EMERGENCY MANAGEMENT
WALTON COUNTY

Local Mitigation Strategy 2025

Walton County Emergency Management
75 S. Davis Lane
DeFuniak Springs, FL 32435
850.892.8065

THIS PAGE INTENTIONALLY LEFT BLANK

Record of Changes

This version of the Walton County Local Mitigation Strategy is updated to meet the criteria set forth by Florida Division of Emergency Management. Information on processes was gathered from those who are currently responsible for those processes.

Date	Description of Change	Location	Posted By

TABLE OF CONTENTS

APPENDICES

INTRODUCTION

PURPOSE

Hazard mitigation is defined as any action taken to reduce or alleviate the loss of life, personal injury, and property damage that can result from a disaster. It involves long- and short-term actions implemented before, during and after disasters. Mitigation activities include planning efforts, policy changes, programs, studies, improvement projects, and other steps to reduce the impacts of hazards.

For many years, federal disaster funding focused on relief and recovery after disasters occurred, with limited funding for hazard mitigation planning in advance. The Disaster Mitigation Act (DMA), passed in 2000, shifted the federal emphasis toward planning for disasters before they occur. The DMA requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. Regulations developed to fulfill the DMA's requirements are included in Title 44 of the Code of Federal Regulations (44 CFR).

The responsibility for hazard mitigation lies with the whole community. The DMA encourages cooperation among state and local authorities in pre- disaster planning. The enhanced planning network called for by the DMA helps local governments articulate needs for mitigation, resulting in faster allocation of funding and more cost-effective risk-reduction projects.

The DMA also promotes sustainability in hazard mitigation. To be sustainable, hazard mitigation needs to incorporate sound management of natural resources and address hazards and mitigation in the largest possible social and economic context.

BENEFITS

Hazard mitigation planning helps to identify strategies and actions that will reduce risk for those who live in, work in, and visit the county and provides a viable planning framework for all foreseeable hazards that may impact the county. Participation in the development of the plan by key stakeholders in the county helps to ensure that outcomes will be mutually beneficial. Benefits of hazard mitigation planning include:

- Reducing the loss of life, property, essential services, critical facilities, and economic hardship,
- Reducing recovery and reconstruction costs,
- Increasing cooperation and communication within the community, and
- Increasing the potential for State and Federal funding for disaster projects.

Walton County (WC) prepared a Local Mitigation Strategy (LMS) in compliance with the DMA in 1999[1]. Subsequent versions have been adopted with the most recent version adopted in 2020. The WCLMS identified resources, information, and strategies for reducing risk from all hazards and called for ongoing updates. This Walton County Local Mitigation Strategy fulfills the ongoing update requirement.

[1] https://weblink.mccinnovations.com/WebLink/3/doc/72370/Page1.aspx

THE PLANNING PROCESS

PREPARATION AND ORGANIZATION

To ensure implementation of mitigation goals, the LMS integrates other plans of the county and municipalities. A review of existing plans is done annually. Participating jurisdictions (City of DeFuniak Springs, City of Freeport, and City of Paxton) solicit public input and consider natural hazards, new development, and hazardous events to ensure mitigation strategies are current and relevant to each community's needs. Walton County and its local jurisdictions participate in the National Flood Insurance Program (NFIP), effective flood mapping products and other jurisdiction specific materials, including non-regulatory mapping products, which are used to support hazard mitigation initiatives.

Walton County Emergency Management (WCEM) staff coordinated with County, Municipal, and State stakeholders to facilitate meetings, collect data, and update the LMS. Walton County has an LMS Working Group (WG) that meets at least quarterly. The mission of the LMSWG is to collaboratively identify potential hazards within the County, assess vulnerabilities, prioritize mitigation actions, and develop strategies to reduce the risk of future damage and loss by implementing preventative measures thus making the County more resilient.

The LMSWG was actively involved in attending meetings to provide input on plan drafts and complete hazard mitigation worksheets to collect data on jurisdiction capabilities, development activity, plan integration with other plans and initiatives, and updates regarding previous mitigation projects.

The LMSWG consists of representatives from the following organizations:

- City of DeFuniak Springs (DFS)
- City of Freeport
- City of Paxton
- Florida Department of Health in Walton County (FDOH-Walton)
- Florida Division of Emergency Management (FDEM)
- Regional Utilities
- South Walton Fire District (SWFD)
- South Walton Utility Company, Inc.
- The Water Management Group
- Various local non-profits
- Walton Area Chamber of Commerce
- Walton County Fire Rescue (WCFR)
- Walton County Board of County Commissioners (WC BCC)
- Walton County Residents
- Walton County School District (WCSD)
- Walton County Sheriff's Office (WCSO)
- Walton County Tourism Department (Tourism)

A complete list of participants can be found here LMS WG List 2024.

The planning process used by the LMSWG and subcommittees adhered to the National Flood Insurance Program's (NFIP) Community Rating System (CRS) by including staff responsible for land use and zoning, construction permitting, code enforcement, floodplain management and mitigation, flood insurance education, and outreach. Additionally, the Code of Federal Regulations (CFR) standards and FEMA's Comprehensive Preparedness Guide (CPG) 101 were adhered to. Specifically, 44 CFR §201.6 (c) (2), 44 CFR §201.6 (c) (3), and 44 CFR §201.6 (b).

The following jurisdictions will adopt by resolution the WCLMS. Jurisdictional representatives include:

- Walton County- Traci Goodhart, Floodplain Manager; Donna Free, EM Deputy Director
- Walton County School District- Charlie Morse, School Safety Specialist
- City of DeFuniak Springs- Kristie Seigler, EM Specialist
- City of Freeport- Latilda Hughes-Neil, City Planner
- City of Paxton- Jennifer Thomas, City Clerk; Donna Smith, Mayor

The following jurisdictions have the option to adopt by resolution the WCLMS. Jurisdictional representatives include:

- South Walton Fire District (SWFD)- Ryan Crawford, Fire Chief
- South Walton Mosquito Control District (SWMCD)- Darren Dunwald, Director
- Argyle Volunteer Fire District (AVFD)- Jonathon Day, Fire Chief
- Liberty Fire District (LFD)- John Dunham, Fire Chief

A copy of jurisdictional resolutions will be included in Appendix C.

Each of the representatives listed above was given an opportunity to complete a detailed assessment and update of jurisdictional mitigation issues. The responses to these assessments can be found in Appendix B.

Meeting minutes, sign-in sheets, and associated materials are included in Appendix A.

PUBLIC INVOLVEMENT

Several meetings were conducted during the planning process to get feedback from stakeholders regarding the update of the LMS. All LMS meetings are advertised to encourage participation from the public. In addition, information regarding on-going planning activities was distributed at public outreach events.

On March 14, 2024, the LMSWG, in partnership with The Water Institute and The Seaside Institute, hosted a community State of Resiliency Workshop at the University of Florida Extension Office in DeFuniak Springs. This public meeting was attended by individuals and stakeholders. This effort led to the development of three LMS Subcommittees: Project Evaluation and Ranking; LMS Plan Revision; Resiliency Education and Outreach.

The Final State of Resilience Report summarizes social vulnerabilities as they relate to natural and manmade hazards. The report provides a resiliency framework that will be used to identify LMS goals and objectives to support future mitigation and recovery efforts.

On November 13, 2024, as part of the Resilient Florida Program Walton County, and the LMSWG hosted a public workshop to introduce the goals and objectives of the statewide Vulnerability Assessment (VA). The VA is a comprehensive assessment of critical facilities and the impacts associated with various flooding scenarios and projections. The meeting provided an opportunity for stakeholders to identify critical facilities or areas of concern. Stakeholder groups and the public were encouraged to participate and provide input at both workshops. Feedback from the members of the LMSWG and the public that attended any LMSWG meetings was compiled and distributed to the LMSWG Plan Revision Subcommittee for review and incorporation into the plan. While all stakeholders were encouraged to provide input into the plan, WCEM and the Floodplain Manager took the lead on the plan completion. The sections of the plan were divided into logical pieces and research was done and submitted to compile this document.

Additionally, a survey was developed to collect public feedback regarding hazards, mitigation priorities, and mitigation actions. The survey and the draft LMS were placed on all Walton County social media sites to solicit feedback and press releases were disseminated to alert the public. Despite the efforts to encourage public participation, only one survey was completed by a member of the public.

On October 21st, 2025, a public workshop is scheduled to review the results of the VA and get feedback on the draft LMS plan and project priority list. A survey was included in the press release and social media posts that advertised the public workshop to obtain public feedback regarding the hazards, mitigation priorities, and actions identified in the draft LMS plan. The results of the VA will be used to identify and prioritize hazard mitigation projects and funding opportunities.

Coordination With Other Agencies/Stakeholders

The LMSWG is responsible for reviewing hazards of concern, the goals and objectives of the plan, risk and vulnerability information, and mitigation projects as well as revising the elements of the LMS as necessary, periodically reviewing the priorities under the plan and eliminating those projects or initiatives that are no longer deemed necessary for meeting the goals and objectives under the LMS. This is achieved by holding in-person and/or online meetings, pushing out surveys, and utilizing social media to solicit input from all stakeholders.

WCEM holds quarterly partner meetings and attends quarterly meetings of all Region 1 Florida counties. At these meetings, current information regarding the LMS update progress is shared and invitations are extended to all meeting attendees. Each regularly scheduled quarterly LMSWG meeting notice includes a *Plan Update* section and a survey link where members and the public can receive information on the status of the LMS document. Each LMSWG meeting includes an opportunity for the current members to identify new or potential stakeholders. Once they are invited to the LMSWG meetings, they have an opportunity to provide feedback on the overall planning process. The LMS Chairperson, on behalf of the LMSWG, sends annual invitations by email to those identified agencies/organizations that may have a stake in the LMS planning process. Everbridge notifications are always sent to the LMSWG distribution list to save the date of meetings. A list of participating agencies and stakeholders can be found on page five of this plan.

Plan Incorporation

The LMSWG reviewed the following existing plans and reports to determine their effectiveness at restricting development in areas of concern, protecting natural resources, actions to reduce vulnerability, implementing recovery plans and redevelopment, and utilizing local resources for mitigation efforts:

- 2023 Enhanced State Hazard Mitigation Plan (FL)
- Walton County Watershed Master Plan (WMP)
- 2018 Local Government Flood Information Reference Guide

- FDEM Hazard Mitigation Grant Program (HMGP) Watershed Planning Initiative, 2024
- Statewide Vulnerability Assessment
- Resilient Florida Walton County State of Resiliency
- Florida Senate Bill 1954 (May 2021)
- Walton County Comprehensive Emergency Management Plan
- Elements of the Walton County Comprehensive Plan including:
    - Future Land Use Plan
    - Intergovernmental Coordination Element
    - Infrastructure
    - Conservation
    - Capital Improvements
    - Coastal Management
    - Housing
    - Recreation, Open Space, and Greenways Element
- FEMA National Flood Insurance Program and Community Rating System
- City of DFS Comprehensive Plan
- City of Freeport Comprehensive Plan
- City of Paxton Comprehensive Plan

These sources were used to identify current mitigation-related activities, identify additional hazards, determine existing vulnerabilities, predict possible impacts, and identify strategies for mitigation.

County Profile

Walton County

Walton County is in the panhandle of northwest Florida. It is bordered by Holmes, Washington, and Bay Counties in Florida to the east, the Gulf of Mexico to the south, Okaloosa County, Florida to the west, and Covington and Geneva Counties in Alabama to the north. Walton County is the 12th largest county in Florida with a total area of 1,240 square miles, of which 1,037.4 square miles are land and 202.6 square miles are water.

Demographics[2]

Demographic Est. July 2024	State of Florida	Walton County	City of DFS	City of Freeport	City of Paxton
Population	23,372,215	89,666	7,048	7,234	621
Households	8,550,911	32,659	2,436	2,517	254
Per Capita Income	$ 41,055.00	$ 49,119.00	$ 28,032.00	$ 35,512.00	$ 28,812.00
Poverty Level (%)	12.3	10.9	19.4	7.6	15.9

Employment

Employer	Number of Employees
Walton County School District	1618
Walton County Government (Including WCSO)	1268
Ascension Sacred Heart Hospital of the Emerald Coast	808

[2] https://www.census.gov/quickfacts/fact/table/FL,defuniakspringscityflorida,freeportcityflorida,waltoncountyflorida/PST045224 https://datausa.io/profile/geo/paxton-fl#housing

Publix Super Markets (multiple locations)	691
Watercolor Inn and Resort	630
Sandestin Golf and Beach Resort	580
Wal-Mart Super Center (multiple locations)	468
Hilton Sandestin Beach and Golf Resort	415
Walton Correctional Institution	300
Professional Products Company	170

City of DeFuniak Springs

The City of DeFuniak Springs is the county seat of Walton County. The city occupies a total area of 11.2 square miles, of which 11.0 square miles is land and 0.3 square miles is water. The city is in the east central area of the County with Interstate 1-10 and the railroad running through it.

City Of Freeport

The City of Freeport occupies a total of 10.8 square miles, of which 10.8 square miles is land, and 0.04 square miles is water. The city is located at the junction of Four Mile Creek and Lafayette Creek.

City of Paxton

The City of Paxton occupies a total of 4.0 square miles, of which 3.9 miles is land and 0.1square miles is water. The city is in the northernmost area of Walton County near the border between Florida and Alabama.

Walton County is Outlined in Green

Hazard Risk and Vulnerability Assessment

Hazard Identification and Risk Assessment (HIRA)

Risk assessment is the process of estimating the potential loss of life, personal injury, and economic and property damage resulting from identified hazards. The process focuses on the following elements:

Hazard identification- Use all available information to determine what types of hazards may affect a jurisdiction, how often they can occur, and their potential severity.
Exposure identification-Estimate the total number of people and properties in the jurisdiction that are likely to experience a hazard event if it occurs.
Vulnerability identification and loss estimation-Assess the impact of hazard events on the people, property, environment, economy, and resources of the jurisdiction to include estimates of the cost of potential damage versus cost that can be avoided by mitigation.

The risk assessment for this LMS evaluates the risk of all hazards prevalent in the planning area and meets requirements of the Disaster Mitigation Act (44 CFR, Section 201.6(c)(2)) (DMA). To protect individual privacy and the security of critical facilities, information on properties assessed is presented in aggregate, without details about specific individual, personal, or public properties.

Based on detailed research, the LMSWG considered all the hazards that could affect the planning area, beginning with those hazards that were profiled in the prior plan, and then listed hazards that present the greatest concern. The process incorporated a review of state and local hazard planning documents as well as information on the frequency, magnitude, and costs associated with hazards that have affected the planning area or are likely to do so. The following is the list of hazards that are addressed in this LMS.

Natural Hazards

Coastal Erosion- The process by which the ocean/gulf wears and carries away the land along the coast.

Flooding- Flooding is a temporary overflow of water onto land that is normally dry.

Severe Weather

- Thunderstorm- A storm with thunder and lightning and typically also heavy rain or hail.
- Tropical Cyclone- localized, very intense low-pressure wind system, forming over tropical waters with varying speed, size, and intensity.
- Tornado- a mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud and advancing beneath a large storm system.
- Extreme Temperatures- a period of marked and unusual temperatures that are much higher or lower than normal for a given area.

Wildfire/Urban Fire- Uncontrolled fire that occurs in a natural area or a community.

Technological Hazards

Hazardous Materials (HazMat) Incident- Occurs when a chemical or other substance that may harm people's health has been released into the air, water, or ground.

Transportation Incident- An accident or incident that happens during transportation, including by air, road, rail, or sea.

Utility Outages- A loss of power or service, such as electricity, water, or transportation.

Human-Caused Hazards

Terrorism- The use of violence or threats of violence to achieve political or ideological goals.

Some of these hazards are interrelated or cascading (i.e., hurricanes can cause flooding, storm surge, and tornadoes), but for preliminary hazard identification purposes these distinct hazards are broken out separately. It should also be noted that some hazards, such as freeze/extreme cold, may impact a large area yet cause little damage, while other hazards, such as tornadoes, may impact a small area yet cause extensive damage.

Low Potential Hazards

The following hazards will not be addressed in this document due to the low potential in Walton County:

Civil Disturbance- There have been no instances of civil disturbances that have exceeded the capacity of local resources to suppress and control.

Dam Failure- Though Walton County has several dams, there have been very few instances of failures.

Disease Outbreak- The occurrence of disease cases exceeding normal expectancy is low due in part to the rural nature of the county.

Drought- According to The NOAA National Integrated Drought Information System, Walton County has been in extreme drought status for one week in the past five years. This is not a significant condition.[3]

Earthquake- There are no identified earthquake hazards located near Walton County.

Nuclear Power Plant Incident- Walton County is outside the Ingestion Pathway Zone (50-mile radius) of any nuclear power generating facility.

Riverine Erosion- Fluctuations in the rivers in Walton County are normal and erosion is so gradual that it is not considered a hazard that warrants mitigation.

Sinkhole- According to the United States Geological Survey, Walton County has no verified sinkholes to date.[4]

Special Events- Walton County has no venue to support large events that would exceed the capacity of local resources.

Utility Outages- Walton County has not experienced widespread power outages in the recent past. Most of the outages reported have been localized in areas affected by a storm.

[3] U.S. Drought Monitor (USDM) | Drought.gov

[4] Map Direct: Subsidence Incident Reports Map

Volcano- There are no identified volcano hazards located near Walton County.

Winter Storm- A weather event that includes snow and/or ice is unlikely to impact the state of Florida.

Workplace/School Violence- There are no recorded historical workplace or school violence events occurring in Walton County.

HAZARD LOCATIONS / PROBABILITY AND EXTENT OF OCCURRENCE

Hazard	Location	Extent	Magnitude	Probability
Coastal Erosion	See Map Page 14	26 Miles of coast	Insignificant	Low (8.57%)
Flood	See Map Attachment 1	6 – 8 Feet of Storm Surge	Major	High (92%)
Severe Weather	Entire County	66,365 Homes/3,199 Businesses	Major	High
Wildfire/Urban Fire	Entire County	1037 Sq. Acres	Minor	Low (28.24%)
HazMat Incident	See Map Attachment 4	Unpredictable	Minor	Medium (47.1%)
Transportation Incident	See Map Attachment 4	Unpredictable	Minor	High
Utility Outage	Entire County	66,365 Homes/3,199 Businesses	Major	High
Terrorism	Eglin AFB See Map Attachment 2	Unknown	Minor	Low

Probability defined as:
High- One occurrence can be expected at least annually
Medium- One occurrence can be expected at least every two years
Low- Occurrences can be expected less frequently than every two years.

Magnitude defined as:
Catastrophic-The entire county, or a majority of the county, is devastated by an event
Major- Most of the county suffers heavy impacts from an event
Minor- A specific area of the county is affected by an event
Insignificant- Impacts are very localized and minor

VULNERABILITY ASSESSMENT

Following the risk assessment, a vulnerability assessment was conducted. The vulnerability assessment predicts the extent of damage that may result from a hazard of a given intensity in an area on the existing and future build environment. Determining the community's vulnerability involved identifying the threats posed to people, property, operations, and the environment. This also included identifying critical facilities that could be affected by hazards.

Developing Hazard Mitigation Initiatives

To develop hazard mitigation initiatives the LMSWG discussed the hazards of concern, the potential risks and vulnerabilities associated with those hazards. Each jurisdiction was provided with a worksheet that they completed to assess their past disasters, their capabilities, and their outlook for development to determine what actions might be needed to address any potential hazards. A meeting with the LMSWG Plan Revision Subcommittee was conducted on February 5, 2025, to discuss the status of past mitigation projects and identify what projects were completed and what projects should be deleted or continued in accordance with the goals and objectives of the next five-year LMS cycle. In addition, the LMSWG was given the results of the public survey so they could consider the concerns, comments, and suggestions of their constituents in identifying hazard mitigation actions.

Developing the Local Mitigation Strategy

The process of developing the plan in line with the goals and objectives as outlined by the LMSWG. The hazard risk data was developed in collaboration with local, State, and Federal agencies to ensure the information regarding the risks and associated vulnerabilities were assembled using relevant and timely data. Prior strategies were examined for their relevancy and determined if they should continue as priorities for the county and cities or be deferred until a later date.

Approval of the Current Edition of the Strategy

At the end of the planning period, the updated LMS provided to the County and Cities for approval by the elected governing bodies of the jurisdictions and organizations that participated in the planning process. By resolution, each governing body approves, endorses, or acts on its own component of the plan and addresses the implementation of mitigation initiatives its own representatives proposed. Resolutions for adopting the strategy document by each governing body will be Appendix C upon execution of each Jurisdiction.

Implementation of Approved Mitigation Initiatives

Once incorporated into the LMS, the agency or organization proposing the initiative becomes responsible for its implementation. This includes developing a budget for the project(s), and/or making an application to state and federal agencies to supply financial support for implementation of the project(s).

Hazard Profiles

Coastal Erosion

Unsafe tidal conditions, because of high winds, heavy surf, erosion, and fog are ordinary coastal hazard phenomena. Some or all these processes can occur during a coastal storm, resulting in an often-detrimental impact on the surrounding coastline. Factors including hurricanes and tropical storms, decreased sediment supplies, and sea-level rise contribute to these coastal hazards.

Previous Occurrences

Critical Areas in Walton County with Coastal Erosion

ID	NAME	BEGIN RANGE	END RANGE	ST ZONE	SHAPELEN
6	Miramar Beach	R001	R023.5	North	7690.444803
7	Dune Allen	R041	R064	North	7259.693727
8	Alligator Lake	R067	R072	North	1540.697571
9	Seagrove Beach	R078	R098	North	6200.979036
10	Inlet Beach	R105.5	R127.4	North	6815.56831

https://geodata.dep.state.fl.us/datasets/FDEP::coastal-critical-erosion-areas/about

See below map of effected locations

Coastal erosion is a constant and ongoing hazard for Walton County and its jurisdictions due to coastal storm impacts and diminished protective dunes and high bluffs.

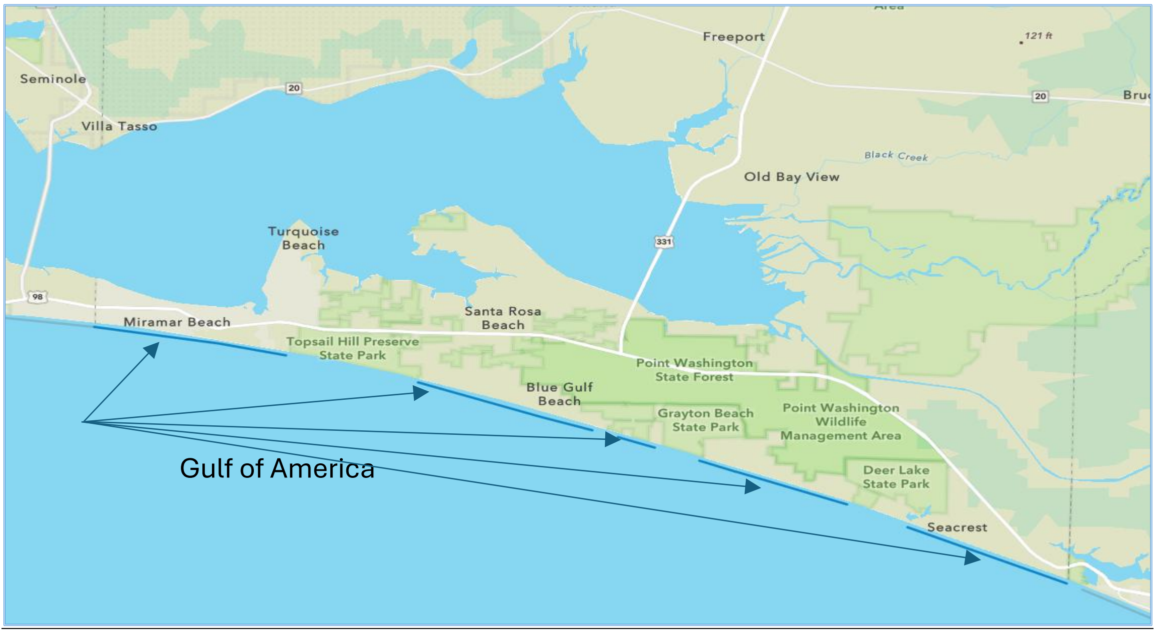


Figure CE: Five areas of coastal erosion

Impacts

Impacts depend on topography, soils, building types and construction materials. Coastal erosion can affect natural systems, coastal food supplies, tourism industry, and small-town viability. When sea water infiltrates freshwater wetlands, they can die, removing key habitats for animals and a protective buffer for nearby communities. Coastal erosion can result in significant economic loss through the destruction of buildings, roads, infrastructure, natural resources, and wildlife habitats. Damage often results from an episodic event with the combination of severe storm waves and dune or bluff erosion.

Impacts on the public and the environment will likely be due to lost private and public property, lost public and private beach front, lost sand dunes or mangroves, leading to storm surge flooding. There is no anticipated impact on first responders.

Impact on operations include businesses, critical infrastructure and any government buildings located near the shoreline. Operations could be impacted if roadways are damaged due to erosion.

Coastal erosion events within the county are common events with an annual probability greater than 1.0. Coastal erosion events have a low impact, accounting for less than $50,000 in annual damages. The primary concerns regarding coastal erosion relate to the economic impacts that result when property and infrastructure close to the eroding coasts lose their natural protection from the water and waves or are affected by destabilization of the land upon which they were constructed. Environmental impacts from erosion include the loss of animal habitats and esthetic losses. Fishing industries that depend on coastal habitats can suffer losses from changes caused by coastal erosion. A loss of tourism can result in similar economic impacts.

Walton County's beaches are the number one economic and environmental asset. Continued erosion will have a variety of impacts on the county including a decrease in the tax base, public access, recreational opportunities, economic value, land value and damage to public infrastructure. Private property could be damaged by increased flooding and private land could be completely lost to the gulf.

Overall Vulnerability

The probable hazard magnitude for coastal erosion is medium, including no deaths or injuries recorded, and more than three days warning time before the event. There are no vulnerable populations or critical facilities along the coastline.

FLOODING

* For the purposes of this document, we will address inland/riverine flooding only. Tsunami and coastal flooding are hazards that will not be addressed since the probability is low (> 1%).

Areal and Riverine (Inland) Flooding

Floods are the most common natural disaster in the United States.[5] A floodplain is defined as the land adjoining the channel of a river, stream, ocean, lake, or other watercourse or water body that becomes inundated with water during a flood. In Walton County, floodplains line the rivers and streams of the County and the coastal areas.

Areal flooding typically occurs when prolonged rain falls over several days, when intense rain falls over a short period of time or a debris jam causes a river or stream to overflow onto the surrounding area. Areal flooding can also occur as a result from the failure of a water control structure, such as a dam or levee.

Riverine flooding occurs when river levels rise and overflow their banks or the edges of their main channel and inundate areas that are normally dry. Riverine flooding can be caused by heavy rainfall, dam failures or a storm.

The National Weather Service (NWS) uses river gauges to determine the severity of floods at different points along a river. There are four gauges in Walton County. Their locations are along the Shoal River, Alaqua Creek, Bruce Creek, and the Choctawhatchee River. The County relies on the gauges to determine the height of the rivers during heavy rain events and to determine whether residents need to evacuate. A map of river locations is on page M3.

The severity of a flood depends not only on the amount of water that accumulates in a period, but also on the land's ability to manage this water. The size of rivers and streams in an area and infiltration rates are significant factors. When it rains, the soil acts like a sponge. When the land is saturated or frozen, infiltration rates decrease and any more water that accumulates must flow as runoff.[6]

Please see flood zone information located at FEMA: Walton County FL-Flood-Zones.

Overall Vulnerability

Historically, flooding in Walton County has occurred near the coast, the bay, and along rivers. The areas near the coast and the bay are not inhabited by vulnerable populations. The populations that live along the rivers are prepared for the effects of the ever-changing riverine landscape. Walton

[5] https://www.census.gov/topics/preparedness/events/floods.html

[6] Science.howstuffworks.com/flood

County has no public transportation system. There are no schools, hospitals, or other critical facilities located near these bodies of water.

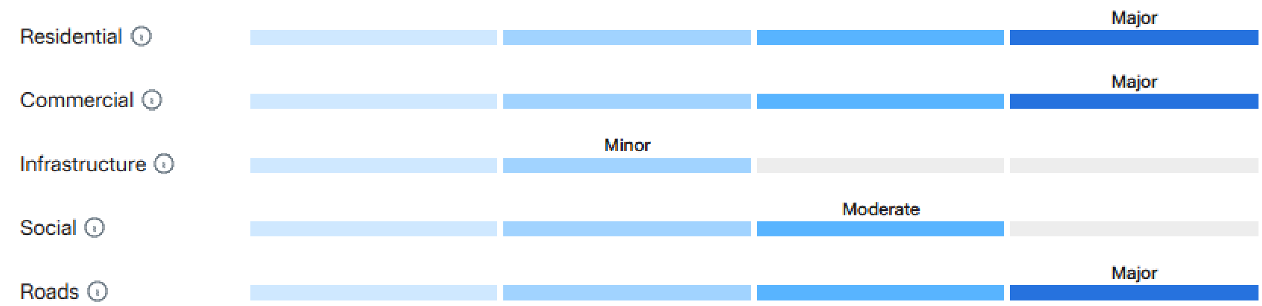


Figure F: Community Impact from Flooding in Walton County[7]

Mitigation Efforts[8]

Please see Ordinance 2005-27

Previous Occurrences and Impacts[9]

Flood Events Impacting Walton County		
Dates of Event	Event Type	Losses/Impact
9/15/2020-9/16/2020	Flash Flood	Hurricane Sally made landfall on September 16 in Gulf Shores, Alabama, causing heavy rain and significant flooding across the tri-state area. Record flooding occurred on the Shoal River at Mossy Head and Holmes Creek at Vernon. Numerous roads were closed due to flooding, including Bunker Road, Boy Scout Road, and areas in Freeport and Santa Rosa Beach. Cessna Landing Park was also closed. Flooding was reported in various locations, including Miramar Beach and Seagrove Beach, and a bridge was washed out on Bob Sikes Road in Alpine Heights. Extensive flash flooding impacted Walton County, particularly along the Shoal River.
4/9/2021	Flash Flood	During April 9-10, the tri-state region experienced showers and thunderstorms ahead of a strong cold front. Storms on April 9 primarily produced large hail, while a squall line on April 10 brought damaging winds and a few tornadoes, especially in Florida. Heavy rainfall during a short period of time led to flooding, notably on Highway 393 in Santa Rosa Beach.
4/24/2021	Flash Flood	On April 24th, the region experienced multiple rounds of strong to severe storms, bringing tornadoes, large hail, and damaging winds. Some hailstones reached sizes up to 2 inches in diameter. The storms resulted in significant rainfall, with amounts surpassing 6 inches in certain areas of the tri-state region, leading to flash flooding. In Glendale, Highway 83 and Bell Road became impassable due to floodwaters. Additionally, roads were flooded near Highway 331 and Elmer Jones Road in New Harmony, as well as Crowder Chapel Road and Hinote Road in Pond Creek. Reports of flooding also emerged from County Highway 1084 in Glendale.

[7] https://firststreet.org/county/walton-county-fl/12131_fsid/flood
[8] Ordinance 2005-27
[9] For events prior to 2020, see 2020 LMS

7/12/2021	Flood	A quasi-stationary upper-level trough has settled over the central Mississippi Valley, while an extensive omega block to the west and a Bermuda upper-level ridge are contributing to a stagnant large-scale flow pattern. As a result, heavy rainfall has affected the Florida panhandle, causing significant flooding. Reports indicate that Highway 81 at Douglass Crossroads experienced approximately 4-6 inches of standing water.
10/4/2021	Flash Flood	At the beginning of the month, a wet weather pattern caused multiple rounds of showers and thunderstorms in the Florida panhandle, leading to significant flash flooding. The Gulf Pines neighborhood in Miramar Beach suffered extensive road flooding due to the heavy rainfall.
7/14/2023	Flash Flood	Scattered thunderstorms continued across the area, leading to reports of severe weather and flash flooding, especially in Jackson and Walton counties. Water flowed over Highway 30A in Seaside, and barricades were placed on Steele Field Road and Bunker Road was closed due to flooding. The intersection of Highway 98 and Highway 331 in Blue Mountain Beach was reduced to one lane. Duffy Lane in Santa Rosa Beach was underwater, and significant flooding affected vehicles and property in Seagrove Beach and Grayton Beach.
8/5/2023	Flood	An active summer pattern brought scattered showers and thunderstorms, causing damaging winds and isolated flash flooding in Bay and Walton Counties, particularly along East Hewitt Road in Turquoise.
6/27/2024	Flash Flood	Slow-moving thunderstorms caused localized flash flooding in South Walton, particularly in the Freeport Area.
9/12/2024-9/13/2024	Flash Flood	Showers and thunderstorms associated with Hurricane Francine's remnants and a stalled frontal boundary. Heavy rainfall led to flash flooding, with two lanes of Highway 98 closed in the Santa Rosa Beach area at Four Mile Village. Knee-deep flooding occurred at places in Pointe of View Condos and Grand Boulevard. Water was reported crossing Highway 30A at Seagrove Beach and Seaside were noted.

Flood Damage to Property (1996 - August 2025)			
Jurisdiction	**Hazard Type**	**Occurrences**	**Property Damage**
Walton County, Florida*	Flood/Flash Flood	142	$77M
**Includes all Jurisdictions in Walton County, FL Source: FEMA NFIP Dataset (2025)*	Coastal Flooding	2	$25K
	Hurricane	8	$77.8M
	Tropical Storm	31	$10.7M
	Storm Surge/Tide	9	$20.1M
Totals		192	$185,652,000

SEVERE WEATHER

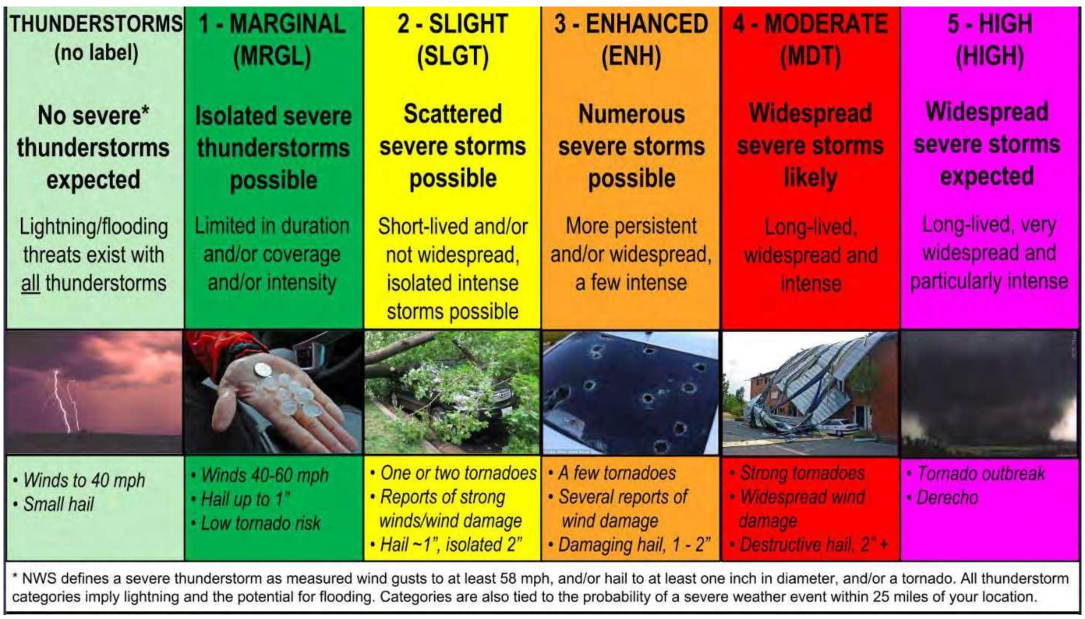
* This LMS addresses severe weather manifesting as thunderstorms, tropical cyclones, tornadoes, and extreme temperatures in Walton County and its jurisdictions.

Thunderstorms

A thunderstorm is a local storm produced by a cumulonimbus cloud accompanied by lightning and thunder. A thunderstorm forms from a combination of moisture; rapidly rising warm air; and a force capable of lifting air, such as a warm front, cold front, a sea breeze, or a mountain. Thunderstorms form from the equator to as far north as Alaska. Although thunderstorms generally affect a small area when they occur, they have the potential to become dangerous due to their ability to generate tornadoes, hailstorms, strong winds, flash flooding, and lightning. Thunderstorms can result in winds more than 57.5 mph and can cause damage from debris and falling limbs to structures and powerlines.

Severe Thunderstorm Watch: Be Prepared! Severe thunderstorms are possible in and near the watch area. Stay informed and be ready to act if a severe thunderstorm warning is issued. The watch area is typically large, covering numerous counties or even states.

Severe Thunderstorm Warning: Take Action! Severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property. Take shelter in a substantial building. Get out of mobile homes that can blow over in high winds. Warnings typically encompass a much smaller area (around the size of a city or small county) that may be impacted by a large hail or damaging wind identified by an NWS forecaster on radar or by a trained spotter/law enforcement who is watching the storm.[10]



Previous Occurrences

Severe Weather Events in Walton County 2020-2024[11]

Dates	Event Type	Description
1/11/2020	Thunderstorm	A cold front brought strong low-level winds and instability, leading to a severe squall line and reports of wind damage, including downed trees. No tornadoes occurred.
2/6/2020	Thunderstorm	A cold front brought strong winds and instability, causing a severe squall line to form with reports of wind damage and multiple fallen trees. No tornadoes occurred.
3/31/2020	Tornado and Thunderstorm	A surface low pressure area moved across the Tri-State region, with a warm front lifting north and a cold front moving through in the afternoon. Scattered severe thunderstorms occurred, including a waterspout that made landfall near Portland, snapping a tree and causing minor roof damage. The tornado was rated EF0 with maximum winds of 70 mph.

[10] https://www.weather.gov/safety/thunderstorm-ww
[11] https://www.weather.gov/tae/events

4/13/2020	Thunderstorm	A strong low-pressure system with instability and a powerful low-level jet impacted the tri-state area. A severe squall line brought reports of wind damage, and a couple of tornadoes were noted in south-central Georgia, along with multiple trees downed in Walton County, though no tornadoes were reported there.
4/23/2020	Tornado and Thunderstorm	A strong upper-level trough swept through the Southeast, leading to an enhanced risk of severe storms. The tri-state area experienced significant wind damage and several tornadoes.
5/24/2020	Thunderstorm	Isolated severe weather was reported as the area shifted to a summer pattern in late May, resulting in downed trees and wind damage.
6/23/2020	Thunderstorm	Scattered afternoon thunderstorms during summer caused some damaging winds and downed a few powerlines.
7/12/2020	Thunderstorm	As is typical in summer, scattered afternoon thunderstorms caused isolated tree damage, with few reports of downed trees.
7/22/2020	Thunderstorm	A strong east coast sea breeze caused a squall line to form, moving from east to west across the Florida big bend and panhandle, leading to downed trees and power lines.
7/26/2020	Thunderstorm	As is typical during summer, scattered afternoon thunderstorms produced an isolated report of tree damage.
4/10/2021	Thunderstorm	The tri-state region faced heavy showers and thunderstorms due to a strong cold front. Large hail hit the area, followed by damaging winds and a few tornadoes in Florida on April 10. Significant flooding occurred, particularly in Florida, where rapid heavy rainfall led to damage. A tornado rated EF1 with winds up to 95 mph touched down near Crowder Chapel and Hinote Roads, uprooting trees and causing roof damage to several buildings, including a single-family home and metal structures, before lifting near County Highway 83 south of Glendale
4/24/2021	Thunderstorm	On April 24th, strong to severe storms hit the region, producing tornadoes, hail up to 2 inches, and damaging winds. Some areas received over 6 inches of rain, leading to flash flooding and fallen trees.
5/4/2021	Thunderstorm	A squall line impacted southeast Alabama and southwest Georgia, causing widespread effects on trees and power lines. Wind gusts of 60-70 mph were recorded in southwest Georgia, resulting in some downed large trees.
6/19/2021	Thunderstorm	Tropical Storm Claudette passed west of the tri-state area. However, some squalls associated with it resulted in a few trees being blown down. Few power poles blown down.
8/29/2021	Thunderstorm	A typical summer pattern brought scattered afternoon thunderstorms, creating conditions for occasional downbursts and gusty winds, with some reports of wind damage.
8/31/2021	Thunderstorm	The remnants of Hurricane Ida moved north and west, but a trailing band of showers caused gusty winds, resulting in wind damage and flooding, including downed trees on Highway 20.
3/23/2022	Thunderstorm	A cold front brought showers and thunderstorms, but limited instability and shear prevented a major severe weather outbreak in the tri-state area, resulting in only a few wind damage reports.
3/31/2022	Thunderstorm	The tri-state area faced a large tornado outbreak affecting central and south-central Alabama, Mississippi, and the Florida panhandle. An EF3 tornado hit Washington County, FL, causing two fatalities and resulting in a tree falling on a structure in Paxton.
4/5/2022	Thunderstorm	A cold front caused severe weather in the tri-state region from April 5-7, including several EF1 tornadoes, wind damage, and some large hail reports. Trees were downed in the northern part of the
4/17/2022	Thunderstorm	A cold front brought showers and thunderstorms to the tri-state region. Severe weather affected southeast Alabama and the Florida panhandle, with some wind damage reported.
6/3/2022	Thunderstorm	Summertime storms brought scattered afternoon thunderstorms to the tri-state region, along with some wind damage reports from the strongest storms.
11/30/2022	Thunderstorm	The last days of November saw active weather in the tri-state area as two cold fronts brought thunderstorms, some severe, causing damage mainly to trees and power lines.
12/14/2022	Tornado and Thunderstorm	A strong cold front brought beneficial rainfall and severe storms, including tornadoes, across the tri-state area. Southeast of De Funiak Springs, there was a large power outage due to wind and reports of downed trees. Tornado reported on Walton County Line, rated EF0, had maximum winds estimated near 85 mph, causing damage to several trees.
1/4/2023	Thunderstorm	A strong upper-level trough and cold front brought numerous showers and thunderstorms, with some storms strong to severe. A few trees were downed by the wind.

1/25/2023	Tornado and Thunderstorm	A strong upper-level shortwaves brought severe weather to the area, resulting in tree and power line damage, as well as a few tornadoes. One tornado, rated EF0, produced a Tornadic Debris Signature near Eglin AFB but caused no structural damage. It touched down in a heavily forested area of southern Walton County, near Bunker Road, before dissipating. Another brief tornado also occurred in the same region, with the same EF0 rating due to tree damage.
4/15/2023	Thunderstorm	A strong spring storm system swept through the area, bringing instability and shear for severe weather. Numerous reports of severe weather occurred across the tri-state area, including downed power lines and trees, but no tornadoes were reported.
6/14/2023 - 6/19/2023	Tornado and Thunderstorm	In mid-June, severe weather impacted the area with strong storms and tornadoes linked to an active subtropical jet stream and warm Gulf of Mexico SSTs. A tornado touched down near Sandestin Resort, causing EF0 damage to a condo's storm shutter and downed trees. EF1 damage occurred east of Baytowne Avenue, affecting Turnberry Court, Laurel Way, and Ravens Run, with additional damage reported on Olde Towne Avenue and Mack Bayou Road. The tornado had maximum winds of 105 mph.
6/22/2023	Thunderstorm	Heavy rainfall over several days caused flash flooding as the ground became saturated. The stormy weather was linked to significant wind anomalies from an active subtropical jet stream and warmer-than-average sea surface temperatures, creating a favorable environment for severe weather. This persistent pattern resulted in a considerable amount of storm activity and reports of downed power lines.
6/26/2023	Thunderstorm	In mid-June, the area was hit by severe storms, including squall lines and supercells that caused strong winds, large hail, and tornadoes. Prolonged heavy rain led to flash flooding, with the active subtropical jet stream creating instability due to warm Gulf sea surface temperatures. This environment for severe weather lasted several days, resulting in significant storm activity and downed trees.
7/5/2023	Thunderstorm	Scattered thunderstorms persisted, leading to reports of severe weather and fallen trees.
7/15/2023	Thunderstorm	Scattered thunderstorms continued throughout the area, with some severe weather reported. Weak steering flow led to slow-moving storms and flash flooding. A few trees were downed along Highway 83.
7/22/2023	Thunderstorm	Scattered thunderstorms continued across the area, with some severe weather reported, including downed trees in Eden Gardens State Park.
7/30/2023	Thunderstorm	A typical summer pattern brought scattered thunderstorms, with some severe weather reports, including downed trees in Choctaw Beach.
8/4/23 - 8/8/23	Excessive Heat and Thunderstorm	An active summer pattern caused numerous showers and thunderstorms, leading to damaging winds and isolated flash flooding in Bay County. Trees were downed along Highway 83, near Wakulla County Fire Station 2, Black Creek Blvd, and Mack Bayou Road. The high temperatures and dewpoints resulted in heat index values exceeding 113°F in much of northwest Florida.
8/11/23 - 8/15/23	Excessive Heat and Thunderstorm	An active summer pattern caused showers and thunderstorms, resulting in damaging winds and isolated flash flooding. Trees were downed along Highway 83 and other local roads. High temperatures and dewpoints led to heat index values exceeding 113°F in northwest Florida.
1/9/2024	Tornado and Thunderstorm	A severe weather event struck the tri-state region, with supercells producing tornadoes, large hail, and winds of 40-70 mph. There were 14 confirmed tornadoes, including two EF-1 tornadoes- one near W Co. Hwy 30A and another south of Rock Hill Road, as well as a brief EF-1 at the DeFuniak Springs airport that damaged hangars and a business.
4/10/2024	Thunderstorm	A significant flash flood event hit the Florida big bend and Panhandle due to slow-moving thunderstorms that repeatedly affected the same areas. Power lines were downed, and the Clyde B Wells Bridge was closed.
5/10/2024	Tornado and Thunderstorm	Tornadoes and strong winds hit the FL Panhandle, with 7 confirmed tornadoes. An EF0 tornado briefly touched down in western Walton County, damaging trees, and another EF0 caused damage along Hwy 20 west of JW Hollington Road.

5/13/2024	Tornado and Thunderstorm	NW FL experienced showers and thunderstorms ahead of a cold front, causing some severe weather with reports of downed trees and power lines. A waterspout moved ashore as a tornado in south Walton County, but no damage was reported. Another waterspout was observed near the US-331 bridge.
5/18/2024	Thunderstorm	A derecho impacted the north central Gulf coast during the early morning hours, causing wind gusts over hurricane force and damage to trees and power lines. Additionally, severe storms affected the tri-state area, with several trees down near the Walton-Holmes County line.
5/31/2024	Thunderstorm	An isolated severe storm blew down a large cedar tree onto a house and vehicle in Walton County.
8/19/2024	Thunderstorm	High instability and deep layer shear in August, along with an upper-level disturbance, caused numerous showers and thunderstorms, some of which were severe with damaging winds.
9/12/2024	Thunderstorm	Showers and thunderstorms associated with the remnants of Hurricane Francine and a stalled front caused rotation detection but no tornado touchdowns. A tree fell and heavy rainfall resulted in flash flooding.

Impacts

Damage and loss due to a severe storm are in direct relation to the population density of the impacted area. Typical injuries may result from: Vehicle accidents, wind-blown debris, falling limbs, lightning strikes, downed power lines, structural collapse, rising flood waters, and mold.

Overall Vulnerability

Due to the unpredictable nature and extent of possible effects, all of Walton County is vulnerable to thunderstorms.

Tropical Cyclones

A tropical cyclone is characterized by a low-pressure center and numerous thunderstorms that produce strong winds and heavy rain. Tropical depressions, tropical storms, and hurricanes are all considered tropical cyclones. Tropical cyclones strengthen when water evaporated from the ocean is released as the saturated air rises, resulting in condensation of water vapor contained in the moist air. These storms rotate counterclockwise in the northern hemisphere around the center and are accompanied by heavy rain and strong winds. Almost all tropical storms and hurricanes in the Atlantic basin, which includes the Gulf of America and Caribbean Sea, form between June 1 and November 30 (hurricane season). August and September are peak months for hurricane development.

Tropical cyclones are fueled by a different heat mechanism than other cyclonic windstorms such as Nor'Easters and polar lows. The characteristic that separates tropical cyclones from other cyclonic systems is that at any height in the atmosphere, the center of a tropical cyclone will be warmer than its surroundings; a phenomenon called "warm core" storm systems.

Previous Occurrences[12]

Walton County Tropical Cyclones 2020 - 2024		
Hurricane	September 14 - 16, 2020	Hurricane Sally made landfall early on the morning of September 16 across Gulf Shores Alabama. While the greatest impacts for Hurricane Sally struck outside

[12] https://www.weather.gov/tae/events

		our forecast area, in portions of the western Florida Panhandle and southern Alabama, we were not spared from Sally's damage. The greatest impacts to our forecast area came in the form of very heavy rain, flooding on and away from area rivers, and many tornado warnings
Tropical Storm	August 16, 2021	Tropical Storm Fred, at its strongest, was a tropical storm containing sustained winds up to 65mph and a central pressure of 994mb. The main impacts to our region revolved around heavy rainfall, strong wind gusts along our coastal communities, and storm surge ranging from 1 to 4 feet along the coast of the FL Panhandle and Big Bend (highest across the Big Bend at Indian Pass and locations eastward).

Overall Vulnerability

The areas south of the Choctawhatchee Bay are the most vulnerable to the effects of wind damage from a tropical cyclone, though much of the rest of the County and its jurisdictions are at risk of flooding produced by heavy rains that are often associated with tropical cyclones. Building codes dictate the minimum criteria for infrastructure development and include requirements for building to withstand severe weather events.

The County has seen an increase in population and new development, however given the strengthening of state-wide building requirements, local land development restrictions, and higher design standards the observed development activity is not perceived to increase overall vulnerability.

Impacts

TROPICAL CYCLONE COMPARISON INCORPORATING THE SAFFIR-SIMPSON HURRICANE SCALE[13]

Storm Classification	Winds (mph)	Storm Surge (feet)	Predicted Damage	Comments / Possible Damages
Tropical Disturbance	**-**	**-**	**Minimal**	A discrete tropical weather system of apparently organized convection; generally, 100 to 300 miles in diameter; originating in the tropics or subtropics, having a non-frontal migratory character, and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable blob of thunderstorms. The Hurricane Hunters may fly a "low-level investigative mission" on a tropical disturbance to see if the winds are forming a "closed circulation", which means it is reaching the next stage of development, the tropical depression.
Tropical Depression	**< 38**	**-**	**Minimal**	The storm exhibits a closed circulation pattern. At this point, the storm gets a cyclone number, starting with "TD01" at the beginning of each storm season.
Tropical Storm	**39 - 73**	**< 4**	**Minimal**	In this stage of development, the cyclone gets a name. In the Atlantic/Caribbean/Gulf of Mexico basin, the names start with "A" each season. Locally, TS Josephine, 1986, had tropical storm winds and a 6' storm surge.
Hurricane Category 1	**74 - 95**	**4 - 5**	**Minimal**	Damage is primarily to shrubbery, trees, foliage, and unanchored manufactured homes. No real damage to other structures. Some damage to poorly constructed signs. Low-lying coastal

13 www.mywaltonfl.gov/DocumentCenter/View/32607/2018-Local-Flood-Information-Guide#:~:text=In%20October%201995%2C%20Hurricane%20Opal,5.7%20to%206.7%20feet%20NAVD.

				areas and roads will be inundated. Also, minor pier damage, some small craft in exposed anchorage torn from moorings. Hurricane Gladys, 1968, made landfall at Homosassa Springs with minimal hurricane winds and a 5' storm surge in Pinellas County.
Hurricane Category 2	**96 - 110**	**6 - 8**	**Moderate**	Storm damage may include some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Major damage to mobile homes, poorly constructed signs, and piers. Evacuation on coastal and low-lying areas required. Coastal and low-lying escape routes flood 2-4 hours before the arrival of the hurricane center. Marinas flood. Small craft in unprotected anchorages break moorings. In 1966, Hurricane Alma paralleled the Pinellas County coast 50 miles offshore with 90 mph winds in the County and creating a storm surge up to 10'.
Hurricane Category 3	**111 - 130**	**9 - 12**	**Extensive**	Damage to shrubbery and trees with foliage torn off trees and large trees blown down. Mobile homes and poorly constructed signs are destroyed. Some structural damage to small residences and utility buildings with damage to roofing, windows and doors. Flooding near the coast destroys smaller structures with larger structures damaged by battering from floating debris. Evacuation of low-lying residences with several blocks of the shoreline may be required. Low-lying escape routes are cut by rising water 3-5 hours before the arrival of the center of the hurricane. Terrain continuously lower than 5 ft above mean sea level may be flooded inland 8 miles or more. Hurricane Opal, 1995, created high winds and a storm surge of 4' locally. Although 90 miles offshore, Hurricane Elena, 1985, caused heavy beach erosion and a 7' storm surge in Pinellas County.
Hurricane Category 4	**131 - 155**	**13 - 18**	**Extreme**	Shrubs, trees, and all signs are blown down. Extensive window and door damages with some complete roof structure failures on small residences. Complete destruction of mobile homes. Major flood damage to lower floors of structures near the shore. Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the center of the hurricane. Terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 2 miles. The 1921 Hurricane which made landfall in northern Pinellas/southern Pasco had winds of 104 mph and a storm surge of 7'. The storm split Honeymoon Island into two, creating Hurricane Pass, Dunedin, and forming Caladesi Island.
Hurricane Category 5	**> 155**	**> 18**	**Catastrophic**	All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Complete roof failure on many residences and industrial buildings. Severe and extensive window and door damage as glass shatters. Some complete building failures. Small utility buildings blown over or away. Major damage to lower floors of all structures < 15' above sea level with 500 yards of shore. Low-lying escape routes are cut by rising water 3-5 hours before the arrival of the center of the hurricane. Massive evacuation of residential areas on low ground within 5-10 miles of the shoreline may be required. In 1969 Hurricane Camille hit

				Mississippi with winds of 200 mph and a 24' storm surge. It has been ranked as the second most intense hurricane to hit the U.S. and the fifth most expensive U.S. hurricane. Hurricane Andrew, 1992, came ashore in Dade County with 165 mph winds and a 17' storm surge. It has been ranked as the third most intense hurricane to hit the U.S. and the first most expensive U.S. hurricane.

Tornadoes

A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 250 miles per hour (mph). Damage paths can be greater than 1 mile wide and 50 miles long. Tornadoes typically develop from either a severe thunderstorm or hurricane as cool air rapidly overrides a layer of warm air. Tornadoes typically move at speeds between 30 and 125 mph and can generate combined wind speeds (forward motion and speed of the whirling winds) exceeding 300 mph. The lifespan of a tornado rarely is longer than 30 minutes. Tornadoes can occur at any time of the year, with peak seasons at different times for different states.

The Enhanced Fujita Scale (EF Scale) is used to assign a tornado a 'rating' based on estimated wind speeds and related damage. When tornado-related damage is surveyed, it is compared to a list of Damage Indicators (DIs) and Degrees of Damage (DoD) which help estimate better the range of wind speeds the tornado likely produced. From that, a rating (from EF0 to EF5) is assigned.[14]

EF SCALE	
EF Rating	**3 Second Gust (mph)**
0	65-85
1	86-110
2	111-135
3	136-165
4	166-200
5	Over 200

Impacts

Damage to buildings is dependent upon several factors including wind speed and duration and building construction. Older critical facilities are vulnerable to wind damage due to the age of construction and possible poor conditions, especially in the more rural and isolated areas of the County. Evaluation criteria include the age of the building and what building codes may have been in effect at the time of construction, type of construction, condition of the structure, and how well the structure has been maintained.

Overall Vulnerability

Tornadoes are high-impact, low-probability hazards whose effect is dependent on their intensity and the vulnerability of development in their path. Tornado vulnerability is based on building construction and standards, the availability of shelters or safe rooms, and advanced warning capabilities. Even well-constructed buildings are vulnerable to the effects of a stronger (generally EF-2 or higher) tornado. Identifying assets at risk for tornado damage is virtually impossible because tornadoes are so unpredictable. However, it can be assumed that every structure has an equal chance of exposure to a tornado event. Since Walton County has no safe structures identified, outreach efforts stress the importance of individual responsibilities for families to pre-identify a safe room in homes and businesses.

The damage resulting from tornadoes is affected by the condition of the exposed structures, their

[14] https://www.weather.gov/oun/efscale

design and construction, and the quality of the building materials. Older homes, certain construction materials, mobile homes, and poorly designed homes are very vulnerable to tornadoes. If homes were destroyed by tornadoes this would impact residents by requiring them to rebuild to current standards or relocate. Destruction of commercial buildings and infrastructure would cause employees to search for employment elsewhere, resulting in relocating to other areas outside of Walton County.

Vulnerability to tornadoes depends on the geographic extent and magnitude of the event. Damages from lower intensity tornadoes (EF0) can range from chimney damage to uprooted shallow trees. A significant tornado (EF2) would cause considerable damage to roofs on frame houses, complete destruction of mobile homes and large trees and utility lines snapping. A devastating tornado (EF4) would result in well-constructed houses being leveled, weak foundations blown away, and cars thrown.

Previous Occurrences[15]

<table>
<tr><th>Date</th><th>Time (LST)</th><th>F/EF-Scale</th><th>Length (Miles)</th><th>Maximum Width (Yards)</th><th>Fatalities</th><th>Injuries</th><th>Property Damage</th><th>Source*</th></tr>
<tr><td>3/31/2020</td><td>1155 am</td><td>EF0</td><td>0.17</td><td>25</td><td>0</td><td>0</td><td>$2,000</td><td>SD</td></tr>
<tr><td colspan="9">A waterspout moved onshore. A tree was snapped and caused some minor roof damage to a home . This tornado was rated EF0 with max winds estimated at 70 mph.</td></tr>
<tr><td>4/23/2020</td><td>213 pm</td><td>EF1</td><td>4.88</td><td>100</td><td>0</td><td>0</td><td>$100,000</td><td>SD</td></tr>
<tr><td colspan="9">Tree damage was first noted along Bob Sikes Rd. just west of Hwy 331. The tornado then crossed Hwy 331 knocking down a few business signs and trees as well as blowing in four windows of a series of businesses at a strip mall. A large retail business also had part of it's roof peeled back and a couple HVAC units blown off . The tornado continued east northeast with points surveyed along Bay Ave southeast of DeFuniak Springs as well as County Rd 183 south of Argyle. Trees and large limbs were downed at both locations. The location south of Argyle was the last portion of the track able to be surveyed as the track then went into inaccessible portions of Holmes County south of HWY 90. Radar was used to extend the track a few more miles into Holmes county. The tornado lifted before reaching Ponce De Leon or Highway 81.</td></tr>
<tr><td>4/10/2021</td><td>523 am</td><td>EF1</td><td>15.76</td><td>100</td><td>0</td><td>0</td><td>$10,000</td><td>SD</td></tr>
<tr><td colspan="9">A tornado touched down in the vicinity of Crowder Chapel and Hinote Roads near the Shoal River . Several large trees were snapped or uprooted in this area. The tornado then moved east northeast snapping and uprooting several more trees along its path. One property on County Highway 1084 sustained roof damage to the primary residence, a well-built single family home. A large metal building system on the property had large garage doors blown in with subsequent uplift and removal of a substantial portion of the roof. A small garage was also destroyed. A bit further down the highway, another metal building system had a portion of its roof rolled back. The tornado lifted near County Highway 83 just south of Glendale. Damage was consistent with an EF1 tornado with maximum estimated winds around 95 mph.</td></tr>
<tr><td>12/8/2021</td><td>807 pm</td><td>EF0</td><td>1.74</td><td>50</td><td>0</td><td>0</td><td>$0</td><td>SD</td></tr>
<tr><td colspan="9">A brief EF0 tornado touched down between Portland and Freeport. Minor damage was reported on social media including a few trees blown down and a window blown out of a residence. A TDS was observed on KEVX radar.</td></tr>
<tr><td>1/2/2022</td><td>102 pm</td><td>EF0</td><td>0.13</td><td>85</td><td>0</td><td>0</td><td>$50,000</td><td>SD</td></tr>
<tr><td colspan="9">A tornado briefly touched down just north of the De Funiak Springs Municipal Airport near the intersection of Dr Roberts Drive and Bellini Road . The tornado uprooted a few trees and caused damage to several outbuildings and two mobile homes. The maximum wind is estimated at 80 mph, making this an EF-0 tornado.</td></tr>
<tr><td>3/18/2022</td><td>238 pm</td><td>EF1</td><td>0.81</td><td>25</td><td>0</td><td>0</td><td>$0</td><td>SD</td></tr>
<tr><td colspan="9">A tornado touched down briefly in a rural area along G Montgomery Road in Walton county and tracked eastward through a wooded area and across County Highway 183 S. There were numerous snapped trees along its path, but no structures were impacted. This tornado was rated EF1 with maximum estimated winds around 90 mph. A dual-pol tornadic debris signature (TDS) was evident on KEVX radar.</td></tr>
</table>

[15] Walton County, FL Tornado Database

12/14/2022	855 pm	EF0	1.61	25	0	0	$0	SD
The Holmes county dispatch received calls of a possible tornado touchdown near Walton County Road 183. In addition, a tornadic debris signature (TDS) was present on radar. Damage consisted of several trees blown down. The tornado was rated EF0 with max winds estimated near 85 mph.								
1/22/2023	514 am	EF2	0.78	85	0	0	$250,000	SD
A tornado touched down in the Driftwood Estates subdivision of South Walton County between Riverbirch Loop and Cocobolo Drive . The tornado caused mainly roof damage as it crossed the subdivision. Homes suffered damage to roof coverings on Cocobolo Drive , and both ends of Pin Oak Loop. The tornado then apparently lifted briefly as it crossed a wooded area. A drone provided by South Walton Fire District could find no damage in the woods . The tornado then touched down on Red Bay Court where it snapped or damaged several small hardwood trees and did some minor roof damage. More substantial roof damage occurred to three homes on Loblolly Bay Drive and four homes on Driftwood Point Road. One sturdy palm tree was snapped at the intersection of Red Bay and Loblolly with four others partially uprooted on Driftwood Point Road. The tornado then lifted over Choctawhatchee Bay. Most of the roof damage in this community was consistent with EF-1 winds. However, three homes experienced the uplift and failure of large sections of the roof structures themselves. That is consistent with EF-2 damage with maximum winds of 115 mph. Damage cost was estimated.								
1/25/2023	504 am	EF0	1.48	50	0	0	$0	SD
A brief Tornadic Debris Signature occurred on Eglin AFB radar in a forested area . No structures were impacted, and the tornado was rated EF0 due to tree damage.								
1/25/2023	515 am	EF0	0.57	75	0	0	$0	SD
A short-lived tornado tracked through a heavily forested portion of southern Walton County , touching down just north of the intracoastal waterway near Bunker Road and dissipating shortly thereafter. The track and EF0 intensity is based on photos of tree damage from Walton County Emergency Management and a Tornadic Debris Signature from the Eglin Air Force Base WSR-88D Radar.								
2/9/2023	826 pm	EF1	0.18	50	0	0	$5,000	SD
A tornado briefly touched down just west of County Highway 280 East south of Pryor Road in Walton County. The tornado did significant damage to trees, uprooting and snapping numerous pines and hardwoods. Minor damage was noted to a garage and several outbuildings. The damage was consistent with an EF1 tornado with maximum winds of approximately 105 mph. We would like to thank Walton County Emergency Management for their assistance with this damage survey.								
3/17/2023	620 pm	EF0	0.12	25	0	0	$0	SD
A well defined TDS appeared just inland from the coast in the Grayton Beach State Park area . Pictures of minor tree damage were received. This tornado was very brief and rated EF0 with the tree damage. No structures were impacted.								
6/19/2023	1016 am	EF1	1.62	200	0	0	$25,000	SD
Several videos posted on social media indicated that a tornado touched down on the Choctawhatchee Bay just west of the Sandestin Resort. Initial damage included damage to a storm shutter on the condo directly facing the Bay, and isolated snapped and toppled trees between the Bay and Baytowne Avenue West. This damage was consistent with EF0 damage. EF1 damage was observed east of Baytowne Avenue, where several hardwood trees were uprooted in multiple directions on Turnberry Court . After crossing a golf course and small unpopulated area, the highest concentration of damage occurred along Laurel Way and Ravens Run, where multiple trees were snapped and uprooted with minor roof damage noted to a few homes. The tornado continued east causing minor roof damage to a home on Olde Towne Avenue in addition to uprooting a few hardwood trees . The tornado continued to the east of the resort, snapping and uprooting trees on Mack Bayou Road and east Mack Bayou Drive where several fences sustained damage in addition to minor damage to the roof of a small business. The tornado then lifted east of Mack Bayou Drive. Damage was consistent with an EF1 max wind speed of 105 mph.								
1/9/2024	429 am	EF1	10.93	220	0	0	$100,000	SD
The tornado initially moved onshore with damage to trees and buildings at the intersection of W County Highway 30 A and Laura Hamilton Blvd consistent with an EF-1 rating. It would then proceed to continue moving off to the northeast sporadically damaging trees and roofs of houses across the area . The tornado would then cross through a majority wooded area before crossing US Highway 98 before entering the woods once again. A high concentration of damage to homes and trees consistent with an EF-1 rating was found off of Chat Holly Rd. before the tornado crossed Choctawhatchee Bay. Max winds were estimated near 110 mph. The tornado would then parallel US Highway 331 as it crossed the bay before making landfall once again at Bay Grove Rd. where numerous manufactured homes were damaged along with tree damage consistent with an EF-1 rating. EF-1 damage had been observed leading up to US 331 where the tornado appears to have dissipated. Thanks to Walton County Emergency Management for assistance with this damage survey.								
1/9/2024	448 am	EF1	5.42	160	0	0	$50,000	SD
A tornado, associated with the same cell which produced a tornado in southern Walton County, touched down south of Rock Hill Road. A large concentration of tree damage and damage to a manufactured home were then observed off Rock Hill Rd . consistent with an EF-1 rating with max winds estimated at 95 mph. The tornado continued north and dissipated in a wooded area. Additional tree damage just to the east of the track along Rock Hill road may have been associated with very strong rear flank downdraft winds associated with this cell. Thanks to Walton County Emergency Management for assistance with this damage survey.								
1/9/2024	706 am	EF1	0.35	200	0	0	$50,000	SD
A brief tornado touched down at the Defuniak Springs airport , damaging two hangars before crossing U.S. 90. The tornado then damaged the roof of a business, as well as numerous trees in the surrounding area. The damage at the airport and the business was consistent with an EF-1 tornado. Thanks to Walton County Emergency Management for assistance with this damage survey.								
SD - National Oceanic and Atmospheric Administration, 1950-2016: *Storm Data* . National Climatic Data Center, Asheville, NC.								

Extreme Temperatures

Extreme Cold is defined as temperatures that are lower than historical averages to the point that it creates a dangerous environment for people, animals, and critical infrastructure. Since there has been one documented event in Walton County since 1950, this LMS will only address extreme heat.

Extreme heat is a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. Heat can pose threats to health and human safety such as fatigue, heat stroke, heat exhaustion, and heat cramps. During a heat wave, "feels like" temperatures can also reach levels that cause hospitalization and even death for certain individuals.[16]

The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. This has important considerations for the human body's comfort.[17]

NWS Heat Index — Temperature (°F)

Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution | Extreme Caution | Danger | Extreme Danger

Previous Occurrences[18]

Specific data on the number of excessive heat days for Walton County was not available, however, with the drastically increasing population and development the County has experienced in the last decade, the temperatures have gradually increased. This is due to the phenomenon known as an Urban Heat Island (UHI). A UHI causes urban areas to experience significant warmer temperatures than their surrounding rural areas. This difference in temperature is due to the concentration of buildings, roads, and other heat-absorbing infrastructure, reduced vegetation, increased human

16 https://firststreet.org/county/walton-county-fl/12131_fsid/heat
17 https://www.weather.gov/ama/heatindex#:~:text=The%20heat%20index%2C%20also%20known,for%20the%20human%20body's%20comfort.
18 https://education.nationalgeographic.org/resource/urban-heat-island/

activity, and building density and height that can trap heat and prevent airflow. This effect will most certainly increase the number of excessive heat days.

Impacts and Overall Vulnerability

Heat waves may cause excessive demand for electrical systems. Air conditioning is available for most residents. Loss of the ability to cool air in a heat wave could mean the possibility of opening shelters for vulnerable populations. Although all residents and businesses are vulnerable to heat waves, air conditioning generally mitigates the issue.

Heat waves occur most frequently during the summer months from June to September. Those people exposed to the heat or sun may experience dehydration, heat exhaustion, even heat stroke or death. Limiting one's exposure to these hot conditions, staying hydrated, taking more frequent breaks while performing physical activities outdoors, and trying to stay out of direct sunlight is imperative. Those populations in urban areas, or elderly populations, may be more susceptible to the risks associated with heat waves. Walton County is particularly vulnerable to heat waves due to a significant percentage of the population represented by those sixty-five years of age or older (20.5 %).[19]

The County has experienced increases in both population and development; however, due to the strengthening of statewide building codes, the implementation of local land development regulations, and the adoption of higher design standards, the resulting growth is not anticipated to substantially elevate overall vulnerability to severe weather events.

URBAN FIRE/WILDFIRE

Urban fires involve buildings or structures in cities or towns with potential to spread to adjoining structures.

Wildfire is a sweeping and destructive conflagration especially in a wilderness or rural area. According to the Northwest Fire Science Consortium, fire severity refers to the effects of fire on the environment, typically focusing on the loss of vegetation above and below ground and soil impacts.[20]

The National Fire Danger Rating System (NFDRS) is a fire assessment system used in the United States to provide a daily estimate of wildfire risk in an area. The NFDRS uses a set of equations with variables that include weather, local topography and fuel types, and humidity to calculate an area's daily fire danger index.[21]

The NFDRS utilizes five potential levels of fire.

Low (Green)

Fires are unlikely to start under these weather and fuel conditions without intense heat sources. Any fires that start will spread slowly, remain at a low intensity, and be reasonably easy to extinguish.

Moderate (Blue)

---

[19] https://usafacts.org/data/topics/people-society/population-and-demographics/our-changing-population/state/florida/county/walton-county/?endDate=2022-01-01&startDate=2010-01-01#population-age

[20] https://www.nwfirescience.org/sites/default/files/publications/Fire%20Severity.pdf

[21] https://wfca.com/wildfire-articles/fire-danger-rating-system-explained/

Some wildfires may ignite at moderate size and intensity. Controlling wildfires at this level is not difficult. Light to moderate mop up will be enough to manage these fires. Controlled burns can be performed under these conditions but should be executed cautiously.

High (Yellow)

Weather and fuel conditions mean that wildfires are likely. Wildfires in areas with heavy, continuous fuel, such as mature grassland, fields, and forest litter, will be hard to control if there are high winds. Directly attacking the fire may be difficult. Careful mop up is essential.

Very High (Orange)

Fires will start easily, and suppression efforts may not be able to keep up with the spread. Flames will be large, intense, and hard to control. Containment, suppression, and mop up will take a lot of work. Outdoor burns are not recommended.

Extreme (Red)

Wildfires can start and spread quickly under these conditions. Any fire has the potential to become huge and uncontrollable. Fire behavior is likely to be extreme and erratic. Hence, there should not be any outdoor burns if fire danger in the area is extreme.

(https://research.fs.usda.gov/firelab/projects/firedangerrating, n.d.)

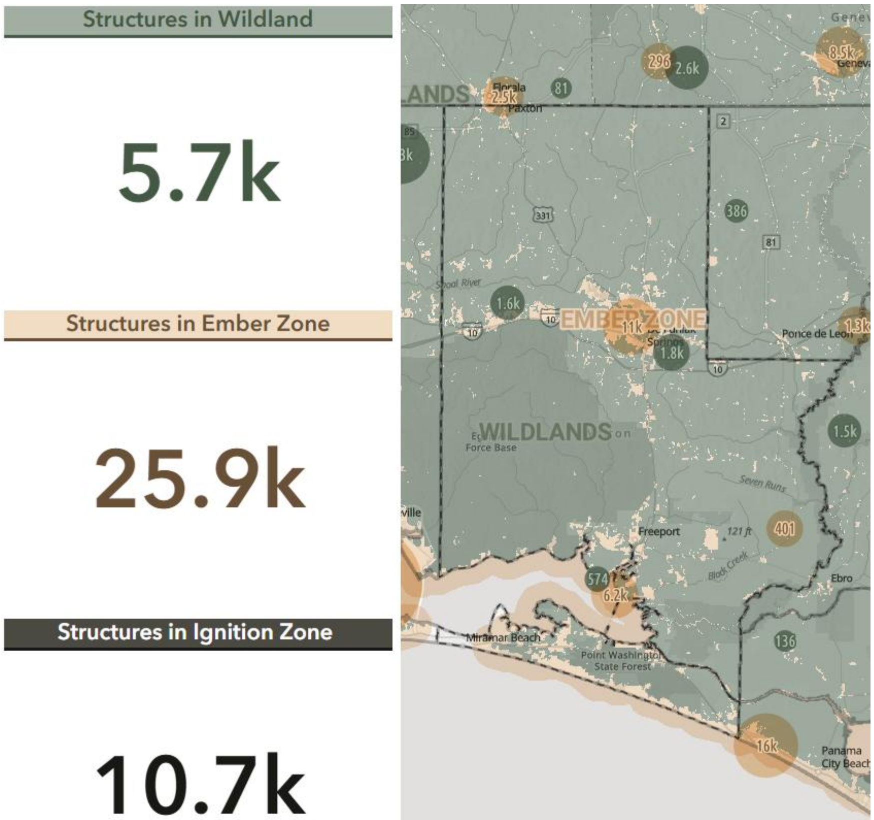
Previous Occurrences[22]

Dates of Event	Event Type	Event Details
May 6 – 12, 2020	Mussett Bayou Wildfire	A wildfire ignited near Mussett Bayou Road in Santa Rosa Beach, reportedly caused by an illegal burn that was left unattended. The fire rapidly spread due to dry conditions and high winds, crossing U.S. Highway 98 and moving south toward the Gulf of Mexico. Evacuations were ordered in the area. The fire burned approximately 343 acres, destroying 34 homes and damaging 15 others. It resulted in an estimate of $10 million in damage and required over 200 personnel, aircraft, and fire apparatus to contain the blaze.

Overall Vulnerability and Impacts, Extent, and Magnitude

Many areas in Walton County, particularly those that are heavily forested or contain large tracts of brush and shrubs, are prone to fires, although the entirety of Walton County (including all its jurisdictions) is vulnerable to wildfires and urban fires. According to the University of Florida's Institute of Food and Agricultural Sciences (IFAS) Extension, scrub pine, pine flatwood, high pine/ sandhill pine, swamp areas and hardwood hammock areas are extreme wildfire hazards to homeowners residing within the wildland urban interface (WUI) of Walton County. See data below. [23]

[22] For occurrences prior to 2020, please see the 2020 LMS
[23] https://fema.maps.arcgis.com/apps/dashboards/c0b5823a64574476b4e7c1726cb6c648

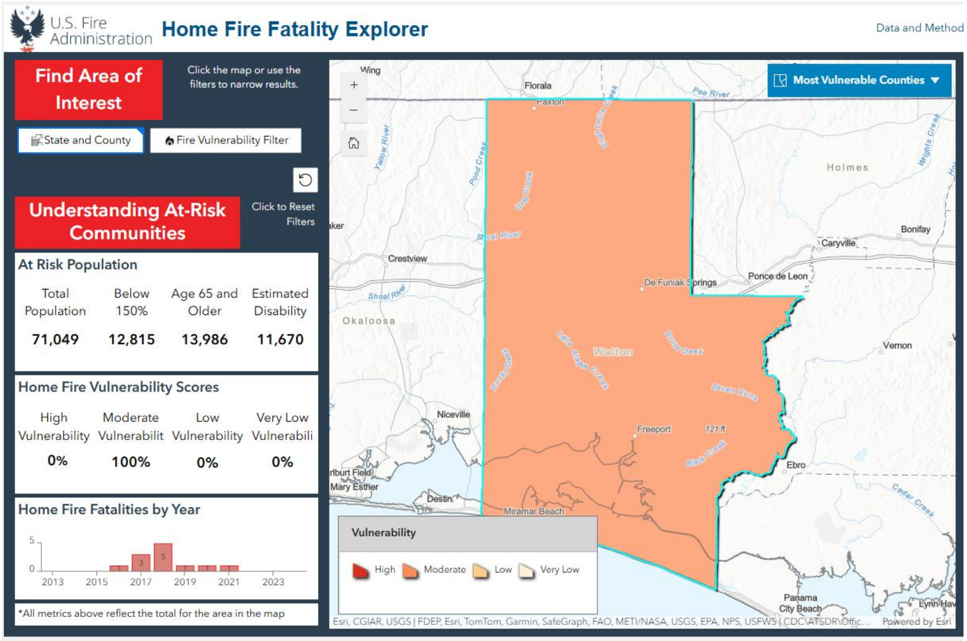


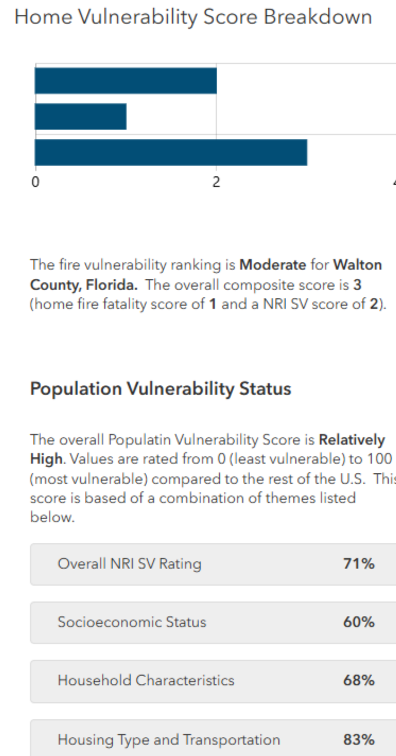
Demographic change is increasing the size of the WUI, defined as the area where structures and other human development meet or intermingle with undeveloped wildlands. The expansion of the WUI in recent decades has significant implications for wildfire management and impact. The WUI creates an environment in which fire can move readily between structural and vegetation fuels. Its expansion has increased the likelihood that wildfire will threaten structures and people.

Buildings without fire suppression are more vulnerable to building fires. If a residence or commercial property were to burn to the ground this would cause significant upheaval in the community.

Potential losses from wildfire include human health and life of residents and responders, structures, infrastructure and natural resources. The most vulnerable populations include emergency responders and those within a short distance of the interface between the built environment and the wildland environment.

Wildfire events can have major economic impacts on a community from the initial loss of structures and the subsequent loss of revenue from destroyed business and decrease in tourism. Wildfires can cost thousands of taxpayer dollars to suppress and control and can involve hundreds of operating hours on fire apparatus and thousands of volunteer man hours from the volunteer firefighters. There are also many direct and indirect costs to local businesses that excuse volunteers from working to fight these fires.





While Walton County does not experience frequent large-scale wildfires, certain events have caused significant damage and prompted evacuations. The county's moderate wildfire risk underscores the importance of ongoing fire management and preparedness efforts.

HAZARDOUS MATERIALS INCIDENT

In a hazardous materials (HazMat) incident, solid, liquid and/or gaseous contaminants may be released from fixed or mobile containers. Hazardous material incidents can occur during the production, transportation, use, and storage of those hazardous materials and can happen anywhere within the State of Florida. As these materials are processed and stored, those in the immediate vicinity are at risk of toxic fumes, soil contamination, and water contamination. Even those communities removed from production or storage facilities are at risk given that hazardous materials are routinely and frequently transported via roadways, railways, pipelines, and waterways, concluding that all areas of the state are potentially at risk. A map of hazardous materials sites in Walton County is Attachment 4.

Biological Hazards

Biological Hazards are materials or incidents that involve exposure to a biological or living agent that cause harm. These agents include microorganisms, viruses, and any toxins originating from biological sources. Examples of biological hazards include Anthrax, Bloodborne Pathogens, Molds, Ebola, Smallpox, and any medical waste that contacts with such microorganisms or viruses. Biological hazards are extremely contagious and pose a threat to any population that is exposed.

Chemical Hazards

Chemical Hazards are hazards or incidents that involve exposure to chemicals that cause harm. Chemical HazMats include neurotoxins, immune agents, dermatologic agents, carcinogens, and other toxins. Chemical hazards can be introduced to populations through ingestion, inhalation, or physical contact. Chemicals enter the body through the eyes, skin, lungs, and digestive tract. Once in the body, the effect depends on the dosage and toxicity. The type of chemical, how it entered the body, and the susceptibility of the individual all affect the outcome of exposure. Once exposed to chemical substances there can be acute (immediate) or chronic (long-term) health issues for the community. The effects of chemical hazards on an exposed population are not limited to the development of lesions and burns on skin and respiratory issues.

Radiological Hazards

Radiological Hazards are hazards or incidents that involve exposure to materials that have encountered radioactive substances, thus making them contaminated. Exposure to radiological materials have both short-term and long-term effects; some short-term effects include radiation burns and radiation sickness, while long-term effects include radiation poisoning and radiation damage.[24]

Previous Occurrences

Since 2020, Walton County has experienced several hazardous materials incidents, including fuel spills, chemical exposures, and significant drug seizures. Though there have been incidents, there have been no significant occurrences to note.

Impacts

Hazardous materials incidences can have a substantial impact on the health and safety of the public and first responders. Such events can cause multiple deaths, shut down facilities or operations, and cause major damage to nearby properties. They can also contaminate water supplies, soil, and materials in the vicinity of the release or spill. Sheltering-in-place or evacuating the people out of the area of impact can often protect people from the harmful effects on a hazardous materials incident.

The extent of a hazardous substance release will depend on whether it is from a fixed or mobile source, the size of impact, the toxicity and properties of the substance, duration of the release, and the environmental conditions (for example, wind and precipitation, terrain, etc.).

Hazardous substance releases can contaminate air, water, and soils, possibly resulting in death and/or injuries. Dispersion can take place rapidly when the hazardous substance is transported by water and wind. While often accidental, releases can occur because of human carelessness, intentional acts, or natural hazards. When caused by natural hazards, these incidents are known as secondary events. Such releases can affect nearby populations and contaminate critical or sensitive environmental areas.

With a hazardous substance release, whether accidental or intentional, several potentially exacerbating or mitigating circumstances will affect its severity or impact. Mitigating conditions are precautionary measures taken in advance to reduce the impact of a release on the surrounding environment. Primary and secondary containment or shielding by sheltering-in-place measures protects people and property from the harmful effects of a hazardous substance release.

[24] https://flshmp-floridadisaster.hub.arcgis.com/pages/hazardous-materials-incident

Overall Vulnerability

With multiple highway systems across the county, virtually all critical facilities have the possibility of being affected by a hazmat incident. Certain corrosive materials can damage roadways and other surfaces they contact. Those vulnerable to a hazardous materials incident include the entire population of the county because there is no way to determine the impact/magnitude of a hazmat incident and no way to predict where and when a hazmat incident will occur. People are vulnerable to hazmat incidents through possible injuries, deaths, effects on transportation routes, establishment of shelters, etc. Responders to hazardous materials incidents are vulnerable to injury from exposure.

Risks to the environment are high should a hazardous materials incident occur. Environmental concerns are interruption of water supply and secondary incidents such as fires and hazmat accidents (such as gas pipelines rupturing, rupture of hazmat containers at facilities, etc.). When spills do occur, whether inside or outside facilities or along roadways, operations can be vulnerable to shutdowns, lost time, and expended man-hours in response to the incident.

Transportation Incident

A transportation accident is an incident that occurs during travel by any mode of transportation, including road, rail, air, or marine. Walton County has no traditional ports, therefore this document will focus on hazards associated with roads, railways, and air travel.

Accidents are possible in any of many major highways and the rail system that travels through the county resulting in loss of life, damage to transportation infrastructure, injury or death to individuals involved in or in the vicinity of the accident, property damages as well as environmental impacts from crashes and releases of hazardous materials. In addition, an incident in one of these modes of transportation can also interrupt supply networks and hinder commerce.

Airports

In Walton County there are 10 airports including one municipal public airport, seven private airports, one heliport, and one seaplane facility. These are listed below:[25]

LOCATION	***OWNER***
Pennington Heliport - FL71 DeFuniak Springs, Florida Facility Usage: Private	Walton County Sheriff's Office 72 North 6th Street DeFuniak Springs, FL 32433 (850) 892-8186
Breezy Knoll Airport - 0FD5 DeFuniak Springs, Florida Facility Usage: Private	Ty Victoria Waterman 1359 Long Road DeFuniak Springs, FL 32433 (850) 892-9566
Cedar Lane Airport - 5FL9 DeFuniak Springs, Florida Facility Usage: Private	Maurice Roberts 460 Boy Scout Road DeFuniak Springs, FL 32435 (850) 892-3953

[25] https://www.tollfreeairline.com/florida/walton.htm

Cuchens Airport - 02FL DeFuniak Springs, Florida Facility Usage: Private	Henry Cuchens 219 Cuchens Ln. DeFuniak Springs, FL 32435 (850) 865-0013
DeFuniak Springs Airport - 54J DeFuniak Springs, Florida Facility Usage: Public	City Of DeFuniak Springs 71 US Highway 90 West, Po Box 685 DeFuniak Springs, FL 32435 (850) 892-8500
Joy Farms Airport - 0FD9 DeFuniak Springs, Florida Facility Usage: Private	Brian Goff 4979 Highway 331 South DeFuniak Springs, FL 32435 (904) 892-2659
Unicorn Place Airport - 69FD DeFuniak Springs, Florida Facility Usage: Private	Richard Sohn 8029 Highway 1087 DeFuniak Springs, FL 32433 (850) 834-4905
Mack Bayor Airheart Heliport - 3FL7 Destin, Florida Facility Usage: Private	Sacred Heart Health Systems 5151 North Ninth Avenue Pensacola, FL 32504 (850) 416-7573
Melanies Airport - 05FA Florala, Florida Facility Usage: Private	Melanie Jim Nipper 316 Thacker Lane Raeford, NC 28376 (910) 875-7657
Dugger Field Airport - 0FD3 Freeport, Florida Facility Usage: Private	Fred Bogle 259 San Juan Ave Seagrovebeach, FL 32459 (850) 231-3644
Ellis Agricultural Field Airport - 34FL Paxton, Florida Facility Usage: Private	Janet L Simpson P.O. Box 135 Florala, AL 36442 (904) 834-2418
Goose Nest Seaplane Base - FD95 Santa Rosa Beach, Florida Facility Usage: Private	Samuel Damico 20 Thornell Rd Pittsford, NY 14534 (585) 218-9099

Aircraft Accidents- Previous Occurrences 2020 - 2024[26]

Ntsb No	Event Type	Mkey	Event Date	City	State	N#	Serial Number	Mode
ERA23LA217	ACC	107814	2023-05-04 T12:15:00Z	DeFuniak Springs	Florida	N3796T	28R-30109	Aviation
ERA20LA342	ACC	102088	2020-09-30 T10:40:00Z	DeFuniak Springs	Florida	N8950R	7GCB-36	Aviation

These incidents were private flights and had very little to no impact on Walton County.

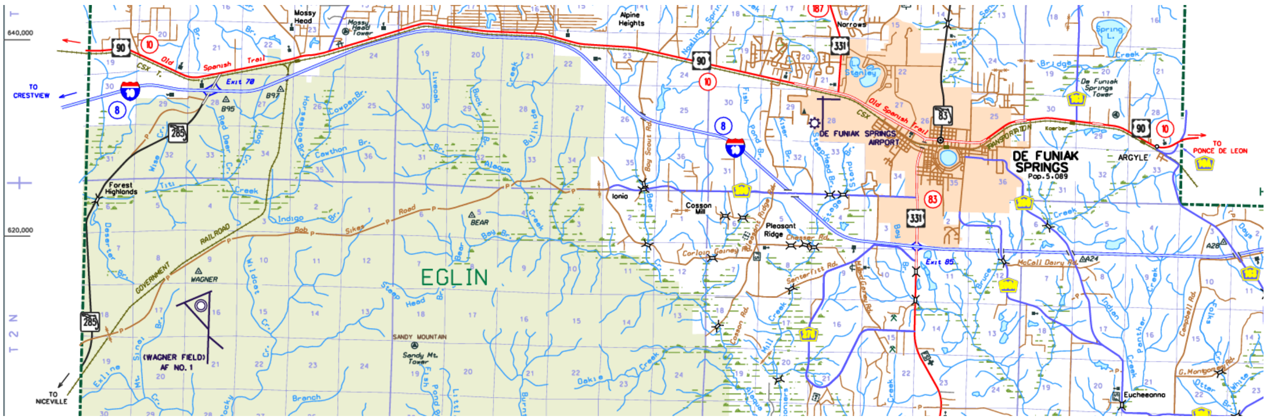
[26] https://data.ntsb.gov/carol-main-public/basic-search

Railways

Florida Gulf and Atlantic Railroad, L.L.C. (FGA), a subsidiary of Rail USA, operates the single railroad through Walton County. See the railroad route through Walton County below (parallel to Hwy 90).

Previous Occurrences

There have been no reported railway incidents in Walton County in recent history.



Roadways

Walton County houses several major roadways that are heavily travelled. Interstate 10 (I-10), State Highways 90, 98, and 20 traverse the County from west to east. State Highways 85, 331, 83, and 81 cross the County from north to south.

There is no warning time for vehicular accidents. Contributing factors for these accidents are typically associated with the driver, vehicle and the environment. Factors associated with the driver include error, speeding, experience, and blood-alcohol level. Factors associated with the vehicle include type, condition, and center of gravity. Environmental factors include the quality of the infrastructure, weather, and obstacles. Most vehicular accidents are attributed to the driver. Vehicular accidents can have severe effects on those directly involved, as well as effects to others not directly involved. Other effects may include severe traffic delays, lost sales to businesses, delayed commodity shipments, and increased insurance costs.

Previous Occurrences[27]

	Category	2023	2022	2021	% Change 2022 - 2023	3-Year Average
Walton County	**Total Crashes**	1,600	1,631	1,692	-1.9%	1,641
	Total Fatalities	21	24	39	-12.5%	28
	Total Injuries	1,049	1,031	969	1.75%	1,016

[27] https://www.flhsmv.gov/pdf/crashreports/crash_facts_2023.pdf

Impacts and Overall Vulnerability

Potential losses from transportation hazards include human health and life, property and natural resources. Vehicular accidents may result in injury or death to drivers/passengers on the road, the public in the immediate vicinity and emergency services personnel. The number of people exposed depends on population density, both by day and night, and on the proportions located indoors and outdoors.

Environmental risks from a highway incident include fires and hazardous materials such as fuel and oil leaking into the environment. Care would need to be taken to contain leaking fluids as well as contain fire retardant materials used to prevent a fire.

Disruption of transportation services could lead to lost wages and substantial losses in productivity. Loss of roadway use, and public transportation services would affect commuters, employment, day-to-day operations within the County, and delivery of critical city, county and emergency services.

TERRORISM

The U.S. Code of Federal Regulations (CFR) defines terrorism as the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. This definition is found in 28 CFR Section 0.85.

Domestic Terrorism

The U.S. Patriot Act defines domestic terrorism as an attempt to "intimidate or coerce a civilian population; to influence the policy of a government by intimidation or coercion; or to affect the conduct of a government by mass destruction, assassination, or kidnapping." Domestic terrorism involves groups or individuals whose terrorist activities are directed at elements of the U.S. government or population without foreign direction. It is the unlawful use, or threatened use, of violence by a group or individual based and operating entirely within the United States, or its territories, without foreign direction, committed against persons or property to intimidate or coerce a government, the civilian population, or any group, in furtherance of political or social objectives. This can also include single issue groups looking to further specific social ideas or practices.

International Terrorism

International terrorism involves groups or individuals whose terrorist activities are foreign based and/or directed by countries or groups outside the United States or whose activities transcend national boundaries. This distinction refers not to where the terrorist act takes place but rather to the origin of the individuals or groups responsible for it. For example, the 1995 bombing of the Murrah Federal Building in Oklahoma City was an act of domestic terrorism, but the attacks of September 11, 2001, were international in nature. For the purposes of consequence management, the origin of the perpetrator(s) is of less importance than the impacts of the attack on life and property; thus, the distinction between domestic and international terrorism is less relevant for the purposes of mitigation, preparedness, response, and recovery than for understanding the capabilities of terrorist groups and how to respond to the impacts they can generate.

Previous Occurrences

There are no documented incidents of terrorism within Walton County.

Impacts and Overall Vulnerability

All assets within Walton County are vulnerable to being affected by a terrorist incident; however, government facilities and public areas are most vulnerable to such incidents especially in the proximity of Eglin Air Force Base.

In evaluating vulnerability of the population in the County, it was determined that risk/vulnerability includes the entire population of Walton County, because there is no way to determine the impact/magnitude of a terrorist incident and no way to predict where and when a terrorist incident will occur. People are vulnerable to terrorist incidents through physical injury or disease, power outages, effects on transportation routes, establishment of shelters, effect of incident on the mental state of the public, confidence of public in law enforcement support, contamination of the food supply, etc.

Risks to the environment are high should a terrorist incident occur, but the frequency of terrorist incidents in Walton County is low. Environmental concerns are interruption or contamination of water or food supplies, secondary incidents such as fires and hazmat accidents (such as gas pipelines rupturing, rupture of hazmat containers at facilities, etc.).

Future development throughout Walton County will take into consideration possible terrorist incidents; particularly if new facilities are built that could be potential terrorist targets.

All network equipment, data and software for government, business, and individuals within Walton County are vulnerable to being affected by a cyberterrorist incident; however, government and healthcare facility servers and networks are currently most vulnerable to such incidents.

For critical facilities in Walton County, cyberterrorism has the potential to disrupt the following systems:

- Communications
  - Next Generation 911 (NG9-1-1)
  - Computer Aided Dispatch (CAD)/ Mobile Data Terminals (MDT)
  - Land Mobile Radio (LMR) / First Responder Network Authority (FirstNet)
- Law Enforcement
  - Data and Equipment
  - Security/ Access Systems
- Fire/EMS
  - Data and Equipment
  - Fleet
- Medical/Public Health
  - Data
  - Durable Medical Equipment (DME)
  - Facilities
- Transit/Transportation
  - Supervisory Control and Data Acquisition (SCADA)/Original Equipment Manufacturer (OEM)
  - Information
- Utilities
  - Data
  - Incident Control System (ICS) / Supervisory Control and Data Acquisition (SCADA)

- Emergency Management
  - Data
  - Common Operating Picture (COP)
  - Alert and Warning

Disruptions to these systems could hinder access to data, result in the theft or leakage of sensitive/private information, cause a temporary or permanent loss of data, prevent access to websites, disrupt phone services such as 911 systems, disrupt emergency services, and result in a loss of public confidence and staff productivity.

Environmental risks are low as environment damage is not the typical target of a cyberterrorism attack, however, it is possible if certain systems are accessed and either disabled or manipulated that harm could result to the environment. Environmental concerns are interruption of water or wastewater systems, damage or disruption to industrial manufacturing facilities resulting in hazardous material incidents, interruption of the power grid and fire suppression systems, etc.

Constant vigilance on the part of staff as well as the deployment of protective systems to detect threats and safeguard data is needed to ensure data in the county is protected from cyberterrorism attempts.

NFIP and CRS Participation

The National Flood Insurance Program (NFIP) was created by the Congress of the United States in 1968 through the National Flood Insurance Act of 1968. It enables property owners in participating communities to purchase insurance protection from the government against losses from flooding. Flood insurance is designed to provide an alternative to disaster assistance and address escalating costs of repairing damage to buildings and their contents caused by floods.

Participation in the NFIP is based on an agreement between local government and Federal Emergency Management Agency (FEMA). Participants are to adopt and enforce floodplain provisions that are aimed at reducing future flood risk. Walton County's initial Flood Insurance Rate Map (FIRM) became effective on November 16, 1977. The City of DeFuniak Springs' (120318) initial FIRM became effective December 21, 1984, the City of Freeport's (120319) on April 30, 1986, and the City of Paxton's (120423) on March 7, 2000.

Walton County and its local jurisdictions participate in the NFIP and continue to enforce their respective flood prevention ordinances. Effective products are automatically adopted as they become available.

Walton County has an interlocal agreement with the City of Paxton to administer its flood ordinance. The Floodplain Manager is responsible for the implementation and enforcement of local floodplain regulations within the unincorporated areas. The Planning Directors for the City of DeFuniak Springs and the City of Freeport are responsible for the implementation of the NFIP for their respective jurisdictions per adopted Flood Ordinance. [28]

---

[28] CHAPTER V. - DEVELOPMENT DESIGN AND IMPROVEMENT STANDARDS | Code of Ordinances | Walton County, FL | Municode Library

Senate Bill 180 prevents local government from enforcing cumulative substantial improvement provisions as outlined in the Flood Protection and Prevention Ordinance.

Post-disaster, both public and private damage assessments are performed to support corresponding Federal and State Assistance available. Each assessment is designed to quantify the eligible amount of damage a community incurred.

After a flood, community officials implement Substantial Damage provisions by: (1) identifying and inspecting damaged structures in the Special Flood Hazard Area (SFHA), (2) determining if repair costs or improvement costs equal or exceed 50% of the structure's pre-damage value, (3) issuing permits for rebuilding only if the structure is brought into compliance with NFIP requirements, and (4) enforcing elevation standards, such as elevating the lowest floor above the effective BFE. Property owners must obtain the necessary permits and comply with the regulations to rebuild or improve their property.

Post-disaster public outreach and coordination include three general categories: Face to face, printed, and/or electronic communications such as social media. Long-term recovery and redevelopment messages will be coordinated through the BCC's Public Information Manager.

NFIP Communities Participating in NFIP

Community	NFIP Entry	Effective FIRM Date
Walton County, Unincorporated (120317)	11/16/1977	12/30/2020
City of Freeport (120319)	4/30/1986	12/30/2020
City of DeFuniak Springs (120318)	12/21/1984	9/29/2010
Town of Paxton (120423)	3/7/2000	9/29/2010

Source: FEMA Community Status Book Report, Florida (2022)

As of August 2025, Walton County has 7,147 policies (2025) in force within the unincorporated areas. The total premium for those policies is approximately $11.9 million. There have been 3,314 historical losses/claims totaling over $137 million. The City of Freeport has 348 active policies, with a total premium of $206, 500. The city has had 8 historical losses/claims totaling over $385,000. The table below summarizes the number of flood insurance policies and the value of those policies for NFIP participating communities in Walton County.

NFIP Statistics by Participating Jurisdictions

Jurisdiction	Active Policies (2025)		Historical Claims	
	In-Force	Total Premium	Number	Total Paid
Walton County Unincorporated (120317)	7,147	$11,997,506	3,314	$137,476,452
City of Freeport (120319)	348	$206,501	8	$385,912
City of DeFuniak Springs (120318)	0	0	0	0
Town of Paxton (120423)	0	0	0	0

Source: FEMA NFIP Dataset (2025)

October 01, 2014, Walton County unincorporated areas qualified for the NFIP CRS. The CRS is a voluntary incentive program that recognizes and encourages floodplain management practices that exceed the minimum requirements of the NFIP. Although the City of DeFuniak Springs, City of Freeport, and City of Paxton participate in the NFIP, these communities are not active participants of the CRS program.

Walton County and its jurisdictions maintain compliance with the NFIP and CRS program, as applicable. The on-going effort to meet regulatory requirements of the NFIP, include but are not limited to:

- Maintain maps of past and effective FIRMs accessible to the public
- Distributing letters to property owners, lenders, insurance offices and real estate brokerages regarding flood hazards and mandatory flood insurance requirements
- NFIP integration into the County Land Development Code and Comprehensive Plan
- Provide flood information during education, outreach events, and social media campaigns (i.e., Flood Safety Week)
- Designating Repetitive Loss Areas (RLA) and informing residents within those areas of the risk and mitigation options available.

Repetitive Loss Data

Walton County is a diverse county with areas ranging from urban to rural and coastal to inland. While all Walton County residents are vulnerable to the hazards identified in this Risk Assessment, geographic location and other factors contribute to the extent of their vulnerability and disaster impacts. Some areas of Walton County experience repetitive flooding from storm surge and heavy rainfall, causing damage to roadways, homes and businesses.

The Federal Emergency Management Agency (FEMA) defines Repetitive Loss as: An NFIP insured structure that has had at least two paid flood losses of more than $1,000 each in any 10-year period since 1978. Mitigation of these types of structures is prioritized in underserved communities and socially vulnerable populations.

A Severe Repetitive Loss building is any building that:

- It is covered under a Standard Flood Insurance Policy made available under this title
- Has incurred flood damage
- Four or more separate claim payments have been made under Standard Flood Insurance. Policy issued pursuant to this title, with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claim's payments exceeding $20,000; or
- At least two separate claims/payments have been made under a Standard Flood Insurance Policy, with the cumulative amount of such claim payments exceed the fair market value of the insured building on the day before each loss

Based on the FEMA NFIP Dataset (2025), the repetitive losses (RL) and severe repetitive losses (SRL) are within the unincorporated areas of Walton County. The City of Freeport, the City of DeFuniak Springs, and the City of Paxton did not have any RL properties. Historically, most RL losses have been single family dwellings within the unincorporated, coastal areas. There are approximately 282 RL properties, 37 identified as SRL accounting for 1,562 losses, with an average claim/payment in the amount of $48,803. The specific address of each property is maintained by FEMA, FDEM, and local jurisdictions and is protected in accordance with the Privacy Act of 1974.

Annually, Walton County notifies residents if a structure is in a Repetitive Loss Area (RRLA) and provides details regarding available mitigation programs or assistance. The following tables summarize the number of repetitive loss properties and the total losses claimed and lists repetitive losses by type and flood zone. The goal of FEMA and NFIP is to reduce the number of structures that meet these criteria, whether through elevation, acquisition, relocation, or a flood control project.

Repetitive and Severe Repetitive Flood Losses					
Jurisdiction	**Total RL Properties**	**Total SRL Properties**	**Number of Losses**	**Total Paid***	**Average Payment/Claim**
Walton County Unincorporated (120317)	282	37	1562	$71,673,817	$43,803
City of Freeport (120319)	0	0	0	0	0
City of DeFuniak Springs (120318)	0	0	0	0	0
Town of Paxton (120423)	0	0	0	0	0

Repetitive Flood Losses by Type				
Jurisdiction	**Single Family**	**Multi Family**	**Non-Residential**	**Total Mitigated**
Walton County Unincorporated (120317)	227	26	29	1 - SF
City of Freeport (120319)	0	0	0	0
City of DeFuniak Springs (120318)	0	0	0	0
Town of Paxton (120423)	0	0	0	0
Source: FEMA NFIP Dataset (2025)				

Repetitive Flood Losses by Flood Zone				
Jurisdiction	**Total RL Properties**	**A/AE**	**V/VE**	**B/C/X**
Walton County Unincorporated (120317)	282	92	55	135
City of Freeport (120319)	0	0	0	0
City of DeFuniak Springs (120318)	0	0	0	0
Town of Paxton (120423)	0	0	0	0
Source: FEMA NFIP Dataset (2025)				

Floodplain Management

Walton County and its jurisdictions closely monitor ongoing changes in development patterns, including increased residential and commercial density, shifts in land use, and evolving regulatory design standards. This active oversight is essential to understanding and mitigating the potential impacts of growth on flood-prone and hazard-vulnerable areas. As development pressures increase, particularly in low-lying coastal and inland floodplain areas, the County is placing greater emphasis on integrating resilience and hazard mitigation into planning and permitting processes.

To support these efforts, Walton County utilizes up-to-date flood risk information, including the Coastal FIRMs, which became effective on December 30, 2020. These maps, developed in coordination with FEMA, serve as a critical tool for identifying flood zones, guiding responsible development, and informing floodplain management strategies. The effective FIRMs provide refined data on coastal flood hazards, including storm surge and wave action, helping the County enforce appropriate building standards and land use policies in areas subject to increased flood risk.

By aligning local planning with the latest FEMA mapping and continuously evaluating the impact of development trends, Walton County is working to ensure that growth does not compromise public safety, environmental integrity, or long-term community resilience. These efforts are further supported through participation in various state and federal programs, such as the NFIP and the CRS, which incentivize strong floodplain management practices and help reduce insurance costs for residents.

Together, these initiatives reflect Walton County's proactive and adaptive approach to balancing growth with hazard mitigation, ensuring that future development is both sustainable and resilient in the face of increasing climate and flood-related risks.

In February 2024, Walton County formally adopted a comprehensive 5-year Capital Improvement Project (CIP) list, outlining key infrastructure and development priorities intended to enhance public services, support sustainable growth, and increase community resilience. This strategic plan serves as a roadmap for allocating resources to critical infrastructure projects, including transportation and public facilities.

Walton County recently completed the necessary steps for participation in FDEM's Hazard Mitigation Grant Program (HMGP) Watershed Planning Initiative. This initiative supports local governments in developing data-driven watershed plans that identify and mitigate flood risks, enhance stormwater management, and strengthen the county's overall ability to withstand extreme weather events.

In addition to the HMGP initiative, Walton County is actively engaged in the Resilient Florida Grant Program, specifically working on the Florida Statewide VA. This effort involves assessing the county's vulnerabilities to the impacts of sea level rise, coastal erosion, flooding, and other climate-related hazards. The assessment will provide a scientific basis for identifying areas of risk and prioritizing future mitigation and adaptation projects. Once completed, this work will position Walton County to access future state and federal funding opportunities for resilience-focused infrastructure and community planning efforts.

Together, these initiatives reflect Walton County's proactive approach to long-term planning and infrastructure investment, ensuring a safer and more sustainable future for its residents and natural resources.

Ongoing efforts by WCEM, along with robust public information and outreach initiatives, help ensure that residents, developers, and stakeholders remain informed about flood risks, preparedness measures, and regulatory requirements, further supporting community resilience.

MITIGATION STRATEGY

EXISTING POLICIES, PROCEDURES, AND AUTHORITIES

County Programs

NPDES Stormwater Management Program

The NPDES Stormwater Management Program is a collaboration of resources and education efforts to prevent pollution by regulating stormwater discharge through the Municipal Separate Storm Sewer Systems (MS4) and monitoring construction and industrial activities. Stormwater structures that are properly designed and constructed can reduce or remove chemicals, debris and sediment from water to keep our waterways healthy.

To provide for the health, safety and general welfare of our citizens, Walton County adopted Ordinance No. 2008-06[29] to help regulate non-stormwater discharges that degrade surface waters, making them unsafe for drinking, swimming, fishing and other activities.

Artificial Reef Program[30]

Artificial Reefs are man-made structures that are deployed in a waterbody to mimic characteristics of natural reefs. They include materials such as clean concrete or rock, clean steel boat hulls, other clean, heavy gauge steel products with a thickness of ¼ inch or greater, and prefabricated structures that are a mixture of clean concrete and heavy gauge steel. Approved and properly cleaned vessels can also be deployed as artificial reefs.

The Walton County Artificial Reef Program originally started in 1994 with three permitted areas (Genesis Reef Site, Eastern Lake Reef Site, and Miramar/Frangista Reef Site). From 1994 to 2013, only four deployments occurred. In 2013, Walton County and the South Walton Artificial Reef Association (http://waltonreefs.org/) partnered together to develop the current Walton County Artificial Reef Program. It consists of 16 permitted areas including four snorkel reef sites, nine nearshore sites, and three fish haven sites.

The objectives of the Artificial Reef Program for Walton County are to:

1. Create stable and durable reefs that provide valuable habitat for fish and marine life and maintain and increase the regional abundance of marine life to levels as found on or exceeding the natural reefs off Walton County.
2. Increase recreational and eco-tourism opportunities off Walton County for both residents and tourists.
3. Increase the economic health and resiliency of south Walton County with artificial reefs.
4. Improve knowledge and understanding of artificial reef biology and performance measures.

Flood Mitigation Policy[31]

[29] Microsoft Word - 2008-06.doc

[30] Resolution-2015-41

[31] Approved-Flood-Mitigation-Policy

The purpose of this policy is to establish protocols and procedures for addressing flooding on public property including, but not limited to, buildings, bridges, roadways and public easements in Walton County and to provide limited assistance to residents during flood events.

Habitat Conservation Plan[32]

Following the passage of Hurricane Dennis in 2005, Walton County issued over 250 permits to coastal property owners to allow the installation of temporary armoring structures to protect their homes from shoreline erosion.

Because of these permits, several miles of new seawalls were built along the County's Gulf Coast beaches. This caused much debate and astonishment among State and Federal regulatory agencies, environmental groups, beachgoers, and the affected beachfront property owners and managers.

The public dialogue that ensued led to an Intergovernmental Agreement between Walton County, the Florida Department of Environmental Protection (FDEP), the Florida Fish and Wildlife Conservation Commission (FWC), and the U.S. Fish and Wildlife Service (USFWS). The agreement was based on the premise that Walton County would apply for Federal funds to develop a Habitat Conservation Plan and apply for an Incidental Take Permit (ITP).[33]

Goals and Objectives of the Mitigation Strategy

Goal 1: Protect and Promote the Health, Safety, and Welfare of the Public

Objective 1.1 Provide education and information to the public and businesses about potential hazards and property protection measures.

Objective 1.2 Utilize community events, print media, and social media to increase awareness and support continuity of operations and community lifelines.

Goal 2: Promote a Disaster Resilient Community

Objective 2.1 Improve the capabilities of local government officials to reduce or eliminate hazards that cause loss of life, inflict injuries, cause property damage and to improve the protection of natural resources.

Objective 2.2 Investigate and implement a range of structural projects that will reduce the effects of natural hazards on structures throughout the county.

Goal 3: Protect the Environment and Natural Resources of the Area

Objective 3.1 Control development activities that would damage or destroy watersheds, wetlands, coastal resources, or other natural areas which serve as natural buffers and help prevent extensive infrastructure damage.

Objective 3.2 Implement property protection measures to facilitate drainage and reduce the effects of natural hazards, including measures that reduce or eliminate repetitive loss occurrences.

[32] Microsoft Word - Wildlife Lighting Ordinance No 2009-03.docx
[33] Ch-4-final Goals

Objective 3.3 Investigate and implement a range of nature-based solutions and utilize and enhance natural resources and their ability to reduce the impacts from natural hazards.

Goal 4: Provide land use regulations to limit damage to developments.

Objective 4.1 Work to improve and coordinate existing local plans, codes and regulations to reduce the impacts of natural hazards.

Objective 4.2 Restrict development in hazard prone areas to eliminate the potential of damage to structures and natural resources and adopt building codes that limit damage caused by the local disasters such as wind loads and flood elevation.

MUNICIPALITIES

Each of the municipalities has a designated point of contact for mitigation efforts which is updated annually. These representatives have the responsibility of coordinating mitigation activities with the relevant agencies and integrating mitigation data into their respective plans and procedures. These include Flood Warning and Response and Comprehensive Development Plans.

Each municipality has within its structure a Public Works Department and a Planning and Development Department which affect and promote mitigation. Walton County has an active interlocal agreement with the City of Paxton to provide floodplain management services.

City of DeFuniak Springs (DFS) Programs

City Beautification & Tree Board

The preservation of existing trees and the promotion of new tree planting is a public purpose that protects the public health, welfare, environment and aesthetics of the City of DeFuniak Springs and its citizens. The urban forest serves a wide variety of functions, which promote the health, safety and welfare of residents. These functions include: (a) conserving energy, by providing shade and evaporative cooling through transpiration; (b) improving local and global air quality by absorbing carbon dioxide and ozone, absorbing particulate matter, and producing oxygen; (c) reducing wind speed and directing air flow; (d) reducing noise pollution; (e) providing habitat for birds, small mammals, and other wildlife; (f) reducing storm runoff and the potential for soil erosion; (g) increasing real property values; enhancing visual and aesthetic qualities that attract visitors and businesses.

Police and Fire Rescue Departments

The City of DFS maintains its own police and fire departments. The emergency responders that staff these agencies are essential for alert and notification as well as lifesaving response, prevention, and protection activities that all contribute to lessening the impact of disasters. Additionally, the police and fire departments conduct educational outreach campaigns to residents to spread awareness on emergency preparedness.

The City of Freeport and the City of Paxton are served by the WCSO and WCFR.

PLAN INTEGRATION

The information on hazard, risk, vulnerability, and mitigation contained in this plan is based on the best science and technology available at the time this plan was prepared. The comprehensive plans of the planning partners are integral parts of this plan. The LMSWG, through adoption of comprehensive plans and zoning ordinances, has planned for the impact of natural hazards. The plan development process provided the opportunity to review and expand on policies contained within these planning mechanisms.

The planning partners used their Comprehensive Plans and the LMS as complementary documents that work together to achieve the goal of reducing risk exposure to the residents of the planning area. An update to a Comprehensive Plan may trigger an update to the LMS unless the Comprehensive Plan utilizes the LMS's HIRA to avoid redundancies and conflicting reporting.

All participating agencies are committed to creating a linkage between the hazard mitigation plan and their individual Comprehensive Plans by identifying a mitigation action as such and giving that action a high priority. Other planning processes and programs to be coordinated with the recommendations of the hazard mitigation plan include the following:

- Emergency response plans and training and exercise
- Debris management plans
- Recovery plans
- Capital improvement programs
- Municipal codes
- Community design guidelines
- Water-efficient landscape design guidelines
- Stormwater management programs
- Water system vulnerability assessments
- Community wildfire protection plans
- Comprehensive flood hazard management plans
- Resiliency plans
- Community Development Block Grant- Disaster Recovery action plans
- Public information/education plans

Walton County and its municipalities have other plans and ordinances that will be reviewed and integrated into the LMS as they all undergo updates. The following is a list of plans and codes that have and will continue to be integrated into the WCLMS. These plans and codes will reciprocatively incorporate the LMS into their planning mechanisms during their individual update cycles.

- Walton County Comprehensive Plan
- Walton County Land Development Code
- Walton County Post Disaster Redevelopment Plan
- Walton County Flood Hazard Specific Plan
- Walton County Flood Prevention Ordinance
- Walton County Flood Insurance Rate Maps
- City of DeFuniak Springs Comprehensive Plan
- City of DeFuniak Springs Land Development Code

- City of Freeport Comprehensive Plan
- City of Freeport Land Use Development Code
- City of Paxton Land Development Code

The LMSWG will consider any changes in these plans and incorporate the information accordingly in its next update cycle. Some action items do not need to be implemented through regulation. Instead, these items can be implemented through the creation of new educational programs, continued interagency coordination, or improved public participation. As information becomes available from other planning mechanisms that can enhance this plan, that information will be incorporated via the update process.

Plan Maintenance

Florida Administrative Code (FAC) 2 P-22 requires submittal of an annual LMS update to FDEM by the last working weekday of each January. To meet this deadline, the following items will be updated in late December/early January of each year. The Mitigation Strategy will be monitored, evaluated, and updated as necessary by the LMSWG that is comprised of representatives from each jurisdiction.

- LMSWG membership list and organizational changes
- Updated/revised Goals and Objectives
- Initiatives and progress made on projects

In order to encourage public participation in the LMSWG, all jurisdictions will make efforts to increase social media campaigns that advertise the program. Additionally, each jurisdiction will make the program part of their outreach efforts.

WCEM staff will make annual presentations to the elected County Officials, School Board members, and civic groups throughout the County.

Plan Monitoring and Evaluation

At least twice annually, the LMSWG Plan Revision Subcommittee will meet to discuss developments and plans that have potential to affect the LMS PPL and to change the priorities of the list. Any mitigation opportunities that are identified will be assessed for feasibility and will be brought to the LMSWG for further evaluation.

Plan Update

The 2025 plan update incorporated several changes that were deemed necessary by the Plan Revision Subcommittee upon review of the following:

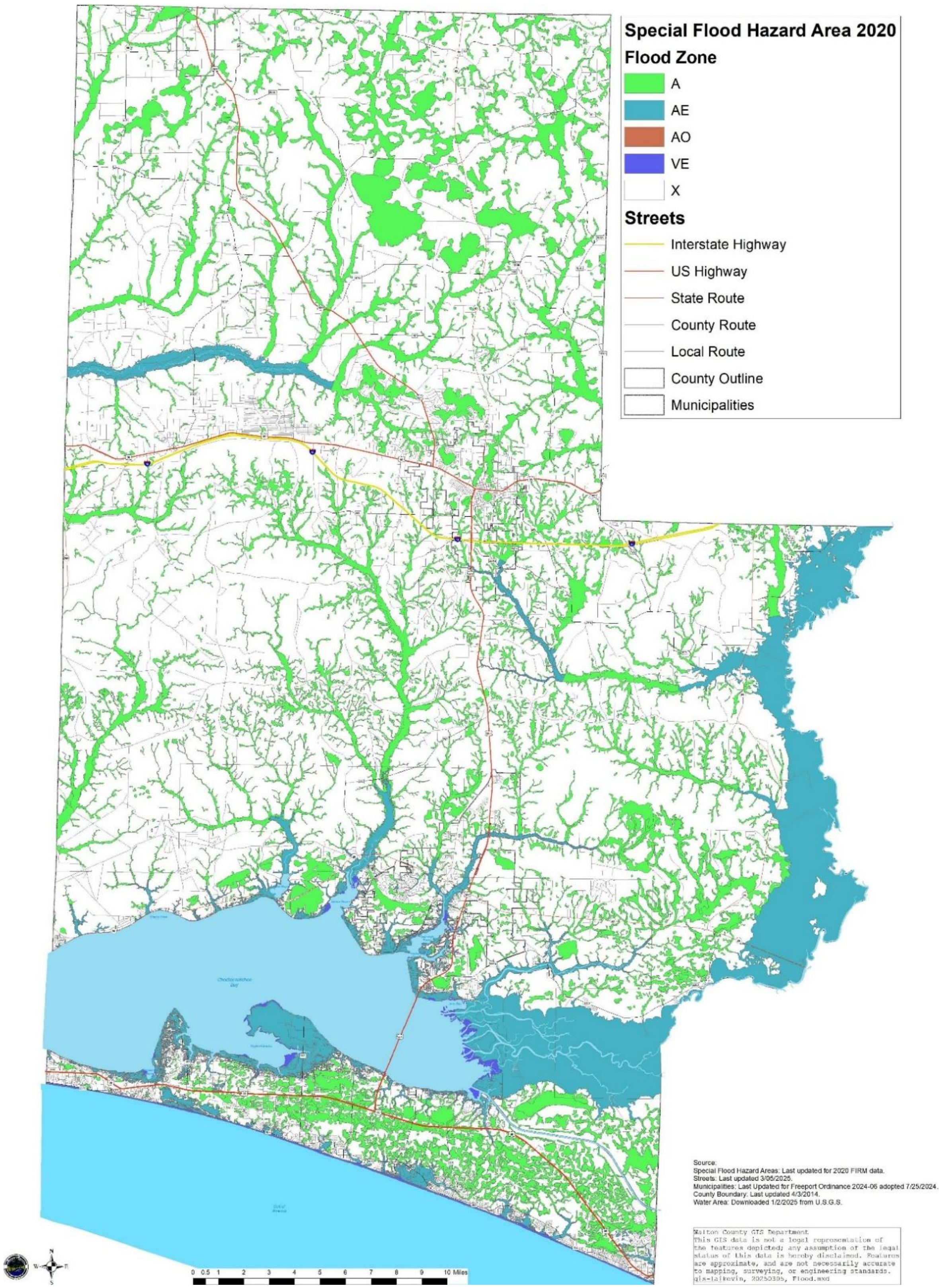
- Analysis of hazards to determine ***actual*** probable hazards to include and those to eliminate
- Review of After-Action Reports
- Updated Goals and Objectives
- Updated Proposed Project List
- Review of new or anticipated law, regulation, or policy changes that may affect the LMS

The changes incorporated into this update were deemed necessary as a result of the creation of the LMSWG Plan Revision Subcommittee that includes members from each jurisdiction. The group determined what new goals should be included and what goals needed to be altered. Priorities for the County and its jurisdictions remain unchanged from the previous plan update.

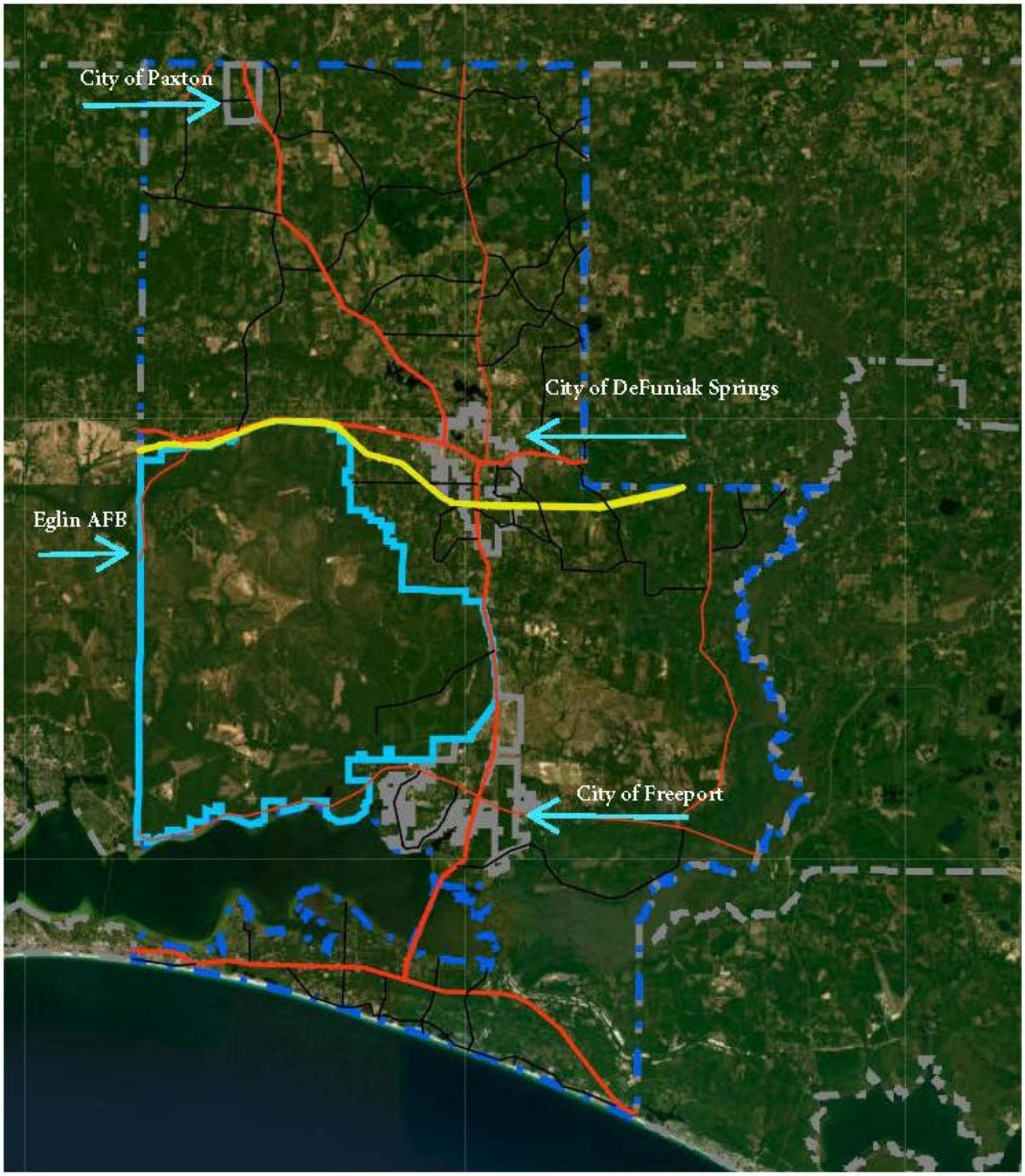
If, during the annual review process, the LMS Working Group determines that any of the above criteria requires a plan update, draft section updates will be made and presented to the LMS Chair for review. Upon LMS Chair approval the LMSWG will vote to approve the update or recommend changes. If the changes are minor (as determined by the WCEM Director or LMSWG Chair) then the LMSWG will vote to approve the update. If the changes are determined to be major (as determined by the WCEM Director or LMSWG Chair) then each jurisdiction will re-adopt the updated LMS through their respective adoption process.

The five-year plan update will be initiated at least one year prior to the expiration date of the plan. The LMSWG Plan Revision Subcommittee will make all possible attempts to get feedback and participation from the public to include in the update. The final update will be completed by the entire committee with the lead taken by the Floodplain Manager and WCEM staff.

THIS PAGE INTENTIONALLY LEFT BLANK

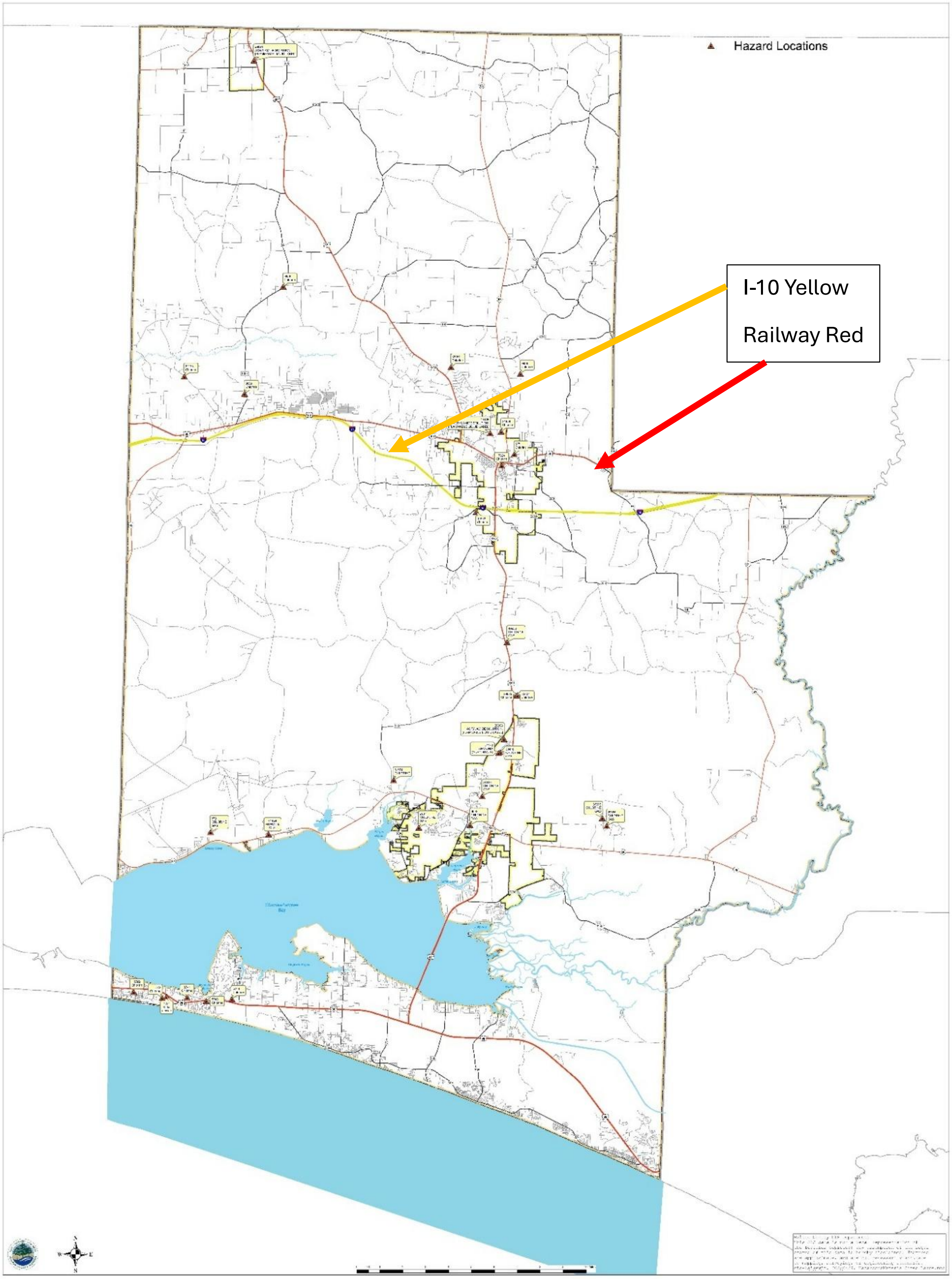


Map 1: Walton County Special Flood Hazard Areas

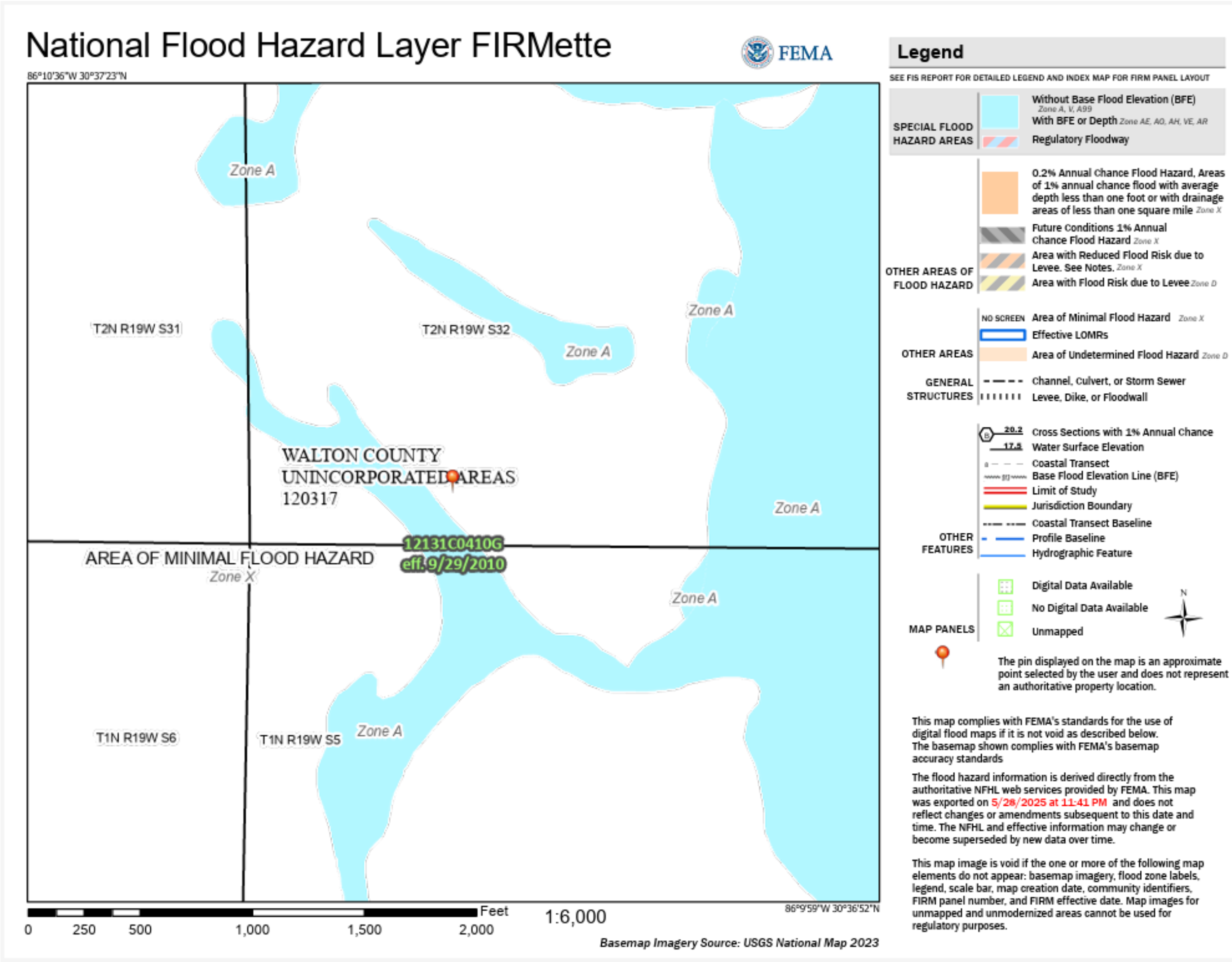


Map 2: Walton County Municipalities/Eglin AFB

Map 3: Walton County Rivers



Map 4: Walton County Railways/Interstate 10



Map 5: NFIP FIRM

THIS PAGE INTENTIONALLY LEFT BLANK

2024 Walton County Mitigation Initiatives

Project #	Project Description	Hazards Mitigated	Cost Per Unit ($)	Units	Total Cost ($)	Potential Funding Source	Timeframe for Completion	Jurisdiction - Department Responsible	Cost / Benefit Rating	Goals + Objectives Met	Project Status	Project Score
2024-1	Generators for Sheriff Office Admin Building (replace only generator #1 for 911), Sheriff Substation in Santa Rosa Beach, EOC Bunker, EOC Annex, and GIS	Tornado, Severe Weather,Utility Outages	$ 184,802.40	5	$ 924,012.00	HMGP, BRIC	6 months	WCEM		1.2, 2.1, 2.2	Application for funding under review	49
2024-2	Wind retrofit (shutters) for Walton Middle School Shelter	Severe weather, tornado, tropical cyclone	$ 1,192,800.00	1	$ 1,192,800.00	HMGP, BRIC	6 months	WCEM		1.2, 2.1, 2.2	Application for funding under review	51
2024-3	Construct hardened facility to house EM, GIS and Traffic Management Ctr.	All hazards	$ 35,000,000.00	1	$ 35,000,000.00	HMGP, BRIC	3 years	WCEM		All	Planning phase	55
2024-4	Construct hardened warehouse to be utilized as a Logistical Staging Area (LSA) during a disaster.	All hazards	$ 5,000,000.00	1	$ 5,000,000.00	HMGP, BRIC	1 year	WCEM		All	Planning phase	55
2024-5	Generators for Fire Stations	Tornado, Severe Weather,Utility Outages	$ 75,000.00	12	$ 900,000.00	HMGP, PDM, FMA	6 months	WCFR	High / High	1.2, 2.1, 2.2	Not started	53
2024-6	Safe Rooms for Fire Stations	Tornado, Severe Weather	$ 150,000.00	15	$ 2,250,000.00	HMGP, PDM, FMA	2 years	WCFR	High / High	1.2, 2.1, 2.2	Deferred	55
2024-7	Review codes and policies for defensible space regulations to prevent wildfire damage.	Wildfire	$ 22,100.00	1	$ 22,100.00	Staff Time, Fire Rescue Agency Budgets	Ongoing	WCFR	Low / Medium	3.1, 3.2, 4.1, 4.2	Ongoing	59
2024-8	Construct hardened facility to house Police, Fire and Emergency Management.	Tornado, Severe Weather,Utility Outages	$ 10,000,000.00	1	$ 10,000,000.00	HMGP, PDM, FMA	5 years	City of DFS	High / High	1.2, 2.1, 2.2	Planning phase	55
2024-9	Bypass pumps for lift stations	Tornado, Severe Weather,Utility Outages	$ 76,000.00	28	$ 2,128,000.00	HMGP, PDM, FMA	8 months	City of DFS	High / High	1.2, 2.1, 2.2	Deferred	51

2024-10	Receive technical assistance for participation in CRS.	Flood	$ 25,000.00	1	$ 25,000.00	PDM, Planning Budget	Ongoing	City of DFS	High / High	2.1, 2.2, 3.1, 3.2	Ongoing	83
2024-11	Construct water storage tank for west side of town.	Tornado, Severe Weather,Utility Outages	$ 250,000.00	1	$ 250,000.00	HMGP, PDM	Short Term	Paxton Utilities Department	High / High	1.2, 2.1, 2.2		55
2024-12	Construct storm shelter: Construct new City Hall building to include a storm shelter to house up to 70 people.	Tornado, Severe Weather,Utility Outages	$ 1,062,584.00	1	$ 1,062,584.00	HMGP, PDM, FMA	5 years	Paxton Public Safety	High / High	1.2, 2.1, 2.2	Planning phase	55
2024-13	Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.	Tornado, Severe Weather,Utility Outages	$ 200,000.00	50	$ 10,000,000.00	HMGP, PDM, FMA	5 years	WCEM, City of DFS Planning and Code Enforcement, City of Freeport Planning Department	High / High	1.2, 2.1, 2.2	Deferred	61
2024-14	Integrate the Local Mitigation Strategy into other plans, ordinances, emergency plans, and programs that dictate land use decisions in the community, including Capital Improvement Programs, Master Plans, and Strategic Plans.	All hazards	$ 9,000.00	1	$ 9,000.00	Staff Time, Planning, EM Budgets	Ongoing	All Jurisdictions	Low / Medium	2.1, 4.1	Ongoing	86

2024-15	Maintain good standing and compliance under the NFIP. • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts.	Flood	$ 6,700.00	1	$ 6,700.00	Staff Time, Floodplain Management Budget	Ongoing	Walton County Emergency Management, Public Works, Planning Departments	Low / Medium	1.1, 2.1, 3.1, 4.1, 4.2	Ongoing	86
2024-16	Develop a Community Urban Wildfire Prevention Program to educate residents on how to reduce damages to residential property from wildfires and urban fires.	Wildfire and Urban Fire	$ 2,500.00	1	$ 2,500.00	Staff Time, Fire Rescue Agency Budgets, Fed 319(h)	2 years	All Jurisdictions	Medium / Medium	1.1, 3.1, 3.2	Deferred	67
2024-17	Provide outreach for workplace / school violence awareness. Possibly work with FDLE. materials.	Workplace/School Violence; Terrorism	$ 40,000.00	1	$ 40,000.00	Staff time, WCSD Funds, FDLE Funds	Ongoing	All Jurisdictions	Low / Medium	1.1, 2.1	Ongoing	73
2024-18	Provide outreach for transportation incident awareness. Coordinate planning initiatives with the FDLE, railroad and airport representatives.	Transportation Incident, HazMat Incident	$ 15,000.00	1	$ 15,000.00	Staff time, City of DFS	Ongoing	WCEM	Low / Medium	1.1, 2.1	Ongoing	82
2024-19	Work with FDEP to monitor beach erosion within the County. Work with beachfront homeowners to provide awareness.	Erosion	$ 6,000.00	1	$ 6,000.00	Staff time, Environmental Budget, Fed 319(h) Grant	2 years	Walton County Planning Dept	Low / Medium	1.1, 2.1	Deferred	55
2024-20	Harden the courthouse to reinforce the glass exterior and interior doors.	Cyberterrorism	$120,000.00	1	$ 120,000.00	HMGP, PDM, FMA, CSGP	2 years	Walton County	High /High	1.2, 2.1, 2.2	Not started	60

2024-21	Install fire suppression system in courthouse to protect network infrastructure and data.	Cyberterrorism	$ 200,000.00	1	$ 200,000.00	HMGP, PDM, CSGP	6 months	WC Public Works	High /High	1.2, 2.1, 2.2	Not started	60
2024-22	Update cyber incident plans	Cyberterrorism	$ 50,000.00	1	$ 50,000.00	PDM, CSGP	1 year	WCEM	Medium / Medium	1.2, 2.1, 4.1	Not started	60
2024-23	Reline all manholes to alleviate infiltration into the sewer system.	Flood	$ 10,000.00	60	$ 600,000.00	HMGP, PDM, FMA	6 months	Paxton Public Utilities	High /High	1.1, 2.1, 3.1, 4.1, 4.2	Not started	63