + Recycling	
Brigette Carrillo	FDEM	brigette.carrillo@em.myflorida.com
Kristin Lentz	FDEM	kristin.lentz@em.myflorida.com

Public Notice of Meeting on County Website

