Gulf County Florida

Local Mitigation Strategy

2020

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Acknowledgements

The 2020 update of the Gulf County Local Mitigation Strategy (LMS) was developed under the authority and support of the Gulf County Board of County Commissioners, and the cities of Wewahitchka and Port St. Joe.

The Gulf County LMS is available for public review at the Office of the Gulf County Emergency Services, Department of Emergency Management located at 1000 Cecil B. Costin Blvd, Port St. Joe and once approved by FEMA, it will be available online at http//www.Gulfemergency.com.

The Gulf County LMS update was developed in conjunction with the Gulf County Local Mitigation Strategy Committee and other interested parties. The 2020 LMS was prepared by the Gulf County Emergency Management Department.

Executive Summary

Gulf County is threatened by a number of different types of natural, technological, and societal or man-made hazards. These hazards endanger the health and safety of the population of the county, jeopardize its economic vitality, and imperil the quality of its environment. Because of the importance of adverting or minimizing the vulnerabilities to these hazards, the public and private sector interests of Port St. Joe, Wewahitchka, and Gulf County have joined together as the Local Mitigation Strategy (LMS) Committee to update the 2020 Gulf County Local Mitigation Strategy.

The Gulf County LMS Committee has reviewed pertinent information to identify the hazards threatening the jurisdictions of Port St. Joe, Wewahitchka, and unincorporated Gulf County and to estimate the relative risks posed to the community by those hazards. This information has been used by the Committee to assess the vulnerabilities of the facilities and jurisdictions of the county to the impacts of future disasters involving those hazards. With these identified, the Committee has worked to identify proposed projects and programs that will avoid or minimize these vulnerabilities to make the communities of the county much more resistant to the impacts of future disasters.

These proposed projects and programs aimed at reducing the impacts of future disasters are termed “mitigation initiatives” in this document. Mitigation initiatives have been developed and will continue to be proposed by the Committee for implementation whenever the resources to do so become available. It is important to note that this mitigation list is not finalized. The list of mitigation initiatives will and should evolve as projects are undertaken and completed, as future disasters affect the county and new needs are identified, and as local priorities change. As the mitigation initiatives identified in this plan are implemented, step-by-step, the county will become a more “disaster resistant” community.

This document details the work of the Gulf County LMS Committee to develop and maintain the planning organization, to undertake technical analyses and to coordinate the mitigation initiatives that have been proposed by the participating jurisdictions and organizations.

The Federal Emergency Management Agency (FEMA) and Florida Division of Emergency Management (FDEM) require that this document be adopted by the governing bodies of Port St. Joe, Wewahitchka, and Gulf County. Adoption of the Gulf County LMS by the City and County Commissions will not have any legal effect on the Comprehensive Plan or any other legally binding documents. However, adoption of the LMS will ensure eligibility with respect to funding for disaster recovery and hazard mitigation from state and federal sources. Through publication of this Strategy, the Committee continues to solicit the involvement of the entire community to make the people, neighborhoods, businesses, and institutions of Gulf County safer from the impacts of future disasters.

1.0 The Planning Process

1.1 Hazard Mitigation Overview

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

Every community is exposed to some level of risk from hazards. Hurricanes, tornadoes, floods, hazardous material spills, fires, and sinkholes are some of the hazards experienced by Florida communities. It is the goal of the local mitigation strategy to identify local hazards and establish a local framework to reduce the risk of those hazards.

This Plan covers the jurisdictions of Gulf County (unincorporated), City of Port St. Joe, and the City of Wewahitchka. All three jurisdictions worked together to complete the update of the 2020 Gulf County Local Mitigation Strategy (LMS). The Plan was updated to reflect changes in development and development patterns. The Future Land Use Map is incorporated into the LMS to demonstrate where future development and growth is expected in Gulf County and its municipalities. The Gulf County Board of County Commissioners, and the City Commissions of Port St. Joe and Wewahitchka formally recognize and approve of the planning process undertaken to develop and update the LMS. All three jurisdictions formally adopted the LMS by resolution.

1.2 Purpose

The county's LMS is intended to serve many purposes. These include the following:

1. Provide a methodical, substantive approach to mitigation planning
2. Enhance public awareness and understanding of the hazards Gulf County faces
3. Create a decision tool for management
4. Promote compliance with state and federal program requirements
5. Enhance local policies for hazard mitigation capability
6. Assure inter-jurisdictional coordination of mitigation-related programming
7. Create jurisdiction-specific mitigation strategies for implementation
8. Provide a flexible approach to the planning process

The planning process used by the Committee is very flexible in meeting the analysis and documentation needs of the planning process. The planning program utilized provides for the creation of this document, as well as the preparation of numerous other reports regarding the technical analyses undertaken. In this way, the LMS assists the Committee with utilizing a full range of information in the technical analysis and the formulation of proposed mitigation initiatives for incorporation into this LMS.

1.3 Current Update and Plan Adoption

The current process of reviewing, revising, and updating the Gulf County LMS began in January 2020. The three jurisdictions represented in the updated plan are the City of Port St. Joe, City of Wewahitchka and the unincorporated areas of Gulf County. These are the same jurisdictions as the older versions of the plan, with no jurisdictional changes having occurred within the county. The LMS Committee met once a year and communicated via email to update and finalize the LMS 2020 update. All revisions provided by the LMS Committee have been incorporated in the LMS 2020 update.

The main goal of the LMS was to identify and assess the various natural and manmade hazards that the county and its municipalities face and to develop local strategies to reduce the impact of future events. The plan includes the procedures that the Committee used to develop the LMS and presents the mitigation initiatives identified by the Committee. All three jurisdictions participated in the updated plan's development process by attending the public meetings and providing information for the project priority list, critical facilities list, and project ideas.

A draft of the Gulf County LMS was submitted to the Florida DEM in the fall of 2020. The deficiencies were corrected and resubmitted to Florida DEM for final approval. Appendix I provides the adoption resolutions from Gulf County, and the Cities of Port St. Joe, and Wewahitchka.

Gulf County Emergency Management will monitor the hazards that affect Gulf County. Monitoring the hazards will assist Gulf County to ensure the Local Mitigation Strategy Plan is current. Gulf County will evaluate and update the Local Mitigation Strategy on a 5-year cycle. During the 5 year cycle the Local Mitigation Committee will meet on a yearly basis to evaluate hazards that affect Gulf County. Gulf County Emergency Management will update the LMS.

1.4 Opportunity for Public Involvement

Gulf County understands the importance of including the public in the hazard mitigation planning process. Multiple opportunities were given to allow the public to attend meetings and provide comments and input to the Gulf County LMS. All meetings of the LMS Committee were advertised to the general public through direct email, social media, and the Gulf County website. These meetings were open to the general public, who are welcome to submit input to the LMS Plan, as well as its revisions, goals, and projects. Representatives from neighboring counties (Bay, Franklin, Calhoun, Liberty) were also encouraged to attend.

A copy of the Gulf County LMS is available to the public at the Gulf County Emergency Management website. Any feedback from the public will be submitted to the Gulf County Emergency Management and reviewed by the LMS Committee on a yearly basis. During the last 5 years public involvement has not been achieved. Public involvement is encouraged and welcomed during annual meetings. The Gulf County LMS will be maintained on the Gulf County Emergency Management website, with a note encouraging the public to review and send comments to Gulf County Emergency Management. Public comments will be reviewed and updated in the LMS yearly review.

1.5 LMS Membership

The Gulf County LMS Committee has a cross section of community members. The strategy was developed by an LMS Committee which included representatives from county and municipal governments as well as private Gulf County citizens. The Group members included representatives from the two municipalities, and unincorporated Gulf County. Also, there are several businesses and a private citizen on the Committee. A full list is provided in *Appendix G.*

1.6 Local Mitigation Strategy Committee Planning Meetings

The Gulf County Local Mitigation Strategy Plan is a local community plan, developed by the LMS Committee. The LMS Planning Committee consists of local government agencies, business interests, community organizations, regional agencies, institutions, and the general public. The LMS Committee met one time in 2020 to evaluate the hazards facing Gulf County and the Cities of Port St. Joe and Wewahitchka. Members are invited via social media, email and the county website. For a complete list of attendees and meeting minutes, refer to *Appendix B.* The Committee reviewed the 2019 LMS project list and provided status updates on the list of projects. The Committee was also asked to bring ideas for other potential mitigation projects to the next meeting. The Group reviews the LMS goals and objectives yearly and minor adjustments to better reflect current Gulf County mitigation issues and concerns. The LMS Committee will meet on a yearly basis and evaluate the LMS project list.

1.6.1 Meeting after a Presidential Declared Declaration

Besides the meetings leading up to the 2020 update of the Gulf County LMS, there were annual meetings held between 2011 and 2020. In the future, if Gulf County is included in a Presidential Disaster Declaration, the LMS Committee will:

1. Meet in order to obtain information regarding the availability of and requirements for Hazard Mitigation Grant Program (HMGP), Community Development Block Grants (CDBG) and any other special post-disaster funding.

2. Identify suitable projects for HMGP, CDBG and any other special post-disaster funding from the existing list of initiatives and add any new projects identified.

3. Prioritize projects and apply for funding for those projects that have the highest priority and the greatest likelihood of being funded.

4. Keep list of any new projects identified to add to annually revised list of mitigation initiatives.

5. Keep narrative and financial records of community and repetitive damage for updating hazard history.

1.7 Supporting Planning Information

The LMS Committee provided a set of plans incorporated into the LMS update. The following plans provide studies, reports, technical information and provide a resource during the 5-year cycle update. Each resource is a useful tool when developing mitigation strategies. The following list details these valuable resources:

- **Florida Department of Environmental Protection Coastal Erosion Study**

The FDEP completed a coastal erosion study and report that included Gulf County. This data was incorporated into the LMS.

- **Gulf County Local Mitigation Strategy – 2015**

The primary document for this project was the 2010-2015 LMS. This plan provides the baseline and the starting point for this planning effort. This LMS plan is considered an extension and an update to the existing 2010 LMS plan. Thus, the 2015 LMS and all its adoptions and updates are incorporated into this planning effort.

- **Gulf County Emergency Management Plan (CEMP)**

CEMP information has been incorporated into this Plan when appropriate. The CEMP directs the preparedness, response, recovery and mitigation actions for the entire County, its municipalities, and the unincorporated communities and areas. It includes an identification of the pertinent hazards affecting Gulf County.

- **Gulf County Comprehensive Plan (COMP)**

The COMP Plan and its elements identify growth management goals and policies and contains the Future Land Use Map (FLUM), which shows where growth in the County is expected to occur. It also includes many policies that include mitigation measures. They have been extracted and included in the LMS.

- **Gulf County Critical Facilities List**

Gulf County Emergency Management and the LMS Committee developed a comprehensive list of all facilities in the county deemed "critical" for the continuing operations of the County. It was used to assist in assessing the overall vulnerability for Gulf County. A comprehensive list of Gulf County's critical facilities can be found in *Appendix H.*

- **Gulf County Floodplain Ordinance**

The Gulf County Floodplain Ordinance, as well as those from Wewahitchka and Port St. Joe, contains valuable information about how Gulf County regulates the construction of buildings in flood prone areas. It establishes the height of freeboard and other pertinent information.

- **Internet Resources**

Data for the hazard risk assessment and vulnerability analysis was obtained through various websites including, but not limited to, National Oceanic and Atmospheric Administration (NOAA), Federal Emergency Management Agency (FEMA), Florida Department of Forestry (DOF), United States Geological Survey (USGS), and numerous others, which are listed in the text.

- **State of Florida Hazard Mitigation Plan**

The SHMP has statewide vulnerability and hazard analyses that are very useful for Gulf County. It provides sources for information needed specific to Gulf County.

1.8 Planning for NFIP Repetitive Loss Structures

Gulf County and the Cities of Port St. Joe and Wewahitchka participate in the NFIP. The following represents data from the NFIP pertinent to Gulf County. As can be seen, the amount of flood losses has not been large when averaged over the 32 years of records.

Table 1.1: NFIP Loss Statistics for Gulf County, and Municipalities of Port St. Joe, Wewahitchka

NFIP LOSS STATISTICS: 1/1/78 – 12/31/14					
Name	**Total Losses**	**Closed Losses**	**Open Losses**	**CWOP* Losses**	**Total Payments**
Port St. Joe	139	123	0	16	$2,810,404
Wewahitchka	20	19	0	1	$277,121
Gulf County	590	477	0	113	$8,876,701
**Closed Without Payment Losses*					

Source: http://bsa.nfipstat.fema.gov/reports/1040.htm#12

Gulf County and its municipalities will continue to comply with the NFIP. The following efforts identify efforts to ensure compliance:

1. Incorporate NFIP provisions into the Gulf County Land Development Regulations/ Comprehensive Plan, Future Land Use Map, and Zoning Regulations.
2. Require freeboard requirements for new construction, or reconstruction if required by the 50% rule.
3. Enforce A-Zone height requirements and free board.
4. Provide flood information at annual County Fair, and through the all hazards awareness campaign.
5. Require non-designated floodway setback requirements.
6. Require agricultural and silviculture interests to require permits for uses in the 100 year floodplain.
7. Prohibit industrial uses, high intensity agricultural uses within the 100-year floodplain

Another indication of the hazards threatening the county is the frequency with which properties are repeatedly damaged by disaster events. The properties, which may be buildings, roads, utilities, or similar construction, are termed "repetitive loss properties." Properties can fall into this classification based on repeated damages from a variety of hazards, and the repetitive loss properties identified in the county are listed in the report enclosed in this section, based on the cause of their prior repetitive losses.

A specific category of repetitive loss properties is those that are insured under the NFIP, and have had repeated claims for flood loss damages. The county has had such properties designated and these are listed in a second repetitive loss property report included in this section.

Repetitive damage properties are properties insured with NFIP that have incurred two or more losses in excess of $1,000. There are at numerous properties in the county that meet the NFIP designation of a repetitively damaged property. Twenty-three of the properties have suffered at least two losses while eight have suffered at least three losses. Cumulatively, these properties have recorded over $1.2 million in damages over the last 20 years. A number of the repetitive damage properties have suffered structural losses in excess of 50% of their property value.

It is important for local officials to be aware that millions of dollars in funding have been made available by the State of Florida and the Federal government through the Hazard Mitigation Grant

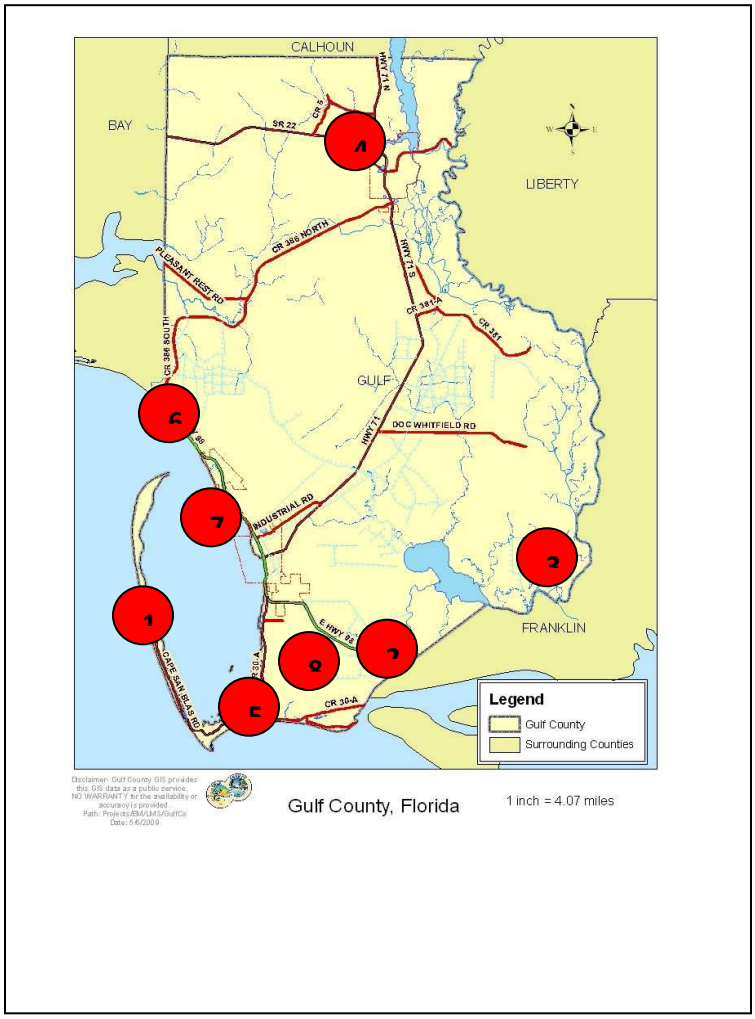
Program (HMGP), the Flood Mitigation Assistance Program (FMAP) and the Community Development Block Grant (CDBG) program to acquire or elevate repetitively damaged properties as they are responsible for a disproportionate share of flood damage nationwide. These programs provide the best opportunity for local officials to mitigate damage in flood prone areas, ensure an uninterrupted tax base, and diminish the burden placed upon local agencies in the pre-storm and post-storm environment. The County will continue to pursue these grant funds in an attempt to address mitigation of the repetitive loss properties in Gulf County.

As of March 2015, there were 48 repetitive loss structures in Gulf County, according to Gulf County Planning Department records. The vast majority of these are located on Cape San Blas and along the Apalachicola River basin. Their general geographic location is provided on the following maps. Specific addresses of repetitive loss properties are maintained by Gulf County Planning Department, and Gulf County Emergency Management. This information is classified and not for public viewing in the LMS.

Table 1.2: Repetitive Loss Structure Locations

Map No	Jurisdiction	Community	Total#	Res	Com
1	Uninc Co	Cape San Blas	7	7	0
2	Uninc Co	Indian Pass	5	4	1
3	Uninc Co	Howard Creek	5	5	0
4	Wewahitchka	Wewahitchka	17	10	7
5	Uninc Co	Simmons Bayou	4	4	0
6	Uninc Co	Highland View	4	4	0
7	Uninc Co	St. Joe Beach	3	2	1
8	Uninc Co	Money Bayou	3	3	0
		Total	**48**	**39**	**9**

Figure 1.1: Repetitive Loss Structures in Gulf County



Source: Gulf County GIS and Planning Department

1.8.1 Community Rating System (CRS)

The City of Wewahitchka does not participate in the Community Rating System (CRS) due to the relatively few flood hazard areas within the jurisdiction. It is imperative that the county along with the City of Port St. Joe remain active participants in the NFIP and continue to work to enhance their CRS scores to ensure the best possible flood insurance rates for property owners. In an effort to ensure continued compliance with the NFIP, the County and the City of Port St Joe will:

1. Continue to enforce their adopted Floodplain Management Ordinance requirements, which include regulating all new development and substantial improvements in Special Flood Hazard Areas (SFHA).
2. Continue to maintain all records pertaining to floodplain development, which shall be available for public inspection.
3. Continue to notify the public when there are proposed changes to the floodplain ordinance or Flood Insurance Rate Maps (FIRM).
4. Maintain the map and Letter of Map Change repositories.
5. Continue to promote Flood Insurance for all properties.
6. Continue their Community Rating System outreach programs.

Gulf County's Building Department, Gulf County Emergency Management Department and City of Port St Joe will conduct community planning meetings to identify, assess and discuss mitigation on flood hazard areas. As part of this effort the LMS contains a number of mitigation initiatives designed to enhance the county and City of Port St. Joe's CRS score.

1.9 Description of the Planning Process

Since the previous 2011 LMS plan was submitted and approved by FEMA, the Gulf County LMS Committee has met on an annual basis in a public forum. The group was chaired by the Gulf County Emergency Management Director. The project list was updated on an annual basis and forwarded to the Florida Division of Emergency Management.

Beginning in January 2015, Gulf County Emergency Management directed the update process and conducted the public meetings. The planning process remains open to public input as well as input from the Federal, State, and local entities, private industry, businesses, neighboring communities, academia, not-for-profit organizations, and other interested parties. Invitees included:

- Bay County Emergency Management
- Calhoun County Emergency Management
- Franklin County Emergency Management
- Liberty County Emergency Management
- Apalachee Regional Planning Council
- Florida Division of Forestry
- Florida Division of Emergency Management
- Florida Department of Environmental Regulation
- Northwest Florida Water Management District
- Florida Division of Emergency Management
- American Red Cross
- Private Citizens/General public

These agencies were invited to the three public meetings via email notification. The LMS document was also posted on-line at the County's Emergency Management website for public review and comment. Through public notices (see *Appendix B*), citizens were given opportunities to attend the LMS public meetings and comment on the plan, both during the drafting stage and prior to approval. The general public was given the opportunity to comment on the LMS prior to final Plan approval through the posting of the plan on the Gulf County Emergency Management's website with a general note welcoming comment. In addition, a public notice was put in The Star, the local newspaper, advertising the LMS meetings, place, and time. All comments that were received were welcome and considered for inclusion in the final plan. The website will host the LMS until the next update.
The LMS Committee established the following general process in the preparation of the updated LMS Plan.

- Research and Data Collection – Gather all relevant, existing data from various sources including the 2010 LMS plan, COMP Plan, CEMP, Internet, State, and Federal resources, and interviews with members of the LMS Committee.

- Data Collation and Plan Writing – After the initial phase of data collection, all of these documents and notes were analyzed for their impact on the preparation of the Gulf County LMS. Using all of this information the initial draft of the Gulf County LMS were written and submitted to the LMS Committee.

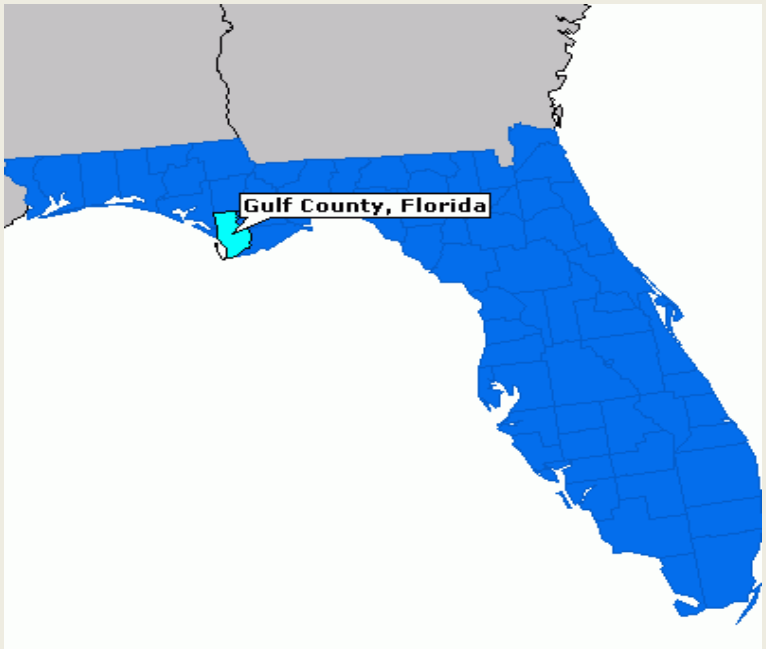
- Review and Comments – The initial draft of the Gulf County LMS was completed and reviewed by the LMS Committee. The public was welcome to provide comments on the draft plan. All comments and ideas have then been incorporated into final edition.

- Finalization, Adoption and Delivery – After all revisions have been made, based on feedback from the Gulf County LMS Committee, Florida DEM, and the public, the initial LMS Plan is to be adopted by Gulf County and the Cities of Port St. Joe and Wewahitchka. This plan, along with the adopted resolutions, is to be delivered to the Florida DEM for approval.

2.0 Jurisdiction Profiles

This section of the LMS contains information about Port St. Joe, Wewahitchka and the unincorporated areas of the county. Local agencies and organizations serving each jurisdiction developed the profiles of Port St. Joe, Wewahitchka and the county's unincorporated areas. The approach of the Committee was to catalogue the results of the planning effort by jurisdiction, in order to provide information and analysis that will support the jurisdictions' efforts to implement their priority mitigation initiatives. In addition, the jurisdiction profiles created a "baseline" or starting point for the Committee to identify potential vulnerabilities to future disasters and to initially indicate avenues for pursuing evaluations and assessments throughout the county as the planning process continues in the future.

Figure 2.1: Geographic Location of Gulf County



This profile includes information regarding the demographic and infrastructure characteristics of each jurisdiction, a list of plans and codes governing the jurisdiction and a general description of land uses and development trends.

Figure 2.2: Map of Gulf County

Figure 2.3: Map of Port St. Joe

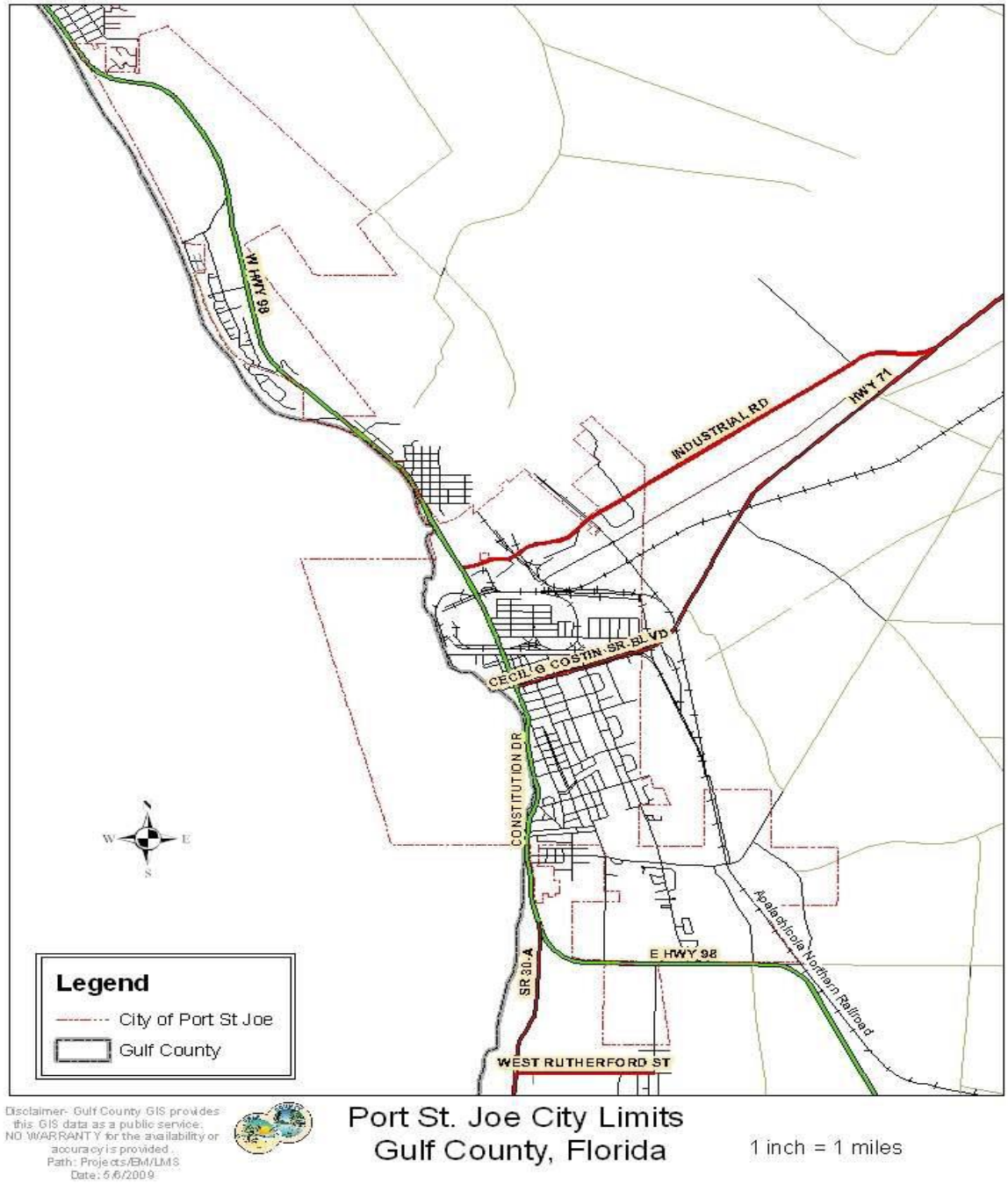


Figure 2.4: Map of Wewahitchka

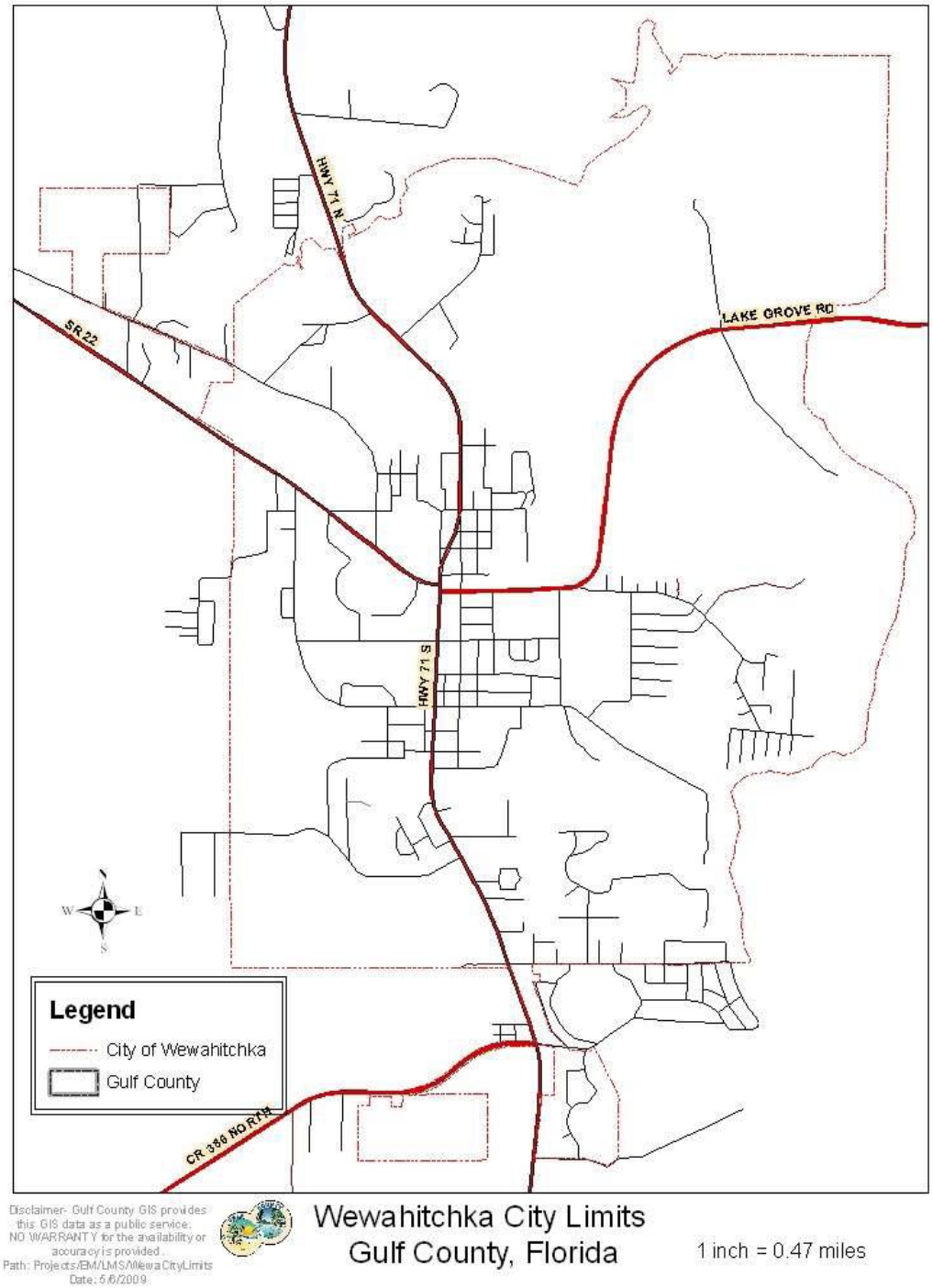


Table 2.1: Gulf County and Municipal Jurisdictional Profile

Juris-diction	Population (2014 Estimates)	Geographic Size (sq mi)	Density (per mi)	Growth Trend 2010-15)	Employment	Median Household Income	Development Trends
Gulf County	16,543	554	29.3	5.8%	Government – 35.0% Trade, Transportation and Utilities – 16.2% Education & Health Services – 13.5% Leisure and Hospitality – 9.9%	$40,455 Below poverty level – 16.4%	• The county's unincorporated areas are not considered to be fully developed. • Development of vacant and unused land is occurring very rapidly or much faster than planned. • Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. • Potential development will face hazards
Port St. Joe	3,499	3.32	1,053	1.25%	Construction – 15% Public Admin – 14% Chemicals – 11% Educational – 7%	$38,763	• The community is not considered to be fully developed. • Development of vacant and unused land is occurring very rapidly or much faster than planned. • Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. • Potential development will face hazards identical to those the community currently faces.
Wewahitchka	1,955	6.21	315	-9.3%	Public Admin– 20% Construction – 17% Educational – 7% Truck Transport – 5%	$26,623	• The community is not considered to be fully developed. • Little or no development is occurring. • Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. • Potential development will face hazards identical to those the community currently faces.

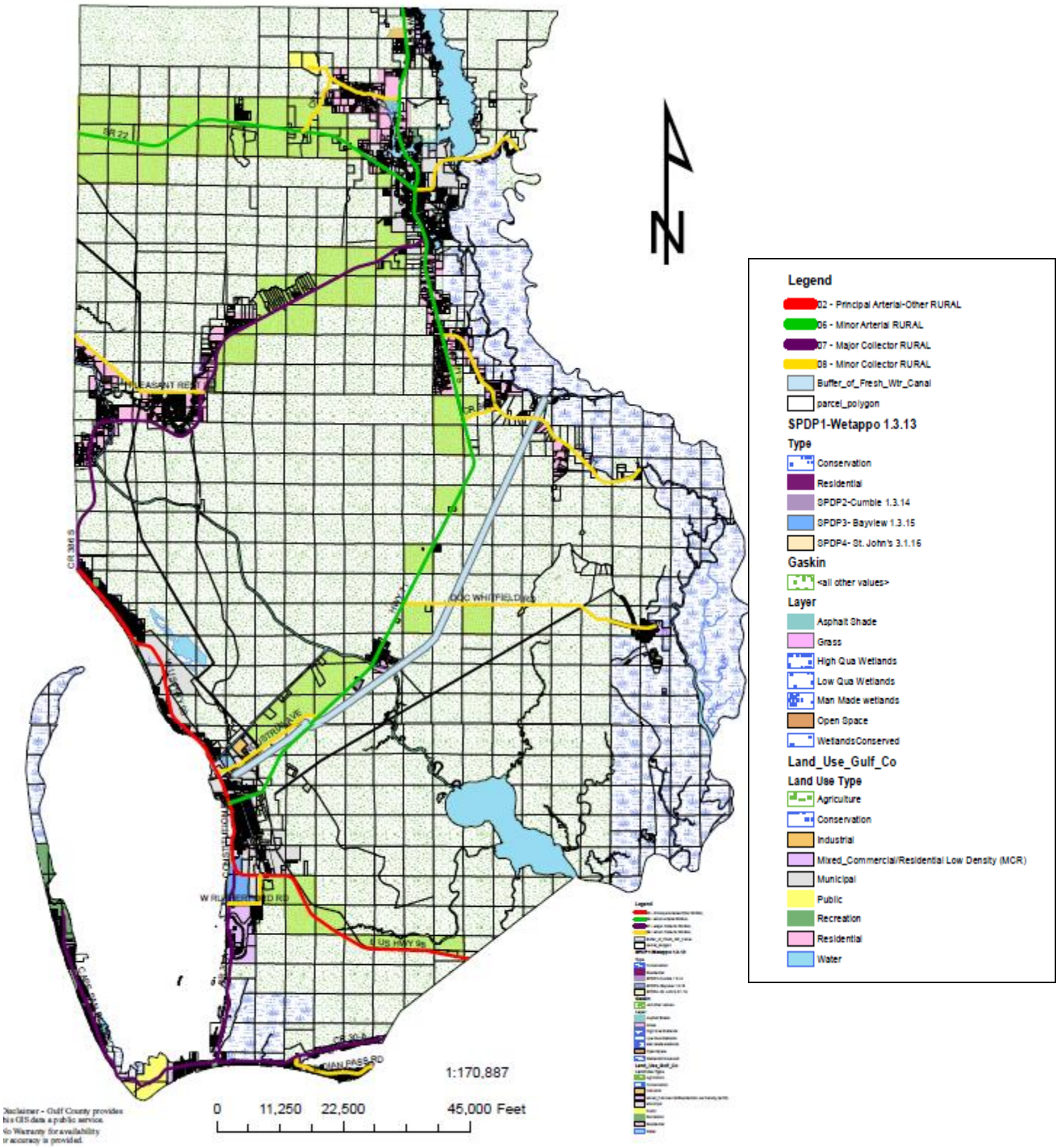
Sources: BEBR (http://www.bebr.ufl.edu/population); City-Data (http://www.city-data.com/city/Wewahitchka-Florida.html); US Census (http://quickfacts.census.gov/qfd/index.html)

2.1 Land Uses and Future Development Trends

Future development trends can also be viewed from the Gulf County Comprehensive Plan. The following map (Figure 2.5) depicts the Future Land Use Map (FLUM) for the County. It is extrapolated out to the year 2020. The coastal areas of Gulf County not held by the State or the military are expected to continue to grow. Coastal areas are always the focus of growth pressure, given this is prime real estate because of its location next to a water body

Port St. Joe and this section of the county are vulnerable to hurricanes and tropical storms, tornadoes, hail and thunderstorms, wildfire, droughts and heat waves, winter storms and freezes, and hazardous materials. The LMS Committee will continue to monitor future development in the County and the vulnerabilities that may occur.

Figure 2.5: Gulf County Future Land Use Map 2006 - 2020



The area on the FLUM designated as High-Quality Wetlands, Low Quality Wetlands, Man-made Wetlands, and Wetlands Conservation areas all provide **natural functions** and cannot have construction impacted. They serve as water recharge areas and floodways that disperse floodwaters to help reduce impacts on infrastructure.

Roads and transportation are two of the other factors leading to growth and development. As roads develop and expand, residential property development follows along with industry and infrastructure. Tables 2.2 and 2.3 detail the Florida Department of Transportation's five-year work plan through 2020 for Gulf County. Although there are no new roads planned for Gulf County, roadway resurfacing, widening, and other improvements will encourage future development.

TABLE 2.2: FDOT FY 2015 – 2020 WORKPLAN FOR GULF COUNTY, FLORIDA	
ATLANTIC STREET FROM SR 30 (US 98) TO GEORGIA AVENUE	WIDEN/RESURFACE EXIST LANES
CR 22A OLD PANAMA HWY FROM SR 22 HWY 22 TO WINNIE STREET	RESURFACING
CR 30A FROM FRANKLIN COUNTY LINE TO E OF MONEY BAYOU	WIDEN/RESURFACE EXIST LANES
CR 30B INDIAN PASS FROM CR 30A TO INDIAN PASS BOAT RAMP	WIDEN/RESURFACE EXIST LANES
CR 382 INDUSTRIAL ROAD FROM SR 30 (US 98) TO SR 71	WIDEN/RESURFACE EXIST LANES
CR 386 OVERSTREET RD FROM BAY COUNTY LINE TO SR 71 S	WIDEN/RESURFACE EXIST LANES
CR 5 FROM SR 22 TO STONE MILL CREEK ROAD	WIDEN/RESURFACE EXIST LANES
DAVID B LANGSTON DR FROM AVENUE A TO 1ST STREET	SIDEWALK
GULF COUNTY ARC TRANSIT NON-URBANIZED AREA 5311	OPERATING/ADMIN. ASSISTANCE
GULF COUNTY JPAS FOR TRAFFIC SIGNALS ON-SYSTEM ROADWAYS	TRAFFIC SIGNALS
GULF TO BAY HIGHWAY FROM S OF PINE STREET TO CR 386	RIGHT OF WAY - FUTURE CAPACITY
JARROTT DANIELS RD FROM CR 386 OVERSTREET RD TO SR 22	ROAD RECONSTRUCTION - 2 LANE
OLD BAY CITY ROAD FROM CROSSOVER ROAD TO CLYDE TEAT ROAD	RESURFACING
OLD BAY CITY ROAD FROM S OF ROSS STRIPLING TO CROSSOVER ROAD	RESURFACING
PORT ST JOE CHANNEL DREDGING	SEAPORT CAPACITY PROJECT
SR 22 FROM BAY COUNTY LINE TO WETAPPO CREEK BRIDGE	RESURFACING
SR 22 OVER WETAPPO CREEK BRIDGE NO. 510022	BRIDGE-REPAIR/REHABILITATION
SR 30 (US 98) FROM FRANKLIN COUNTY LINE TO SR 30A	RESURFACING
SR 30 (US 98) FROM GULF CO CANAL BRIDGE TO S OF US 98 REALIGNMENT	RESURFACING
SR 30 (US 98) FROM PINE STREET TO BEACONHILL PARK ROAD	BIKE PATH/TRAIL
SR 30 (US 98) OVER ST. JOE BAY INLET BRIDGE NO. 510014	BRIDGE REPLACEMENT
SR 30A FROM SR 30E TO SR 30 (US 98)	WIDEN/RESURFACE EXIST LANES
SR 30A FROM SR 30E TO SR 30 (US 98) LANDSCAPING	LANDSCAPING
SR 30E CAP SAN BLAS FROM SR 30A TO ST JOE BAY BUFFER PRES	WIDEN/RESURFACE EXIST LANES
SR 30E CR C 30E FROM TEST SITE D 3A ENTRANCE TO COASTLINE DRIVE	PRELIMINARY ENGINEERING
SR 71 FROM END OF CONCRETE PVMT TO INTERCOASTAL BRIDGE	RESURFACING
SR 71 FROM WHITE CITY BRIDGE TO PINE STREET	RESURFACING

Source: http://www2.dot.state.fl.us/fmsupportapps/workprogram/WorkProgram.aspx

Table 2.3: FDOT 5-Year Work Program Cost Summary for Gulf County, Florida

	2015	2016	2017	2018	2019	2020
Freight Logistics and Passenger Operations Program: Transit	$181,992	$180,000				
Highways	$11,332,134	$13,165,179	$14,194,845	$10,220,363	$10,630	2,061,684
Freight Logistics and Passenger Operations Program: Seaport	$20,000,000					
Grand Total	**$31,514,126**	**$13,345,179**	**$14,194,845**	**$10,220,363**	**$10,630**	**$2,061,684**

Source: http://www2.dot.state.fl.us/fmsupportapps/workprogram/WorkProgram.aspx

As developments in Gulf County, City of Port St Joe and the City of Wewahitchka tend to expand. The LMS Committee will assess the impacts of each area and ensure the vulnerability for is minimal or decreased. The Gulf County Planning and Zoning Department, Port St Joe Building Department and City of Wewahitchka will continue to monitor and assess as areas of county develop. The vulnerability impact will be minimal.

3.0 Hazard and Vulnerability Analysis

3.1 Hazard Ratings

As part of developing the Gulf County LMS, the LMS Committee reviewed existing emergency management materials and conducted their own analysis based on recent disasters and their knowledge of the county, in order to determine which natural and manmade disasters presented the greatest threat to the county, and to assess the county's vulnerability to each of those threats. The Gulf County Hazard Identification and Vulnerability Assessment represent that effort.

This information was gathered by using both primary and secondary research materials, which includes, but is not limited to, reports from local, state, and national agencies, as well as mass media accounts, state and local weather records, and conversations with key personnel and residents in Gulf County and its municipalities. This analysis includes assessment of the possible severity and magnitude of the hazards as well as the potential impact of damage within the County from future hazards.

This information will serve as the basis for prioritizing mitigation measures based on the potential frequency and the likely extent of damage from known hazards.

Priority Ranking was defined as follows:
High – Extremely important. High impact to the County and Municipality
Medium – Moderately important. Moderate impact to the County and Municipality
Low – Low importance. Low impact to the County and Municipality
X – No impact. Of no importance to the County and Municipality

Probability was defined as follows:
High – Occurrence at least once every two years
Medium – Occurrence at least once every five years
Low – Occurrence less frequently than every five years
X – Event has never happened and is not expected to occur

Magnitude was defined as follows:
High – the entire jurisdiction is potentially affected by an event
Medium – Most of the jurisdiction is potentially affected by an event
Low – Only a specific area of the jurisdiction is potentially affected
X – event has never occurred, nor is it expected to occur

Table 3.1: Hazards - Priority Ranking, Probability, and Magnitude, Gulf County

Hazard	Priority Ranking			Probability			Magnitude		
	Uninc.	Port St Joe	Wewa hitchka	Uninc.	Port St Joe	Wewa hitchka	Uninc.	Port St Joe	Wewa hitchka
Tropical Cyclones	H	H	H	H	H	H	H	H	H
Severe Weather Events (tornadoes, thunderstorms /lightening)	M	M	M	M	M	M	M	M	M
Environmental Events (hail, freeze, drought/ heat wave)	L	L	L	M	M	M	L	L	L
Wildfires	H	M	M	H	L	M	M	L	L
Flood	H	H	H	H	H	H	H	H	M
Coastal Erosion	M	M	X	M	M	X	M	L	X
Technological Events (HazMat, Oil Spill)	M	M	M	M	M	M	L	L	L
Biological Events (exotic pests and diseases)	L	L	L	L	L	L	H	H	H
Terrorism Events	L	L	L	L	L	L	L	L	L

Source: Gulf County Local Mitigation Strategy Committee

3.1.1 Hazards Not Included in the LMS

For purposes of hazard identification, the following hazards were not included based on the recommendation of the LMS Committee that these events have never occurred or would have little to no impact if they did. These include:

- ***Earthquakes:*** Gulf County is not in a seismic zone. It has never experienced an earthquake. If one were to occur, it would be of such a small magnitude, that it would not cause any damages. Therefore, earthquakes are of no concern to Gulf County.

- ***Civil Disturbances:*** Gulf County has never experienced any type of civil disturbance. If a civil disturbance were to occur, it is estimated it would not be a significant event, or cause significant damages.

- ***Riverine Erosion:*** Although Gulf County is bordered on the right by the Apalachicola River, which can flood, there are virtually no primary dwellings there. Erosion along the river shoreline is of no consequence to any primary facilities, ergo this is not a concern to Gulf County.

- ***Dam Failure:*** The only dam of any consequence for Gulf County is the Woodruff Dam on the border of Florida/Georgia/Alabama in Gadsden County. If the dam were to breach, the effect in Gulf County would be the same as a flooding experience along the Apalachicola River. Ergo, this hazard is covered under the flood section of the LMS.

- ***Sinkholes:*** Gulf County has a very low vulnerability to sinkholes. The topography is not karsts, and the county rarely experiences a sinkhole. The very few that have happened have not caused any damages. Ergo, this hazard is not appropriate for Gulf County.

- ***Tsunamis***: If Gulf County were to ever experience a tsunami, it would have the same effect as a hurricane storm surge. Ergo, the impact of a tsunami is the same as a hurricane surge, and therefore is not an appropriate hazard for Gulf County

3.2 Vulnerability Analysis

Hazard identification and risk estimation can be a highly complex, time consuming and very costly effort if sophisticated technical and engineering studies are undertaken. Most communities will not have the resources to undertake hazard identification and risk assessment studies to this level of detail. However, in order to complete the LMS, it is necessary to have a general understanding of the hazards threatening the county and its jurisdictions, and to estimate the level of risk to the community posed by these hazards.

Working with US Census data, and several other sources, to include the Gulf County Property Assessor's Office, the general growth factor of 6% is applied to the 2010 data sets used in the LMS. Although not an exact science, it provides a generic assessment of the value of expected losses to be experienced from each of the hazards listed above. Some hazards, such as biological events and terrorism are virtually impossible to quantify, in terms of loss. In those cases, a vulnerability rating of high, medium or low was used.

In addition, the following data was extracted from the 2013 State of Florida Mitigation Strategy pertinent to Gulf County.

Table 3.2: Insured Value of Gulf County Facilities - 2013

Hospitals	Police Stations	Schools	Other	Total Insured Value
$8,751,000	$3,780,000	$33,343,000	$39,840,000	$137,493,000

Source: 2013 State of Florida Mitigation Strategy, pg C.7

3.3 Hurricanes and Tropical Storms

Hurricanes and tropical storms impact all of Gulf County. They are low-pressure systems in the tropical and sub-tropical zones with cyclonic surface wind circulation. A hurricane is a tropical storm or cyclone in the Atlantic Basin with winds that have reached an average 1-minute sustained speed of 74 miles per hour or more. Tropical storms have an average 1-minute sustained wind speed between 39 and 73 miles per hour. Hurricane winds blow in a counterclockwise spiral

around a relative calm center, known as the eye. The eye is generally 20 to 40 miles wide, and the storm may extend outward, up to 500 miles in diameter. As a hurricane nears land, it can bring with it heavy rains, high winds, tornadoes, and storm surge. The typical rainfall from a hurricane is between 6 to 12 inches. Hurricanes can last for more than two weeks over open waters and can run the entire length of the eastern seaboard. The official hurricane season runs from June 1 through November 30. Intense hurricanes are those hurricanes classified as Category 3 or higher.

Impacts from hurricanes and tropical storms include high winds, heavy rain, storm surge, coastal and inland flooding, and tornadoes. Any or all of these can cause damage to buildings and infrastructure. They can also result in death or injuries as the result of flooding, collapsing buildings, electrocution from downed power lines, fires from natural gas line breaks, etc.

Given that Gulf County sits adjacent to the Gulf of Mexico, the entire County is susceptible to hurricane force winds and torrential rainfall from hurricanes and tropical storms. Coastal portions of Gulf County are susceptible to storm surge. Gulf County has also experienced tornadoes spawned by tropical storms and hurricanes. Sustained rainfall can cause widespread flooding in the County, due to the fact that much of the county lies in a floodplain. Historically, August, September, and October have been the peak months for hurricanes in Gulf County.

The following are events impacting Gulf County, and the damages they caused. They are indicative of future impacts to the County:

Table 3.3: Impacts of Hurricanes and Tropical Storms in Gulf County

Date	Event	Impacts
6/24/2012	TS Debbie	Resulted in heavy rainfall and gusty winds in Gulf County. A 6 foot storm surge occurred, washing out Indian Pass Road on the eastern edge of the County. Rainfall caused localized flooding, power outages, and some damages to businesses and homes.
9/1/2016	Hurricane Hermine	Hurricane Hermine was a Cat 1 event Landfalling in Biloxi, Mississippi. The effects of George were felt in Gulf County. Cape San Blas experienced a minor storm surge of 1.7 feet.
9/10/2017	Hurricane Irma	Hurricane Irma made landfall near Marco Island after making initial landfall in Florida Keys. Impacts of Hurricane Irma was felt through Gulf County. Gulf County experienced a reverse effect. Winds from Hurricane Irma caused down trees and a loss of power. All Florida Counties were included in the Presidential Declaration.
5/28/2018	Subtropical Storm Alberto	Alberto made landfall at Laguna Beach Florida. Alberto dropped heavy rainfall throughout the panhandle. Gulf County experience minor flooding and damage from Subtropical Storm Alberto.
10/6/2018	Hurricane Michael	Hurricane Michael was a Cat 5 hurricane that made landfall in Mexico Beach. There was 1 fatality in Gulf County. Storm Surge cut through the peninsula creating two inlets. Hurricane Michael created 4.2 billion dollars' worth of damage in Florida. Gulf County was severely impacted by Hurricane Michael. Gulf County lost power and communications for several days.

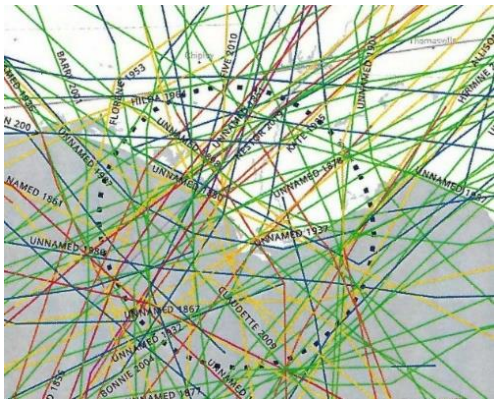
3.3.1 Saffir-Simpson Scale

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures.

Table 3.4 Saffir-Simpson Hurricane Scale

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

Figure 3.1: Historical Hurricane Tracks



3.3.2 Previous Hurricanes and Tropical Storms

According to the National Oceanic and Atmospheric Administration (NOAA), there have been a total of 89 tropical depressions, storms or hurricanes passing within 60 miles of Port St. Joe Florida between 1842-2020. These are listed on Table 3.5.

Table 3.5: Tropical Storms and Hurricanes Passing Within 60 Statute Miles of Gulf County

Category	Name	Year	Dates
5	Michael	2018	Oct 6-Oct 15
3	Elena	1985	Aug 28 - Sep 04
3	Un-named	1926	Sept 11 - Sept 22
3	Un-named	1894	Oct 01 - Oct 12,
3	Un-named	1887	Sep 21 - Oct 05
3	Un-named	1851	Aug 16 - Aug 18
2	Kate	1985	Nov 15 - Nov 23
2	Alma	1966	Jun 04 - Jun 14
2	Un-named	1899	Jul 28 - Aug 02
2	Un-named	1886	Jun 27 - Jul 02
2	Un-named	1877	Sept 21 - Oct 5
2	Un-named	1856	Aug 25 - Sept 03
2	Un-named	1852	Oct 06 - Oct 11
1	Hermine	2016	Aug 28- Sept 8
1	Earl	1998	Aug 31 - Sept 08
1	Erin	1995	Jul 31 - Aug 06
1	Kate	1985	Nov 15 - Nov 23
1	Agnes	1972	Jun 14 - Jun 23
1	Alma	1966	Jun 04 - Jun 14
1	Un-named	1941	Oct 03 - Oct 13
1	Un-named	1939	Aug 07 - Aug 19
1	Un-named	1929	Sep 19 - Oct 05
1	Un-named	1924	Sep 13 - Sep 19
1	Un-named	1915	Aug 31 - Sep 06
1	Un-named	1903	Sep 09 - Sep 16
1	Un-named	1898	Aug 02 - Aug 03
1	Un-named	1880	Aug 24 - Sep 01
1	Un-named	1873	Sep 18 - Sep 20
1	Un-named	1867	Oct 2 - Oct 09

Category	Name	Year	Dates
TS	Fay	2020	Jul 4-Jul 11
TS	Nestor	2019	Oct 17-Oct 21
TS	Alberto	2018	May 25- May 31
TS	Colin	2016	Jun 5- Jun 8
TS	Debby	2009	Jun 23 -Jun 27
TS	Five	2010	Aug 10- Aug 18
TS	Claudette	2009	Aug 16 - Aug 17
TS	Fay	2008	Aug 15 - Aug 28
TS	Bonnie	2004	Aug 08 - Aug 14
TS	Allison	1995	Jun 03 - Jun 11
TS	Beryl	1994	Aug 14 - Aug 19
TS	Agnes	1972	Jun 14 - Jun 23
TS	Becky	1970	Jul 19 - Jul 23
TS	Un-named	1957	Jul 08 - Jul 15
TS	Un-named	1953	Sept 14 - Sept 21
TS	Alice	1953	May 25 - Jun 06
TS	Un-named	1937	Sep 16 - Sep 21
TS	Un-named	1937	Aug 24 - Sep 02
TS	Un-named	1936	Aug 20 - Aug 23
TS	Un-named	1932	Sep 09 - Sep 18
TS	Un-named	1292	Sep 19 - Oct 05
TS	Un-named	1928	Aug 07 - Aug 17
TS	Un-named	1924	Sep 13 - Sep 19
TS	Un-named	1907	Jun 24 - Jun 30
TS	Un-named	1907	Sep 27 - Sep 30
TS	Un-named	1906	Jun 08 - Jun 14
TS	Un-named	1901	Sep 21 - Oct 02
TS	Un-named	1901	Jun 11 - Jun 15
TS	Un-named	1899	Jul 28 - Aug 02
TS	Un-named	1898	Aug 02 - Aug 03
TS	Un-named	1885	Sep 17 - Sep 23
TS	Un-named	1885	Aug 29 - Aug 31
TS	Un-named	1880	Aug 24 - Sep 01
TS	Un-named	1879	Oct 09 - Oct 16
TS	Un-named	1878	Oct 09 - Oct 15
TS	Un-named	1875	Sep 24 - Sep 28
TS	Un-named	1871	Sep 30 - Oct 07
TS	Un-named	1868	Oct 01 - Oct 07

3.3.3 Probabilities of Hurricanes and Tropical Storms Striking Gulf County

Each year, Colorado State University (CSU) makes predictions on the number of tropical storms, hurricanes, and intense hurricanes that will arise in the Atlantic Basin. Using these predictions, the Tropical Meteorology Research Project at CSU along with the GeoGraphics Laboratory at Bridgewater State College produce probability statistics for individual counties. The data shown in Table 3.6 represents the 2014-2015 probabilities for different types of tropical cyclones in Gulf County as well as the probabilities (in parentheses) based on actual occurrences.

Table 3.6: 2014-15 Hurricane Probabilities

County Name	1 or More Named Storms Making Landfall in the County	1 or More Hurricanes Making Landfall in the County	1 or More Intense Hurricanes Making Landfall in the County	Tropical Storm-Force (>= 40 mph) Wind Gusts in the County	Hurricane-Force (>= 75 mph) Wind Gusts in the County	Intense Hurricane-Force (>= 115 mph) Wind Gusts in the County
Gulf	**1.5% (2.3%)**	**.7% (1.0%)**	**.1% (.1%)**	**14.8% (21.9%)**	**4.1% (6.3%)**	**1.0% (1.6%)**

50 Year County Data:

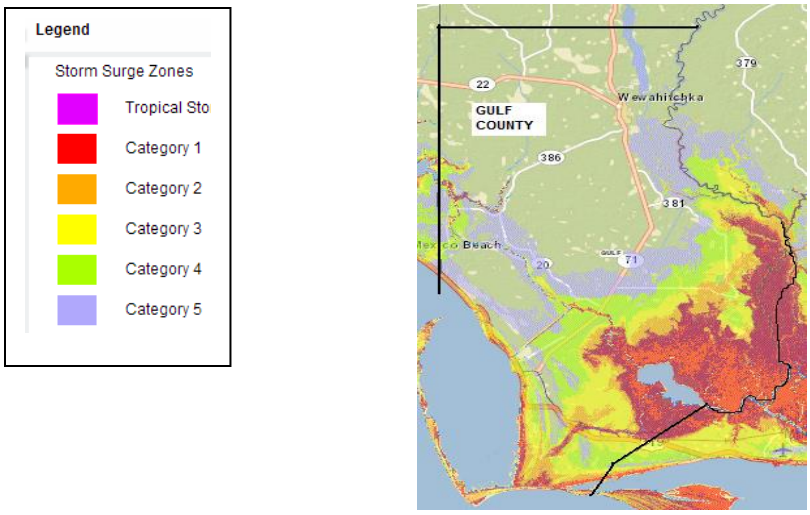
County Name	1 or More Named Storms Making Landfall	1 or More Hurricanes Making Landfall	1 or More Intense Hurricanes Making Landfall	Tropical Storm-Force (>= 40 mph) Wind Gusts	Hurricane-Force (>= 75 mph) Wind Gusts	Intense Hurricane-Force (>= 115 mph) Wind Gusts
Gulf	**69.7%**	**40.1%**	**5.2%**	**>99.9%**	**96.5%**	**55.4%**

Source: http://landfalldisplay.geolabvirtualmaps.com/

3.3.4 Vulnerability Analysis

All of Gulf County is vulnerable to the wind and water effects of tropical cyclones. Cyclone-induced flooding is a major concern for the County, since much of the County lies in a floodplain. In addition, given the amount of tree coverage in the County, all areas would be impacted by debris related to high winds and tornado activity. The wind effects from a major hurricane would likely cause significant damage throughout the county, damaging buildings and property and destroying vegetation.

Figure 3.2: Gulf County Hurricane Storm Surge Zones



All of the critical facilities designated by the LMS Committee are vulnerable to all categories of hurricane force winds. Some facilities, due to their proximity to the coast, are more vulnerable to storm surge than inland facilities. *Appendix H* lists the locations of the County's critical facilities.

The Figures that follow show the impacts for various categories of hurricanes. At the direction of the LMS Committee, a 6% growth factor was applied across the board to the 2010 figures to give an approximate analysis of the expected impacts to future events.

Depending on a hurricane's strength and projected landfall, the vulnerable areas, facilities, and populations will vary. Obviously, the stronger the storm, the more potential for damages. Port St. Joe, being near the Gulf coast, is very vulnerable to high winds and storm surge, which have impacted the City on numerous occasions. Wewahitchka is far enough inland to be largely protected from storm surge, but is highly susceptible to hurricane force winds and rainfall, which has caused flooding in previous hurricanes.

The following tables estimate the loss expected from all categories of a hurricane. These are just estimates of potential damages based on percentage loss from each category of hurricane.

Table 3.7: Total Just Value of Gulf County Property - 2020*

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$1,059,731,626	4021	$251,924,586	1585	$41,791,215	592
Mobile Homes	$59,329,407	1243	$203,339	7	$8,738,228	290
Multi-Family	$34,037,624	89	$11,085,228	200	$1,734,521	11
Hotels	$2,758,228	2	$1,885,718	5	0	0
Commercial	$23,268,947	77	$69,810,273	154	$7,725,584	51
Church	$9,125,119	26	$10,797,189	29	$4,924,210	19
Government	$492,447,101	295	$27,584,781	65	$9,161,939	44

**Date extracted from Gulf County GIS, using 2019 Just Values, and current surge zone data. Commercial includes all just value categories of a commercial nature. Government includes Federal, State, County and municipal entities. There are other categories of just value property that are not listed here including vacant structures, miscellaneous entries in the database, underground (mining) resources, timberland values, and others of similar stature.*

Table 3.8: Potential Loss – Category 1 (+-10%)

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$354,162,721	878	$5,718,000	31	0	0
Mobile Homes	$2,676,044	26	0	0	0	0
Multi-Family	0	0	0	0	0	0
Hotels	0	0	$192,810	1	0	0
Commercial	$10,104,562	26	$88,631	1	0	0
Church	$96,324	1	0	0	0	0
Government	$424,842,639	175	$6,450,560	9	0	0

Table 3.9: Potential Loss – Category 2 (+-30%)

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$484,625,347	1421	$18,881,971	150	0	0
Mobile Homes	$4,675,369	62	0	0	0	0
Multi-Family	$4,316,522	26	0	0	0	0
Hotels	0	0	$1,395,350	4	0	0
Commercial	$10,594,108	28	$3,534,228	6	0	0
Church	$855,786	2	$1,519,635	4	0	0
Government	$430,248,491	196	$8,101,594	17	0	0

Table 3.10: Potential Loss – Category 3 (+-50%)

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$624,741,598	2088	$86,498,500	662	0	0
Mobile Homes	$13,158,060	240	0	0	0	0
Multi-Family	$13,182,791	72	$1,756,969	14	0	0
Hotels	0	0	$1,628,986	5	0	0
Commercial	$13,488,068	39	$21,408,132	83	0	0
Church	$2,344,276	5	$3,124,540	10	0	0
Government	$438,152,244	216	$11,567,520	35	0	0

Table 3.11: Potential Loss – Category 4 (+-70%)

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$672,909,875	2497	$156,123,411	1354	0	0
Mobile Homes	$21,850,907	452	0	0	0	0
Multi-Family	$16,292,262	84	$1,920,715	16	0	0
Hotels	$2,726,427	1	$1,628,986	5	0	0
Commercial	$15,306,160	50	$56,918,903	145	0	0
Church	$5,016,062	12	$5,584,875	24	0	0
Government	$448,649,339	235	$23,569,067	59	0	0

Table 3.12 Potential Loss – Category 5 (+-80%)

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$701,875,573	2688	$179,983,280	1542	$2,472,762	22

Mobile Homes	$25,036,784	529	$155,482	7	$844,775	10
Multi-Family	$16,934,155	87	$6,067,557	62	0	0
Hotels	$2,726,427	1	$1,628,986	5	0	0
Commercial	$16,387,178	54	$57,717,582	149	0	0
Church	$5,016,062	12	$6,639,361	29	0	0
Government	$457,225,527	246	$25,979,828	63	$284,998	1

3.3.5 Extent of Tropical Cyclones

Since 1842, there have been a total of 63 tropical depressions, storms or hurricanes passing within 60 miles of Port St. Joe. Of these 63 events, 10 were tropical depressions, 25 were tropical storms; 15 were Category 1; 7 were Category 2; 5 were Category 3; and 1 Category 4/5. In 2018, Gulf County was impacted by a Category 5 hurricane. This event caused county-wide damages to include large amounts of debris, washed out roadways, downed power lines, damages to all structures, including homes, especially mobile homes, and widespread flooding.

3.3.6 Future Development and Hurricanes

Much of Gulf County is forested wetlands, and unsuitable for large scale development. Yet, the most vulnerable part of the county to hurricanes are the coastal areas, which are always under development pressure. As noted in the Future Land Use Map [*Figure 2.5*], much of the county is in the 100 year flood zone, comprised mostly of forested land owned by St. Joe Land Development Corporation. Therefore, although development will occur, it will not occur at a rapid pace. Coastal development is mostly comprised of secondary homes, many of which are rented as vacation rentals. Development along the coastline will always remain high. Well over half of the barrier island protecting Gulf County is in the Cape San Blas State Park, and therefore cannot be developed.

3.4 Severe Weather Events

Several weather events include tornadoes, and thunderstorms that product strong winds and lightning. Every year, Gulf County experiences severe thunderstorms that occasionally result in tornadoes.

3.4.1 Tornado

A tornado can impact all areas in Gulf County the participating jurisdictions. It is a violent rotating column of wind characterized by a twisting funnel extending from a cloud. Tornadoes are usually spawned by thunderstorms and are produced when cool air overrides a layer of warm, moist air, forcing it to rise rapidly. Damages are the result of high winds as well as the wind-blown debris. Tornado season in the U.S. is generally from March through August, but tornadoes can happen in any month of the year. Tornados occur more frequently between the hours of 3 pm and 7 pm.

Impacts from tornadoes include damage to buildings and infrastructure due to high winds and flying debris. Deaths and injuries can result from collapsing buildings, flying debris, and downed power lines. The following is a sample of damaging tornadoes that have impacted Gulf County in the past.

Table 3.13: Impacts of Tornadoes in Gulf County

Year	Event	Impacts
1983	F1	A F1 tornado touched down in the town of Sopchoppy for one mile. Two homes were extensively damaged, roofs were blown off and structural damaged occurred, along with downed power lines and trees over roadways.
3/7/98	F0	Waterspout came ashore two miles east of Port St. Joe Beach. Condo roof lifted off on beach side of Highway 98. Two neighboring houses and two vehicles sustained damage from flying debris. Numerous homes reported water damage in the Port St. Joe Beach, Port St. Joe, and Highland View areas. Damages exceeded $35K
2/16/03	F0	A waterspout came ashore at the north side of Port St. Joe and damaged a dozen homes. A home was damaged by a fallen tree, a carport had collapsed on top of a vehicle, and the front porch of a beach house was blown onto a vehicle. Numerous trees and power lines down. Damages estimated at $250K
2/5/03	F0	A waterspout came ashore near Windward Street on Cape San Blas. The weak tornado uprooted trees and power lines, and damaged a dozen homes as it moved northeast through Port, Leeward and Angle Fish Streets. Damage estimates exceeded $225K
4/25/03	F0	A waterspout came ashore near Windward Street on Cape San Blas. The weak tornado uprooted trees and power lines, and damaged a dozen homes as it moved northeast through Port, Leeward and Angle Fish Streets. Damages exceeded $250K
11/26/13	EF1	An EF1 tornado touched down near Wewahitchka and traveled for 2.92 miles with internal winds exceeding 95mph. Damages included snapped trees, downed power lines, and structural damage to several homes. It caused an estimated $200K in damages.
8/18/2015	EF0	An EF0 tornado touched down in St Joseph Bay State Buffer Preserve just west of Indian Pass in Gulf County. Only minor damage to trees was reported. The tornado was confirmed via social media reports and eyewitness video obtained through a local media partner.

3.4.1.1 Tornado Magnitude

Tornado magnitude is measured by the Enhanced Fujita Scale.

Table 3.14: ENHANCED FUJITA SCALE FOR TORNADOES

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

3.4.1.2 Historical Events

All of Gulf County and all its residents are susceptible to tornadoes. Although Gulf County has yet to record a major tornado, there have been several F-1 events. However, due to the speed with which tornadoes develop and the unpredictability of their paths, tornado warnings must be

disseminated quickly to inform residents to seek shelter. Mobile homes in the county are particularly susceptible to tornado-related damage. Table 3.16 lists the tornados recorded in Gulf County from 1990 to January 2020, along with their dates, times, magnitudes, deaths, injuries, and damage reports. 25 events were reported between 01/01/1950 and 12/30/2014.

Table 3.15: Tornado Summary: 1950 – 2020 for Gulf County

Number of County/Zone areas affected:	1
Number of Days with Event:	25
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	2
Number of Days with Event and Property Damage:	22
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Table 3.16: Tornado Events in Gulf County 1950 – 2020

Location	Date	Time	Type	Mag	Death	Injury	Damage ($)	Crop Damage
GULF CO.	4/16/1954	14:30	Tornado		0	0	0.25K	0.00K
GULF CO.	9/24/1956	1:00	Tornado	F2	0	0	25.00K	0.00K
GULF CO.	9/15/1960	6:55	Tornado	F0	0	0	0.00K	0.00K
GULF CO.	12/10/1967	10:00	Tornado	F2	0	0	25.00K	0.00K
GULF CO.	7/10/1970	11:15	Tornado		0	0	0.00K	0.00K
GULF CO.	3/2/1972	13:30	Tornado	F1	0	0	2.50K	0.00K
GULF CO.	10/27/1972	6:10	Tornado	F2	0	1	250.00K	0.00K
GULF CO.	3/9/1976	3:51	Tornado	F0	0	0	25.00K	0.00K
GULF CO.	12/24/1978	4:10	Tornado	F1	0	0	250.00K	0.00K
GULF CO.	1/23/1980	1:30	Tornado	F0	0	0	2.50K	0.00K
GULF CO.	7/12/1989	14:12	Tornado	F1	0	0	25.00K	0.00K
GULF CO.	2/17/1992	8:20	Tornado	F1	0	0	25.00K	0.00K
GULF CO.	2/17/1992	10:12	Tornado	F0	0	0	2.50K	0.00K
Port St. Joe	1/24/1993	12:30	Tornado	F1	0	2	50.00K	0.00K
Wewahitchka	2/17/1995	16:30	Tornado	F0	0	0	0.00K	0.00K
Wewahitchka	3/7/1996	11:00	Tornado	F0	0	0	2.00K	0.00K
HIGHLAND VIEW	11/13/1997	18:00	Tornado	F0	0	0	5.00K	0.00K
PORT ST JOE	3/7/1998	14:02	Tornado	F0	0	0	35.00K	0.00K
BEACON HILL	3/8/1998	16:00	Tornado	F0	0	0	25.00K	0.00K
WEWAHITCHKA	1/2/1999	16:30	Tornado	F0	0	0	30.00K	0.00K
PORT ST JOE	3/16/2000	12:20	Tornado	F0	0	0	150.00K	0.00K
PORT ST JOE	2/16/2003	6:37	Tornado	F0	0	0	250.00K	0.00K
INDIAN PASS	4/25/2003	10:05	Tornado	F0	0	0	250.00K	0.00K
BEACON HILL	9/15/2004	15:35	Tornado	F0	0	0	25.00K	0.00K
PORT ST JOE	3/7/2005	22:15	Tornado	F0	0	0	150.00K	0.00K

Location	Date	Time	Type	Mag	Death	Injury	Damage ($)	Crop Damage
WEWAHITCHKA	3/7/2005	22:25	Tornado	F0	0	0	75.00K	0.00K
WEWAHITCHKA	11/26/2013	9:00	Tornado	EF1	0	0	200.00K	0.00K
INDIAN PASS	8/18/2015	1318	Tornado	EF0	0	0	0.00K	0.00K
Totals:					**0**	**3**	**1.880M**	**0.00K**

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

3.4.1.3 Probability for Gulf County and its Municipalities

There is a low probability of tornadoes that will have significant impacts in Gulf County. In recorded history, there has never been an F3 or above tornado in Gulf County, but there is a remote possibility one could occur. In the past 55 years, there have been 27 tornadoes that have impacted the County, as indicated in Table 3.16. Based on the historical data, it is expected that Gulf County and its municipalities will occasionally experience tornadoes. Using the data supplied by NOAA's National Severe Storms Laboratory, Gulf County historically averages one tornado every two years that may cause damages.

3.4.1.4 Tornado Vulnerability Analysis

Severe storms and tornadoes have the potential to cause significant damage to Gulf County and its municipalities. The damage is primarily wind damage to roofs and tree debris impacting infrastructure. The other significant impact can be flooding. The storm systems associated with tornadoes are frequent in nature even though tornadoes themselves are relatively rare. Tornado warnings are issued several times a year and are evenly distributed throughout county. In a review of the historical weather data, the likelihood of a tornado impacting either the Cities of Port St. Joe or Wewahitchka is low and the likelihood of a tornado impacting the remainder of the County is a low to medium risk.

For Gulf County, the following factors add to the overall vulnerability of the County to tornadoes:

- According to the Gulf County Comprehensive Emergency Management Plan, approximately 27% of the county lives in mobile homes. This equates to over 1,553 mobile homes and 3,880 residents. Mobile homes are historically more vulnerable to tornadic winds than brick and mortar homes.
- According to the NOAA, Florida ranks first in the number of tornadoes per square mile in the nation. Although the majority of these events are EF0's, they can still cause wind related damages to all structures and personal injuries.
- Over 80% of Gulf County is heavily wooded. Tornadoes cause wind related damages to trees, ergo all residents in Gulf County are vulnerable to wind driven debris damage caused by tornadoes.
- Many of the tornadoes that cause historical damages in Gulf County began as water spouts that came ashore. Gulf County has a large exposure to the Gulf of Mexico and many coastal homes in harms way.
- Gulf County is predominately located in 100-year flood zone (see Figure 3.13) meaning virtually no one has basements or sellers for protection when a tornado warning is given. This makes the population extremely vulnerable based on lack of a safe shelter spaces to evacuate to.

- Based on the requirements of the NFIP, all coastal construction in the V Zone must be elevated above the 100-year flood event to prevent storm surge impacts. Yet, elevating coastal homes makes them much more vulnerable to tornado winds. This adds an extra level of vulnerability to newer constructed coastal homes in Gulf County.

All 16,543 residents of unincorporated Gulf County, and the Cities of Port St. Joe and Wewahitchka are susceptible to tornadoes. Property damage, although extreme at the site of the occurrence, is relatively small in terms of the entire community. The following Table estimates the structures vulnerable to a F0 – F2 tornado.

Table 3.17: Potential Loss from F0-F2 Tornado in Gulf County

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$167,453,949	4,156	$68,400,251	1695	$17,176,062	426
Mobile Homes	$16,817,801	1553	$647,215	60	$2,157,385	199
Multi-Family	$2,800,890	16	$746,904.3	4	$186,726.0	2
Hotels	$630,000.0	2	$844,219.2	4	$0.0	0
Commercial	$230,777,733	169	$157,471,376	127	$18,597,015	15
Industrial	$5,762,691.0	53	$1,646,483.1	16	$822,000.0	7
Government	$13,098,506	111	$4,297,947	37	$3,069,962	26

3.4.1.5 Extent of Tornado Impacts

Gulf County has experienced 25 tornado events since 1950, all were either F0 or F1 events. Gulf County could expect to receive an EF-1 tornado between March - September causing a moderate amount of business and residential damages from high winds and wind- borne debris. There were two F2 events. Gulf County could theoretically receive a F3 event, but it would be highly unlikely. All of Gulf County is susceptible to tornadoes. It is expected a tornado would cause significant damages if the tract goes through downtown Port St. Joe or Wewahitchka. The more likely impact area would be the unincorporated areas, of which 80% is timberland.

3.4.1.6 Future Development and Tornadoes

Given that tornadoes can hit anywhere in the County, all areas are equally vulnerable. As the County and its municipalities grow, more people and their supporting infrastructure will be vulnerable to tornado damages and injury. The biggest risk is to the more densely populated areas of Gulf County.

3.4.2 Thunderstorms and Lightning Events

Thunderstorms can occur anywhere in Gulf County. They are formed as warm moist air rises over colder drier air, causing the water vapor to condense. Thunderstorms are capable of producing heavy rains, lightning, hail, strong winds, and tornadoes. Lightning occurs when positive and negative charges build up and there is a rapid discharge of electricity. All of Gulf County and its municipalities are vulnerable to thunderstorm winds and hail events. Table 3.21: shows thunderstorm wind events reported to NOAA between 1990 and April 2020. Table 3.20 documents previous occurrences. These events occurred throughout Gulf County and in the Cities of Port St. Joe and Wewahitchka.

Thunderstorms can produce damaging hail, high winds and dangerous lightning strikes. The extent of high winds is similar to that of a F0 to F1 tornado or Category 1 hurricane. There have been 7 fatalities caused by lightning between 1950 – 2020, the last one in 2010 on St. Joseph's Peninsula.

Impacts from thunderstorm wind events include damage to buildings, infrastructure, and agricultural crops from lightning, hailstones, and high winds. Deaths and injuries can result from lightning strikes and hailstones, as well as from flying debris. The extent of possible hail events in Gulf County, based on the historic record, can be as large as 1.75 inches in diameter.

Table 3.18: Sample Thunderstorm Impacts in Gulf County

Date	Thunderstorm Impacts
5/31/2015	Scattered Convections developed across the tri-state area with isolated strong to severe weather. A tree fell on a house in Wewahitchka Damages totaled $20K
12/22/2015	Squall line moved across the Florida panhandle, sporadic reports of trees and power outages due to strong winds and lightning.
1/15/2016	Strong level trough and surface cold front moved through region. A power line was blown down at Hwy 71 and Industrial Rd Damage estimated $2K
4/25/2019	Strong thunderstorms developed ahead of a cold front moving across the area. Hurricane impact glass was also flexing.
4/20/2020	A potent upper trough moved across the southeast states with numerous severe storms, including wind damages and tornadoes. Some tornadoes were significant and rated EF2. On fatality occurred in southeast Alabama. Tree was blown down onto a power line near 13th and Monument Ave.

Source: NOAA National Climatic Data Center, Storm Events Database - Thunderstorms3.4.2.1 Historical Events
High Wind Thunderstorm Impacts in Gulf County, Florida

21 events were reported between 01/01/1990 and 06/01/2020 (11110 days) resulting in $778,000 in damages.

Table 3.19: Summary: Thunderstorm Events in Gulf County Producing High Winds

Gulf County, Florida	
Number of Days with Event:	40
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	27
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

The following is a list of historical events reported to the National Weather Service between 1990 – 2020 of severe thunderstorms in Gulf County.

Table 3.21: Historical Thunderstorm Events – Gulf County Florida

County	Date	Time	Type	Mag	Dth	Inj	PrD ($)
GULF CO.	11/4/1992	16:00	TS Wind	0 kts.	0	0	0.00K
GULF CO.	12/9/1992	22:45	TS Wind	0 kts.	0	0	0.00K
GULF CO.	12/9/1992	23:20	TS Wind	0 kts.	0	0	0.00K
GULF CO.	7/18/1995	18:10	TS Wind	1 kts.	0	0	0.00K
GULF CO.	2/22/1998	9:02	TS Wind	52 kts.	0	0	0.00K
GULF CO.	2/28/1999	4:30	TS Wind		0	0	200.00K
GULF CO.	5/7/1999	6:50	TS Wind		0	0	2.00K
GULF CO.	5/7/1999	7:30	TS Wind		0	0	50.00K
GULF CO.	8/14/1999	14:35	TS Wind		0	0	1.00K
GULF CO.	3/29/2000	19:53	TS Wind		0	0	15.00K
GULF CO.	7/20/2000	14:30	TS Wind		0	0	300.00K
GULF CO.	7/24/2000	12:39	TS Wind		0	0	25.00K
GULF CO.	8/9/2000	22:40	TS Wind		0	0	2.00K
GULF CO.	9/6/2000	21:07	TS Wind		0	0	50.00K
GULF CO.	3/20/2001	1:55	TS Wind	65 kts.	0	0	0.00K
GULF CO.	3/12/2002	16:40	TS Wind		0	0	50.00K
GULF CO.	3/7/2005	22:10	TS Wind	55 kts.	0	0	10.00K
GULF CO.	5/10/2006	23:49	TS Wind	55 kts	0	0	0.50K
GULF CO.	7/19/2006	16:29	TS Wind	55 kts.	0	0	2.50K
GULF CO.	3/27/2009	8:27	TS Wind	55 kts.	0	0	5.00K
GULF CO.	5/28/2010	13:45	TS Wind	50 kts	0	0	0.00K
GULF CO.	4/5/2011	0:45	TS Wind	55 kts	0	0	20.00K
GULF CO.	7/30/2012	14:00	TS Wind	50 kts	0	0	2.00K
GULF CO.	8/2/2012	11:14	TS Wind	50 kts	0	0	1.00K
GULF CO.	4/14/2013	14:15	TS Wind	50 kts.	0	0	2.00K
GULF CO.	1/11/2014	12:15	TS Wind	50 kts	0	0	1.00K
GULF CO.	4/30/2014	8:00	TS Wind	50 kts.	0	0	2.00K
GULF CO.	10/14/2014	2:45	TS Wind	50 kts.	0	0	2.00K
GULF CO.	11/23/2014	13:45	TS Wind	50 kts.	0	0	1.00K
GULF CO.	4/20/2015	7:25	TS Wind	50 kts	0	0	0.00K
GULF CO.	05/31/2015	12:00	TS Wind	50 kts.	0	0	0.00K
GULF CO.	7/25/2015	14:20	TS Wind	50 kts	0	0	0.00K
GULF CO.	12/22/2015	3:50	TS Wind	50 kts.	0	0	0.00K
GULF CO.	1/15/2016	4:12	TS Wind	50 kts.	0	0	0.00K
GULF CO.	2/07/2017	17:25	TS Wind	50 kts.	0	0	0.00K
GULF CO.	7/03/2018	15:36	TS Wind	50 kts	0	0	0.00K
GULF CO.	07/22/2018	21:05	TS Wind	50 kts.	0	0	0.00K
GULF CO.	4/25/2019	20:04	TS Wind	60 kts.	0	0	0.00K
GULF CO.	4/25/2019	20:10	TS Wind	65 kts.	0	0	0.00K
GULF CO.	4/13/2020	4:40	TS Wind	50 kts	0	0	0.00K
GULF CO.	4/20/2020	2:45	TS Wind	50 kts	0	0	0.00K
Total					0	0	744.0K

Table 3.20: Summary Lightning Events in Gulf County Producing Injuries

Gulf County, Florida	
Number of Days with Event:	1
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

The following chart is extrapolated from the just property values in Gulf County and applying a .025% factor. Thunderstorms have the potential to cause significant damage, especially if they include any hail. The life safety aspect is normally a function of lightning strikes, which are extremely rare in Gulf County. All of the population of Gulf County, Port St. Joe, and Wewahitchka are vulnerable to the impacts of thunderstorms. Lightning can impact Gulf County on a weekly basis, however there as been no record of a significant impact caused by lightning in the last 5 years.

Table 3.21: Potential Loss from Severe Thunderstorms in Gulf County

Building Type	Uninc. Co.	Number	Port St. Joe	Number	Wewahitchka	Number
Single Family	$13,954,496	4,156	$5,700,021	1695	$1,431,339	426
Mobile Homes	$1,401,483	1553	$53,935	60	$179,782	199
Multi-Family	$233,408	16	$62,242	4	$15,561	2
Hotels	$52,500	2	$70,352	4	$0	0
Commercial	$19,231,478	169	$13,122,615	127	$1,549,751	15
Industrial	$480,224	53	$137,207	16	$68,500	7
Government	$1,091,542	111	$358,162	37	$255,830	26

In addition, Gulf County considers thunderstorms a hazard based on the following facts:

- Thunderstorms frequently occur in Gulf County. On average, the County will experience six severe thunderstorms a year that cause moderate damages. During the summer months, the County can experience daily thunderstorms that include high winds and lightning.
- Gulf County has a large boating population. Port St. Joe and Indian Pass have marinas, and boat launches are located in several more locations that egress the Gulf of Mexico, and the internal freshwater rivers. This means Gulf County can have many boaters on open water at any given time, making them extremely vulnerable to a thunderstorm, and the lightning they produce.
- All of all residents in Gulf County live in close proximity to forested lands. Thunderstorm winds will often cause tree damage to improved property, structures, and people.
- 80% of the County is in the 100-year flood plain and highly vulnerable to flooding. Thunderstorms can cause excessive rainfall over short periods of time, causing localized flooding. Flooding can result in temporarily displacing County residents and result in damages to structures.

3.4.2.3 Probability of Thunderstorm and Lightning

Gulf County can expect thunderstorms of this magnitude in the future at a rate of approximately one per year. This is based on historical rates of thunderstorms impacting Gulf County.

3.4.2.4 Vulnerability of Thunderstorm and Lightning

Gulf county and the City of Port St Joe and City of Wewahitchka are vulnerable to Thunderstorms and lightning. Every year there are multiple thunderstorms and lightning are discovered across Gulf County. Potential loss is documented in Table 3.21.

3.4.2.5 Extent of Thunderstorm and Lightning

Since 1990, 29 severe thunderstorms have been recorded, of which 21 caused some level of damage. Thunderstorms will impact the entire county and cause dangerous lightening that can injure or kill people. Gulf County could have Thunderstorm events that generate winds of up to 80 mph and produce hail up to 3.5 inches in diameter. Lightning can strike up to 12 miles from a thunderstorm. All structures are susceptible to thunderstorms and lightning in Gulf County.

3.4.2.6 Future Development Trends and Thunderstorms

Gulf County uses the Florida Building Code, which ensures protection against thunderstorms, and to some degree, against hail. There are no impacts on future development trends from thunderstorms.

3.5 Environmental Events [Hail, Freeze, Drought/Heat wave]

3.5.1 Hail Events

Hail events can be experienced throughout Gulf County, City of Port St Joe and the City of Wewahitchka. It is precipitation in the form of lumps of ice produced by convective clouds. Hail typically accompanies thunderstorms. Because hail needs convective clouds and strong updrafts to increase in size, hailstorms are more frequent in warmer months (spring and early summer) when these conditions are present. In Gulf County, hail accompanies only a few thunderstorms that affect the county.

The **impact** of hail is damages to cars in parking lots, and some agriculture. Hail can impact residents if they are trapped outside during an event, but this has never happened in Gulf County. The county's vulnerability to hail is very limited and the effect to structures is non-existent.

Table 3.22: Hail Event Impacts in Gulf County

Date	Hail Impacts
2/11/2013	Quarter size hail was reported in northern Gulf County. A cold front in south moved into the region and stalled.
6/28/2014	A scattered afternoon convection developed across the Honeyville Area No damages were reported.
4/3/2017	Hail around Howard Creek resulted in tornadoes and several reports of hail and straight-line wind damage across the tri-state area.
4/4/2017	Hail was reported through the Wewahitchka area. This was a result from the straight-line wind damage across the tri-state area.

3.5.1.1 Historical Events

12 events were reported between 01/01/1990 and 11/30/2020 none of which caused any appreciable amount of damage or injuries. Minor vehicle damages have occurred, and minor crop damages.

Table 3.23: Summary: Hail Events in Gulf County

Gulf County, Florida: Hail Events	
Number of Days with Event:	14
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

Table 3.24: Recorded Hail Events in Gulf County – 1960 – 2020

Location	County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:						0	0	0.00K	0.00K
GULF CO.	GULF CO.	11/2/1992	2:55	Hail	0.75 in.	0	0	0.00K	0.00K
WEWAHITCHKA	GULF CO.	7/18/1995	18:10	Hail	0.50 in.	0	0	0.00K	0.00K
PORT ST JOE	GULF CO.	2/22/1998	9:25	Hail	0.75 in.	0	0	0.00K	0.00K
PORT ST JOE	GULF CO.	3/7/1998	14:25	Hail	1.75 in.	0	0	0.00K	0.00K
OVERSTREET	GULF CO.	7/20/2000	14:23	Hail	0.75 in.	0	0	0.00K	0.00K
PORT ST JOE	GULF CO.	5/5/2005	4:30	Hail	1.75 in.	0	0	0.00K	0.00K
PORT ST JOE	GULF CO.	5/9/2006	0:40	Hail	0.88 in.	0	0	0.00K	0.00K
PORT ST JOE	GULF CO.	7/29/2006	17:30	Hail	0.75 in.	0	0	0.00K	0.00K
WEWAHITCHKA	GULF CO.	3/15/2012	15:28	Hail	1.00 in.	0	0	0.00K	0.00K
WEWAHITCHKA	GULF CO.	2/11/2013	18:30	Hail	1.00 in.	0	0	0.00K	0.00K
WEWAHITCHKA	GULF CO.	3/23/2013	6:41	Hail	1.00 in.	0	0	0.00K	0.00K
HONEYVILLE	GULF CO.	6/28/2014	16:03	Hail	1.75 in.	0	0	0.00K	0.00K
HOWARD CREEK	GULF CO.	4/3/2017	17:30	Hail	0.88 in.	0	0	0.00K	0.00K
WEWAHITCHKA	GULF CO.	4/4/2017	17:42	Hail	1.25 in.	0	0	0.00K	0.00K
Totals:						0	0	0.00K	0.00K

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

3.5.1.2 Probability of Hail

Based on data from the National Weather Service, Gulf County can expect to have a hail event once every two years.

3.5.1.3 Vulnerability of Hail

Based on information provided by the NOAA Storm Events Database websites, there have been no damages of any appreciable amount to occur in Gulf County or its municipalities since 1990 from hail. Given that, there was insufficient information to generate an estimate of potential dollar

losses resulting from hail. All residents of Gulf County, and the Cities of Port St. Joe and Wewahitchka are vulnerable to hail events.

In addition, hail in Gulf County must be taken seriously because:

- Prior hail events in Gulf County produced hail stones the size of dimes, nickels, quarters, and some the size of golf balls. This can severely damage vehicles, structures and people in Gulf County.
- Gulf County experiences thunderstorms that produce hail once every 1.5 years. This has the potential to cause serious damages to structures, livestock, and people.
- Gulf County has many vacationers who visit Cape San Blas who will be using many outdoor amenities. Hail events can cause serious injuries and have negative impacts on the tourist industry.

3.5.1.4 Extent for Hail Events

Based on previous events since 1990, all of Gulf County is susceptible to hail events. Gulf County can expect a thunderstorm producing hail once every two to three years. Hail has the potential to cause personal injuries, property damage, boat damage. Maximum hail size can reach three inches in diameter, but this is extremely rare. The most common size is less than ¾ inch in diameter.

3.5.2 Winter Storms/Freeze Events

A winter storm can occur throughout Gulf County, including the City of Port St Joe and City of Wewahitchka. It can range from moderate snow over a few hours to blizzard conditions with high winds, freezing rain or sleet, heavy snowfall with blinding wind-driven snow, and extremely cold temperatures that lasts several days.

Impacts can include more traffic accidents due to frozen road and/or bridge surfaces. Severe frosts can cause exposed pipes to freeze and burst, resulting in water damage to buildings. Severe frosts can damage and destroy crops and affect livestock production. There has been one significant winter storm to impact Gulf County in the past three decades. It is described below, and indicative of what can happen if a Winter Storm occurs in Gulf County.

Table 3.25: Sample Winter Storm Impacts

Date	Winter Storm Impacts
1/28/14	A severe winter storm in the entire Big Bend area produced a mix of wintery mix of precipitation to the entire area. Several roads were closed, including a large stretch of Interstate 10 in the Florida Panhandle. Most bridges were closed at one point from Tallahassee westward, and during the peak of the event, there was no road access to cross over the Apalachicola River. This led to very large transportation impacts with significant monetary losses for some trucking companies. light wintry precipitation lingered across the Florida Big Bend throughout the day, as the upper level trough continued to approach from the west. The combination of the unusually cold air and thick clouds prevented many locations from getting above freezing, a very rare occurrence in Gulf County.

Source: NOAA Storm Events Database – Winter Storm, Gulf County

The climate in North Florida is mild compared to the rest of the nation and winter storms of this nature are very rare. Although Gulf County does not typically experience severe winter weather, all of the County at risk for cold-related hazards. Some of the possible severe weather includes snow, freezing rain and subfreezing temperatures (equal to or less than 32 degrees Fahrenheit).

3.5.2.1 History of Events

Table 3.26: Summary: Winter Storms in Gulf County

Gulf County Florida – Winter Storms	
Number of Days with Event:	**1**
Number of Days with Event and Death:	**0**
Number of Days with Event and Death or Injury:	**0**
Number of Days with Event and Property Damage:	**1**
Number of Days with Event and Crop Damage:	**0**
Number of Event Types reported:	**1**

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

Since 1970, the National Weather Service has only reported one winter storm [January, 2014) that caused an estimated $200,000 in damages.

3.5.2.2 Probability of Winter Storm

According to the National Weather Service, the probability of Gulf County having a severe winter storm or damaging freeze is very low. Based on historical events, the County and its municipalities could expect a severe winter storm once every 30 years.

3.5.2.3 Vulnerability of Winter Storm

For Gulf County, the aftermath of a winter storm is economic. Extremely cold weather can impact fishing as well as the tourism industries, which are important to the County. Although these events are very rare, their impacts could be significant. In Gulf County, freezes are not normally severe. The only calculated amount of damages that have officially occurred as a result of a winter storm is $204,000 that occurred in 2014.

3.5.2.4 Extent for Winter Storms

Historically, Gulf County has had very few winter storms, yet they are very possible. A winter storm will impact the entire county, and all its residents. Although very rare, Gulf County could expect a severe winter storm of the same magnitude as the last event (1.28.14), resulting in icing of roadways and bridges. Gulf County could expect extreme cold temperatures between 15 to 20 degrees lasting for two to three days. In very rare cases, snow can occur, but highly improbable. Light damages could be expected, and some minor injuries. The economic impact can be more serious, as extreme cold weather will impact the fishing/tourism businesses, and some utilities.

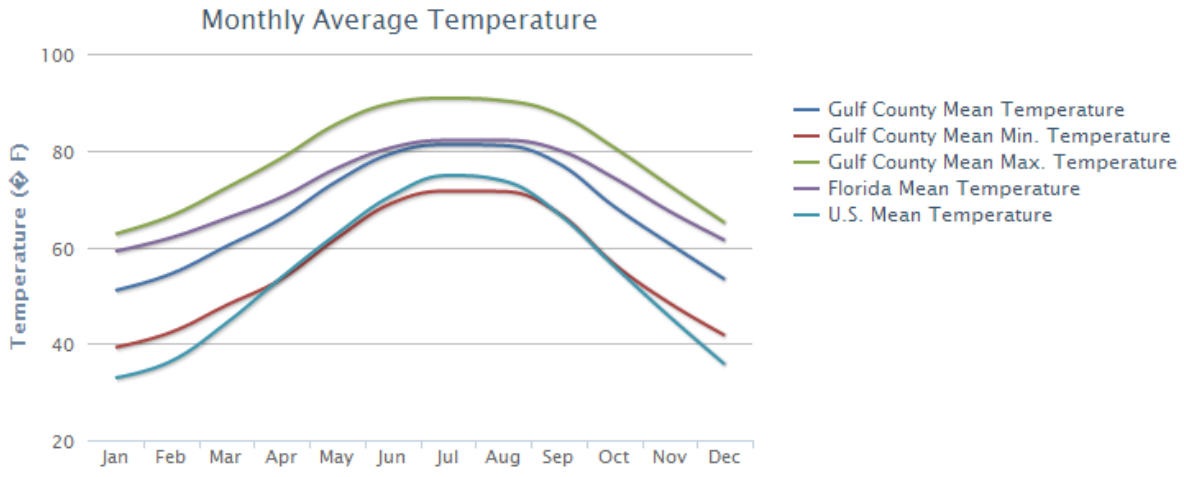
3.5.3 Drought/Heat Wave

A drought is defined as a period of drier than normal conditions that results in water-related problems. Precipitation falls in uneven patterns across the country. When no rain or only a small

amount of rain falls, soils can dry out and plants can die. When rainfall is less than normal for several weeks, months, or years, the flow of streams and rivers declines. Water levels in lakes and reservoirs fall, and the depth to water in wells decreases. If dry weather persists and water supply problems develop, the dry period can become a **drought.** The first evidence of drought usually is seen in records of rainfall. Within a short period of time, the amount of moisture in soils can begin to decrease.

Temperatures that hover 10 -15 degrees or more above the average high temperature (See Figure 3.3) for the region and last for several weeks are defined as a **heat wave**. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Heat waves often result in drought conditions to exist in Gulf County and the participating jurisdictions.

Figure 3.3: Monthly Average Temperatures – Gulf County, Florida



Source: http://www.usa.com/gulf-county-fl-weather.htm#HistoricalTemperature

Droughts occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation. The **impact and vulnerability** of a drought /heat wave is increased threat of wildfires, lowering of the well water tables, heat stroke in residents. During heat waves Gulf County Emergency and Gulf County Health Department will provide heatwave precautions and information to residents ensure their safety especially the more vulnerable population such as the elderly.

The following are examples of the impact a drought will have in Gulf County and the City of Port St Joe and City of Wewahitchka.

Table 3.27: Drought and Heatwave Impacts – Gulf County, Florida

Date	Drought Event Impacts
5/10/11	An extended heatwave and lack of rainfall caused severe drought conditions (D2) in Gulf County on May 10th and worsened to extreme drought conditions (D3) across the area by the end of the month. Extreme dry ground conditions resulted in several wildfires in the interior part of the County. Agriculture crops were impacted by the lack of rainfall. No estimates of loss are available.
5/1/12	Drought conditions ranged from D2 severe status to D4 exceptional status across the area to start the month. The D4 conditions were confined to the southeast big bend, including portions of Taylor, Lafayette, and Dixie counties. Fortunately, the remnants of Tropical Storm Beryl impacted the southeast big bend at the end of the month with heavy amounts of rain, and the drought status there improved from D4 to D3

Source: NOAA Storm Events Database – Drought, Gulf County Florida

3.5.3.1 History of Events

Between 1990 – 2020, there have been a number of droughts recorded in Gulf County. The following summary is provided by NOAA for Gulf County.

Table 3.28: Summary: Drought Conditions in Gulf County 1990-2020

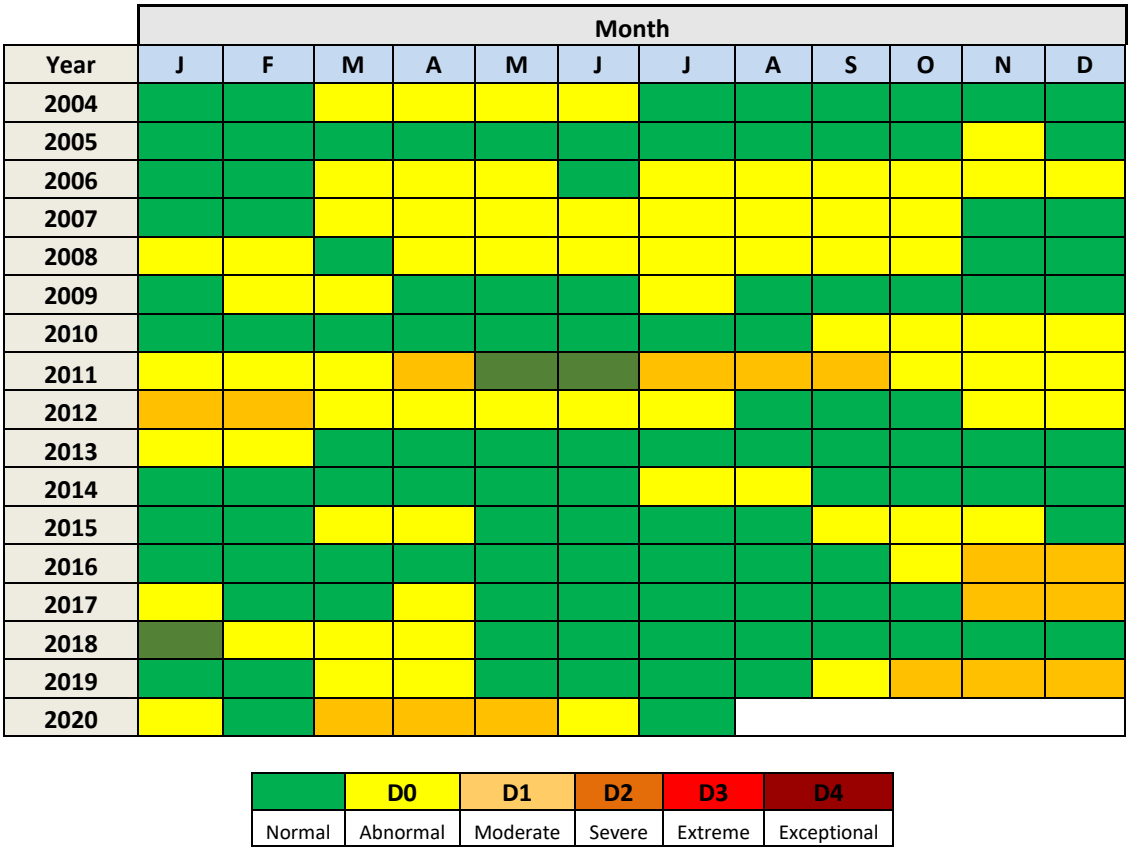
Gulf County Florida - Drought	
Number of Days with Event:	18
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

Because the county is a coastal county, it is not particularly prone to severe droughts. However, droughts have occurred as recently as 2000 and again in 2004, 2006, 2007, 2008, 2011, 2012, 2019 and 2020. Port St. Joe and Wewahitchka residents use deep wells as a water sources and thus are only affected by long-term drought. Rural residents who use shallow wells may be more affected. In addition, severe droughts may have an adverse effect on the county's wetlands and exotic flora species.

The following chart is a summary by month of the drought conditions in Gulf County, beginning in 2004 – 2020.

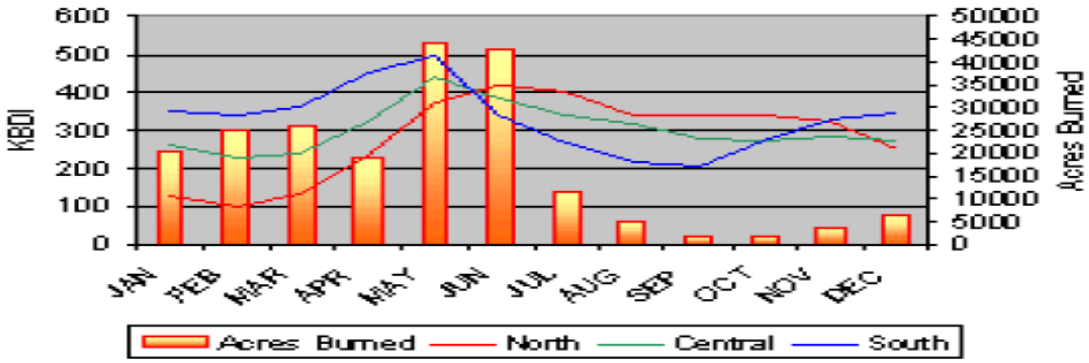
Table 3.29: U.S. Drought Monitor 2004-2020 for Gulf County



Source: http://droughtmonitor.unl.edu/MapsAndData/DataTables.aspx

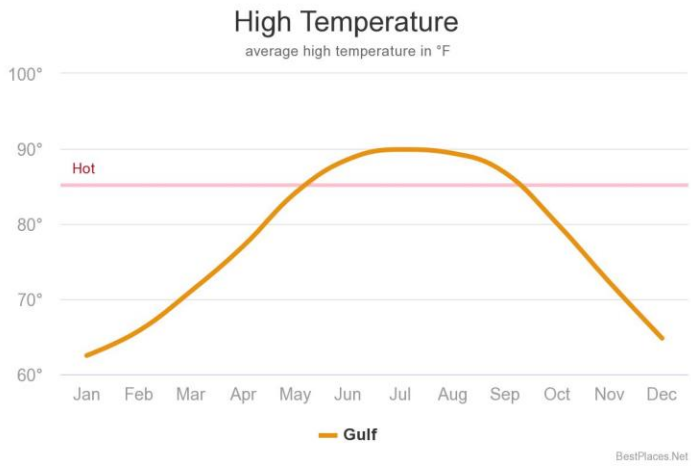
Figure 3.4 shows the seasonal drought index averages in North Florida using the Keetch-Bryam Drought Index (KBDI). For many months of the year, the county is extremely moist and not susceptible to drought. During late spring and mid-summer, drought presents the greatest risks.

Figure 3.4: Seasonal Drought Index for North Florida



Source: Division of Forestry – www.fl-dof.com/fire_weather/information/activity.html

Figure 3.4.1: Seasonal Heat Index for Gulf County



Source: https://www.bestplaces.net/climate/county/florida/gulf

3.5.3.2 Probability of Drought

According to NOAA, a drought will occur in Gulf County once every 10 years. This is based on the historical events of droughts occurring in Gulf County and its municipalities. Heatwaves can occur every year in un-incorporated Gulf County, City of Port St Joe and City of Wewahitchka. The incorporated cities will have a higher probability of heat wave due to lack of the tree canopy, building and road materials.

3.5.3.2 Vulnerability of Drought and Heat Wave

Drought presents the greatest economic threat to the seafood industry, and the timber industry. Although timber is somewhat drought resistant, dry conditions spawn forest fires, which in turn burn the timber. This causes economic ripple effects in the economy of Gulf County. The entire population of Gulf County and the Cities of Port St. Joe and Wewahitchka are vulnerable to the impacts of drought, albeit very small. There is no historical data on an estimated damage caused by a drought or heat wave in Gulf County. If one were to occur, it is estimated the impact would be minimal. It would normally be associated with extending water wells to compensate for low water tables. This would not be a cost associated with the jurisdictions.

3.5.3.4 Extent of Droughts and Heat Wave

The extent of Heat Wave can be experienced throughout Gulf County and its participating jurisdictions. Heat wave is the high humidity and high temperatures combined together to cause extreme vulnerability to conditions outside. The Palmer Drought Severity Index (PDSI) has been the most commonly used drought index in the United States and was developed to measure intensity, duration, and spatial **extent** of drought. PDSI values are derived from measurements of precipitation, air temperature, and local soil moisture, along with prior values of these measures. Values range from -6.0 (extreme drought) to +6.0 (extreme wet conditions) and have been standardized to facilitate comparisons from region to region.

Figure 3.5: Palmer Drought Index

Palmer Drought Classifications Scale	
Palmer Classifications	
4.0 or more	extremely wet
3.0 to 3.99	very wet
2.0 to 2.99	moderately wet
1.0 to 1.99	slightly wet
0.5 to 0.99	incipient wet spell
0.49 to -0.49	near normal
-0.5 to -0.99	incipient dry spell
-1.0 to -1.99	mild drought
-2.0 to -2.99	moderate drought
-3.0 to -3.99	severe drought

Gulf County can expect to experience a severe drought once every 10 years on average. The average duration of the drought is approximately five to eight months, with a Palmer Drought Severity Index of -3.0 to - 3.99.

Impacts from heat waves can put lives at risk with the possibility of heat strokes and heat exhaustion. The municipalities of Port St. Joe and Wewahitchka may be more susceptible to the effects of a heat wave due to the urban heat island effort from urban development. Gulf County can expect to experience a heat index of 110 degrees in the unincorporated part of Gulf County, and slightly higher in Port St. Joe and Wewahitchka. This could last 3 to 5 days. The has been no significant occurrences in Gulf County in the last 5 years. Table 3.28 documents the previous occurrences of heat waves in Gulf County.

Table 3.28: Summary: Heat Wave Conditions in Gulf County 1990-2020

Gulf County Florida – Heat Waves	
Number of Days with Event:	**0**
Number of Days with Event and Death:	**0**
Number of Days with Event and Death or Injury:	**0**
Number of Days with Event and Property Damage:	**0**
Number of Days with Event and Crop Damage:	**0**
Number of Event Types reported:	**0**

3.6 Wildfires

Wildfires fall into three classifications/definitions. A surface fire is the most common type, burning along the forest floor, moving slowly, and killing or damaging trees. A ground fire usually starts by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the treetops. Dense smoke is usually a sign of wildfires and can be seen and smelt for miles. Wildfires represent potentially significant disasters in Florida, due to its year-round mild climate and potentially high levels of combustible material in forested areas. When

these conditions are combined with people and/or lightning, the stage is set for large, destructive wildfires.

Wildfires can occur anywhere in Gulf County. They vary in size from a backyard trash burn, to a major forest fire.

3.6.1 Historical Events

There are three different classes of wildland fires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees.

The rural areas of the county are heavily forested, and wildfires are common. Data provided by the State Division of Forestry shows that from January 2012 through January 2015, a significant number of acres burned in the county. Wildfires affecting commercial forest, non-commercial forest and non-forest (agricultural) lands are included in the information presented. Commercial forests are forestlands capable of producing crops of industrial wood, regardless of stocking, and not withdrawn from timber utilization. A non-commercial forest is land that is unproductive forestland, including productive forestland withdrawn from commercial timber use. Non-forest land is any area not growing timber and devoted to non-forest uses such as crops, pasture, etc.

The **impact** of wildfires is highest for residents living in close proximity to the county's heavily wooded rural areas. Wildfire impacts the economy, residential homes, and natural resources by making them temporarily unusable. The wildfires that swept throughout the state in 1998 burned many residences in areas where the urban environment intersected with large tracts of heavily wooded land. Areas of the county have a similar urban / wildland interface and are vulnerable to this hazard. The following is a list of wildfires and their impacts in Gulf County. Previous occurrences were documented in Table 3.30.

Table 3.30: Wildfire Occurrences and Impact in Gulf County

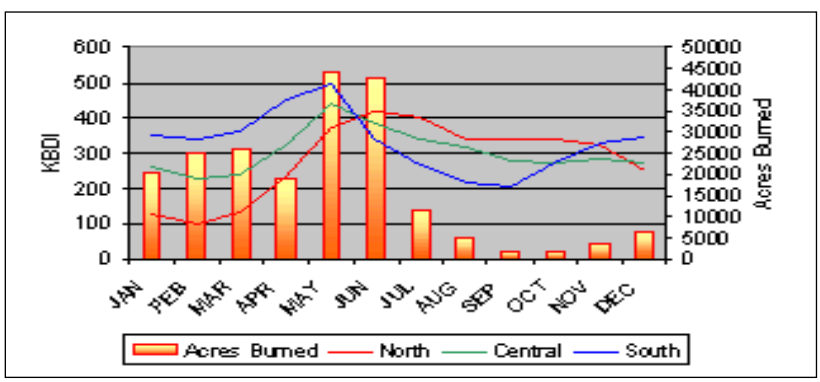
Cause	Fires	Percent	Acres	Percent
Campfire	3	3.41	4.5	0.05
Children	1	1.14	30.0	0.32
Debris Burn*	0	0	0.0	0
Debris Burn--Auth--Broadcast/Acreage	8	9.09	63.1	0.68
Debris Burn--Auth--Piles	7	7.95	8,118.0	86.93
Debris Burn--Auth--Yard Trash	1	1.14	0.5	0.01
Debris Burn--Nonauth--Broadcast/Acreage	0	0	0.0	0
Debris Burn--Nonauth--Piles	1	1.14	17.0	0.18
Debris Burn--Nonauth--Yard Trash	12	13.64	256.2	2.74
Equipment use*	0	0	0.0	0
Equipment--Agriculture	2	2.27	2.2	0.02

Equipment--Logging	2	2.27	35.1	0.38
Equipment--Recreation	0	0	0.0	0
Equipment--Transportation	3	3.41	1.7	0.02
Incendiary	5	5.68	307.0	3.29
Lightning	26	29.55	470.8	5.04
Miscellaneous -- Breakout	0	0	0.0	0
Miscellaneous -- Electric Fence	0	0	0.0	0
Miscellaneous -- Fireworks	1	1.14	0.3	0.00
Miscellaneous --Power Lines	6	6.82	7.8	0.08
Miscellaneous -- Structure	2	2.27	0.8	0.01
Miscellaneous--Other	3	3.41	16.0	0.17
Railroad	0	0	0.0	0
Smoking	3	3.41	3.6	0.04
Unknown	2	2.27	4.0	0.04
Total	88		9,338.6	

Source: http://tlhfor013.doacs.state.fl.us/PublicReports/FiresBySTR.aspx

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

Figure 3.5: Mean Regional KDBI Along with Mean Number of Acres Burned Statewide



Source: Division of Forestry – www.fl-dof.com/fire_weather/information/activity.html

For different soil types, the depth of soil required to hold 8 inches of moisture varies (loam = 30", clay = 25" and sand = 80"). A prolonged drought (high KBDI) influences fire intensity largely because more fuel is available for combustion (i.e. fuels have a lower moisture content). In addition, the drying of organic material in the soil can lead to increased difficulty in fire suppression.

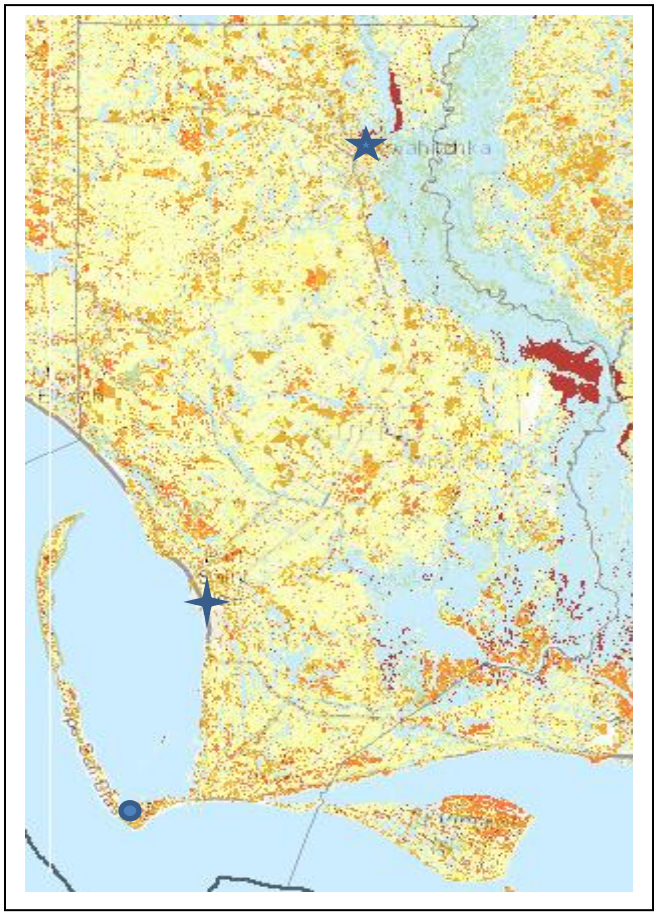
High values of the KBDI are an indication that conditions are favorable for the occurrence and spread of wildfires, but drought is not by itself a prerequisite for wildfires. Other weather factors, such as wind, temperature, relative humidity and atmospheric stability, play a major role in determining the actual fire danger.

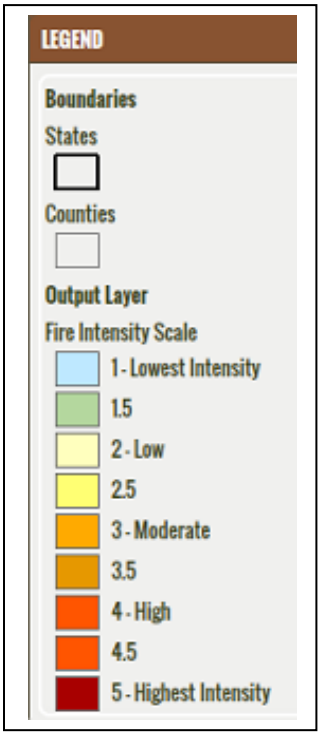
Table 3.31: North Florida KBDI Averages

Threat	Winter	Spring	Summer	Fall
Very Low	0 – 160	0 – 190	0 – 220	0 – 180
Low	161 – 220	191 – 260	221 – 300	181 – 240
Normal	221 – 390	261 – 460	301 – 500	241 – 420
Moderate	391 – 500	461 – 600	501 – 640	421 – 540
Severe	501 - 800	601 - 800	641 - 800	541 - 800

In addition, the Southeastern Wildfire Risk assessment is produced by the Southern Group of State Foresters. It shows the most vulnerable sections of Gulf County to wildfires. This data is currently maintained and updated by the Florida Forest Service.

Figure 3.6: Wildfire Risk Assessment - 2020





City of Port St Joe

City of Wewahitchka

Cape San Blas

Source: http://www.southernwildfirerisk.com/map/index/public

3.6.2 Probability of Wildfires

Based on historical records, Gulf County can expect to have on average 16 wildfire events a year. Of these, only 1-2 would rank as being serious enough to cause widespread damages to improved property.

3.6.3 Vulnerability of Wildfire

The Table 3.32 lists the potential dollar losses in the county from wildfire. This is based on the number of homes in close proximity to a forested area of the County receiving moderate damages as a result of a wildfire encroaching on developed land. As can be seen, the unincorporated areas of Gulf County is the most vulnerable, basically because this is where the highest number of homes and structures exist closest to the forested lands.

Table 3.32: Potential Loss from Wildfires

Risk Level	Structures	Potential Dollar Value	Risk Level	Structures	Potential Dollar Value	Risk Level	Structures	Potential Dollar Value
Gulf County (unincorporated)			**Port St. Joe**			**Wewahitchka**		
Low	185	$45,300,780	Low	9	$445,965	Low	7	$216,375
Med	244	$58,543,331	Med	17	$482,279	Med	8	$515,748
High	504	$120,301,048	High	3	$56,840	High	9	$636,214

Beyond this, Gulf County takes the threat of wildfire very seriously because of the following factors:

- Nearly 80% of Gulf County is heavily wooded. The predominant species of forested areas is Southern Pine, which is highly susceptible to wildfires.
- 100% of everyone who lives in Gulf County lives in, or near wooded areas. Given the number of historical wildfire events to occur in the County, everyone is vulnerable to the threat of a fast approaching wildfire.
- Gulf County, nor its municipalities, have a robust firefighting capacity equal to the threat. If a wildfire occurs, Gulf County must rely on the resources of the Florida Forest Service, or the St. Joe Company. These resources are not guarantees available every time they may be needed.
- The Southern Pine Beetle has killed over 15% of the pine trees in Gulf County, increasing the fuel loads and vulnerability to wildfires.

3.6.4 Extent of Wildfires

The average wildfire that has historically occurred in Gulf County are relatively small but have occurred in large numbers. Therefore, the County would expect to experience up to 15 wildfires a year, burning up to 500 acres. Of course, droughts and heat waves will dramatically increase these numbers. Historically, there has not been a significant impact from Wildfires in Gulf County for 5 years. Gulf County is a rural county inundated with creeks, rivers and lakes.

3.7 Flooding

Given that the majority of Gulf County lies in the 100-year flood plain, floods can occur virtually anywhere in the County. Floods are the most common and widespread of all-natural disasters. Many communities have experienced flooding after heavy thunderstorms or tropical storms. Floods can be slow or fast rising but generally, floods develop over a period of days. Mitigation includes any activities that prevent an emergency, reduce the chances of an emergency, or lessen the damaging effects of unavoidable emergencies. Investing in mitigation, such as engaging in floodplain management activities, will reduce the damages to homes and agricultural, should a flood occur.

Flooding refers to the general or temporary condition of partial or complete inundation of normally dry land areas with surface water from any source. Floodplains are defined as any land areas susceptible to water inundation from any source. Flooding is a natural aspect of the earth's hydrologic cycle, but it is because of their frequency; floods are the most destructive category of natural hazards in the United States. The impacts from floods include loss of life and damages to personal property, crops, businesses, utilities, and loss of transportation infrastructure. Additional losses and economic hardships ensue when supplies or supply routes are damaged or destroyed. When floodwaters inundate drinking water, chemical and waste storage facilities, wastewater treatment facilities, and/or solid waste disposal sites, they present a hazard to public health. In addition, mold is a serious concern when residences get inundated with floodwaters. Furniture, drywall, insulation, air conditioning ducts, and more can spawn mold spores that become a serious health issue and must be remediated.

The Port St. Joe is subject to flooding from rainfall ponding during periods of high rainfall, and coastal storm surge flooding during hurricane or tropical storm activity. The community is primarily subject to coastal flooding from St. Joe Bay, although the amount of surge is reduced somewhat by St. Joe Peninsula.

A bulkhead protects a portion of the Port St. Joe's waterfront. The city is also protected by a storm drainage system, which is adequate to protect the city from annual storm events but does not have sufficient capacity to handle the rainfall from a 100 year storm.

Minor storm surge flooding has occurred during Hurricane Agnes (1972). Hurricane Eloise (1975) created flooding from storm surge 6.5' above normal, causing a washout of St Rd 30 at Lighthouse Point and flooding around Patton Bayou and along the bay front. Coastal surge from Hurricane Frederick (1979) was 3.5' - 3.8' above mean high tide.

The major sources of flooding in Wewahitchka are two-fold: Riverine backwater and shallow flooding resulting from intense rainfall. The backwater effects are felt from the Apalachicola River system and Taylor Branch (sometimes known as Johnny Bell Creek locally). A majority of the backwater from Taylor Branch is a result of constrictive culverts under River Road and SR-71 causing runoff ponds behind both of these embankments to overflow.

Gulf County has many of its 308 critical facilities (Appendix H) in the 100-year flood zone. They are geocoded by Gulf County GIS and layered on a map with the FIRMs. Many of the projects listed on the project list are a result of trying to address their flood potential. Table 3.28 depict the previous occurrence of flooding in Gulf County and the participating jurisdictions.

Table 3.28: Summary: Flooding Conditions in Gulf County 1990-2020

Gulf County Florida – Flooding	
Number of Days with Event:	**3**
Number of Days with Event and Death:	**0**
Number of Days with Event and Death or Injury:	**0**
Number of Days with Event and Property Damage:	**4**
Number of Days with Event and Crop Damage:	**0**
Number of Event Types reported:	**2**

3.7.1 Historical Events

The Chipola Cutoff just south of Dead Lake ties the Apalachicola and Chipola Rivers together. During times of high flows on the Apalachicola, a substantial portion of the flow is diverted to the Chipola River causing high stages along the eastern boundary of Wewahitchka. Significant flooding occurred in 1966, 1977, 1994, 1998, 2005, 2009 and 2011. The highest flooding of record occurred in September of 1929.

The Apalachicola River has a watershed that extends well into northern portions of Georgia and Alabama. Heavy rains well outside of the region can result in flooding in the county. Other flood related declarations were awarded in 2005, and 2009. The floodwaters reached high enough to isolate or damage 607 houses (268 single-family dwellings and 339 mobile or manufactured homes) in the county. In addition to overt damage, flooding can result in hidden damage such as septic tank failure, fuel tank failure, and contamination of water wells. There were also economic disruptions.

The following is historical data on the most recent flooding events and their impacts in Gulf County:

October 10, 2018
Hurricane Michael, a Category 5 hurricane, made landfall on October 10, 2018. Hurricane Michael produced significant storm surge in Gulf County. Due to the rain fall and the storm surge Gulf County sustained flooding throughout the county. Many roads were closed within the county due to flooded roads and storm surge.

September 2020
Hurricane Sally impacted Gulf County and the City of Port St Joe and City of Wewahitchka by producing large amounts of rain in a short period of time. As a result of the rain that Gulf County received the Chipola River and the Apalachicola River began to rise, creeks and ditches began to fill with flood waters. The severe damage to the roads caused many residents to be unable to return to their homes.

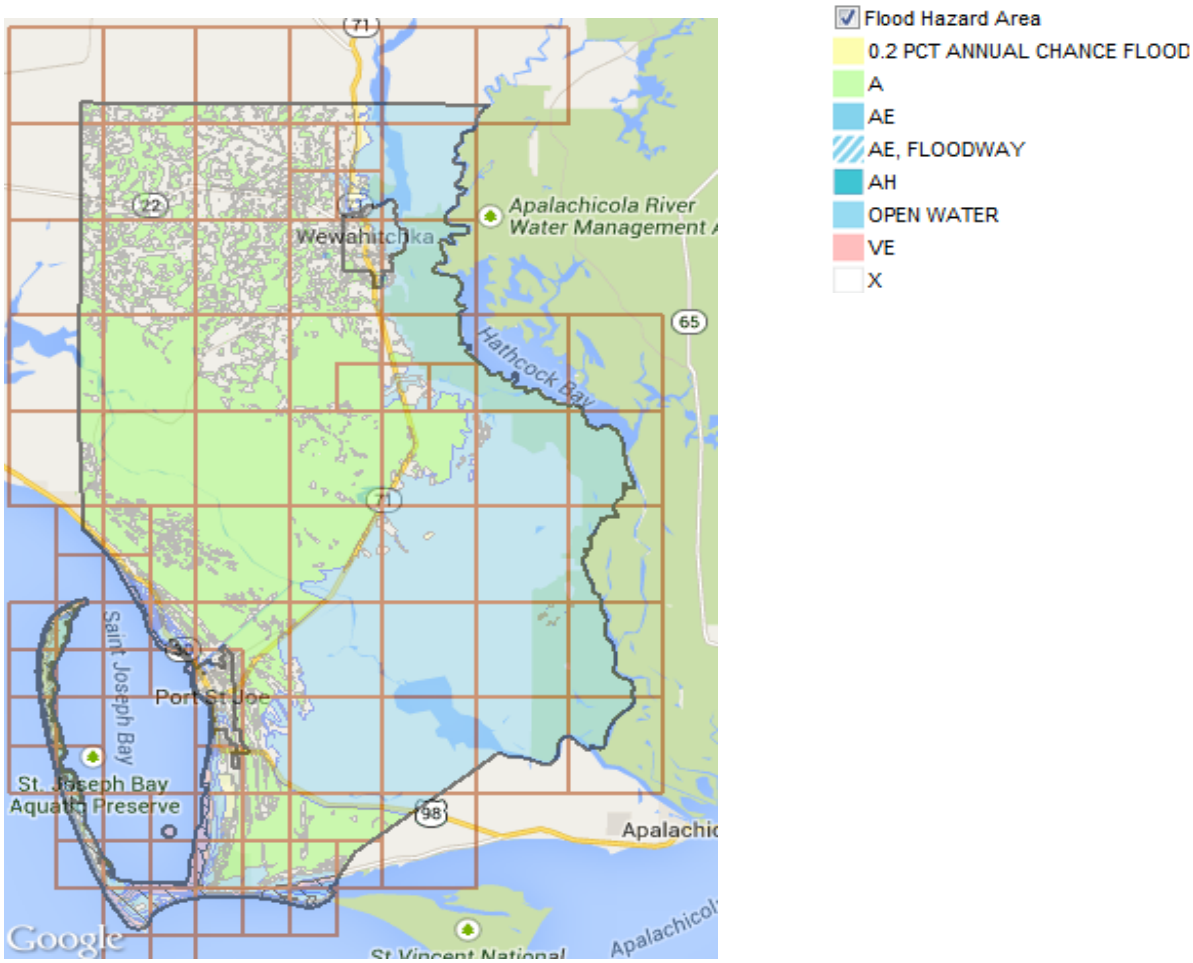
3.7.2 Probability of Floods

Based on historical occurrences of flooding in Gulf County, a major flood event can be expected to occur once every 8.5 years. This is based on the fact that Gulf County has experienced six major flood events over 50-year period.

3.7.3 Vulnerability of Floods

Although Gulf County historically experiences moderate rainfall, the primary causes of flooding are tropical cyclones. Gulf County is also subject to flooding from heavy rains in South Georgia and Alabama, which contain the headwaters for the rivers and streams that bisect Gulf County. The Apalachicola River, which is the western border of the County, is a significant source of flooding. A large amount of the county is categorized as wetlands and therefore, is more susceptible to flooding. Figure 3.7 is a composite of the Flood Insurance Rate Maps for Gulf County. Any panel can be clicked on at http://portal.nwfwmdfloodmaps.com/map.aspx?cty=gulf to greatly enlarge the flood hazard boundaries. Most of Gulf County is in the A or AE zone, making it highly susceptible to flooding events. Most of the FIRM maps have been updated in the past seven years. The maps are currently maintained by the Northwest Florida Water Management District.

Figure 3.7: Flood Insurance Rate Map Composite for Gulf County



source: http://portal.nwfwmdfloodmaps.com/map.aspx?cty=gulf

Gulf County has a number of locations that have historically and consistently flooded during past 100-year flood events. These areas are especially vulnerable to water rise, and result in major infrastructure damages. They are listed below.

Table 3.33: Areas Affected by Previous 100yr Flood Events in Gulf County

Stone-mill Creek	Midway Park Area
Idlewood Drive Area	Our Town Road Area
Brian Setterich Road Area	Gaskin Side Camp Area
Lake Height Subdivision	West Arm Creek Area
Willis Landing	White City Area
Jehu Road Area	Lake Grove Road Area
Red Bull Island Area	East River Road Area
Roberts Cemetery Area	Bryant's Landing Area
Douglas Landing Area	Howard Creek Area

It is clear from the preceding information that the county is extremely prone to flooding. Approximately 28% of the residents and 34% of the residential dwellings in the county are located in the 100-year flood plain. In 2015 figures, over $200 million in property is located in the flood plain. A flood could adversely impact Gulf County's economy and the tax base when residents are required to relocate.

The following Figures demonstrate the flood inundation zones expected from all categories of hurricanes impacting Gulf County. These are different than the normal 100-year flood zones, in that much of this flooding is caused by tidal storm surge that either inundates the land, or acts as a barrier to water trying to escape into rivers. Given Gulf County's low topography, it does not take much of a storm surge to effectively block flood waters from trying to exit the County. This is especially true with the impacts of **sea level rise.** Although no definitive studies have been completed on the impacts of sea level rise in Gulf County, suffice it to say, the following maps represent the worst case flooding caused by a hurricane, and would only be exacerbated by the impacts of sea level rise.

Figure 3.8: Flood Zone for a Category 1 Hurricane

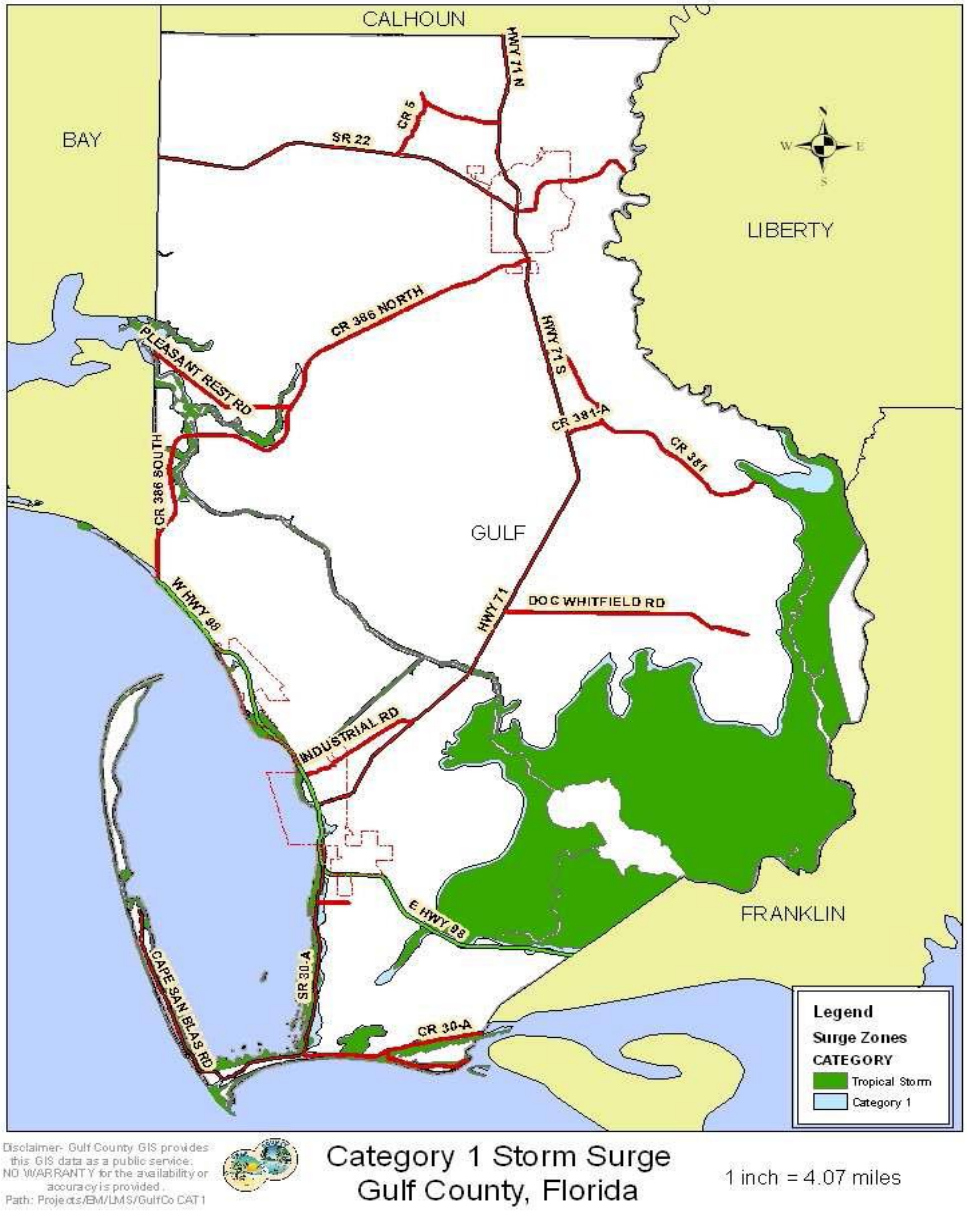


Figure 3.9: Flood Zone for a Category 2 Hurricane

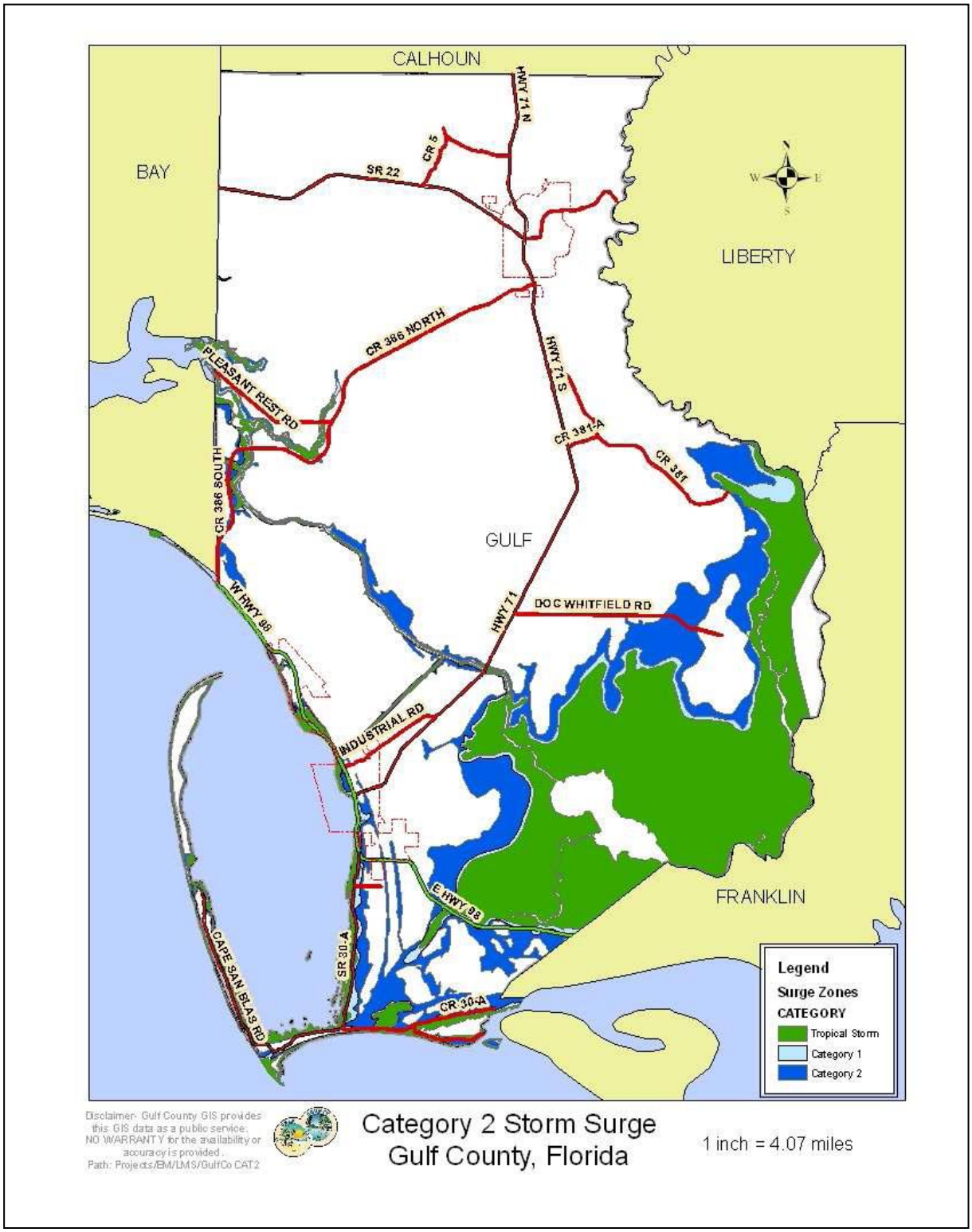


Figure 3.11: Flood Zone for a Category 3 Hurricane

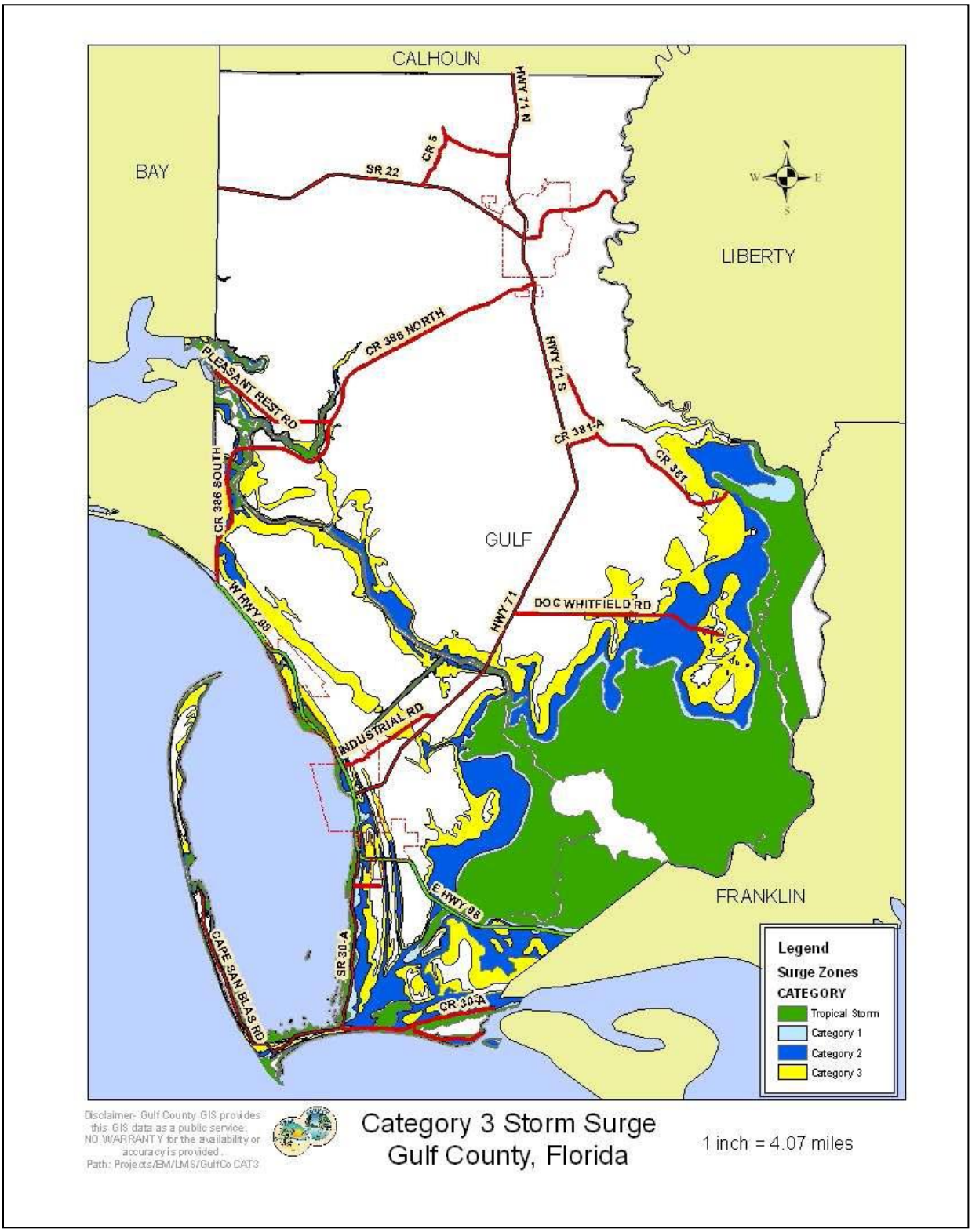


Figure 3.12: Flood Zone for a Category 4 Hurricane

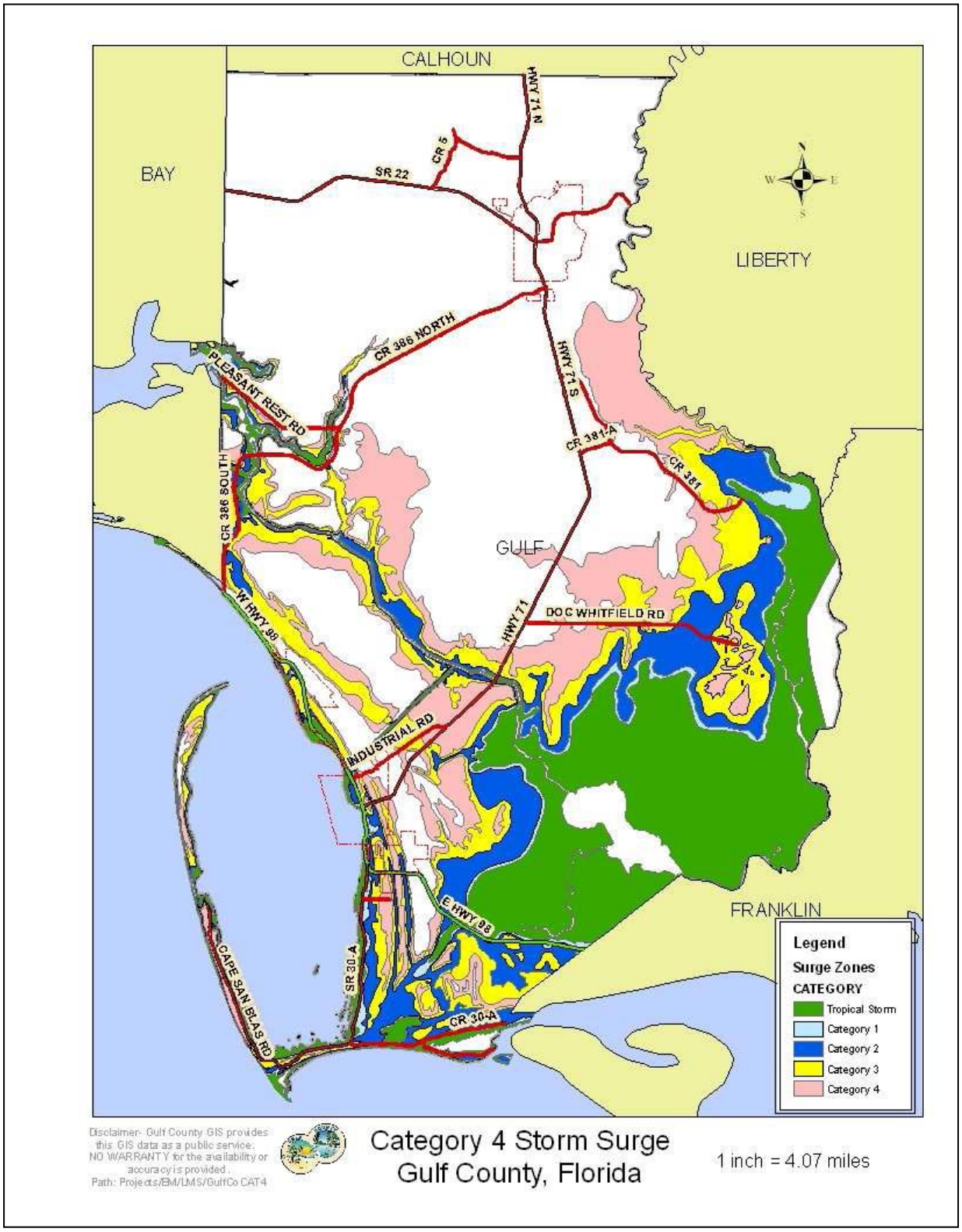
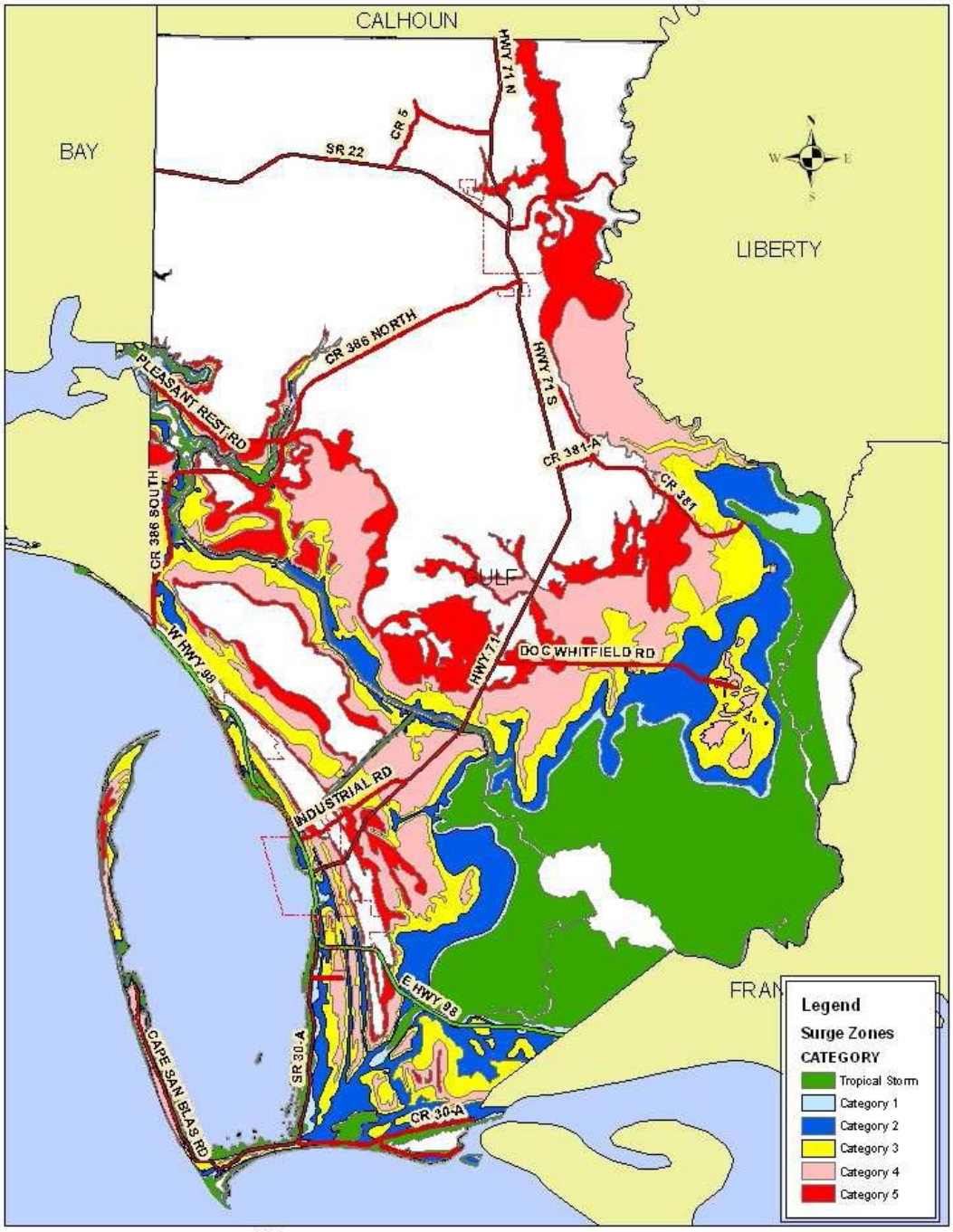


Figure 3.13: Flood Zone for a Category 5 Hurricane



Disclaimer- Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided. Path: Projects/EM/LMS/GulfCo CAT5

Category 5 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles

Damages from coastal flooding are primarily due to erosion and the battering effect of waves upon buildings, coastal structures, and near-shore septic tanks. Coastal portions of the county have been subjected to significant coastal flooding and storm surge from several hurricanes in recent years including Hurricane Eloise in 1975, Hurricanes Elena and Kate in 1985, Hurricane Opal in 1995, Hurricane Dennis in 2005, Hurricane Ivan in 2006, and Tropical Storm Debbie in 2009. Hurricane Kate destroyed or caused major damage to 31 structures apart from roads. In Highland View, approximately 100 feet of US Hwy 98 was damaged and 90' of a sloping concrete revetment were destroyed. Hurricane Kate's storm surge caused extensive erosion on Cape San Blas. Profile data obtained by DEP's Bureau of Coastal Data Acquisition indicated that a dune in this area with an elevation of 13.5' NGVD was reduced to an elevation of 3' after Kate. Approximately 1,500' of the southern tip of Cape San Blas disappeared after Hurricane Elena passed 30 miles offshore in September 1985. The exposed southwest shore of Cape San Blas sustained heavy beach and dune erosion. Much of this has been replaced since 1985 by natural forces, but this is just to demonstrate the impact such storms can have on Gulf County.

The following tables show the potential dollar losses for the county resulting from flooding. It is a compilation of current data from Gulf County GIS, using the Property Appraisers data. These are just estimates of loss based on actual losses from prior events.

Table 3.34: Potential Losses from Future Flooding Events by Jurisdiction

Building Type	10-Year	25-Year	50-Year	100 Year
Unincorporated Gulf County				
Single Family	$29,640,970	$60,780,946	$80,846,425	$79,590,291
Mobile Home	$964,600	$2,196,171	$4,249,919	$5,861,340
Multi-Family	$0	$0	$0	$0
Hotels	$275,600	$275,600	$351,000	$351,000
Commercial	$1,342,109	$2,731,881	$3,273,237	$2,095,653
Industrial	$1,406,358	$1,490,740	$1,560,996	$1,648,584
Government	$1,866,221	$3,001,920	$6,239,494	$6,108,303
Port St. Joe				
Single Family	$2,143,358	$29,272,803	$60,105,158	$65,764,600
Mobile Home	$17,384	$205,640	$678,400	$898,300
Multi-Family	$0	$0	$0	$0
Hotels	$0	$105,000	$105,000	$371,000
Commercial	$29,319	$4,946,061	$9,127,167	$10,336,550
Industrial	$0	$9,158,025	$10,806,216	$11,031,992
Government	$392,200	$5,838,913	$8,071,560	$8,158,207
Wewahitchka				
Single Family	$2,015,324	$6,297,889	$10,878,173	$17,176,062
Mobile Home	$276,864	$791,041	$1,366,344	$2,157,385
Multi-Family	$23,963	$68,466	$118,260	$186,726.0
Hotels	$0	$0.0	$0	$0.0
Commercial	$2,386,616	$6,818,905	$11,778,110	$18,597,015
Industrial	$105,490	$301,400.0	$503,600	$822,000.0
Government	$393,978	$1,125,652	$1,944,310	$3,069,962

Source: Gulf County Property Appraisers Data/Gulf County GIS

Table 3.35: Gulf County Inland Flood Hazard Vulnerability by Structure

County	Event	Residential	Commercial	Medical	Industrial	Agriculture	Education	Government
Gulf	100Yr	3,480	63	17	11	34	0	19
	500yr	364	11	4	3	6	0	0

Source: 2013 Florida Mitigation Strategy, pg c.11

Table 3.36: Gulf County Inland Flood Hazard Vulnerability by Value

County	Event	Residential	Commercial	Medical	Industrial	Agriculture	Education	Government
Gulf	100Yr	$562,703,000	$31,478,000	$20,170,000	$2,238,000	$7,001,000	$0	$28,283,000
	500yr	$53,949,000	$1,889,000	$3,397,000	$425,000	$999,000	$0	0

Source: 2013 Florida Mitigation Strategy, pg c.11

3.7.4 Extent for Flooding

Gulf County is predominately flat, highly susceptible to sheet flooding. In addition, the coastal areas are susceptible to high storm surges from hurricanes. Hurricane induced flooding can result in up to 18 feet of storm surge impacting Cape San Blas, causing flooding of all of Port St. Joe with up to 10 feet of water. Flooding from non-hurricane weather events, such as a stalled cold front, can produce up to 20 inches of rainfall, resulting in several feet of standing water in low-lying areas, inundating both roadways and flooding homes and businesses.

3.7.5 Future Development and Flooding

Much of Gulf County is forested wetlands, and unsuitable for large scale development. Yet, the most vulnerable part of the county to hurricanes are the coastal areas, which are always under development pressure. As noted in the Future Land Use Map [*Figure 2.5*], much of the county is in the 100 year flood zone, comprised mostly of forested land owned by St. Joe Land Development Corporation. Therefore, although development will occur, it will not occur at a rapid pace. Coastal development is mostly comprised of secondary homes, many of which are rented as vacation rentals. Development along the coastline will always remain high. Well over half of the barrier island protecting Gulf County is in the Cape San Blas State Park, and therefore cannot be developed. Gulf County, Port St. Joe and Wewahitchka all have floodplain management ordinances that guide current and future building permitting. Areas in the watershed are unsuitable for any type of development.

3.8 Coastal Erosion

Coastal erosion is the landward displacement of the shoreline caused by the forces of waves and currents. It is limited to the coastal barrier island (Cape San Blas). A critical erosion area is a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost. Critical erosion areas may also include peripheral segments or gaps between identified critical erosion areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects. **Impacts** include loss of beach dune systems, damage to

public infrastructure, damage to coastal homes, and loss of mitigation against future hurricane storm surges. Table 3.37 describes the historical impacts and previous occurances of coastal erosion in Gulf County.

Table 3.37: Coastal Erosion Impacts – Gulf County, Florida

Date	Coastal Erosion Impacts
9/25/02	Storm surge heights of four feet combined with large battering waves eroded sand up to six feet deep at Cape San Blas. A protective berm and several septic tanks were damaged. The Florida DOT reported that State Road 30 on Cape San Blas was washed over at the Stumphole, with about four feet of roadway eroded for a distance of 100 feet. St. Joseph Peninsula State park was closed
9/15/04	Storm surges of six feet caused moderate to severe beach erosion. Four waterfront homes collapsed and washed out into the Gulf. Several homes sustained significant foundation erosion and will have to be condemned. Reported by the Gulf County EMA and St. Joseph State Park officials. Over $3M in damages were reported.
7/10/07	A five to eight foot storm surge caused major coastal flooding and severe beach erosion. The Gulf County EMA reported extensive damage at Cape San Blas beyond the Stumphole. The road at the Stumphole was severely damaged and will require repair of the rock. Highway 98 at Highland View was washed out. Indian Pass Road and a portion of Cape San Blas Road were closed. 615 homes were damaged and 10 homes destroyed. Nine businesses were destroyed and six damaged. At least 60 homes have been condemned. This event caused over $8.5M in damages.
10/8/2019	Hurricane Michael produced record storm surge for Gulf County. FDOT reported extensive damage around the Stumphole. The protective berm was impacted but erosion from the bay caused several homes and the road to be impacted.

3.8.1 Historical Events

Evidence of coastal erosion can be seen when looking at storm surge and storm tides that have historically occurred in Gulf County. The following table summarizes these events in Gulf County.

Table 3.38: Coastal Erosion Events in Gulf County

Date	Damages	Date	Damages	Date	Damages
9/14/02	$15K	6/11/05	$25K	9/1/08	$200K
9/25/02	$1M	7/10/05	$8.5M	8/16/09	$25K
8/12/04	$15K	8/28/05	$300K	8/28/12	$0K
9/15/04	$3M	6/12/06	$0K		
				Total	**$13.08M**

Source: http://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=12%2CFLORIDA

3.8.2 Probability

There is a 100% probability that coastal erosion will occur on a consistent basis along the fragile Cape San Blas / St. Joseph Peninsula. Historically, this occurs once every other year, to some extent. Parts of this area have been hardened with large granite boulders along the roadway, which have become displaced during major storm events. This is going to be an ongoing concern for Gulf County.

3.8.3 Vulnerability of Coastal Erosion

The worst-case scenario for coastal erosion is the loss of county, state and Federal roadways as well as beaches and wetlands in the areas identified on the Critical Beach Erosion Areas map found on the following page. This map identifies areas within the county of critical erosion.

The Florida Department of Environmental Protection's Bureau of Beaches and Coastal Systems has described the county's beach erosion problems as follows:

> *There are two critically eroded areas (8.3 miles) and three non-critically eroded areas (8.6 miles) in the county.*
>
> *Most of St. Joseph Peninsula is eroded between R41 and R106. A segment of St. Joseph Peninsula State Park (R41-R69) is non-critically eroded for 5.5 miles and a segment of the peninsula (R69-R106) is critically eroded for 7.2 miles due to threatened development and recreational interests. Two segments within the designated critically eroded area (R85.5-R90.1 and R91.3-R95.5) are included for continuity of management of the coastal system and for the design integrity of a beach management project. The St. Joseph Peninsula Beach Restoration project was completed in the winter of 2009.*
>
> *The west shoreline of Cape San Blas is severely eroded and is considered to have the highest erosion rate along the coast of Florida. The segment between R106 and R111.5 (1.1 mile) is designated critically eroded from Stump Hole to the threatened and damaged U.S. Air Force facilities, because*
> *the erosion has destroyed nesting sea turtle habitat along Cape San Blas. After Hurricane Opal (1995), a rock mound structure was constructed to protect the county road at Stump Hole. Likewise, the U.S. Air Force constructed a rock mound structure in front of their road to the rocket launch site after Hurricane Kate (1985), but both the road and the rock mound-structure were destroyed by Hurricane Opal (1995). The rock mound at Stump Hole was extended and subsequently damaged by Hurricanes Ivan (2004) and Dennis (2005). An engineered boulder mound structure was constructed in 2009 to replace the earlier rock mound to provide major storm protection to the county road. South of the US Air Force facilities, Cape San Blas (111.5-R114) has sustained severe but noncritical erosion for an additional 0.5 mile.*
>
> *Indian Peninsula (R150-R162) at the east end of the county is also eroded for 2.6 miles with no threatened interests at this time.*
> *Source: http://www.dep.state.fl.us/beaches/publications/pdf/CriticalErosionReport.pdf*

In 2008, residents and parcel owners on Cape San Blas were allowed to levee a special tax to raise the estimated $22M cost to renourish the shoreline. Of that recent effort, it is estimated 25% of the renourished beaches have eroded again. Gulf County has tried repeatedly to have Congress repeal the COBRA (Coastal Barrier Resources Act) designation on Cape San Blas. A COBRA designation disallows any federal funds from being spent in that designated area, thus preventing Gulf County from receiving federal funds to assist in re-nourishment efforts

Figure 3.14: Critical Beach Erosion Areas – Gulf County

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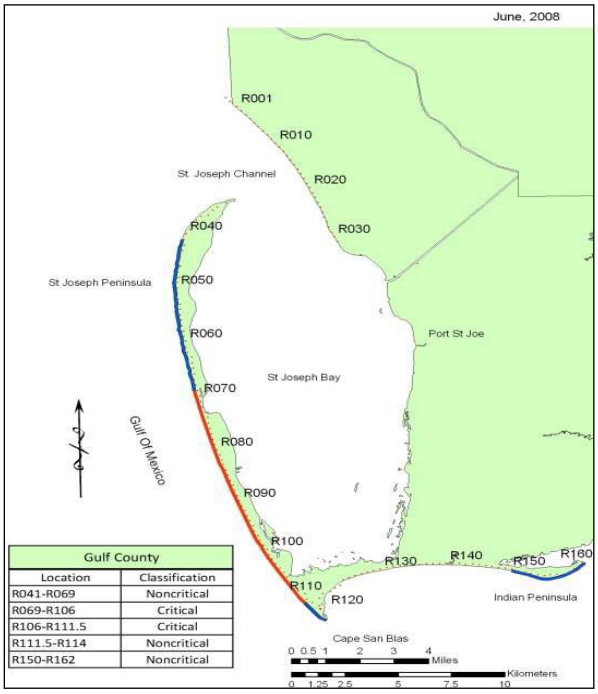


Gulf County	
Location	Classification
R041-R069	Noncritical
R069-R106	Critical
R106-R111.5	Critical
R111.5-R114	Noncritical
R150-R162	Noncritical

In terms of damages, the recent renourishment efforts cost $22M for just the critical erosion areas of Cape San Blas. It would be reasonable to expect future costs of renourishment will follow if improved property is to be protected.

3.8.4 Extent

Under the right conditions, a hurricane can result in significant erosion along Cape San Blas. Gulf County could realistically experience up to 20 vertical feet of shoreline erosion destroying the natural dune system in place now. The cost to repair such destructions could exceed $200M (based on costs associated with beach restoration projects undertaken by the US Army Corps of Engineers in other locations).

3.9 Technological Events

Hazardous materials are chemical substances, which if released or misused can pose a threat to the environment and human health. These chemicals are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents in plants. Also, with the BP Deepwater Horizon oil well rupture in the Gulf of Mexico in 2010, coastal oil spills can pose serious problems for the environment, and the economy of Gulf County. **Impacts** include contamination of land, injuries to people who are involved in an accident, evacuation of contaminated areas for lengths of time which can impact businesses, residents, and more. Spills on roadways can cause traffic diversions until the spill is cleaned up.

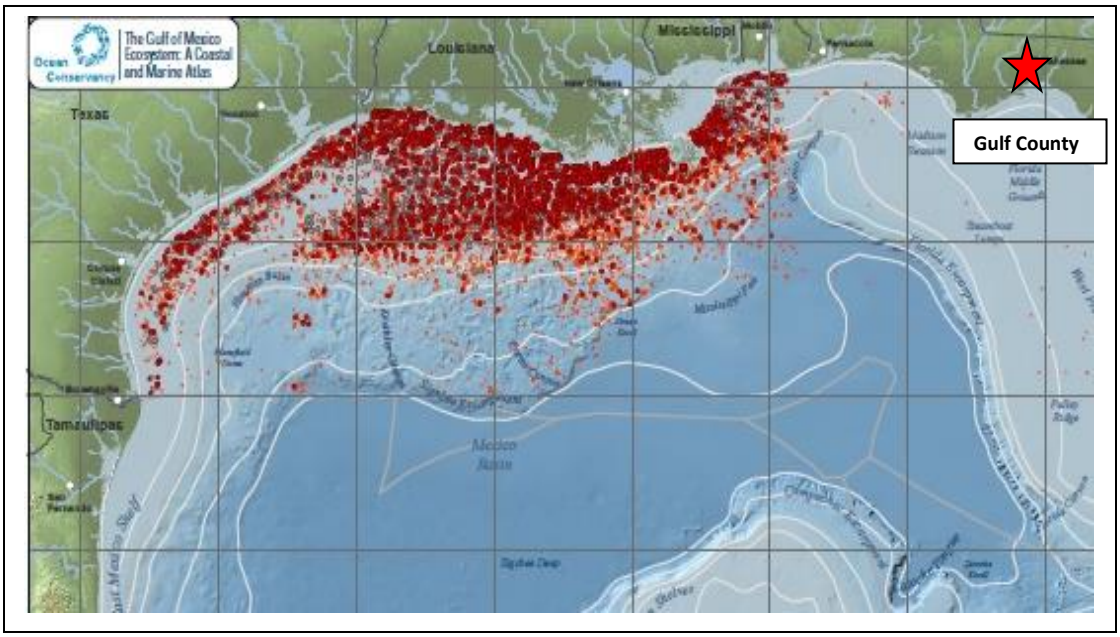
3.9.1 Historical Events - BP Deepwater Horizon Oil Spill

On April 10, 2010, the BP Deepwater Horizon Oil rig exploded as a result of failing equipment, causing the rupture of the deep water oil well, spilling millions of gallons of crude oil into the Gulf of Mexico. Given Gulf County's location, oil in the form of oil slicks and tar balls eventually arrived on the shoreline, fouling both tourists and the ecology, and impacting many businesses (fishing, tourism, retail). As of 2015, 154 Gulf County businesses and individuals have filed economic loss claims with the BP Deepwater Horizon Court Supervised Settlement Program (CSSP). The CSSP began receiving claims on June 4, 2012 and will likely continue into 2015.

Of the 154 Gulf County claims filed, 28 have been paid to-date for a total of $2,500,000, resulting in an average claim value of $89,000. Assuming all 154 claims are paid, and no additional claims are filed, Gulf businesses will receive $13,750,000 over the next two years.

According to the latest U.S. Census figures, there are approximately 1,232 business and non-profit entities in Gulf County. Based on other community's experiences, it is estimated that one-fourth to one-third of all Gulf County businesses suffered a measurable economic loss as a result of the Deepwater Horizon Disaster and are eligible for compensation by the CSSP. Conservatively, that suggests that approximately 308 Gulf entities could file claims. Were all eligible Gulf County businesses to file claims, based on the average claim value for the county, it would expect an infusion of $27,000,000 into the county over the next two years. As such, this is an economic development matter of great local and regional importance.
Source: http://tampa.legalexaminer.com/toxic-substances/bp-oil-spill-claim-payment-statistics-for-gulf-county-florida/

Figure 3.15: Location of all Oil Rigs/Wells in the Gulf of Mexico



Source: http://coast.noaa.gov/digitalcoast/stories/ecosystem-restoration

Currently, there are several thousand oil wells in the Gulf of Mexico, many of them in deep water. Although this is a very rare event, the threat is real, and Gulf County is highly vulnerable to oil spills from oil wells in the Gulf of Mexico.

Hazardous materials coordination is the responsibility of the county's Emergency Management Department along with local facilities that use or store hazardous materials. Hazardous chemicals are transported into and through the county on a daily basis via highway, rail and barge. Over-the-road transportation is the most common method in the county. In Northwest Florida the most frequently transported chemicals over the roads are petroleum-related products including gasoline, diesel, fuel oil and LP gas. Other commonly transported substances include nitric acid, sulfuric acid and molten sulfur. Rail transportation of hazardous chemicals is limited to the Apalachicola Northern Railroad.

Hazardous chemicals are also shipped via barge though Gulf County Intercoastal Canal. Fuel oil, crude petroleum and sodium hydroxide are the primary hazardous materials shipped by this method. In addition to the hazard created by the routine transportation of chemicals through the county, a hazard also exists from facilities storing large quantities of Extremely Hazardous Substances (EHS) at their facilities. There are a number of facilities in the county that store EHS chemicals above the minimum threshold planning quantity designated by the US Environmental Protection Agency. Many of these facilities store chlorine gas, which is used for water treatment and purification. It is important to note that a variety of safety and security precautions in place at facilities storing these chemicals greatly reduces the potential for a significant release to occur. The following table provides specific information regarding each of these facilities.

Table 3.39: Section 302 Facility Summary

SERC #	Facility Name	EHS Chemical	City
1517	City of Port St Joe-Industrial Wastewater	Chlorine	Port St Joe
15232	City of Port St Joe-WTP	Chlorine	Port St Joe
1549	General Chemical-Port St Joe	Sulfuric Acid	Port St Joe
15875	GT COM (Fairpoint) -Port St Joe	Sulfuric Acid	Port St Joe
6142	Lighthouse Utilities-16 inch Well	Chlorine	Port St Joe
33534	Lighthouse Utilities-6 inch Well	Chlorine	Port St Joe
15430	Premier Magnesia	Sulfuric Acid	Port St Joe
23649	Raffield Fisheries	Ammonia	Port St Joe
31402	Woods Fisheries	Ammonia	Port St Joe
1530	City of Wewahitchka-WTP	Chlorine	Wewahitchka
1529	City of Wewahitchka-WWTP	Chlorine	Wewahitchka
18824	DOC-Gulf Correctional Facility	Chlorine	Wewahitchka
11152	DOC-Gulf Forestry Camp	Chlorine	White City

Source: Apalachee Regional Planning Council – 2014 Report

3.9.1.1 Historical Events

Despite the routine shipment of hazardous materials through the county and the presence of large quantities of chemicals at a number of local facilities, there have been relatively few incidents involving the release of hazardous substances.

Between 1/1/2011 and 4/1/2015, there were no reportable quantities of Section 302 hazardous materials incidents. There were a number of small events reported to the State Watch Office, of which the majority were transportation-related, originated from private sector firms, and involved the release of a petroleum-based chemicals. This included small spills of diesel fuel, gasoline, hydraulic oil, vegetable oil, oil, and diluted sulfuric acid. The i**mpacts** from these events were negligible. None of these events triggered the need for a significant response other than basic clean up and decontamination.

3.9.1.2 Probability of Hazardous Materials

Based on previous experiences, the probability of a release of any Section 302 hazardous materials substances in Gulf County is extremely low. Frequent spills of a very minor nature occur regularly in Gulf County, but do not require any significant amount of response or clean up.

3.9.1.3 Vulnerability of Hazardous Materials

One of the primary concerns for Gulf County has been the placement of facilities for people with special needs (such as nursing homes or hospitals) in close proximity to major transportation routes or near fixed facilities storing large quantities of hazardous chemicals. Unfortunately, however, there are few locations in the county that are not within a short distance of major trucking routes or within areas that could potentially be affected by a worst-case release from a facility storing extremely hazardous substances. Analysis of census data shows that approximately 71% of county residents reside within a hazardous materials vulnerable zone. It is important to note however, that incidents at fixed facilities have rarely occurred and transportation-related incidents in this county have been small in scale and highly localized in impact.

3.9.1.4 Extent

A spill caused by a vehicle accident with a truck carrying hazardous materials in a populated area of Gulf County (i.e. Port St. Joe) will cause potential injuries, and some property damages. Clean up costs could be significant. Economic fallout from another off shore oil rig blow up resulting in oil slicks and tar balls on Gulf County's beaches could cause significant tourist and fishing industry damages.

3.10 Biological Events

Biological events include any hazard that includes pathogens, infestations, or the like impacting humans, animals, or the environment in a negative way. In Gulf County, this includes human impacts from influenza (H1N1) or any other infectious disease. The recent Ebola Virus scare is an example of this.

3.10.1 Southern Pine Beetle

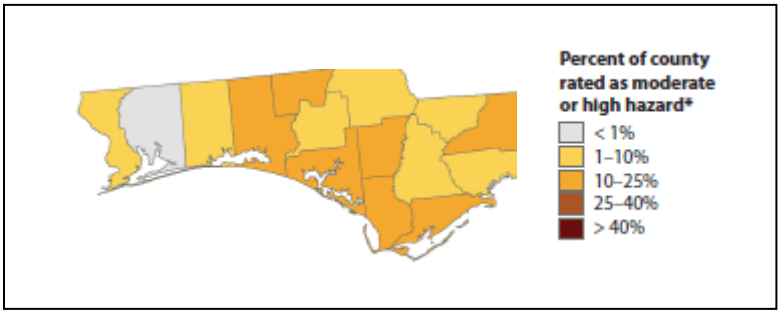
Infestation is the state of being invaded or overrun by something. In hazard mitigation, infestation usually refers to parasites, insects, or rodents. Typically, disease is linked to infestation because "pests" that overrun an area carry disease with them, infecting plants, animals, and humans. The primary sources of infestation and disease in the county are Southern Pine Beetle infestation, Red Tide and mosquito related infections. **Impacts** include the killing of pine trees, one of the main cash crops in Gulf County; loss of jobs caused by loss of tree harvesting, economic impacts with ripple effects throughout Gulf County. The impacts of the current pine beetle infestation in Gulf County have both short term and long-term consequences. The short-term impacts are the cumulative damages to existing pine trees (over $10M), and the long term impacts mean the loss of production of pine tree harvesting and products over the next decade (over $75M).

3.10.1.1 Historical Events

Some scientists blame the recent outbreaks of the Southern Pine Beetle on global warming. As the ambient air warms up, it allows for the beetle to germinate in more favorable conditions in locations where their natural enemies are not present. The current outbreak of the beetle is the most damaging. Past experiences with the pine beetle have been minor, and have occurred since 1980. Currently, the Southern Pine Beetle (SPB) is the most economically important forest pest in the southern United States, causing an estimated $1.5 billion in damage in recent years. Preferred hosts are shortleaf, loblolly, Virginia, and pitch pines.

In 2019, between 10% - 25% of Gulf County's pine forests are impacted by the Southern Pine Beetle. All of the timberlands in Gulf County are privately owned, so the impact of the beetle has an indirect impact on Gulf County, given a loss of trees equates to loss of jobs, tax revenues, and has a ripple effect through the economy. The following map shows the Southern Pine Beetle hazard rating for the county.

Figure 3.16: Southern Pine Beetle County Hazard Rating – 2020



Source: US Department of Agriculture – www.fs.fed.us/foresthealth/technology/nidrm_spb.shtml

3.10.1.2 Probability of Southern Pine Beetle Infestation

Pine beetle outbreaks have occurred in the past, but have had minor impact. The current infestation is by far the most devastating. It can be expected that pine beetle outbreaks like the

current one will happen on an ongoing basis until nature can establish a natural equilibrium between the beetles natural predators and their reproductive rates.

3.10.1.3 Vulnerability of Southern Pine Beetle Infestation

Over 80% of Gulf County is inhabited by pine forests. Most of this land is privately owned. The current infestation will cause millions of dollars of damage, as trees die, and cannot be harvested for any use. This is an ongoing vulnerability until natural conditions change. All of the pine trees in Gulf County are vulnerable to the Southern Pine Beetle.

3.10.1.4 Extent

Currently, between 10% - 25% of Gulf County's pine forests are impacted by the Southern Pine Beetle. Without natural intervention, this could climb to 50% in five years, and higher. The economic impact will be significant, as much of Gulf County is timberland.

3.10.2 Red Tide

Red Tide refers to a bloom of harmful microorganisms that color the water while releasing toxins. Because of the tremendous fish and marine life kills, Red Tide consistently poses a threat to the county's seafood industry. **Impacts** include respiratory problems with tourists and residents, fish kills, marine mammal kills, impacts to the fishing industry, economic impacts for residents and the county.

3.10.2.1 History of Events

The last red tide outbreak was in 2011, but did not result in significant fish kills nor did it cause respiratory problems in beach goers. Impacts did result in a decrease in tourism income based on a decrease in rental unit on Cape San Blas. This was probably the result of the media exposure of the red tide outbreak, and it causing fear in beachgoers and vacation home rentals. Figure 3.17 displays the origin of this red tide outbreak.

Figure 3.17: Origination Point for 2011 Red Tide Outbreak in Gulf County

Source: http://myfwc.com/research/redtide/monitoring/historical-events/noctiluca-scintillans-bloom/

3.10.2.2 Probability of Red Tide

There is no data on prior event impacts, and it is very hard to predict future impacts, given the lack of historical data. The probability of a red tide outbreak in Gulf County is extremely low.

3.10.2.3 Vulnerability of Red Tide

Although Gulf County is very vulnerable to a red tide outbreak, it has historically not caused any significant damages. The vulnerable population impacted by a red tide outbreak are those who live on Cape San Blas. A red tide outbreak would impact the tourist industry, as beach house renters would not come to Gulf County until the event had passed, causing the loss of rental revenues.

3.10.2.4 Extent

A large red tide outbreak impacting the Gulf County shoreline during peak tourist season (spring-summer) lasting up to two months. This could cripple the tourist industry, and impact the local tax revenues generated by tourists that would not come to Gulf County. This is the maximum extent of damages a red tide outbreak could cause in Gulf County.

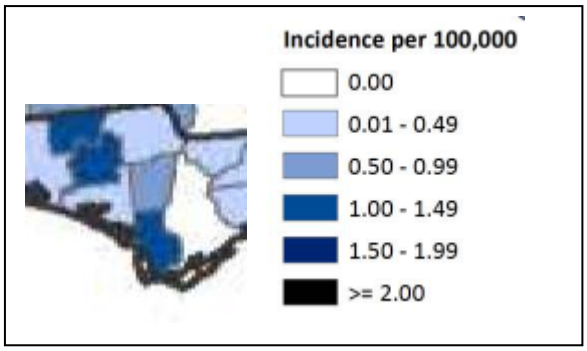
3.10.3 West Nile Virus

West Nile Virus as well as Equine Encephalitis is a mosquito-borne disease that impacts both animals and humans. Those **impacts** include illnesses and death, curtailment of outdoor activities, which can have economic impacts, and the decreased tourist. The Gulf County Health Department keeps tabs on any occurrence of West Nile Virus. In the event of any occurrence, the Health Department will send out community notices warning residents of the event, and provide the proper protective actions to take. West Nile Virus can be fatal to humans. In 2003, one death occurred in Gulf County from West Nile Virus. Some outdoor, evening events were either moved to earlier in the day, brought indoors, or cancelled. This lasted several months until the threat passed. No estimates of economic loss were generated from this event.

3.10.3.1 Historical Events and Probability

The mosquito related infections tracked in the county have included West Nile Virus and Eastern Equine Encephalitis. Cases of both of these viruses have occurred in recent years. The following figure is generated by the Centers for Disease Control. Since 1999, Gulf County has experienced an average occurrence of West Nile Virus of 1.0 – 1.5 per 100,000 in population. The last death caused by West Nile Virus in Gulf County was in 2003.

Figure 3.18: Average Annual Incidence of West Nile Virus Reported to CDC by Counts 1999-2013



Source: http://www.cdc.gov/westnile/resources/pdfs/cummulative/99_2013_AvgAnnualIncidenceNeuroInvasiveCounty.pdf

3.10.3.2 Probability of West Nile Virus

Based on the above, Gulf County has a .255% annual probability of someone contracting West Nile Virus.

3.10.3.3 Vulnerability of West Nile Virus

All residents of Gulf County are vulnerable to West Nile Virus. Gulf County has a mosquito control unit to keep the mosquito population in check. The FDOH in Gulf County monitors all occurrences of West Nile Virus. It is virtually impossible to estimate a dollar value to an outbreak of West Nile Virus.

3.10.3.4 Extent

An event causing heavy rainfall (hurricane, stalled cold front) resulting in countywide ponding of water, promoting a large mosquito explosion, resulting in multiple exposures to the West Nile Virus from residents participating in outdoor events. This could result in multiple infections of the virus, especially with school age children engaged in outdoor events.

3.11 Terrorism

Under the Homeland Security Act of 2002, terrorism is defined as an activity that involves an act dangerous to human life or potentially destructive to critical infrastructure or key resources and is a violation of the criminal laws of the United States or any State in which it occurs and is intended to intimidate or coerce the civilian population or influence a government or affect the conduct of a government by mass destruction, assassination or kidnapping. **Impacts** can include damage to critical infrastructure, death, injuries, community trauma, and more. There have been no terrorist events in Gulf County, yet one could occur anywhere in County.

3.11.1 Historical Events

There have been no terrorist attacks within Gulf County. There have been several events statewide that could have originated in Gulf County, or any other rural county. Gulf County sponsors several annual festivals and holiday celebrations. The potential for a terrorist event is remotely possible.

3.11.2 Probability of Terrorism

Given the rural nature of Gulf County, and given it is not a major tourist mecca, the probability of a terrorist attack occurring in Gulf County is extremely low.

3.11.3 Vulnerability of Terrorism

Gulf County has a list of critical facilities that if disrupted, could have a large impact on the County. They are listed in *Appendix G.* The water system is of greatest concern to the County, and would impact the most people. Also, Gulf County has several large outdoor events and festivals which involve many residents and visitors. Such gatherings can be targets for a terrorism event.

3.11.4 Extent

The LMS Committee believes that an attack on the water system in Gulf County would have the most impact. The water delivery system is on the list of critical facilities. A compromised water delivery system could impact hundreds of residents before it was identified.

4.0. Mitigation Goals and Policies

This section of the LMS describes the goals established by the Committee and the current programs, policies and plans that support mitigation. In addition, a catalog of organizations with mitigation functions is provided.

4.1. Goals for the Mitigation Plan

The county has established a number of goals to guide its work in the development of this plan and focus the efforts of the group in the mitigation planning effort to achieve an end result that matches the unique needs, capabilities and desires of the participating jurisdictions. The goals selected by the Committee for the planning process are those listed below in Table 4.1. They are related to the broad mitigation needs and capabilities of the communities involved, rather than addressing a specific hazard type or category. Therefore, the county's mitigation goals, by definition, are "multi-hazard" in scope and can be described as statements of the desired "mitigation-related capabilities" that will be present in each participating jurisdiction in the future as the goals are achieved." Table 4.2 demonstrates how these mitigation goals are reflected in other current policies.

In the planning approach used by the Committee, the goals are established for the entire planning area and all of the participating jurisdictions. For the 2015 update of the Gulf County LMS, the goals and objectives from the 2010 LMS were distributed to the entire LMS Committee. The Committee then met to update the 2010 goals and objectives. They are provided below.

Table 4.1: Ranked Mitigation Goals

Ranking	Goal
1	Protect the health, safety and welfare of the community's residents and visitors from disasters
2	Support effective hazard mitigation programming throughout the community with local government policies and regulations to reduce our vulnerability to known hazards in Gulf County, Port St. Joe, and Wewahitchka.
3	Local government will have the non-delegable duty to develop, implement and maintain effective mitigation programs.
4	Minimize property damage to homes, institutions and places of employment in the community.
5	Maintain the condition of coastal and riverine environmental systems, especially those that provide natural protection and have economic value.
6	Maintain the availability and functioning of the community's infrastructure during a disaster
7	Seek preventative measures that would reduce loss and the need for response and recovery measures.
8	Promote the economic vitality of the community.
9	Protect scenic, historical and recreational community resources.
10	Promote community awareness of local hazards and the techniques to minimize vulnerability to those hazards.
11	Coordinate with other government agencies to enhance regional mitigation efforts.
12	Minimize government expenditures for public goods and services.
13	Maintain continuity of local government operations after disasters.
14	Maintain emergency response readiness.

Table 4.2: Goals Identified in Existing Policy Objectives

Mitigation Goals as Policy Objectives	Source
1. Protect the health, safety, and welfare of the community's residents and visitors from disasters.	
To protect human life and health;	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9} • Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L • Port St. Joe Floodplain Ordinance
The Primary objective of the Gulf County Comprehensive Emergency Management Plan is to minimize the loss of lives and property and to reduce human suffering resulting from any type of disaster, whether natural or man-made.	Gulf County Comprehensive Emergency Management Plan Objectives (Part I, Sect H, p. 22-23)
2. Support effective hazard mitigation programming throughout the community with local government policies and regulations.	
…the unified development code… requires land development to be compatible with the topography, natural resources, soil conditions, and availability of facilities and services.	Comprehensive Plan, Land Use Element Objective 1.1
Gulf County will promote the redevelopment and renewal of blighted areas within the county by continuing to provide funding at or above existing levels for infrastructure improvements, housing rehabilitation, and related programs.	Comprehensive Plan, Land Use Element Objective 1.2
County shall endeavor to provide for safe, convenient, and efficient motorized and non-motorized traffic flow by implementing the policies of the Comprehensive Plan	Comprehensive Plan, Traffic Circulation Element Objective 1.1

Mitigation Goals as Policy Objectives	Source
County will conserve its potable water resources…(by coordinating with NWFWMD to develop conservation strategies, Policy 1.4.1, and by adopting procedures for emergency water conservation, Policy 1.4.2).	Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element. Objective 1.4
3. Local government will have the non-delegable duty to develop, implement, and maintain effective mitigation programs.	
4. Minimize property damage to homes, institutions, and places of employment in the community.	
To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas;	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(6) • Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L
County will seek to eliminate substandard housing conditions and encourage the structural and aesthetic improvement of existing housing by adopting a minimum housing code.	Comprehensive Plan, Housing Element Objective 1.2
County will develop and implement a program for housing conservation, rehabilitation, or demolition as local conditions dictate.	Comprehensive Plan, Housing Element Objective 1.5
5. Maintain the condition of coastal and riverine environmental systems, especially those that provide natural and beneficial functions and have economic value.	
County will protect the functions of natural groundwater recharge areas and natural drainage features…	Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element. Objective 1.5
Conventional septic tank systems shall be prohibited within 150 feet from coastal waters and wetlands (including , salt marsh areas) within the Bayside area depicted on the revised Future Land Use Map, and shall be prohibited within 75 feet of coastal waters and wetlands (including salt marsh areas) within the Gulf side area depicted on the revised Future Land Use Map. Lots or parcels of record which existed prior to January 14, 1992, which cannot be developed without placement of the septic tank within the 150 foot setback, may be exempted from the 150 foot setback requirement, but the septic tank shall be placed as far landward as possible. The minimum setback distance for buffering other Gulf County wetlands or water bodies shall be 75 feet as required by Florida Statutes 381-.031	Septic Tank Setbacks {LDR 4.01.04 (E), page IV-7}
The coastal resources of Gulf County, including wetlands, living marine resources, coastal barriers, and wildlife habitats shall be protected, conserved, or enhanced through the implementation of land development regulations…	Comprehensive Plan Coastal Management Element Objective 1.1
Gulf County shall maintain or improve estuarine environmental quality …	Comprehensive Plan Coastal Management Element Objective 1.3

Mitigation Goals as Policy Objectives	Source
Gulf County shall protect beach and dune systems by preparing, adopting and enforcing construction standards which minimize the impacts of development on these systems and establishes a shoreline restoration policy.	Comprehensive Plan Coastal Management Element Objective 1.4
6. Maintain the availability and functioning of the community's infrastructure during a disaster.	
County will ensure the provision of adequate drainage facilities to minimize adverse impacts from stormwater and stormwater runoff…	Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element Objective 1.6
7. Seek preventative measures that would reduce loss and the need for response and recovery measures.	
8. Promote the economic vitality of the community.	
to minimize prolonged business interruptions;	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(4) • Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L
9. Protect scenic, historical and recreational community resources.	
Gulf County shall protect and restore natural and historic resources by implementing Policies 1.4.1 through 1.4.10 and by continuing to enforce existing regulations. (named resources include well fields, aquifer recharge areas, areas subject to flooding, environmentally sensitive areas such as wetlands and floodplains, open spaces, and identified historic and archaeological resources).	Comprehensive Plan Land Use Element Objective 1.4
Gulf County will adopt land development regulations … which encourage the protection or sensitive reuse of historic resources.	Comprehensive Plan Coastal Management Element Objective 1.6
10. Promote community awareness of local hazards and the techniques to minimize vulnerability to those hazards.	
to insure that potential homebuyers are notified that property is in a flood area.	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(7) • Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L
To conduct public outreach and educational programs on floods and all other hazards.	• Gulf CEMP, ESF 14 Annex
11. Coordinate with other government agencies to enhance regional mitigation efforts.	
12. Minimize government expenditures for public goods and services.	
to minimize expenditure of public money for costly flood control projects;	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(2) • Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L • Port St. Joe Floodplain Ordinance
to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the	• Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(5)

Mitigation Goals as Policy Objectives	Source
general public; to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in the floodplains	• Wewahitchka Floodplain Mgmt Ordinance No. 2014-1170L
13. Maintain continuity of local government operations after disasters.	
Entire Gulf County COOP Plan is directed at providing continuity of operations, and continuity of government	• Gulf County COOP – entire plan
14. Maintain emergency response readiness.	
Entire Gulf County CEMP is directed at readiness, which mitigates all hazards	• Gulf County CEMP – entire plan

4.2. Organizations with Mitigation Functions

An essential part of getting things done is coordinating with others. This means knowing what agencies are available to help, what it is that those agencies do and how their operations are supposed to work with others. Tables 4.3, 4.4, 4.5 and 4.6 are lists of federal, state, regional and local organizations with descriptions of the mitigation functions they perform. Table 4.7 also catalogs utility companies in the area and indicates their infrastructure functions.

Table 4.3: Federal Organizations and Mitigation Functions

Organization	Mitigation Functions
Federal Emergency Management Agency (FEMA)	Post-disaster relief and assistance, National Flood Insurance Program, Community Rating System, Hazard Mitigation Grant Program, Repair and Restoration of Disaster-Damaged Historic Properties program. Hazardous Materials Training Program for Implementation of the Superfund Amendment and Reauthorization Act makes funding available to provide training designed to improve emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals.
US Army Corps of Engineers	Intercostal waterways, dam maintenance, dredge and fill permitting, wetland permitting, emergency protection from erosion caused by flooding.
US Department of Defense	Post-disaster relief and assistance.
US Department of Commerce	Small Business Administration loans for individual relocation and repair or flood proofing. Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program makes grants for enhancement of sustainable fishing industries.
US Department of Agriculture	Soil Conservation Service is a possible source for Wetland Reserve program, flood hazard studies, and levee infrastructure improvement funds. Rural Development program provides low cost loans to rural communities for public services and infrastructure.
US Environmental Protection Agency	Chemical Emergency Preparedness and Prevention Technical Assistance Grants Program provides funds for chemical accident prevention activities and emergency preparedness for chemical accidents. Pollution Prevention Grants Program provides grants to implement pollution prevention projects. Sustainable Development Challenge Grants encourage partnerships among community, business, and government entities to work cooperatively to

Organization	Mitigation Functions
	develop flexible, locally-oriented approaches that link environmental management and quality of life activities with sustainable development and revitalization
National Estuarine Research Reserve	Promotes preservation of the Port St. Joe River basin and estuary; Provides information on ecological health of estuary
US Department of Housing and Urban Development	The Community Development Block Grant program (CDBG), although administered by the state, originates from the HUD. The CDBG program provides funds to local governments under a variety of programs (neighborhood revitalization, commercial revitalization, economic development, and housing rehabilitation). Congress may allocate additional funds for post-disaster recovery. All projects must benefit primarily (51%) low to moderate-income people.
General Services Administration	Disposal of Federal Surplus Real Property program provides equipment to local government at discounts up to 100%.

Table 4.4: State Organizations and Mitigation Functions

Organization	Mitigation Functions
Governor's Office of Planning and Budgeting	Review of federal assistance applications, intergovernmental coordination.
Florida Department of Economic Opportunity	Local planning assistance and review, comprehensive plan amendments and evaluation, disaster preparedness, response, recovery, and mitigation
Florida Communities Trust Program	Provides financial and technical assistance to acquire lands that conserve natural resources, correct undesirable development patterns, restore degraded natural areas, enhance resource values, restore deteriorated urban waterfronts, reserve lands for later purchase, use innovative land acquisition methods, and provide public access to surface waters. Land acquisition grants, loans, and matching grants are available through the P-2000 program.
Florida Coastal Management Grants Program	Local governments within Florida's 35 coastal counties are eligible to apply for about $1,200,000 for project subgrants for planning small-scale capital improvements, acquisition, and technical assistance.
Waterfronts Florida	Designated communities receive a combination of technical assistance and limited financial assistance for the purpose of developing a plan for revitalizing traditional working waterfronts.
Community Development Block Grant (CDBG)	Community project grants are awarded to applicants on a funds available basis according to a project score that depends on the degree the project benefits very low, low, and low to moderate-income populations within the community.
Emergency Management Preparedness and Assistance Trust Fund (EMPA)	Provides competitive grants to state or regional agencies, local governments, and private non-profit organizations to implement projects that will further state and local emergency management objectives.
State Housing Initiatives Partnership (SHIP)	Funding for improving local housing for low-income households.
Florida Department of Environmental Protection	Environmental studies, water facilities (stormwater, potable water, wastewater), wetland permitting, landfill permitting. Drinking or waste water system loans. Fisheries management
Florida Department of Transportation	Local transportation planning assistance, long-term (five year) state transportation planning.

Organization	Mitigation Functions
Florida Dept. of Health	Public health services, septic tank permitting.
Florida Division of Forestry	Forest management, prescribed burning, fire-fighting, agricultural support, fire hazard awareness programs, burn permits, fire-fighting equipment, aerial surveillance equipment
Flood Mitigation Assistance	Federally funded state program providing 75% of cost to elevate or relocate repetitively damaged properties in NFIP communities.

Table 4.5: Regional Organizations and Mitigation Functions

Organization	Mitigation Functions
Apalachee Regional Planning Council (ARPC)	Local planning assistance, grant writing assistance, grant program administration.
Northwest Florida Water Management District (NFWMD)	Regional and local water studies/planning assistance, wetland permitting, dam /impoundment permitting. Payments in Lieu of Taxes Program provides compensation to counties
Local Emergency Planning Committee (LEPC)	Planning, regional coordination, education and awareness regarding hazardous materials public safety issues. LEPC is organized in conjunction with the Apalachee Regional Planning Council.
American Red Cross	Disaster planning, disaster awareness, disaster response training and post-disaster assistance
Salvation Army	Post-disaster assistance

Table 4.6: Local Organizations and Mitigation Functions

Organization	Mitigation Functions
City of Port St. Joe	Local land use planning, conduit for local hazard information, public works, drainage, sewer system, water system.
City of Wewahitchka	Local land use planning, conduit for local hazard information, water system, sewer system, local drainage maintenance.
County Planning and Community Development	Local land use planning, community development, conduit for local hazard information and community analysis.
County Planning and Building department	Enforcement of local building codes including anchoring of manufactured housing, registration of mobile homes, permit elevated of structures in flood zones, site review.
County Health Department	Medical laboratory, water testing, soil testing, immunizations, distributes health related information and emergency medical staff.
County EMS Department	Emergency medical technical services.
County Senior Citizens Association	Advocate for senior issues, conduit for information.
County School District	Placement of schools, use of schools as shelters.
County Sheriff's Office	Law enforcement, evacuation support, traffic control.
County Emergency Management Department	Coordination of local disaster preparation, response, recovery, and mitigation activities
County Road and Public Works Department	Local road repair, bridge maintenance, culvert maintenance, debris removal, sewer maintenance, water system maintenance
County Volunteer Fire Departments	Fire fighting and first responders to hazardous material spills.
County Extension Service	Information on how to prevent soil erosion.

4.3 Plans, Programs and Policies Examination

All county wide plans will be reviewed on an annual basis, during the Annual LMS meeting organizations will evaluate all policies and procedures to ensure up to date county ordinances and codes are being utilized. Immediately following the code and ordinance update, is a quick overview of the key policy issues with respect to mitigation that should be addressed in the LMS and eventually incorporated into the county's long-term planning process. Descriptions of Federal, state, regional, and local (county and city) policies that pertain to hazard mitigation can be found in Appendix D: Evaluation of Mitigation Policies. Although these policies exist in source plans and documents, they have been summarized as an accessible support to mitigation planning and funding. Many grant applications require that proposed projects conform to existing policies. Thus, these policy summaries can be used to find the policy support needed for a local project or initiative. These mitigation policies have also been evaluated in terms of how well they are being implemented within each jurisdiction. These evaluations can serve as a review of local mitigation policy implementation.

4.3.1. Evaluation of Local Policies Relating to Hazard Mitigation

Coastal High Hazard Area: The county's Comprehensive Plan, Coastal Element Policy 2.1.1 defines the Coastal High Hazard Area (CHHA) "as the area seaward of currently established CCCL and shall include FEMA designated V zones (V = velocity zone, the area where wave action is most destructive)." This definition of the CHHA is adequate for describing the most active area of the coast for the purposes of establishing where building codes must be most stringent to prevent the destruction of coastal structures from the wave action of coastal storms. However, it may be useful to consider other kinds of vulnerability. For example, the CHHA could be based on the evacuation zone of a category 1 hurricane. This would reflect the hazard posed by coastal flooding from a common low magnitude hurricane. Another possible enhancement could be a policy to review and update of CHHA after a hurricane to include areas where a high level of storm damage occurred. This review and revision process could also be part of the review and revision of the LMS.

Development in the Coastal High Hazard Area (CHHA): Land use within the CHHA has been consistent with Comprehensive Plan policies favoring location of water-dependent uses in the port area and low-density residential development (1 unit per acre) on Bay and Gulf front property. The problem areas for development are the high erosion areas of Cape San Blas (near Stump Hole or the area of the Cape where it takes a sharp turn westward towards the Cape San Blas State Park). The road in this area was washed out from Hurricane Opal and could be washed out again from any modest hurricane. The vulnerability of the road to erosion also affects all the property owners who live beyond this point. State building codes take into account the long-term erosion rates and should be adequate to establish building setbacks for new construction. However, some undeveloped lots in the Stump Hole area have already experienced erosion to the degree that the lots may not have sufficient setback space to legally build a useful structure. The county is looking into acquiring some of these lots to prevent land use that could accelerate erosion in this vulnerable area. There is a possibility that the peninsula could be breached eventually, which would require the construction of a bridge to continue road service to the far end of the Cape. In addition, some older existing housing on the Cape are vulnerable to long-term erosion. In terms of long-term planning, the county will face a choice between expensive beach

re-nourishment projects to continually rebuild the beach that is lost to erosion, and facing additional loss of beachfront property.

Local Development Codes: The County has implemented coastal development codes but has not imposed stricter standards than the state because it lacks the resources to enforce regulations. Issues that need addressing and coordination with state agencies for remediation and mitigation are:

- Enclosure of the area underneath the elevated portion of coastal structures.
- Location and design of septic systems in erosion prone areas.
- Enforcement of stormwater permits.

From the county's point of view, these issues might be solved with more vigorous enforcement of state rules and permits by state agencies. Coordination between local governments and state agencies might improve the ability to understand the areas of jurisdiction and improve enforcement or implementation of existing policies.

Building Codes: Codes are implemented and enforced. A possible enhancement would be to extend the coastal building zone to encompass the entire coastal community. This zone currently extends 1,500' from the shore and buildings within this zone require a variety of specific building techniques (such as number of nails per foot and anchoring techniques) to make structures more weather resistant. Building in excess of 2000 square feet must also be engineered (certified by an engineer to meet minimum requirements for weather resistance). Extending the coastal building zone to the Gulf Canal would allow the zone to encompass the entire coastal community.

Post-Storm redevelopment: There is not a specific post-storm redevelopment plan other than the usual provisions to favor particular land uses and avoid infrastructure and critical facilities in the CHHA. The LMS could identify specific mitigation measures and policies for post-storm redevelopment. In addition the LMS, or a portion thereof, could serve as the redevelopment portion of the county's Comprehensive Plan.

Flood hazards and Stormwater: Port St. Joe experiences stormwater or flash flooding during heavy rainfall along US Hwy 98, northern sections of the city, and in the Gulfview Pines area. Current stormwater regulations are minimal and the county relies on state enforcement of stormwater permits to address potential stormwater problems with respect to new development. However, state regulations only address larger developments (5 acres or more). A stormwater plan is included as one of the mitigation project proposed by the LMS Committee.

Evacuation: Policies exist for evacuation on St Rd 71. In practice, most evacuation coordination occurs through county's Board of County Commissioners and Emergency Management Department. The traffic capacity on St Rd 71 should be increased to facilitate the evacuation of residents from the county's coastal region. In addition, evacuation consideration needs to be given anticipation of future development in the county's coastal region.

Non-Flood Hazards: The county's Comprehensive Plan does not address non-flood hazards. Non-flood hazards are addressed in the County's Comprehensive Emergency Management Plan (CEMP) but no specific county-wide land use or development policies that consider mitigation of

non-flood hazards exist. The LMS should identify policies to minimize non-flood hazards such as fire, hazardous materials, transportation accidents and severe wind.

Hazard Awareness: No policies substantially address hazard awareness, although the county's Emergency Management Department publishes hurricane and flooding awareness materials. Additional measures might include posting high water marks along river banks and shore lines, publishing insurance rates for improved building standards, and posting evacuation information in rental properties, resort properties and real estate sales contracts.

5.0 Compilation of Mitigation Initiatives

This section of LMS contains the compilation of the mitigation initiatives that are the result of the earlier planning efforts by the Committee. Typically, they will involve strengthening a structure against a hazard, elevating a structure above a flood hazard, relocating a structure away from a hazard, or removing the structure all together to avoid further damage. In addition, mitigation initiatives can be designed as local government actions or activities designed to reduce further exposure to hazards through policy, hazard information, or incentive. The Committee chose to design mitigation initiatives that address hazards presenting a significant threat to the county's communities, NOT every hazard to which the county has vulnerability. The compilation is provided in two formats.

5.1. Mitigation Projects

A complete list of the mitigation projects can be found in *Appendix F*. Many of the mitigation projects offered focus on new and existing infrastructure. Some of the projects focus on mitigation efforts on existing buildings and infrastructure. All projects will be prioritized by utilizing the cost benefit review. The LMS Committee meet yearly or directly after a major disaster to evaluate and rank mitigation projects. During their yearly meetings the committee review all projects, add new ones, delete ones that were no longer viable, identify those that had been completed, and edit and refine the scope of work for all mitigation projects. The LMS committee will address all the projects on the list on a yearly basis. The Committee will address any new mitigation projects and determine the viability of the project. If the project is viable it will be added to the LMS project list. The projects that are no longer viable will be removed from the list. All completed projects will be moved to the completed list on the LMS project list. The LMS committee identify funding sources, potential hazard mitigation information, and actions that can be incorporated to mitigate projects on the LMS project list. During the yearly LMS Committee meeting, all projects will be evaluated with the input of all jurisdictions. The meeting the committee will discuss the project scope of work and make any modifications that may be required to ensure the viability of the project. The committee will review evaluate and update all plans especially the LMS. The jurisdictions will integrate data, hazard information and goals to obtain mitigation plans for each project. The LMS project list will include the mitigation plan for each project to ensure that all hazards are being mitigated and a plan to ensure that the project is a viable. All jurisdictions and the public will provide input and updates on all mitigation projects included in the LMS project list. The list is reviewed and updated at a minimum on a yearly basis. The following list is a result of the work effort of the LMS Committee. Projects will be prioritized with life safety ranking the highest, followed property protection and lastly county wide benefits. When an event that impacts the area such as Hurricane Michael the process for prioritizing the projects may include areas that need

repair or mitigation to ensure the safety of the public. The projects that were completed or deleted because they were no longer viable are included in *Appendix E.*

5.2 Funding Sources

The following is a list of the primary funding sources that could be used for mitigation projects, in some fashion. The Gulf County LMS Working Committee will make every attempt to secure funding from any of these sources for identified mitigation projects.

- Hazard Mitigation Grant Program
- Community Development Block Grants
- Florida Communities Trust
- Florida Small Cities Community Development Block Grant Program
- Emergency Management Preparedness and Assistance Trust Fund
- Flood Mitigation Assistance Program
- Pre-Disaster Mitigation Program
- State Housing Initiative Partnership Program
- Low-Income Home Energy Assistance and Weatherization
- Florida Department of Agriculture and Consumer Services/Division of Forestry Wildfire Grant Funds
- Florida Department of Transportation
- National Resource Conservation Services
- US Corp of Engineers
- Office of Domestic Preparedness

The most probable sources for funding for mitigation projects are the HMGP and the PDM programs. Because the funding sources are specific to mitigation, a more detailed explanation of these two programs is listed below.

5.2.1 Hazard Mitigation Grant Program (HMGP)

The Hazard Mitigation Grant Program is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 93-288 as amended). It is a partnership that is designed to assist states, local governments, private non-profit organizations and Indian Tribes in implementing long-term hazard mitigation measures following a major disaster declaration. The objectives of the Hazard Mitigation Grant Program are: 1) To prevent future losses of lives and damage to property due to disasters; 2) To implement state or local hazard mitigation plans; 3) To enable mitigation measures to be implemented during immediate recovery from a disaster; and 4) To provide funding for previously identified mitigation measures that benefit the disaster area.

5.2.2 Pre-Disaster Mitigation Grant Program (PDM)

The PDM program was authorized by Section §203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended by Section §102 of the Disaster Mitigation Act of 2000, to assist communities to implement hazard mitigation programs designed to reduce overall risk to the population and structures before the next disaster occurs. The Florida Division of Emergency Management solicits project applications and encourages local governments to identify and submit applications that address eligible mitigation activities that are designed to

reduce your community's overall risk to hazards. The strength of the funding available has wavered through the years, and has been significantly reduced from prior year's levels.

5.3 Jurisdictional Action Items

Section 201.6(c)(3)(iv) of 44 CFR requires that individual action items for each jurisdiction requesting FEMA approval of or credit for the plan. For FEMA program funding these mitigation measures must be cost effective, environmentally sound, and technically feasible. The local jurisdiction and the State must prioritize the measures based on these criteria.

Refer to Table 5.1 for a complete listing of proposed mitigation projects. Each municipality submitted projects for consideration, and many of the countywide initiatives will impact the Cities of Port St. Joe and Wewahitchka as well.

5.4 Monitoring, Maintenance and Updating the LMS

The Gulf County LMS Committee recognizes that in order to be effective, the Gulf County LMS needs to be reviewed and updated on a regular basis. The following procedures fulfill this process:

1. The LMS Committee will meet on at least an annual basis to review the local mitigation strategy to ensure it is current and reflects changing conditions within the community. This should provide adequate time to incorporate any needed revisions prior to the next grant cycles. The LMS Committee will meet more frequently if needed, such as in a post-disaster environment.

2. The Chairperson of the LMS Committee will be responsible for convening the Group.

3. The review of the LMS will include the recognition of completed projects and/or programs, the identification of new mitigation initiatives, an evaluation of the impact of recommended changes to city and/or county plans and ordinances identified during the local mitigation process; and an evaluation of any changes in the hazard identification and vulnerability assessment.

4. As needed, additional public and private sector interests will also be invited to participate in the review, as well as representatives from neighboring jurisdictions. Changes recommended by the LMS Committee will be forwarded to the Gulf County Emergency Management Office for consolidation in the CEMP. Gulf County Emergency Management will forward recommended revisions to the County Commission and City Councils for review and determination of action. Any changes to the LMS will be made available to the public for review and comment.

5.4.1 Future Maintenance

The Gulf LMS Committee is committed to continuing the LMS process into the future. It is the intention of the Committee to meet at least once a year to discuss mitigation initiatives, evaluate progress made on each project and achieving its purpose and the prioritized goals, and review

the overall LMS plan. Each of these meeting are public meetings, and notices for the public to attend appear in the local media outlets. If necessary, the LMS will be updated by the Committee Chairperson at the end of each annual meeting to reflect any new initiatives wanted by the LMS Committee. A report is prepared to summarize the status of the LMS and its implementation annually. A strong emphasis on project successes and the integration of the LMS into the Comprehensive Plan will be the theme of the continued LMS development. Every five years, the LMS Committee will incorporate the Comprehensive Plan changes in land use trends into the update of the vulnerability assessments. In efforts of ensuring that the LMS Plan is current, the LMS Chairperson will review the LMS plan on a yearly basis. The LMS chairman will address the changes in the LMS with the committee during their annual meeting. The LMS planner will review and update the LMS plan 18 months prior to the expiration date. This timeframe will allow the LMS Committee to meet and discuss updates to the new Local Mitigation Strategy Plan. The LMS Committee will provide information for the completion of the updated LMS plan.

Gulf County Emergency Management will continue to monitor and lead in scheduling the LMS Committee efforts. The Director of Emergency Management has been selected each year for the past five years to chair the Committee. Each year, a Chairperson will continue to be elected by the LMS Committee. A notice to the public and neighboring jurisdictions will be made before every meeting, and the results of the meetings will be submitted to the public and to the County Commission and City Councils. Special meetings of the LMS Committee will be called, as needed, especially if there has been a disaster event resulting in Gulf County being included in a state Presidential Disaster Declaration.

It is the goal of the LMS Committee, as implemented through the Chairperson, to maintain, and when necessary, update this Plan, ensure it has practical application, is consistent with guidelines set forth by the State of Florida and Federal agencies, and continues to support the mitigation goals and successes in Gulf County.

5.4.2 Incorporation with Other Planning Mechanisms

The Gulf County LMS Plan is to be adopted by the Gulf County Board of County Commissioners, the City of Wewahitchka and City of Port St Joe as an integral planning document used by the County along with the Comprehensive Emergency Management Plan (CEMP) and the Comprehensive Plan (COMP). As these Plans are updated with future enhancements and modifications, the LMS Plan will be consulted to be sure that these changes consider the impacts of natural disasters and potential mitigation strategies.

Members of the LMS Committee will suggest mitigation opportunities when any action is proposed by the municipal councils, or the Board of County Commissioners using the following steps:

1. When one of the documents or plans identified above is due for an update, the plan will be reviewed by the LMS Committee for recommendations to include mitigation actions or activities.

2. When an ordinance, code or revision to the Land Development Regulations are proposed, the chair of the LMS Committee will provide recommendations, if warranted, to the governing body for consideration. If this occurs in a municipality, then the municipal member of the LMS Committee will make the recommendation.

3. Upcoming plan reviews will be discussed at the LMS Committee meetings on a regular basis to identify what plan is due for update, and when.

Since 2015, the LMS risk assessment was used as a basis to update the Gulf County Comprehensive Emergency Management Plan, and in the development of the Gulf County Logistics Plan, Disaster Housing Plan, Debris Management Plan, and the Continuity of Operations Plan. The information contained in the LMS was also used where appropriate in the update of the COMP after the Evaluation and Appraisal Report (EAR) was issued. The LMS was also shared with the Apalachee Regional Planning Council for possible inclusion in any documents they develop.

The LMS Committee will continue as the lead agency for the promotion of mitigation against natural disasters. This group will continually monitor the situation in Gulf County, City of Port St Joe and City of Wewahitchka and propose new initiatives and projects, as required. These new initiatives will be considered in conjunction with the other planning mechanisms and their subsequent goals. The Gulf County COMP and the Future Land Use Map (FLUM) specifically, will incorporate risks from the various hazards into the planning for future land use. Capital improvement plans will need to incorporate a study of potential impacts from natural hazards and prioritize any projects that will reduce the vulnerability to these hazards.

The COMP Plan references the CEMP and the CEMP references the LMS Plan. Ensuring the LMS Plan, COMP Plan, and the CEMP are synchronized will continue to be a primary focus of the LMS Committee. There is a symbiotic relationship between growth management, represented through the COMP Plan, emergency management, represented through the CEMP, and hazard mitigation, represented by the Gulf County LMS. Each plan compliments and is in sync with all areas of Gulf County, City of Port St Joe and the City of Wewahitchka. The COMP Plan's Future Land Use Element is especially important to prevent future damages to future growth. The CEMP establishes a clear strategy for protecting lives and property from the impacts of these hazards, and the LMS provides direction on how to prevent these losses.

5.5 Continued Public Participation

Section 201.6(c)(4)(iii) of 44 CFR requires a discussion on how the community will continue public participation in the ongoing mitigation planning process. The community is encouraged to participate in the on-going mitigation planning process in Gulf County. There will be three primary ways for the public to continue to participate in this LMS process.

1. LMS Committee Meetings – The annual LMS Committee meetings will be open to the public. Each meeting will be publicly advertised and held in a public and easily accessible location. Citizens and private organizations will be encouraged to attend these meetings and provide their comments and feedback.

2. Internet Correspondence. – The adopted LMS plan has been posted on the Gulf County Emergency Management website for review. Comments and feedback can be emailed to the Emergency Management Office who will convey the information to the LMS Committee.

3. Placement of Plan in the Gulf County Library – A copy of the LMS Plan will be permanently placed in the Gulf County Library for public review and comment. Such comments will be

directed to the Gulf County Emergency Management, who will consolidate them and give them to the LMS Committee.

5.6. Status of Plan Promulgation

Promulgation of the LMS is a very important step in assuring its implementation through the implementation and actual functioning of the mitigation incorporated into it. The LMS is formatted to place all of the jurisdiction-specific information into discussions throughout this document. Jurisdiction-specific information has been developed through the efforts of the personnel representing the corresponding individual jurisdiction or organization participating in the planning process.

It is the expectation of the Committee that governing body or executive leadership of each participating jurisdiction or organization will review, consider, and act on the information provided in the LMS. If the governing body acts in a positive manner, this is basically an approval or endorsement of the proposed mitigation initiatives. This approval or endorsement, with or without modification by the governing body, represents both consent and commitment by the representatives of that organization or jurisdiction to seek the resources needed to implement the priority initiatives contained therein. In addition, resolutions signed by each jurisdiction have been included with this document as approval of the LMS and inter-agency agreement to implement its initiatives. Only through actual implementation of the proposed mitigation initiatives contained in the LMS can it actually help to make the county a disaster resistant community.

Appendix A: Gulf County LMS Committee Bylaws

Article I: Purpose of the Committee
The purpose of the Committee is to decrease the vulnerability of the citizens, governments, businesses and institutions of the county to the future human, economic and environmental costs of natural, technological and societal disasters. The Committee will develop, monitor, implement and maintain a comprehensive plan for hazard mitigation, which will be intended to accomplish this purpose.

Article II: Membership
Participation in the Committee is voluntary by all entities. Membership in the Committee is open to all jurisdictions, organizations and individuals supporting its purposes.

Article III: Organizational Structure
The organizational structure of the Committee shall consist of the Committee, county support staff and other temporary subcommittees as deemed necessary by the Committee.

A. Committee

The Committee shall consist of designated representatives of the following:

- Representatives from the government of Gulf County and the cities of Port St. Joe and Wewahitchka.
- Representatives from organizations and associations representing key business/ industry and community interest groups from throughout the county.
- Other such individuals.

Members of the Committee will be designated by informal resolution, appointment or other action to serve as the official representative and spokesperson for the jurisdiction or organization regarding the activities and decisions of the Committee.

B. Subcommittees

Temporary subcommittees may be established at any time for special purposes by the chair of the Committee, and their membership designated at that time. Membership in the subcommittees is not restricted. There are no requirements for individuals to maintain good standing as members of a permanent or temporary subcommittee.

C. Support Staff

The Gulf County Emergency Management Department serves as the program staff for the Committee and assists in the coordination and support of the Committee's activities.

Article IV: Officers
Any member in good standing of the Committee is eligible for election as an officer. The Committee will have a chair elected by a majority vote of a quorum of the members. The Committee will also elect by majority vote a vice chair. Representatives of both local government and any participating private sector organizations will be eligible for election as an officer. Each will serve a term of one year, and be eligible for re-election for an unlimited number of terms.

The chair of the Committee will preside at each meeting of the Committee, as well as establish temporary subcommittees and assign personnel to them. The vice chair will fulfill the duties and responsibilities of the chair in his or her absence.

The chair of each permanent or temporary subcommittee will be designated from the members in good standing of the Committee by its chair and will serve at the pleasure of the chair of the Committee.

Article V: Responsibilities

A. Committee

The Committee will be responsible for oversight and coordination of all actions and decisions by the Committee and is solely responsible for formal actions in the name of the Committee, including the release of reports, development of resolutions, issuance of position papers, and similar activities. The Committee makes assignments to the subcommittees, coordinates their work and takes action on their recommendations.

In addition, the Committee will have the following responsibilities:

Planning – To identify, analyze and monitor the hazards threatening the county and the vulnerabilities of the community to those hazards, as well as to assist in the definition of actions to mitigate the impacts of those hazards; to define structural and non-structural actions needed to decrease the human, economic and environmental impacts of disasters, and to prepare for consideration and action by the Committee a strategy for implementation of those initiatives in both the pre- and post-disaster time frame; to define the general financial vulnerability of the community to the impacts of disasters; to assist with identification of initiatives to minimize vulnerabilities; and to seek funding sources for all priority mitigation initiatives identified in the mitigation strategy developed by the Committee.

Public Information – To secure public input and comment on the efforts of the support staff; to inform the public about the activities of the Committee; to conduct public information and education programs regarding hazard mitigation; to assist with the conduct of public hearings; and to promote public acceptance of the strategy developed by the Committee.

The responsibilities of temporary subcommittees will be defined at the time they are established by the chair of the Committee.

B. The Committee

Technical, clerical and other types of support activities to the Committee and sub-committees will be provided through the county or other agency or organizational staff as designated by the Committee. The Committee will also designate an agency of county to serve as the legal representative and agent of the Committee, and to be empowered under county statutes to accept and disburse funds, enter into contracts, hire staff, and take such other actions as necessary in support of, or for the benefit of, the Committee. Other jurisdictions and organizations may also provide such services on a voluntary basis upon request of the chair of the Committee.

Article VI: Actions by the Committee

A. Authority for Actions

Only the Committee has the authority to take final actions in the name of the Committee. Actions by subcommittees or program staff are not considered as final until affirmed by action of the Committee.

B. Meetings, Voting and Quorum

Meetings of the Committee and its subcommittees will be conducted informally but may be carried out in accord with Robert's Rules of Order, if and when deemed necessary by chair of the meeting. Regular meetings of the Committee will be scheduled at least quarterly with a minimum of 10 working days' notice. Subcommittees will meet at least quarterly prior to Committee meetings, or more frequently as deemed necessary, at the discretion of their chairperson.

All final actions and decisions made in the name of the Committee will be by affirmative vote of a quorum of the Committee. A quorum shall be 50 percent of the members of the Committee in good standing at the time of the vote. Each member of the Task Force will have one vote. Voting by proxy, written or otherwise, is not permitted.

C. Special Votes

Special votes may be taken under emergency situations or when there are other extenuating circumstances that are judged by both the chair and vice chair of the Task Force to prohibit scheduling of a regular meeting of the Committee. Special votes may be by telephone, e-mail and / or first class mail, and shall be in accord with all applicable statutes for such actions.

D. Public Hearings

When required by statute or the policies of the county, or when deemed necessary by the Committee, a public hearing regarding actions under consideration for implementation by the Committee will be held. All formal Committee meetings will be conducted as public hearings.

E. Documentation of Actions

All meetings and other forms of action by the Committee and permanent subcommittees will be documented and made available for inspection by the public.

Article VII: Adoption of and Amendments to the Bylaws

The Bylaws of the Committee may be adopted and / or amended by a two-thirds majority vote of the members in good standing of the Committee. All proposed changes to the bylaws will be provided to each member of the Committee not less than ten working days prior to such a vote.

Article VIII: Dissolution of the Committee

The Committee may be dissolved by affirmative vote of 100% of the members in good standing of the Committee at the time of the vote, by order of a court of competent jurisdiction, and / or by instruction of the county's governing body. At the time of dissolution, all remaining documents, records, equipment and supplies belonging to the Committee will be transferred to the county for disposition.

Appendix B: Documentation of the Planning Process

The Gulf County LMS Committee met at least annually since the last update. Agendas and meeting minutes follow to cover the timeframe from 2015-2020.

[LMS Meeting 3.21.17 –Agenda]

Gulf County Emergency Management Local Mitigation Strategy Meeting
3/21/2017
2:00pm – 3:00pm

Meeting called by: Marshall Nelson

2:00-2:05	**Introduction**
2:05-2:20	**Current LMS Project List** • Provided with Email Meeting Invitation
2:20-2:55	**Project List Updates** • Additional Projects • Completion of Projects • Deletion of Projects
2:55-3:00	**Conclusion** • Q & A

[LMS Meeting 3.21.17– Meeting Minutes/ Sign in Sheet]

Gulf County Emergency Management Local Mitigation Strategy Meeting | MINUTES

Meeting date | 3/21/2017 2:00 PM | Meeting location Gulf County EOC

Meeting called by	Marshall Nelson	Attendees
Type of meeting	Discussion and Evaluation of LMS Project list	[Attendees]
Facilitator	Marshall Nelson	
Note taker	Rachel Jackson	
Timekeeper	Rachel Jackson	

AGENDA TOPICS

Time allotted | 2:00-2:05 | Agenda topic Introduction | Presenter Marshall Nelson

Discussion [Conversation]

Conclusion [Closing]

Action items	Person responsible	Deadline
[Topic]	[Presenter]	[Date | time]
[Topic]	[Presenter]	[Date | time]

Time allotted | 2:05-2:20 | Agenda topic Current LMS Project List | Presenter Marshall Nelson

Discussion [Conversation]

Conclusion [Closing]

Action items	Person responsible	Deadline
[Topic]	[Presenter]	[Date | time]
[Topic]	[Presenter]	[Date | time]

Time allotted | 2:20-2:55 | Agenda topic LMS Project List Updates | Presenter Marshall Nelson

Discussion [Conversation]

Conclusion [Closing]

Gulf County Emergency Management Local Mitigation Strategy Meeting
3/21/2017

Name:	Agency:	Phone:	Email:
MARSHALL NELSON	GULF Co, EM	850-229-9110	mnelson@gulfcounty-fl.gov
Jessica Susich	GULF Co EM	850-229-9110	jsusich@gulfcounty-fl.gov
Jessie Shuler	DOH-Gulf	850-847-8550	jessie.shuler@flhealth.gov
Jimmy Rogers	G-C C C	850 227-8851	
Don Minchew	City of Wewa	850-814-3180	
Chris Buchanan	G.C.S.O.	850 227-1115	cbuchanan@gcso.fl.gov
MARK COTHEAN	GCPW	850-227-4247	MCOTHEAN@GULFCOUNTY-FL.GOV
Brett Lowery	Gulf Co Planning	850.227.9562	blowery@gulfcounty-fl.gov
Marsha Linderman	DOH Gulf + Franklin	850.227.1276	marsha.linderman@flhealth.gov
Rachel Jackson	Gulf Co EM	850-229-9110	rjackson@gulfcounty-fl.gov

[LMS Meeting 9.27.17 – Meeting Notice and Agenda]

From: Rachel Jackson

To: Austin Horton (ahorton@gulfcounty-fl.gov); Ben Guthrie; bprice@gulfcounty-fl.gov; Brett Lowry ; Bryce S. Thomas (bryce.thomas@freshfromflorida.com); Dennis Barfield; Don Minchew (citywewa@gtcom.net); George Knight (gknight@gulfcounty-fl.gov); Gloria Salinard (gloria@rafsg.com); Hannah Anderson (Hannah.Anderson@freshfromflorida.com); Houston Whitfield (hwhitfield@gulfcounty-fl.gov); Jerrick Saquibal (Jerrick.Saquibal@nwfwmd.state.fl.us); Jessica Susich (jsusich@gulfcounty-fl.gov); Jim Anderson (janderson@psj.fl.gov); John Grantland (jgrantland@psj.fl.gov); Lee Collinsworth (lcollinsworth@gulfcounty-fl.gov); Leslie Chapman Henderson (leslie@flash.org); Mark Cothran (mcothran@gulfcounty-fl.gov); Marsha Lindeman (marsha_lindeman@doh.state.fl.us); Marshall Nelson (mnelson@gulfcounty-fl.gov); Matt Herring (mherring@psj.fl.gov); Mike Harrison (mharrison@gcso.fl.gov); Pearce, Bob; Rachel Jackson (rjackson@gulfcounty-fl.gov); Ray Bodrey (rbodrey@ufl.edu); Roy Smith (rsmith@hannoninsurance.com); Tom Williams (tom_williams@uss.salvationarmy.org); Don Butler; Michael Hammond; Ward McDaniels; Jimmy Rogers; Phillip McCroan; Sandy Quinn

Subject: LMS Meeting

Start: Wednesday, September 27, 2017 2:30:00 PM

End: Wednesday, September 27, 2017 3:30:00 PM

Location: Gulf County EOC

Attachments: 2017 LMS Project Updates.docx

The Gulf County Local Mitigation Strategy (LMS) Task Force will be meeting on Wednesday September 27, 2017 to continue the update on our LMS plan and project list. The meeting will take place at the Gulf County Emergency Operations Center (EOC) located at 1000 Cecil G. Costin, Sr. Blvd., Bldg. 500, Port St. Joe, FL 32456, from 2:30pm – 3:30pm ET.

We look forward to you joining us to discuss and update the current list of mitigation projects and their rankings. Please review the attached LMS project list to ensure everything was captured correctly.

Date: Wednesday, September 27, 2017

Time: 2:30 pm – 3:30 pm ET

Where: Gulf County Emergency Operations Center (EOC)

1000 Cecil G. Costin, Sr. Blvd.

Port St. Joe, FL 32456

Gulf County Emergency Management Local Mitigation Strategy Meeting
9/27/2017
2:30pm – 3:30pm

Meeting called by: Marshall Nelson

2:30-2:35	**Introduction**
2:35-2:50	**Current LMS Project List** • Review Current LMS Project List
2:50-3:20	**Project List Updates** • Additional Projects • Completion of Projects • Deletion of Projects
3:20-3:30	**Conclusion** • Q & A

[LMS Meeting 9.27.17 Sign- in Sheet]

Gulf County Local Mitigation Strategy (LMS) Meeting
9/27/17

Name:	Agency:	Phone:	Email:
Chris Buchanan	GCSO	227-1115	cbuchanan@gcso-fl.gov
MARSHALL NELSON	Gulf Co. EM	850-229-9110	mnelson@gulfcounty-fl.gov
Jessica Susich	Gulf Co EM	850-229-9110	jsusich@gulfcounty-fl.gov
Rachel Jackson	Gulf Co EM	850-229-9110	rjackson@gulfcounty-fl.gov
Wanda Stafford	FDEM	850-528-7525	Wanda.Stafford@em.myflorida.com
Brett Lowry	Gulf Co Planning	850-227-4045	blowry@gulfcounty-fl.gov

[LMS Meeting 1.9.2019 – Meeting Agenda/Sign- In Sheet]

From: Rachel Jackson

To: Sandy Quinn (commissioner4@gulfcounty-fl.gov); Ward McDaniel (commissioner2@gulfcounty-fl.gov); David Rich; Jimmy Rogers; "Phillip McCroan"; Warren Yeager - Florida - Gulf County (wyeager@gulfcounty-fl.gov); Michael Hammond (mhammond@gulfcounty-fl.gov); Marshall Nelson; Ben Guthrie; Rachel Jackson (rjackson@gulfcounty-fl.gov); Mark Cothran (mcothran@gulfcounty-fl.gov); Lee Collinsworth (lcollinsworth@gulfcounty-fl.gov); Brett Lowry ; Jim McKnight; Houston Whitfield (hwhitfield@gulfcounty-fl.gov); Jessica Susich; mitch@gulfpa.com; Kelli Jackson (kelli@visitgulf.com); (director@gulfchamber.org); Brad Bailey; bnorris@gulfclerk.com; Dennis Barfield; scherry@gulfcounty-fl.gov; mharrison@gcso.fl.gov; cbuchanan@gcso.fl.gov; Joe Paul (jpaul@gulfcounty-fl.gov); Lynn Lanier; janderson@psj.fl.gov; citywewa@fairpoint.net; mhenning@psj.fl.gov; jgrantland@psj.fl.gov; psj.bkennedy@gmail.com; Jerrick Saquibal (Jerrick.Saquibal@nwfwmd.state.fl.us); arpc1@fairpoint.net; Sarah Hinds (sarah.hinds@flhealth.gov); rbodrey@ufl.edu; Bryce S. Thomas (bryce.thomas@freshfromflorida.com); costinin@gtgcom.net; rsmith@hannoninsurance.com; Dwight Vanlierop (dwight@vlins.com); Florida - Cook Insurance Agency (cbaldwin@my100bank.com); ggraddyins@fairpoint.net; rhpearce@redcrosscpc.org; Tom_Williams@uss.salvationarmy.org; rrobinso9@gulfcoast.edu; jnorton@gulf.k12.fl.us; leslie@flash.org; gloria@rafgc.com

Subject: LMS Taskforce Meeting

Start: Wednesday, January 9, 2019 10:00:00 AM

End: Wednesday, January 9, 2019 11:00:00 AM

Location: Gulf County Emergency Operations Center (EOC)

Attachments: 2019 LMS Project Updates.docx

The Gulf County Local Mitigation Strategy (LMS) Task Force will be meeting on Wednesday January 9, 2019 to continue the update on our LMS plan and project list. The meeting will take place at the Gulf County Emergency Operations Center (EOC) located at 1000 Cecil G. Costin, Sr. Blvd., Bldg. 500, Port St. Joe, FL 32456, from 10:00am – 11:00AM ET.

We look forward to you joining us to discuss and update the current list of mitigation projects and their rankings. Please review the attached LMS project list to ensure everything was captured correctly.

Date: Wednesday, January 9, 2019

Time: 10:00 am – 11:00 am ET

Where: Gulf County Emergency Operations Center (EOC)

1000 Cecil G. Costin, Sr. Blvd.

Bldg. 500

Port St. Joe, FL 32456

Gulf County Emergency Management Local Mitigation Strategy Meeting
1/9/2019
10:00AM – 11:00AM

Meeting called by: Marshall Nelson

10:00 – 10:05	**Introduction**
10:05-10:30	**Current LMS Project List** • Review Current LMS Project List
10:30-10:50	**Project List Updates** • Additional Projects • Completion of Projects • Deletion of Projects
10:50-11:00	**Conclusion** • Q & A

Gulf County Local Mitigation Strategy Taskforce Meeting Sign In
1/9/2019

Name:	Agency:	Phone:	Email:
Jessica Susich	Gulf Co EM	229-9110	jsusich@gulfcounty-fl.gov
Houston Whitfield	Gulf Co. EMS	227-5839	HWHITFIELD@GULFCOUNTY-FL.GOV
MICHAEL GORTMAN	CITY OF WEWA	340-3002	CITYWEWA@FAIRPOINT.NET
Rachel Jackson	Gulf Co EM	229-9110	rjackson@gulfcounty-fl.gov
Marshall Nelson	Gulf Co EM	229-9110	mnelson@gulfcounty-fl.gov
Ben Guthrie	Gulf Co EM/911	229-9110	bguthrie@gulfcounty-fl.gov
TYLER MARSH	SCE, INC.	819-0425	tyler.marsh@southeasterce.com
LANCE WATSON	SCE, INC	340-0586	lance.watson@southeasterce.com
Duke Wiser	DOH-Gulf	247-8550	robert.wiser@flhealth.gov
Randi Sandoval	DOH-Franklin	227-3846	Randi.Sandoval@flhealth.gov
Sarah Hinds	DOH-Gulf/Franklin	227-8366	Sarah.Hinds@flhealth.gov
Zach Hodges	DOH-Gulf/Franklin	227-5550	Zachary.Hodges@flhealth.gov
Sandy Martin	DOH-Gulf Franklin	227-4145	Sandy.Martin@flhealth.gov
Jim McKnight	Gulf County Economic Development	832-0227	jmcknight@gulfcounty-fl.gov
MIKE HARRISON	G.C.S.O.	227-1115	mharrison@gcso.fl.gov
Becky Norris	Clerk	227-6112	bnorris@gulfclerk.com
Rhonda Woodward	Clerk Dir. of fin.	227-2317	RWOODWARD@gulfclerk.com
Ben Guthrie	Gulf Co. EM.	229-9111	bguthrie@gulfcounty-fl.gov
Kelli Godwin	Gulf TDC	229-7820	kelli@visitgulf.com

[LMS Meeting 3.2.2020 – Meeting Agenda/Sign-In Sheet]

Gulf County Emergency Management Local Mitigation Strategy Meeting
3/2/2020
1:30PM – 3:00PM

Meeting called by: Marshall Nelson

1:30 – 1:40	**Introduction**
1:40-2:40	**Current LMS Project List** • Review Current LMS Project List
2:40-2:50	**Approval Project List**
2:50-3:00	**Conclusion** • Q & A

Gulf County Local Mitigation Strategy (LMS) Taskforce Meeting
3/3/20

Name:	Agency:	Phone:	Email:
Hunter Bailey	DOH-Gulf	850-227-4330	William.bailey@flhealth.gov
John Grantland	City of PSJ	850-229-8847	jgrantland@psj.fl.gov
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Jessica Susich	Gulf Co Emgmt	850-229-9110	jsusich@gulfcounty-fl.gov
Gayla Burge	Gulf Coast Elec	850-639-1749	gburge@gcec.com
Angie Morris	Gulf Coast Elec	850-381-3908	amorris@gcec.com
Zach Hodges	DOH-Gulf	8502275350	zachary.hodges@flhealth.gov
Rachel Jackson	Gulf Co EM	850-229-9110	rjackson@gulfcounty-fl.gov
Austin Horton	GC BOCC	625 2600	ahorton@gulfcounty-fl.gov
Raymond Hart	GCBOCC	840-3913	rhart@gulfcounty-fl.gov
Mark Cotham	GCBOCC	227-4247	mcotham@gulfcounty-fl.gov
Jim Roberts	FDEM	850 519 8636	jim.roberts@em.myflorida.com

Appendix C: Committee Operating Procedures

This appendix provides supplementary information for Section 2: The Planning Process.

Procedure 1.0: Background and Purpose

The Committee was established to identify and recommend projects and programs that, when implemented, would eliminate, minimize, or otherwise mitigate the vulnerability of the people, property, environmental resources and economic vitality of the community to the impacts of future disasters. These identified projects and programs are termed "mitigation initiatives" and constitute the principal component of the LMS. The fundamental purpose of the LMS is to guide, coordinate and facilitate the efforts of the agencies, organizations and individuals participating in the Committee as they seek funding, authorities or other resources necessary for implementation of the identified mitigation initiatives.

The Committee has established an organizational structure to support its operations, and has adopted by laws that govern the membership and functioning of the group. To complement these bylaws, these procedures have been prepared to define how this organizational structure identifies, evaluates and processes the mitigation initiatives needed to reduce the community's vulnerability to future disasters. The procedures identify the steps through which newly proposed mitigation initiatives are evaluated and coordinated among the participants in the Committee, and then incorporated into the LMS. The procedures also define how the local mitigation plan will be routinely updated, enhanced and maintained in the future.

Procedure 2.0: Overview of the Procedure

This procedure defines the fundamental operations by the Committee to develop, expand and maintain the LMS, including the following:

- Support of the organization and its operations.
- Identification of the natural, technological and societal hazards threatening the community.
- Evaluation of the human, economic and environmental vulnerabilities to those hazards.
- Assessment of the existing framework of policies, plans and requirements of the community as related to the capability to eliminate, reduce or mitigate the community's vulnerabilities to the identified hazards.
- Identification, characterization, justification and prioritization of new initiatives to eliminate, reduce or mitigate the community's vulnerabilities.
- Evaluation and coordination of new mitigation initiatives by the Committee.
- Resolution of conflicts between participants in the planning regarding proposed mitigation initiatives and their implementation.
- Incorporation of mitigation initiatives into the plan for future implementation.
- Coordination of the implementation of mitigation initiatives in the LMS.
- Periodic review of the status of implementation of the initiatives incorporated into the LMS and assessment of their priority for the ensuing planning period.
- Preparation and distribution of updated editions of the LMS to the community for review and adoption by the jurisdictions and organizations represented on the Committee.

Procedure 3.0: Development and Maintenance of the Committee's Organization

The categories and types of participants that are eligible for membership in the Committee are specified in the bylaws. Participants in the Committee include many different types of agencies, organizations and individuals, such as government agencies, regional authorities, community and neighborhood groups, business associations, private businesses and industries, local institutions, and even interested individuals.

The bylaws of the Committee also establish the organizational structure and responsibilities of the Committee for development, maintenance and implementation of the LMS. The general duties and responsibilities of this group are identified in the bylaws and this procedure defines how these groups carry out those duties. The support staff will establish a schedule of meetings, notify individuals and the public of the meeting time and locations and otherwise aid the Committee in their activities.

Procedure 4.0: Increasing Community Awareness and Understanding of Hazard Mitigation
One of the key roles of the Committee is to increase the general public's awareness of the benefits of hazard mitigation and the available techniques for making the community more disaster resistant. An important assessment necessary for the effective development and maintenance of the LMS is to evaluate the current level of the public's understanding of, acceptance for and willingness to implement a range of mitigation initiatives. Periodically, as indicated or upon the request of the Committee, the support staff will survey portions of the community or otherwise solicit information regarding the public's perspective on mitigation needs and programs, as well as the factors that make the public more vulnerable to disasters than is warranted.

The support staff will be responsible for ensuring that processes undertaken for the development, implementation and maintenance of the LMS have adequately considered public needs and viewpoints. As needed, the support staff will encourage appropriate participating agencies and organizations to propose mitigation initiatives that would, upon implementation, further public understanding and utilization of good mitigation practices.

Procedure 5.0: Identification of the Hazards Threatening the Community
The support staff is responsible for the Committee's ongoing efforts to identify the natural, technological and societal hazards threatening the community. The purpose of this analysis is to define those locations, facilities or systems within the county that may be vulnerable to the impacts of those hazards and warrant further assessment. For the convenience of subsequent planning, the analysis will be conducted, as much as feasible, on the basis of local government jurisdictional boundaries.

At their discretion, the county's Emergency Management Department may conduct this analysis on behalf of all jurisdictions, or may request each local government jurisdiction to conduct the analysis independently. To the extent information is available, these local governmental jurisdictions will utilize data provided in a Geographic Information System (GIS) format for those identified hazards that have been so characterized. When feasible, information and data resulting from the Committee's efforts will be recorded a GIS format as well. In the absence of available GIS data, the analysis will be conducted on the basis of "best judgment" by the planning participants.

The hazard identification analysis will be accomplished through the following general methodology:

- Identifying all significant natural, technological and societal hazards that threaten the county.
- Defining or estimating the geographic and / or operational scope of the areas and / or community functions within the county that could be impacted by the hazard.
- Determining or estimating the probability or frequency of occurrence of the hazard event.
- Defining, estimating or predicting the general consequences of the event to human health and safety, to property, to valuable environmental resources and the economic vitality of the community.
- Deriving a measure of risk to reflect the relative significance of hazard being addressed to the jurisdiction being evaluated.

The measure of relative risk may then be used by the jurisdiction and / or the county's Emergency Management Department to guide and prioritize the subsequent mitigation planning process. The hazard identification process is intended to encompass both developed areas of the county as well as those likely to be developed in the future.

Hazard identification information and other findings from this analysis will be made available for use by the public and other interested organizations and agencies. As applicable, the findings of the analysis will be included in the individual jurisdictional and / or organizational sections of the LMS.

Procedure 6.0: Vulnerability Assessment

Considering the relative risk of the identified hazards for each local jurisdiction, the participants in the Committee will then conduct an assessment of the vulnerability of specific facilities, systems, and / or neighborhoods within those jurisdictions, as applicable to their authorities, responsibilities and / or interests. The Committee is responsible for monitoring progress in implementation of the vulnerability assessment process.

The vulnerability assessments of specific facilities and systems will be conducted by those agencies, organizations or individuals represented on the Committee that have established operational control over the facilities or systems, or otherwise have been designated as responsible for their operation and maintenance. For neighborhoods, the assessment will be conducted by the local government agency with expertise, responsibility or interest in the location, and / or by representatives of the applicable neighborhood or community association.

Vulnerability assessments will include evaluation of the potential for physical damage or operational failure due to the occurrence of the hazards identified as threatening the community. This evaluation will also include the vulnerability of the community to physical damage or operational failure of that facility, system or neighborhood. The vulnerability assessment process will identify, for the evaluated facilities, systems and neighborhoods, those features or functions relatively more vulnerable to damage or failure in the event of the occurrence of a specified hazard. This finding is then available for the Committee participants and / or the Committee to use in the development of proposed initiatives needed to eliminate, reduce or otherwise mitigate those vulnerabilities.

The findings from the vulnerability assessment will be made available for use by the public and other interested organizations and agencies. As applicable, the findings of the analysis will be included in the individual jurisdictional and/or organizational sections of the LMS.

Procedure 7.0: Evaluation of Existing Policies, Plans and Regulations

Using the results of the hazard identification and vulnerability assessment process, the Committee will maintain an ongoing effort to evaluate the existing policies, plans and regulations of the local government jurisdictions in the planning area. This analysis will be used to define the capabilities of the local jurisdiction's policies, plans and regulations to effectively control or manage the identified hazards and / or eliminate or minimize the vulnerability to those hazards. The Committee will implement a common analysis methodology to define the following characteristics of the policy, planning and regulatory framework of the county and its local jurisdictions:

- The existing array of policies, plans and regulations established by local jurisdictions and the county that are relevant to the control and management of hazards and vulnerabilities to those hazards.
- Inconsistencies or conflicts between the policies, plans and regulations of local jurisdictions resulting in reduced capabilities to eliminate or reduce vulnerabilities to identified hazards.
- Inadequacies of local jurisdiction's policy, planning or regulatory framework to fully comply with State or Federal hazard mitigation requirements.

This analysis may be conducted by the support staff or individual local jurisdictions using the established methodology. The findings of the analysis will be available for the applicable participating local jurisdictions to identify mitigation initiatives to modify or enhance the existing policy, planning and regulatory framework and to incorporate these initiatives into the corresponding section of the LMS.

Procedure 8.0: Identification and Characteristics of Proposed Mitigation Initiatives

All agencies and organizations participating in the Committee are encouraged to propose mitigation initiatives for processing and incorporation into the LMS, based on the findings of the hazard identification, vulnerability assessment and evaluation of policies, plans and regulations. Formulation of mitigation initiatives will be done only by those individual agencies, organizations or jurisdictions participating in the Committee that have the responsibility or authority to implement the identified mitigation initiative should the resources and / or authorities become available to do so. When needed, the Committee may request an agency, organization or jurisdiction that has such responsibility or authority for its cooperation and support to formulate proposed mitigation initiatives determined to be needed based on the results of the hazard identification, vulnerability assessment or evaluation of policies, plans and regulations.

Procedure 9.0: Prioritization and Submission of Proposed Mitigation Initiatives

Upon the update of the LMS every update cycle, the LMS Committee will re-evaluate the list of proposed mitigation projects. They are currently prioritized during the LMS meeting. New initiatives will be added, and completed ones dropped off the list. If the project is no longer viable, it will be deleted by the LMS Committee. All projects will be prioritized by evaluating all components of the project. Projects that provide a county-wide benefit will be given priority over projects that benefit a specific jurisdiction. Prioritization may be effected by events such as

Hurricane Michael and change of county leadership. It is the role of the committee to ensure that projects are fair and comprehensive to the whole community.

Procedure 10.0: Review and Coordination of Proposed Mitigation Initiatives

The Committee is responsible for ensuring the inter-jurisdictional and inter-organizational review and coordination of proposed mitigation initiatives. To accomplish this responsibility, the Committee will do the following:

- Establish a schedule for the participants to submit proposed mitigation initiatives to be considered for incorporation into the next edition of the LMS.
- Review each proposed mitigation initiative received for completeness, adherence to the prescribed methodology,
- Compare proposed mitigation initiatives with others already incorporated into the LMS or being submitted during the current planning period to ensure an absence of conflict or redundancy in purpose.
- Prepare a recommendation for action to incorporate the proposed mitigation initiative into the LMS and to consent to the participant listing the proposed initiative in their section of the LMS.

Procedure 11.0: Incorporation of Proposed Mitigation Initiatives into the Strategy

The Committee will review and act upon that recommendation regarding incorporation of the proposed mitigation initiatives into the LMS. The support staff may concur with the recommendation or disagree. Upon concurrence, the Committee will vote to incorporate or refuse to incorporate the proposed mitigation initiative into the strategy.

Procedure 12.0: Resolving Conflicts

In the event that a mitigation initiative proposed by a participating agency or organization is determined by the Committee to be in conflict with one or more other initiatives in the LMS or being submitted by others, the support staff will take action to resolve the conflict. This will be done in the following manner:

- The participants proposing the conflicting mitigation initiatives will be notified of the findings of the Committee and requested to make any such modifications to the proposals needed to resolve the conflicts.
- Should the participants be initially unwilling or unable to make such modifications to their proposed mitigation initiatives, the Committee will schedule and hold a detailed discussion of the matter and involve both participants and any other interested parties.
- In the event that such detailed discussions do not result in voluntary action on the part of the participants making the proposals, the Committee will formulate a recommendation to resolve the conflict. In making this recommendation, in its discretion, the Committee may give preference to the proposal already incorporated into the strategy, to that first submitted to the support staff for review, and / or to the proposal achieving the highest priority.
- The Committee recommendation will be transmitted for action to the support staff.
- The support staff will review the recommendation and take any such action as deemed appropriate to reconcile the conflict prior to incorporation of the proposal(s) into the next edition of the strategy.

Procedure 13.0: Incomplete Processing of Proposed Mitigation Initiatives

If proposed mitigation initiatives are submitted to the Committee after the deadline established for that purpose, in its discretion, the support staff may decline to process such proposed initiatives for the next edition of the LMS. However, the support staff will retain the submissions, and review and process the initiatives in accord with this procedure for purposes of incorporating them into the subsequent edition of the LMS. These unprocessed mitigation initiatives will be termed "pending" mitigation initiatives.

Procedure 14.0: Implementation of Proposed Mitigation Initiatives
Following its incorporation into the LMS, each participating agency or organization is responsible to attempting to secure the funding, resources or other approvals and permits necessary to implement the proposed mitigation initiative. The Committee will provide such support to the agency or organization as is feasible at the time, but the agency or organization itself maintains full legal, financial and administrative responsibility for implementation of the proposed action.

Procedure 15.0: Monitoring of Implementation of Mitigation Initiatives
The Committee will be responsible for monitoring the status of implementation of proposed mitigation initiatives incorporated into the LMS. On an annual basis, the participating agencies and organizations will make information available to identify the status of each project.

In monitoring the implementation status of the mitigation initiatives incorporated into the LMS, the Committee will evaluate the continued priority for implementation to be afforded each initiative incorporated into the strategy.

Procedure 16.0: Approval and Issuance of the LMS
On a five year cycle, the Committee will approve and issue an update of the LMS. To do this, the Committee will, by affirmative majority vote, allow release of the updated version of the strategy, which will contain at least the following information:

- The currently approved listing of the mitigation initiatives proposed by participating agencies and organizations.
- A statement of the Committee's goals and objectives for initiative implementation for the coming planning period.
- Updated information regarding the findings of the hazard identification, vulnerability assessment and evaluation of policies, plans and regulations.
- Progress on implementation of the mitigation initiatives previously incorporated into the strategy.
- A listing of the currently participating agencies and organizations and the status of their participation.
- The current edition of the Committee's bylaws and operating procedures.

The updated LMS will contain any proposed and approved or pending mitigation initiatives processed by the Committee during the preceding planning period. It will also include the approved proposed mitigation initiatives listed in any previous editions of the LMS unless they are recommended for removal by the Committee and the support staff has concurred with that recommendation.

Procedure 17.0: Approval of Supplements to the LMS

When indicated, the Committee may elect to approve issuance of a supplement to the currently approved LMS. This supplement may contain one or more proposed mitigation initiatives that have been fully processed by the Committee in accord with this procedure. Upon its issuance, the supplement and the mitigation initiatives contained therein are considered to be an integral part of the LMS pending the approval of the supplement by the governing body of the jurisdiction or organization that proposed the initiatives.

Procedure 18.0: Assistance with Initiative Funding and Implementation

Each participating agency and organization is responsible for implementation of the mitigation initiatives contained within their portion of the LMS when the necessary resources, funding, authorities, and / or authorizations to do so become available. The Committee will, nevertheless, offer assistance and support to the participating agencies and organizations in implementing their proposed mitigation initiatives as appropriate opportunities arise.

The Committee, with the assistance of the support staff will, during each planning cycle, will attempt to obtain information regarding upcoming State and Federal programs which may offer opportunities for participating agencies and organizations to receive funding for initiative implementation. The Committee will assess the proposed mitigation initiatives listed in the current approved edition of the LMS for all jurisdictions and organizations, and identify the proposed mitigation initiatives matching the funding requirements and / or limitations of the applicable state and federal program. The Committee will then select the proposed initiatives in descending order of priority ranking and, in turn, notify the participating agency or organization of the potential availability of funding for initiative implementation.

Procedure 19.0: Assessment of Recent Disaster Events

Shortly following a significant disaster or emergency event impacting the county or any of its municipal jurisdictions, the county's Emergency Management Department will conduct an informal analysis of the event to capture any "lessons learned" for the purpose of continuing development of the LMS. With the aid of the support staff, it will classify the event based on the hazard category and assess the magnitude of the event and the community's reaction to it. The direct and indirect damage, response and recovery costs will also be gathered or estimated. Any mitigation techniques in place in the impacted areas would be assessed for their apparent effectiveness in decreasing damages. The type and extent of the damages that were experienced would also be evaluated to determine the types of mitigation initiatives that should be incorporated into the LMS to avoid similar losses during future hazard events of the same type. Based on this assessment, the support staff would recommend to one or more of the participating agencies or organizations that they propose appropriate mitigation initiatives for incorporation into the next edition of the LMS. In its discretion, the agency or organization could then propose such an initiative and transmit it to the Committee for processing in accord with this procedure.

Appendix D: Evaluation of Mitigation Policies

Plans, Programs and Policies Examination

Immediately following is a quick overview of the key policy issues with respect to mitigation that should be addressed in the LMS and eventually incorporated into the county's long-term planning process. Descriptions of Federal, State, regional, and local (county and city) policies that pertain to hazard mitigation can be found here. Although these policies exist in source plans and documents, they have been summarized as an accessible support to mitigation planning and funding. Many grant applications require that proposed projects conform to existing policies. Thus, these policy summaries can be used to find the policy support needed for a local project or initiative. These mitigation policies have also been evaluated in terms of how well they are being implemented within each jurisdiction. These evaluations can serve as a review of local mitigation policy implementation.

1. Evaluation of Local Policies Relating to Hazard Mitigation

Coastal High Hazard Area: The county's Comprehensive Plan, Coastal Element Policy 2.1.1 defines the Coastal High Hazard Area (CHHA) "as the area seaward of currently established CCCL and shall include FEMA designated V zones (V = velocity zone, the area where wave action is most destructive)." This definition of the CHHA is adequate for describing the most active area of the coast for the purposes of establishing where building codes must be most stringent to prevent the destruction of coastal structures from the wave action of coastal storms. However, it may be useful to consider other kinds of vulnerability. For example, the CHHA could be based on the evacuation zone of a category 1 hurricane. This would reflect the hazard posed by coastal flooding from a common low magnitude hurricane. Another possible enhancement could be a policy to review and update of CHHA after a hurricane to include areas where a high level of storm damage occurred. This review and revision process could also be part of the review and revision of the LMS.

Development in the Coastal High Hazard Area (CHHA): Land use within the CHHA has been consistent with Comprehensive Plan policies favoring location of water-dependent uses in the port area and low-density residential development (1 unit per acre) on Bay and Gulf front property. The problem areas for development are the high erosion areas of Cape San Blas (near Stump Hole or the area of the Cape where it takes a sharp turn westward towards the Cape San Blas State Park). The road in this area was washed out from Hurricane Opal and could be washed out again from any modest hurricane. The vulnerability of the road to erosion also affects all the property owners who live beyond this point. State building codes take into account the long-term erosion rates and should be adequate to establish building setbacks for new construction. However, some undeveloped lots in the Stump Hole area have already experienced erosion to the degree that the lots may not have sufficient setback space to legally build a useful structure. The county is looking into acquiring some of these lots to prevent land use that could accelerate erosion in this vulnerable area. There is a possibility that the peninsula could be breached eventually, which would require the construction of a bridge to continue road service to the far end of the Cape. In addition, some older existing housing on the Cape are vulnerable to long-term erosion. In terms of long-term planning, the county will face a choice between expensive beach re-nourishment projects to continually rebuild the beach that is lost to erosion, and facing additional loss of beachfront property.

Regarding vulnerable community assets, there is a need to mitigate (strengthen or relocate) two critical facilities existing in areas of the county subject to coastal flooding: The Highland View Elementary School and the telephone router in the FairPoint Communications Inc telephone building.

Local Development Codes: The county has implemented coastal development codes but has not imposed stricter standards than the state because it lacks the resources to enforce regulations. Issues that need addressing and coordination with state agencies for remediation and mitigation are:

- Enclosure of the area underneath the elevated portion of coastal structures.
- Location and design of septic systems in erosion prone areas.
- Enforcement of stormwater permits.

From the county's point of view, these issues might be solved with more vigorous enforcement of state rules and permits by state agencies. Coordination between local governments and state agencies might improve the ability to understand the areas of jurisdiction and improve enforcement or implementation of existing policies.

Building Codes: Codes are implemented and enforced. A possible enhancement would be to extend the coastal building zone to encompass the entire coastal community. This zone currently extends 1,500' from the shore and buildings within this zone require a variety of specific building techniques (such as number of nails per foot and anchoring techniques) to make structures more weather resistant. Building in excess of 2000 square feet must also be engineered (certified by an engineer to meet minimum requirements for weather resistance). Extending the coastal building zone to the Gulf Canal would allow the zone to encompass the entire coastal community.

Post-Storm redevelopment: There is not a specific post-storm redevelopment plan other than the usual provisions to favor particular land uses and avoid infrastructure and critical facilities in the CHHA. The LMS could identify specific mitigation measures and policies for post-storm redevelopment. In addition the LMS, or a portion thereof, could serve as the redevelopment portion of the county's Comprehensive Plan.

Flood hazards and Stormwater: Flood Insurance Rate Maps (FIRM) are not entirely accurate. Several designated C zones (areas of minimal flooding) are easily flooded.

Port St. Joe experiences stormwater or flash flooding during heavy rainfall along US Hwy 98, northern sections of the city, and in the Gulfview Pines area. Current stormwater regulations are minimal and the county relies on state enforcement of stormwater permits to address potential stormwater problems with respect to new development. However, state regulations only address larger developments (5 acres or more). A stormwater plan may be necessary as development accelerates to avoid or reduce additional localized flooding.

Evacuation: Policies exist for evacuation on St Rd 71. In practice, most evacuation coordination occurs through county's Board of County Commissioners and Emergency Management Department. The traffic capacity on St Rd 71 should be increased to facilitate the evacuation

of residents from the county's coastal region. In addition, evacuation consideration needs to be given anticipation of future development in the county's coastal region.

Non-Flood Hazards: The county's Comprehensive Plan does not address non-flood hazards. Non-flood hazards are addressed in the County's Comprehensive Emergency Management Plan (CEMP) but no specific county-wide land use or development policies that consider mitigation of non-flood hazards exist. The LMS should identify policies to minimize non-flood hazards such as fire, hazardous materials, transportation accidents and severe wind.

Hazard Awareness: No policies substantially address hazard awareness, although the county's Emergency Management Department publishes hurricane and flooding awareness materials. Additional measures might include posting high water marks along river banks and shore lines, publishing insurance rates for improved building standards, and posting evacuation information in rental properties, resort properties and real estate sales contracts.

Table D.1: Evaluation of Existing Policies for the City of Port St. Joe

Policies	Location	Notes
By the year 2000, the vacant/undeveloped land use acreage (presently 860 acres) will decrease in order for the land use categories to accomplish the projected growth. Development of this land will require provisions for drainage and stormwater management in compliance with State regulations. Open space provisions, as well as safe and convenient on-site traffic flow provisions will be required for developments under the City's adopted land development regulation.	Land Use Element Policy 1.1.1:	There is a missed opportunity to describe provisions such as stormwater and drainage as an issue of local health and safety.
The City will develop and maintain an ongoing program of storm water management, including both regulation and capital improvements. Stormwater regulations shall rely upon existing laws and rules for permitting criteria. Stormwater permits must be obtained pursuant to the provisions of Chapter 17-25, Florida Administrative Code (F.A.C.) prior to the City issuing final development approval.	Land Use Element Policy 1.1.2:	80% of stormwater problems solved with Reid Ave renovation; T-section installed at Reid and 4th St. Still problems at Ave. A, B and C at Battle and at 98 & Ave. A. Preble-Rish engineers have project drawings.
The City will, upon adoption of development regulations, strictly enforce standards on non-conforming land uses	Land Use Element Policy 1.3.2:	Enforcement is fairly strict at County level. City does not issue building permits. City and County subscribe to Southern Building Code.
The City will utilize land development review procedures which encourage mixed land uses when beneficial, to include conservation uses and natural groundwater aquifer recharge areas.	Land Use Element Policy 1.3.5	Few projects have been large enough to accommodate multiple or mixed land uses.
Emphasis will be placed by the City in activities that will assist in revitalizing the downtown area. The City will cooperate with the downtown merchants and Downtown Redevelopment Advisory Committee in providing assistance to further the recommendations from a recent downtown redevelopment plan conducted by the University of Florida.	Land Use Element Policy 1.4.1	Downtown area renovated according to plan. Storm water, underground utilities, curbs, gutters, and repaving funded by CDBG.
The City will protect potable water well fields and natural groundwater aquifer recharge areas by working with the Northwest Florida Water Management District to develop protective measures such as a radius buffer zone around the existing public supply wells will be located to avoid the potential for degradation of groundwater due to the close proximity of the saltwater/freshwater	Land Use Element Policy 1.5.1	Supply wells for City water are near the Inter-coastal (Gulf Canal). This area along the canal is largely zoned industrial and commercial. This area is mostly undeveloped, but as it is developed, this policy should be used to protect well heads and ground water quality.

Policies	Location	Notes
interface both coastward and within the aquifer. Management of pollutant sources will be controlled by provision of or reference to specific requirements that shall include, but not be limited to, zoning ordinances, source permitting, prohibition and site plan review.		
The City will adopt guidelines for addressing the preservation of historic resources, as a part of its site plan development review regulations.	Land Use Element Policy 1.5.3:	Guidelines do not address hazards. Historic resources are few. Just the museum for Florida constitution, Maddox house and 1 other
Historic resources will be subject to conditional development requirements prior to permits being issued for demolition or substantial alteration. Rehabilitation guidelines shall be as specified in the Secretary of the Interior's Standards for Rehabilitation, 1983.	Land Use Element Policy 1.5.4:	This is done but few historic resources.
The City will enforce building regulations in areas subjected to seasonal flooding and in coastal high hazard areas designated by the Federal Emergency Management Agency	Land Use Element Policy 1.6.2:	This is done.
The City shall limit the density of dwelling units in the coastal area so as not to exceed hurricane evacuation capabilities within the City's jurisdiction. This will be accomplished as part of the development review process	Land Use Element Policy 1.6.4:	This is not a problem as there has been little growth in the City.
The City will address areas subject to seasonal and periodic flooding and provide for drainage and stormwater management through provision of (by means of Code or land development regulations) or reference to specific requirements and/or standards for construction in designated flood-prone areas.	Land Use Element Policy 1.6.5:	
Provide an alternate evacuation route to that segment of State Road 30 which lies within the 100-year flood (FEMA V) zone.	Traffic Circulation OBJECTIVE 1.5:	City unaware of a flood problem on SR 30.
All major developers will demonstrate their impact on traffic circulation and, if increased traffic volumes or safety at new or existing intersections cause a change in the existing level of service, the developers will contribute toward the elimination or mitigation of impacts on the roadway system.	Traffic Circulation Policy 1.6.1:	No major development since comprehensive plan was put in place.
The City shall review subsequent versions of the Florida DOT 5-Year Transportation Plan in order to update/modify this element as may be necessary.	Traffic Circulation Policy 1.7.1:	This is done but DOT is always late in providing plan for comment.
The City will strive to condemn housing units only if they pose a serious health and safety problem and are unoccupied.	Housing Element Policy 1.1.1:	City police have condemned 40 structures used in the drug trade.
The City will support public and private efforts which are directed at improving housing. Such actions could include sponsorship of "fix-ups, clean-ups" days, utilizing City resources and personnel to assist such efforts and coordinating with various entities (e.g. church groups, non-profit organizations, etc.) to undertake housing improvements.	Housing Element Policy 1.2.3:	This has not been done on any regular basis.
The following level of service drainage standards shall be used as the basis for determining the availability of facility capacity and the demand generated by a development: 25-yr. frequency, 24-hr. duration storm event for those areas designated as residential, commercial, mixed commercial/residential, public, and industrial land use on the Future Land Use Map; and 3-yr. frequency, 24-hr. duration storm event for those areas designated as agricultural, conservation, and recreation land use on the Future Land Use Map. Treatment of the first one-half inch of run-off on sites less than 100 acres, and treatment of the first inch of run-off on sites greater than 100 acres.	Infrastructure Policy 1.1.5:	These drainage level of service standards been adequate. The 3 year frequency standard has never been used. The only major development has been the US Post Office complex which did comply to 25 year standard.

Policies	Location	Notes
The City will institute a water distribution leak prevention program in an effort to conserve our natural resource, "water." In addition, water customers will be continuously informed to conserve water for conservation sakes. Programs instituted by the Water Management District, such as alternate irrigation program, will be supported by the City.	Infrastructure Policy 1.1.17	This has not been done. However, City is actively pursuing a leak prevention grant for sewer system piping
Proposed capital improvement projects will be evaluated and ranked according to the following priority level guidelines: Level One -- whether the project is needed to protect public health and safety, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities. Level Two -- whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs or provides service to developed areas lacking full service. Level Three -- whether the project represents a logical extension of facilities and services within a designated service area.	Infrastructure Policy 1.2.2	Good system of prioritizing that could inform the process of prioritizing mitigation initiatives.
Projected demands for the period 1996 through 2000 will be met by undertaking the following projects: **Drainage Projects** 1. Construct a supplemental 24" diameter culvert across Fifth Street to relieve flooding on Park Avenue and work with the DOT to provide funding and coordination of work schedules with State Five-Year Plan. **Potable Water Projects** 1. Construct a 10" diameter distribution main around the southern portion of the City limits to provide adequate flows to the Ward Ridge area. 2. Construct a 6" diameter distribution main on Tapper Avenue, Barbara Drive and Monica Drive in the Ward Ridge Area to provide proper water service to the residents.	Infrastructure OBJECTIVE 2.2:	These projects are completed and were successful.
Repair and Replacement projects for the Planning Period 1990 through 2000 will be met by establishing an annual budget for: a) $40,000 per fiscal year for repairing or replacing old and defective sewer pipes and manholes, on an as needed basis to be determined by the Public Works Department. b) $5,000 per calendar for replacing potable water distribution pipes under 6" diameter, on an as needed basis to be determined by the Public Works Department. c) Fiscal Years 1993 and 1994 a budget $65,000 per year will be established to include not only annual repair and replacement but funds to update the Drainage Master Plan	Infrastructure OBJECTIVE 2.3:	Still looking for technique to establish which pipes are leaking. Smoke test is one possibility that has been examined. Noted that some unsupervised demolition crews failed to cap sewer lines after houses were demolished. Now it is always done.
The city will identify and map areas with the greatest recharge potential based on infiltration characteristics identified in the Conservation Element for Port St. Joe.	Infrastructure Policy 3.1.1:	Mapping as a planning tool could be expanded into hazard mapping
The land in the coastal high hazard area serves as a natural buffer to the coastal shoreline and estuarine areas. The Future Land Use Plan will provide classification in the category of Open Space for this area. Standards in accordance with the Federal Emergency Management Administration's regulations for this area will be supported by the City.	Coastal Element Policy 1.2.1:	This is done
The City shall limit specific and cumulative impacts upon coastal wetlands, water quality, wildlife habitat and living marine resources using the following regulatory and management techniques: require protection of identified wildlife habitat as part of enforceable development agreements, coordinate with the Florida Department of Natural Resources to restrict construction activities which would permanently damage marine resources unless appropriate mitigation measures are undertaken, and enforcement of policies.	Coastal Element Policy 1.2.3:	The City has upgraded the sewer system to Advance Waste Treatment to help preserve water quality.

Policies	Location	Notes
In order to protect the human population and the shoreline and estuarine resources of the Coastal zone all infrastructure improvements will be designed in accordance with standards which consider impacts to the Coastal zone (natural disasters such as hurricanes, flooding, etc. with resultant emergency evacuation requirements).	Coastal Element Policy 1.4.1:	This is done, however it may be wise to exceed minimum standards for infrastructure that has long design life.
As part of the post-disaster redevelopment process, the City shall structurally modify or remove infrastructure facilities which have experienced repeated storm damage	Coastal Element Policy 1.5.1:	This was done at least once. Restroom facilities in gulf front park were redesigned to be hazard and vandal resistant after Opal destroy them.
When undertaking post-disaster redevelopment activities, development permits may be waived for short-term recovery measures such as; emergency repairs to streets, water, electricity or other utilities to restore service; removal of debris; and public assistance matters including temporary shelter or housing.	Coastal Element Policy 1.5.2:	County handles most permitting.
Long-term redevelopment shall require approval of development permits and be consistent with this plan. These activities include: repair or restoration of private residential or commercial structures with damage in excess of 50% of market value; non-emergency repairs to bridges, highways, streets, or public facilities; repair or restoration of docks, seawalls, groins, or other similar structures.	Coastal Element Policy 1.5.3:	No permitting issues with respect to nonconforming land uses have come up during redevelopment activities.
The city will, upon completion of the Master Drainage Plan update in 1994, incorporate the recommendations of the update into (1) the Analysis, and (2) the Goals, Objectives and Policies of the Coastal Management element as they pertain to maintaining the water quality and estuarine resources of St. Joseph's Bay.	Coastal Element Policy 1.6.1:	This has been done.
The city will reserve final approval of development permits until all applicable permits are obtained from jurisdictional agencies, including stormwater discharge permits obtained pursuant to Chapter 17-25, F.A.C., and jurisdictional interpretation on wetlands conducted pursuant to Chapter 17-12, F.A.C.	Coastal Element Policy 1.6.4:	This was done for the one major development in the City since the time of Comprehensive Plan
The city recognizes the need to establish the public interest between competing waterfront land uses. The city shall choose the following land uses in priority order: water dependent, water-related land uses where a definitive public purpose has been established, and other land uses (residential commercial, institutional, or industrial).	Coastal Element Policy 1.8.1:	This is accomplished and supported through future land use map.
Specific and detailed provisions for the siting of marinas shall be included in the land development regulations. Such provisions shall include, but not be limited to, the following criteria: 1. Demonstrate the presence of sufficient upland area to accommodate parking, utility and support facilities; 2. Provide a hurricane mitigation and evacuation plan; 3. Be located in proximity to natural channels so that minimum or no dredging shall be required for provision of docking facilities. 4. Maintain water quality standards as provided by Chapter 403, Florida Statutes; 5. Demonstrate that it meets a public need thereby demonstrating economic viability/feasibility.	Coastal Element Policy 1.8.2:	This is done and is demonstrated in City Marina complex currently under construction. It may be good to establish a periodic review of marina hurricane mitigation and evacuation plan.
The city shall require the enforcement of the provisions of the Flood Ordinance, building set-backs from the shoreline and stormwater permits pursuant to Chapter 17-25, F.A.C. in order to lessen the impact of man-made structures on the coastal zone.	Coastal Element Policy 1.9.1:	This is done.
The city shall provide specific provisions to include set backs from the shoreline for nonwater dependent structures and coordination of permitting with appropriate jurisdictional agencies	Coastal Element Policy 1.10.1:	This is done.

Policies	Location	Notes
Land development regulations will be used to discourage the locating of hospitals, nursing homes and other similar structures which concentrate population in coastal high hazard areas	Coastal Element Policy 1.11.1:	Land Development Code prohibits group homes hospitals or other uses having special evacuation requirements in the coastal high hazard area (section 4.08)
The city shall review and, where appropriate, incorporate applicable recommendations regarding hurricane evacuation from other disaster preparedness plans (county, regional, state and federal) into this Plan. Specific inclusions of future r recommendations will be undertaken as Plan amendments.	Coastal Element Policy 1.12.2:	Because of lack of development and population growth, no updating has been necessary.
The city shall maintain existing evacuation times by maintaining existing level of service standards on evacuation roadways. These measures shall be incorporated into the Gulf County Peacetime Emergency Plan upon its next revision. Upon its next revision, recommendations from the Gulf County Peacetime Emergency Plan will also be included in this Plan.	Coastal Element Policy 1.12.13:	This has not been an issue. The policy language should be changed to Comprehensive Emergency Management Plan
The city will initiate a public awareness program to inform citizens of the recycling alternatives for hazardous waste.	Conservation Policy 1.4.1:	The County does this. The City does not.
The city will enter into an agreement with the county for temporary storage of any future hazardous waste that the City might generate based on Gulf County constructing a temporary storage / transfer facility as recommended in the 1986 Gulf County Hazardous Waste Management Assessment.	Conservation Policy 1.4.2:	This agreement is in effect.
The city will inform the St. Joe Paper Company of aquifer recharge areas.	Conservation Policy 1.5.1:	There is a water well on St. Joe property and the company is informed.
If natural resources are contaminated by hazardous wastes, the party responsible for the contamination will be responsible for appropriate remedial actions.	Conservation Policy 1.6.2:	This has not come up as an issue so far. It may some day. Federal law required the owner of the property to assume liability which should be considered in any future land deals between the City and local industry.
If natural systems are degraded by stormwater runoff from transportation facilities which are under the authority and maintenance of the state (Florida Department of Transportation), the City will take the necessary actions to improve the conditions by notifying appropriate state agencies.	Conservation Policy 1.6.3:	DOT maintains stormwater facilities for Hwy. 98 and on Hwy. 71 between Marvin and Woodward.
Maximize the utilization of existing parks and facilities. Lands acquired through purchase or easement for public works projects shall be used to fulfill recreation and open space needs if site conditions and public safety considerations allow for such use.	Recreation & Open Space Policy 1.3.1:	City will acquire 38 acres for recreation from St. Joe Co. as well as the land currently leased and used as a ball park.
The city's development regulations will contain provisions for review of proposed developments which may impact public access and the preservation of scenic vistas in regard to recreation and open space areas.	Recreation & Open Space Policy 1.5.1.:	This hasn't come up. No large development in scenic area since Comprehensive Plan in effect.
Promote an environment of cooperation in dealing with regional problems by establishing increased representation by regional boards, commission and committees	Intergovernmental Coordination Policy 1.2.1:	This is done and helps to promote City's interest and Mutual understanding.
Develop and coordinate a M.O.U. with FDOT and the county which addresses transportation planning issues in regard to emergency hurricane evacuation routes.	Intergovernmental Coordination Policy 1.2.3:	Trying to increase FDOT interest in an alternate Hwy. 98.
The city will resolve conflicts with other local governments through the Apalachee Regional Planning Council's informal mediation process, including conflicts involving annexation issues	Intergovernmental Coordination Policy 1.2.5:	Policy used to support the LMS conflict resolution policy.

Policies	Location	Notes
Redevelopment planning for the city's downtown area will be coordinated with the Downtown Redevelopment Advisory Committee.	Intergovernmental Coordination Policy 1.4.2:	This is done.
The city shall fund only those projects for replacement and renewal of existing public facilities.	Capital Improvements Policy 1.2.1:	Policy could be limiting if projects would strengthen existing public facilities.
Funding will not be established for projects not included in this Comprehensive Plan, or in later approved and adopted amendments, in high hazard coastal areas	Capital Improvements Policy 1.2.2:	This is done. May wish to consider enlarging the coastal high hazard area, which is only the coastal V zones.
The following criteria will be used to evaluate projects for inclusion in the Five-Year Schedule of Capital Improvements: • The relationship to individual elements of the Comprehensive Plan; The elimination of public hazards; • The elimination of existing capacity deficiencies; • The impact on the annual operating and capital budgets; • Location in relation to the Future Land Use Map • The accommodation of new development and redevelopment facility demands; • The financial feasibility of the proposed project; and • The relationship of the improvements to the plans of State agencies and the Northwest Florida Water Management District	Policy 1.5.2:	Supports guiding principles and prioritizing criteria. Another criteria could be improving resistance to disasters.
Applicable outside funding sources shall be examined for eligibility of funding for the specific projects under the city's capital improvements budget for the fiscal year.	Policy 2.3 2	Supports LMS principles

Evaluation of Existing Policies for the City of Wewahitchka

Policy	Location	Notes
To manage land development in such a way that the health, safety, social, and economic well being of the citizens of Wewahitchka is ensured.	Wewahitchka Comprehensive Plan, Land Use GOAL 1:	Supports local mitigation strategy Guiding Principles
Within one year of Comprehensive Plan submittal, the City shall adopt and enforce Land Development Regulations that require land development to be compatible with the topography, soil conditions, natural resources and the availability of facilities and services.	Land Use OBJECTIVE 1:	Could add risk from hazards as a criteria for development. drainage facilities
The City Land Development Regulations shall require that the provision of continued maintenance of stormwater and drainage facilities be submitted as part of any development plan.	Land Use POLICY 1.4:	No new development has been large enough to require stormwater and drainage facilities
The City shall require that the owner of any development project shall be responsible for the provision of adequate drainage and stormwater controls in compliance with State stormwater management regulations.	Land Use POLICY 1.5:	No new development has been large enough to require stormwater and drainage facilities
Wewahitchka's Land Development Regulations, required to be adopted by January 1991, will include the following principles aimed at protecting surface water resources: a) require the use of Best Management Practices for agriculture and silviculture; b) require that all federal, state, and local regulations regarding stormwater runoff and drainage be met; and c) require the use of vegetative buffer zones adjacent to surface waters.	Land Use POLICY 1.10	This has been done.
To promote the protection of wetlands, the City's Land Development Regulations, to be adopted by January 1991, will include the following principle:	Land Use POLICY 1.11:	Clustering has never been used so far. Minimum buffers are required

Policy	Location	Notes
1. Provisions will be made for innovative land development techniques which allow the clustering of higher density development in areas that would have the least impact on wetlands such as upland areas and existing developed areas. 2. Requirements for buffering wetlands from high density and inappropriate adjacent land uses.		
The City Council shall coordinate with the Regional Planning Council to develop alternative methods for development of blighted areas.	Land Use POLICY 2.1:	Local mitigation strategy could help with this.
The City Council shall continue to seek funding sources such as the Community Development Block Grant Program, for the redevelopment of blighted areas.	Land Use POLICY 2.2:	This has been done and will continue through LMS.
The city shall continue to enforce City building code regulations to ensure the maintenance of existing structures	Land Use POLICY 2.3:	This is done.
Development in identified flood prone areas must be in accordance with the Wewahitchka Flood Plain Management Ordinance.	Land Use POLICY 4.5:	This is done, however some older housing should be elevated
The City Planning Board shall review changes in land use practice on a continuing basis	Land Use POLICY 7.2:	This is done.
The city will consider the utilization of Federal, State, and local subsidy programs to provide adequate housing.	Housing POLICY 1.3	Add elevation or relocation funding programs to mitigate flood hazards
By 1993 the city will adopt a minimum housing code which specifies regulatory authority for enforcing code.	Housing POLICY 2.1:	Any special elements to housing code?
Upon adoption of the Housing Code, the City will initiate enforcement activities aimed at reducing the number of substandard units by one percent annually	Housing POLICY 2.2:	Enforcement has been casual
Wewahitchka will initiate a public awareness program to inform citizens of the recycling alternatives for hazardous waste.	Conservation POLICY 4.1	This has not been done at local level.
Where contamination of natural resources by hazardous wastes has occurred, the party responsible for the contamination will be required to monitor and, where necessary, restore the contaminated area.	POLICY 4.2:	This has not come up as an issue. Could include reference federal regulations.
The city will maintain current levels of shoreline access to recreational surface waters within its jurisdiction.	Housing POLICY 4.1:	Could include safety considerations such as location away from vulnerability zones and flood zones.
The city will coordinate its Comprehensive Plan with the plans of Gulf County, the Gulf County School District, and other units of local government which provide services but do not have regulatory authority over the use of land, by implementing policies 2.1 through 2.4. These policies shall apply to coordination with the Gulf County Peacetime Emergency Preparedness Plans, the Hazardous Materials Response Plan, and the Hazardous Waste Assessments.	Housing POLICY 5.1:	Elevation relocation or flood proofing could be added.
The following criteria will be used to evaluate projects contained in the individual comprehensive plan elements for inclusion in the Five-Year Schedule of Capital Improvements: • the elimination of public hazards; • the elimination of existing capacity deficiencies; • the impact on the annual operating and capital budgets; • location in relation to the Future Land Use Map; • the accommodation of new development and redevelopment facility demands; • the financial feasibility of the proposed project; and • the relationship of the improvements to the plans of State agencies and the Northwest Florida Water Management District.	Infrastructure POLICY 4.3:	This has not been done

Appendix E: Project List for 2020

The following table is a list of those 2020 LMS projects to include a list of completed, or deleted because they were not longer a viable project to the LMS Committee.

Key	
Completed	
Deleted	

Project # (2010 List)	Status	Project Description	Reason for Action Taken
2	Deleted	Register and establish the Gulf County Citizen Corps.	Project deleted as Gulf County is not in need of Citizens Corp program at this point. Other sources of volunteer assistance are available.
10	Deleted	Design and facilitate a Disaster Resistant Business initiative to educate local business owners on the need to be prepared for future disasters.	Consolidated with a similar project with similar outcomes. Concept of the project was kept, just placed in a different project listing.
11	Completed	Increase capacity / replace 1,000 feet of stormwater drainage pipe along US Highway 98 near the bridge and Avenues A through F to prevent water backing up.	Project has been completed
13	Deleted	Mitigate flooding at the Port St. Joe High School sewage lift station.	The LMS Committee determined this project was no longer needed
19	Deleted	Require flood hazard disclosure in the deed for the sale or transfer of improved or unimproved property in the floodplain.	This is a requirement of any real estate contract for sale by the lending bank and realtor. Not needed as an LMS project
22	Deleted	Design and facilitate a household disaster resilience initiative to educate low income families to be prepared for future disasters.	Project combined with a similar project with same scope.
26	Completed	Elevate the back-up generator in Fair Point Communications Inc's telephone switching building.	Project has been completed
28	Deleted	Replace the existing 330 foot communications tower at the Courthouse Complex in Wewahitchka	Project has been combined with a similar project with a similar scope.
30	Deleted	Retrofit the existing community center in Wewa so that it can be used as a hurricane risk shelter.	The facility was upgraded, but not to shelter standards. It cannot be used as a public shelter. This project is deleted.
37	Deleted	Improve the disaster resistance of existing site built housing stock	Deleted. This project is no longer needed
39	Completed	Purchase and install a countywide telephone emergency notification system.	Project was completed

Project # (2010 List)	Status	Project Description	Reason for Action Taken
40	Deleted	Using the Gulf County Critical Facilities listing, identify facilities that need hurricane shuttering and / or other structural mitigation initiatives.	This project is deleted based on most of the critical facilities are already covered by other projects on this list.
43	Deleted	Conduct Community Emergency Response Team (CERT) training for neighborhoods residents and high school students.	The CERT program is no longer a viable project for Gulf County for a number of reasons. Gulf County can get volunteer assistance through Community Relations Teams, FEMAs Youth Corps, and other means.
44	Completed	Funding to purchase two variable message boards.	The two variable message boards were purchased and are available for use in directing evacuees out of Gulf County.
51	Completed	Replace pipe culverts with low water crossings and / or fords on Saul's Creek Road. This will lessen the possibility of road damage due to high volumes of water going through culverts during flood events.	Project is completed
52	Completed	Replace pipe culverts with low water crossings and / or fords on Old Bay City Road. This will lessen the possibility of road damage due to high volumes of water going through culverts during flood events.	Project is completed
55	Deleted	Identify additional hazard data to satisfy element 7B which refers to the impact of hazards to the county in regards CFR requirement 201.6 (2)(ii).	Project is no longer viable and has been deleted

LMS Project List 2020

Priority	Description of Mitigation Project	Goal for Hazards Mitigated	Mitigation Goals Achieved	Funding Source	Jurisdiction (Location)	Agency Responsible for Implementation	Estimated Costs	Status	Timeframe to Complete
								New/Ongoing/Deferred/Explanation	
The projects located in this color are completed projects.									
1	Elevate Indian Pass Road (CR30B) - Design, construct and provide project management to elevate CR30B (Indian Pass Road) between CR30A and the Indian Lagoon Bridge.	Flooding/ Storm Surge	No	Various	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$2,744,767.09	New- Design, construct and provide a project management to elevate CR30B between 30 A and the Indian lagoon bridge. This is the only access to the Indian Pass area and without access in can be a life/safety issue	Within five-year timeframe

2	Safe Room for Mission Essential Personnel - Design, construct and provide project management for a hardened facility to provide a safe room for mission essential personnel during hurricane and other extreme wind events. (During Hurricane Michael we did not have the appropriate space to safely house Federal, State, Mutual Aid, Volunteer, etc. agencies responding to assist).	Tornados, Hurricanes, High-Winds	No	HMGP	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$25,616,122.00	New- LMS working group approved to add this to the LMS project list. Jurisdictions for Phase 1 would be Gulf Coast Electric Co-op Wewahitchka ($23,222,122.00), and Administrative Building(2,394,000.00)	Within a 5 year time frame
3	Backup Water System- Install a deep water well for EOC	Storm Surge	No	HMGP	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management**	$20,000.00	New- During Hurricane Michael EOC and essential personnel were left without water. This would allow for redundancy after a hurricane	Within a 5 year time frame

4	Backup Wastewater System for County Emergency Operation Center -	Power outage/ Storm Surge/	No	HMGP	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management**	$100,000.00	New-Design, Construct and provide project management for a septic tank for an alternate wastewater treatment plant becomes inoperable	Within a 5-year time frame
5	County Fuel Depot and Management System -	Fuel	No	Various	**All Jurisdictions in Gulf County**	**Gulf County Public Works**	$250,000.00	New- Design and Construct a Fuel Depot for essential personnel during a disaster	Withing a 5 year time frame

6	Alternate Waste Water and Water Treatment Facility	Health	No	Various	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$38,285,141.34	New- Design, Construct a Waste water treatment facility as a backup when the City Water Treatment plant is damaged and/or inoperable for extended periods of time. 2 locations ($10,802,967.51) and ($27,482,173.83)	Within a 5 year time frame
7	Address the flooding and storm drainage on Doc Whitfield Rd (CR 387) mitigate storm water drainage	Flooding	No	Various	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$3,001,160.25	New- address flooding by lengthening the bridges, mitigate culverts, address water runoff along CR 387	Within a 5 year time frame

8	Acquire backup generators for mission essential government critical facilities/lift stations/ businesses/ fire stations that perform essential services	High Winds/ Lightning/Hurricanes/ Tornados	No	HMGP	**All jurisdictions in Gulf County**	**Gulf County Emergency Management**	$150,000.00	Ongoing-Gulf County has purchased small portable generators/ Hurricane Michael caused massive power outage and critical facilities we unable to perform their function. Generators are required to ensure whole community resilience. Gulf County is exploring install generators to critical facilities/ essential businesses	Within five-year timeframe
9	Ensure the county's Emergency Service Agencies (EOC, EMS, LE and Fire) have the ability to support the needs of the county's residents, businesses, and essential city and county services by maintaining state of the art communication and operational support system	All Hazards	No	TBD	**All jurisdictions in Gulf County**	**Gulf County Emergency Management**	$2,500,000.00	Ongoing Project- All Agencies constantly evaluate discussing options for interoperable communications throughout the county. EM is researching all weather stations to be located throughout the county.	Within five year time frame
10	County wide beach renourishment and dune restoration with an emphasis on the Stump hole and St Joe Penisula Areas	Storm Surge and Flooding	No	TBD	**All Jurisdictions of Gulf County**	**GCBOCC**	$20,000,000.00	Ongoing Project- Gulf County has received re-nourishment funds in 2016- Other possible re-nourishment funds DEP/ RESTORE/FDOT	Within a five-year timeframe

11	Hurricane Loss Mitigation for critical facilites and buisnesses and residents	High Winds/ Flooding Storm Surge	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management**	$500,000.00	Ongoing- Gulf County has a list of critical facilities that require mitigation. Gulf County is implementing a program HLMP to assist residents with HLMP retrofitting their home. GCEM assists businesses with information on retrofitting and assisting them when funds become available to increase their resiliency after a storm.	Within five-year timeframe
12	Protect the shoreline along HWY 98 and the Highland View/ Constituion drive and 98 area to prevent road erosion	Floods, Storm Surge	No	TBD	**Gulf County/ City of Port St Joe**	**Gulf County Public Works/ City of Port St Joe**	$1,000,000.00	Ongoing- Project delayed due to Funding, Gulf County is communicating with FDOT in hope to ensure the resiliency of the road. After Hurricane Michael- concrete mesh was implemented to mitigate the coastal erosion in the City of Port St Joe	Within a 5 year time frame
13	Implement a Disaster Resistant Buisness initiative to educate local buisness owners on the importance of being prepared for future disasters	All Hazards	No	HMGP/ TBD	**All jurisdictions in Gulf County**	**Gulf County Emergency Management**	$20,000.00	**Ongoing-**Gulf county has implemented a Be Prepared program. Gulf County EM provides businesses with Disaster Preparedness Program. There as not been a plan approved for mitigation of this section of roadway	Within 5 year time frame
14	Collaborate with FDOT to build a storm-proof roadway through the Stump hole area located on Cape San Blas	Storm Surge	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$2,000,000.00	Ongoing- GCBOCC/GCPW and FDOT have discussed mitigation plans to ensure the resilience of the section of roadway.	Within five-year timeframe

15	Upgrade to federal and state requirement and Mitigate sewage systems and lift stations against flooding	Flooding	No	HMGP	**All Jurisdictions of Gulf County**	**Gulf County Public Works/ City of Port St Joe**	$589,220.00	Ongoing-Evaluate and Mitigate all lift stations in the county to reduce the impact of flooding on the community, Project would elevate components to mitigate against flooding	Within five-year timeframe
16	Educate,Relocate and Elevate structures in flood prone areas-	Flooding	No	Various	**All Jurisdictions of Gulf County**	**GCBOCC**	$2,500,000.00	Ongoing- Gulf County evaluates all repetitive loss property, proposes plans to reduce repetitive loss in Gulf County, Gulf County identifies and plots all parcels with repetitive loss on the tax role. Encourage homeowners to insure purchase flood insurance on the 100 yr. flood plain	Within a five-year timeframe.
17	Evaluate and remove all debris, hazardous trees, and brush on all county and city right of ways and easements	All Hazards	No	Various	**All Jurisdictions of Gulf County**	**FDOT, Gulf County Public Works, Wewahitchka and Port St Joe Public Works**	$500,000.00	Ongoing- This project is ongoing with FDOT/ Gulf County Public Works/ Duke Energy assist in clearing all debris from County right-of-way and easements	Within a five year plan
18	Develop a county wide stormwater management plan	Storm Surge/ Flooding	No	FPMS	**All Jurisdictions of Gulf County**	**All jurisdictions in Gulf County**	$15,000,000.00	Ongoing- Water Management District will assist with Gulf County Planning to complete project. Funding source has yet to be identified.	Within a five-year timeframe.

19	Coordinate with FDOT to expand SR 71 from 2 lane to 4 lane	Flooding	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$2,000,000.00	Ongoing- FDOT and GCBOCC/GCPW have discussed this project. However, no action has been taken on this project	Within a five-year timeframe.
20	Coordinate with FDOT to improve stormwater drainage in the Simmons Bayou area	Flooding	No	TBD	**All Jurisdictions of Gulf County**	**GCBOCC/FDOT**	$1,000,000.00	Ongoing- FDOT and GCBOCC/GCPW have discussed this project. Work has begun on the drainage ditch- this is an constant ongoing project	Within a five year time frame
21	Extend city sewage lines to Indian Pass/ Overstreet/ Beacon Hill in an effort to reduce or prevent repetitive damage to septic tanks and improve water quality to local residents	Storm Surge	No	CDBG	**Gulf County City of Port St Joe**	**Port St Joe Public Works/ Gulf County Public Works**	$1,500,000.00	Ongoing- City/County has extended several sewage lines to accommodate more residents- still remains a viable project	Within 5 year time frame
22	Purchase and install smoke detectors in low-income homes	Fire	No	SHIP/ RED Cross	**All Jurisdictions of Gulf County**	**GCEM/SHIP**	$10,000.00	Ongoing- Gulf County partners with Red Cross to install smoke detectors in low -income residents homes. As funds become available supplies will be distributed.	Ongoing

23	Evaluate and stabilize sandy clay roads and repair located throughout the county.	Flooding	No	CDBG/ Various	**All Jurisdictions of Gulf County**	**Gulf County Public Works**	$500,000.00	Ongoing-Gulf County PW will evaluate and stabilize clay roads in order to mitigate future flooding concerns/	Ongoing
24	Develop and deliver Disaster Resistant programs for the business and residential communities on "how to prepare" for future disasters	All Hazards	No	Various	**All Jurisdictions of Gulf County**	**GCTDC/ GCEM**	$15,000.00	Ongoing- TDC and Gulf County EM will distribute materials and present ongoing programs to ensure tourists, residents and businesses are prepared for a disaster	Within a five-year timeframe.
25	Post signs indicating high-water marks in coastal and river flooding	Floods, Storm Surge	No	TBD	**All Jurisdictions of Gulf County**	**GCBOCC/GC PW/GCEM**	$10,000.00	Ongoing-Gulf County will coordinate with Gulf County public Works to ensure areas that are prone to flooding have proper signage to inform the public	Within a one-year timeframe
26	Provide NOAA radios to real estate agencies and residents	All Hazards	No	TBD	**All Jurisdictions of Gulf County**	**GCEM**	$2,000.00	GCEM will collaborate with real estate agencies and residents to provide them with an All-Weather radio. Radios will be provided as funds become available.	On going
27	Identify and purchase equiment fir responding to CBRNE (Hazardous materials) release	Hazmat	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County Fire Department**	TBD	Ongoing- GCFD has purchased Hazmat suits, CBRNE equipment are required to ensure response in the event of a HAZMAT incident	Within five-year timeframe

28	Identify location and prepare alternative landfill debris sites for Storm debris removal	Hurricanes, Tropical Storms, Tornadoes, and High Winds	No	Various	**All Jurisdictions of Gulf County**	**Gulf County PW**	$1,500,000.00	Ongoing-Gulf County has identified debris management sites and new landfill has been identified and in the process of constructing a new landfill scale station	Within five-year timeframe
29	Evaluate/Upgrade/ repair all county/ city roadways/guardrails/bridges to FDOT standards	Traffic	No	FDOT/TE	**All Jurisdictions of Gulf County**	**Gulf County PW**	$2,000,000.00	Ongoing- FDOT and Gulf County collaborate to ensure all roadways/guardrails/ bridges are inspected/evaluated and repaired to FDOT standards. Deficiencies will be addressed as needed	Ongoing
30	Upgrade all dune walkovers and board-walks to composite materials to address safety issues and address ADA compliancy	Hurricanes, Tropical Storms, Coastal Flooding	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County TDC**	$250,000.00	New project- Gulf County TDC is researching and in the process of upgrading all dune walkovers to ensure safety and compliancy throughout the county.	Within five-year timeframe
31	Upgrade/Evaluate and repair of existing wayfinding and informational signs	Storm Surge/ High Winds	No	TBD	**All Jurisdictions of Gulf County**	**Gulf County TDC**	$100,000.00	Ongoing- Gulf County TDC is evaluating and repairing signs that were damaged during Hurricane Michael	Within a five-year timeframe.
32	Conduct Community Emergency Response Team (CERT) training for the Gulf County residents.	All Hazards	Yes	N/A	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management**	$20,000.00	Ongoing Gulf County is in the process of organizing and implementing the Gulf County CERT program	Ongoing

33	Work with the Florida Forest Service on evaluating the defensible space on all the critical facilities throughout the county.	Wildfires	No	HMGP	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management/ Florida Forest Service**	N/A	The Gulf County EM Director sent specifics to the local Florida Forest Service. Florida Forest Service will provide the information on the defensible space on critical facilities. Ongoing Project	Within a one-year timeframe
34	Work with the Florida Forest Service and develop and participate in the Community Wildfire Protection Plans (CWPP) to reduce wildfire risks within the Wildland-Urban Interface. And inform the public of the Firewise building and landscape design principles and the Ready, Set, Go program.	Wildfires	No	Florida Forestry Service	**All Jurisdictions of Gulf County**	**Gulf County Emergency Management/ Florida Forest Service**	N/A	Grant for 128,000 to due boundary cutting to provide a defensible space. FFS is constantly looking for new project areas	Ongoing
35	Conduct a shoreline erosion mitigation study to determine possible initiatives that can be undertaken to reduce future coastal erosion	Storm Surge and Flooding	No	TBD	**Gulf County/ City of Port St Joe**	**Gulf County Planning Department**	$100,000.00	Completed-2016 Gulf County TDC funded a shoreline erosion study. Study was complete	

Appendix F: LMS Committee Members

Gulf County LMS Committee Members							
Gulf County (Unincorporated)		**Addresses**				**Phone #'s**	**E-mail addresses**
Sandy Quinn	Gulf County Board of Commissioners	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	commissioner4@gulfcounty-fl.gov
Ward McDaniel	Gulf County Board of Commissioners	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	commissioner2@gulfcounty-fl.gov
Carmen McLemore	Gulf County Board of Commissioners	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	commissioner1@gulfcounty-fl.gov
Jimmy Rogers	Gulf County Board of Commissioners	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	commissioner3@gulfcounty-fl.gov
Freddie Whitfield	Gulf County Board of Commissioners	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	commissioner5@gulfcounty-fl.gov
Don Butler	Gulf County Administration	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	dbutler@gulfcounty-fl.gov
Marshall Nelson	Gulf County Emergency Management	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-9110	mnelson@gulfcounty-fl.gov
Ben Guthrie	Gulf County Emergency Management	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-9110	bguthrie@gulfcounty-fl.gov
Rachel Jackson	Gulf County Emergency Management	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-9110	rjackson@gulfcounty-fl.gov
Mark Cothran	Gulf County Mosquito Control/Public Works/Solic	1001 Tenth Street	Port St. Joe	FL	32456	850-227-1401	mcothran@gulfcounty-fl.gov
Lee Coolinsworth	Gulf County Public Works	1001 Tenth Street	Port St. Joe	FL	32456	850-227-1401	lcollinsworth@gulfcounty-fl.gov
Brett Lowry	Gulf County Planning	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-227-9562	blowry@gulfcounty-fl.gov
Lianna Sagins	Gulf County EDC/Grants	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6144	lsagins@gulfcounty-fl.gov
Houston Whitfield	Gulf County EMS	140 Library Drive	Port St. Joe	FL	32456	850-229-8002	hwhitfield@gulfcounty-fl.gov
Jessica Susich	Gulf County GIS	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-9110	jsusich@gulfcounty-fl.gov
Mitch Burke	Gulf County Property Appraiser	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6115	mburke@gulfcounty-fl.gov
Jennifer Jenkins	Gulf County Tourist Development Council	150 Captain Fred's Place	Port St. Joe	FL	32456	850-229-7800	info@visitgulf.com
Roni Coppock	Gulf County Chamber of Commerce	308 Reid Ave	Port St. Joe	FL	32456	850-227-1223	director@gulfchamber.org
George Knight	Gulf County Building Department	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-8944	gknight@gulfcounty-fl.gov
Becky Norris	Gulf County Clerk of Court	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6112	bnorris@gulfclerk.com
Dennis Barfield	Gulf County IT Department	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-227-2385	dbarfield@gulfcounty-fl.gov
Mike Harrison	Gulf County Sheriff's Department	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-227-1115	sheriff@gulfsheriff.com
Brad Price	Gulf County Fire Department	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6106	bprice@gulfcounty-fl.gov
Joe Paul	Gulf County Veterans' Service	1000 Cecil G. Costin Sr. Blvd.	Port St. Joe	FL	32456	850-229-6125	jpaul@gulfcounty-fl.gov
Municipalities							
Jim Anderson	City of Port St. Joe	P O Drawer 278	Port St. Joe	FL	32457	850-229-8262	janderson@psj.fl.gov
Don Minchew	City of Wewahitchka	P O BOX 966	Wewahitchka	FL	32465	850-639-2605	citywewa@fairpoint.net
David Garner	City of Port St. Joe Police Department	P O Drawer 278	Port St. Joe	FL	32457	850-229-8265	dgarner@psj.fl.gov
David A Barnes	City of Port St. Joe Police Department	P O Drawer 278	Port St. Joe	FL	32457	850-229-8265	dbarnes@psj.fl.gov
John Grantland	City Of Port St. Joe Public Works	P O Drawer 278	Port St. Joe	FL	32457	850-229-8247	jgrantland@psj.fl.gov
Gail Alsobrook	City of Port St. Joe Redevelopment Agency	308 Reid Ave	Port St. Joe	FL	32456	619-655-0021	gail@PSJRA.com
State							
Douglas Barr	Northwest Florida Water Management District	4765 Pelt Street	Marianna	FL	32446	850-482-9522	
Jerrick Saquibal	Northwest Florida Water Management District	81 Water Management Drive	Havanna	FL	32333	850-539-5999	Jerrick.Saquibal@nwfwmd.state.fl.us
Chris Rietow	Apalachee Regional Planning Council	20776 Central Ave E	Blounstown	FL	32424	850-488-6211	arpc1@fairpoint.net
Marsha Lindeman	Gulf County Health Department	2475 Garrison Ave	Port St. Joe	FL	32456	850-227-1276	Marsha_Lindeman@doh.state.fl.us
Ray Bodrey	Gulf County Extension Office	P O Box 250	Wewahitchka	FL	32465	850-639-3200	rbodrey@ufl.edu
Bryce Thomas	Florida Forestry Service	8180 Hwy 71	Wewahitchka	FL	32465	850-827-1421	bryce.thomas@freshfromflorida.com
Businesses							
Al Scheffer	Costin Insurance Agency	322 Reid Avenue	Port St. Joe	FL	32456	850-229-8899	costinin@gtgcom.net
Roy Smith	Hannon Insurance Agency	221 Reid Avenue	Port St. Joe	FL	32456	850-227-1133	rsmith@hannoninsurance.com
Dwight Vanlierop	Coastal Insurance Agency	402 Reid Avenue	Port St. Joe	FL	32456	850-227-1900	dwight@vlins.com
C. Baldwin	Cook Insurance	22 Ave E	Apalachicola	FL	32320	850-653-8054	cbaldwin@my100bank.com
Cindy Traylor	Gaskin-Graddy Insurance Agency	156 N 2nd Street	Wewahitchka	FL	32465	850-639-5077	ggraddyins@fairpoint.net
Volunteer Organizations							
Bob Pearce	Panhandle Chapter of the American Red Cross	430 East 15th Street	Panama City	FL	32405	850-763-6587	rhpearce@redcrosscpc.org
Tom Williams	Salvation Army	P O BOX 540	Panama City	FL	32402	850-769-5259	Tom_Williams@uss.salvationarmy.org
Institutions							
Loretta Costin	Gulf Coast Community College-Gulf/Franklin Center	3800 Garrison Avenue	Port St. Joe	FL	32456	850-227-9670	lcostin@gulfcoast.edu

Gulf County LMS Committee Members-Continued							
Institutions							
Jim Norton	Gulf County Public Schools	150 Middle School Road	Port St. Joe	FL	32456	850-229-8256	jnorton@gulf.k12.fl.us
Non-Profit							
Leslie Chapman	Florida Federal Alliance of Safe Homes (FLASH)	1427 E Piedmont Dr	Tallahassee	FL	32308	877-221-7233	leslie@flash.org
Patricia Hardman	South Gulf County Tax Payers Association	123 Mariner Lane	Port St. Joe	FL	32456	850-229-7799	Gulftobay@fairpoint.net
Gloria Salinard	Realtors Association	1013 McClelland Avenue	Port St. Joe	FL	32456	850-653-3322	gloria@rafgc.com

Appendix G: LMS Committee Membership Roster

Organization	Representative	Title	Membership Type	Location	Phone	Email
PRIVATE SECTOR						
Blount Insurance Agency	TBA	Agent	Business	Port St. Joe	850-227-1900	
Cook Insurance Agency	C. Baldwin	Agent	Business	Port St. Joe	850- 697-3473	cbaldwin@my100bank.com
Coastal Insurance Agency	TBA	Agent	Business	Port St. Joe	850-227-1960	
Costin Insurance Agency	Al Sheffer	Agent	Business	Port St. Joe	850-229-8899	costinin@gtcom.net
Farm Bureau Insurance Agency	TBA	Agent	Business	Port St. Joe	850-639-5077	
Hannon Insurance Agency	Roy Smith	Agent	Business	Port St. Joe	850-227-1133	rsmith@hannoninsurance.com
Graddy Insurance Agency	Cindy Traylor	Agent	Business	Wewahitchka	850-639-5077	ggraddyins@fairpoint.net
General Public	David Richardson	Citizen	General Public	Gulf County	850-647-5253	smrder1971@gmail.com
PORT ST. JOE						
City of Port St. Joe	Jim Anderson	City Manager	City Government	Port St. Joe	850-229-8262	janderson@psj.fl.gov

Organization	Representative	Title	Membership Type	Location	Phone	Email
City of Port St. Joe Police Dept	David Barnes	Police Chief	Law Enforcement	Port St. Joe	850-229-8265	dbarnes@psj.fl.gov
City of Port St. Joe Downtown Redevelopment Agency	Gail Alsobrook	Director	City Government	Port St. Joe	619-655-0021	gail@PSJRA.com
WEWAHITCHKA						
City of Wewahitchka	Don Minchew	City Manager	City Government	Wewahitchka	850-639-2605	citywewa@fairpoint.net
GULF COUNTY (UNINCORPORATED)						
American Red Cross	Bob Pearce	Vol Coordinator	Volunteer Org	Port St. Joe	850-763-6587	bob.pearce@redcross.org
Salvation Army	Tom Williams	Services Rep	Volunteer Org	Port St. Joe	850-769-5259	tom_williams@uss.salvationarmy.org
Florida Forestry Service	Bryce Thomas	Mitigation Agent	State Government	Port St. Joe	850-827-1421	bryce.thomas@freshfromflorida.com
FLASH of Florida	Leslie Champman	Director	Non Profit	Tallahassee	877-221-7233	leslie@flash.org
Gulf Coast Community College	Loretta Costin	Director, Gulf/Franklin Campus	Education	Port St. Joe	850-227-9670	lcostin@gulfcoast.edu
Gulf County Extension Service	Roy Lee Carter	County Agent	State Government	Port St. Joe	850-639-3200	rlcarter@ufl.edu
Gulf County School Board	Jim Norton	Superintendent	Education	Port St. Joe	850-229-8256	jnorton@gulf.k12.fl.us
Gulf County BOCC	Don Butler	County Administrator	County Government	Port St. Joe	850-229-6106	dbutler@gulfcounty-fl.gov
Gulf County Building Dept	George Knight	Building Inspector	County Government	Port St. Joe	850-229-8944	gknight@gulcounty.gov
Gulf County Clerk of the Court	Becky Norris	Clerk of the Court	County Government	Port St. Joe	850-229-6112	bnorris@gulfclerk.com
Gulf County Emergency Mgmt	Marshall Nelson	Director	County Government	Port St. Joe	850-229-9110	mnelson@gulfcounty-fl.gov
Gulf County Emergency Mgmt	Ben Guthrie	911 Director	County Government	Port St. Joe	850-229-9111	bguthrie@gulfcounty-fl.gov
Gulf County Grants Department	Kari Summers	Division Director	County Government	Port St. Joe	850-229-6144	ksummers@gulfcounty-fl.gov

Organization	Representative	Title	Membership Type	Location	Phone	Email
Gulf County GIS	Mike Nelson	Division Director	County Government	Port St. Joe	850-229-9110	mikenelson@gulfcounty-fl.gov
Gulf County Health Dept	Marsha Lindeman	Administrator	State	Port St. Joe	850-227-1276	marsha_lindeman@doh.state.fl.us
Gulf County Mosquito Control and Solid Waste Department	Joe Danford Mark Cothran	Directors	County Government	Port St. Joe	850-227-3696 850-227-1401	jdanford@gulfcounty-fl.gov mcothran@gulfcounty-fl.gov
Gulf County Planning	Brett Lowry	Director	County Government	Port St. Joe	850-227-9562	blowry@gulfcounty-fl.gov
Gulf County Property Appraiser	Mitch Burke	Property Appraiser	County Government	Port St. Joe	850-229-6115	mitch@gulfpa.com
Gulf County Public Works Dept	Mark Cothran Lee Collinsworth	Directors	County Government	Port St. Joe	850-227-1401 850-227-1401	mcothran@gulfcounty-fl.gov lcollinsworth@gulfcounty-fl.gov
Gulf County Tourist Development Council	Jennifer Jenkins	Director	County Government	Port St. Joe	850-229-7800	jennifer@visitgulf.com
Gulf County Chamber of Commerce	Paula Pickett	Director	Non Profit	Port St. Joe	850-227-1223	paula@gulfchamber.org
Gulf County Economic Development Council	Towan Kopenski	Director	County Government	Port St. Joe	850-229-6144	tkopenski@gulfcounty-fl.gov
Gulf County Veterans Services	Joe Paul	Director	County Government	Port St. Joe		jpaul@gulfcounty-fl.gov
Coastal Community Association	Pat Hardman	Chairman	Non-Profit	Port St. Joe	850-229-7799	gulftobay@fairpoint.net
NW Florida Water Mgmt District	Jerrick Saquibal	Director	Special District	Quincy	850-539-5999	Jerrick.Saquibal@nwfwmd.state.fl.us
Apalachee RPC	Chris Reitow	Director	State	Tallahassee	850-488-6211	Chris.rietow@thearpc.com

Appendix H: Gulf County Critical Facilities

Facility Name	Address	City
AN RAILWAY L.L.C.	190 RAILROAD SHOP RD	PORT ST JOE
BAYSIDE ANIMAL HOSPTIAL	324 LONG AVE	PORT ST JOE
BAYSIDE LUMBER & BLDG SUPPLY	272 COMMERCE BLVD	PORT ST JOE
OUR HOME AT BEACON HILL ASSISTED LIVING FACILITY	141 KAELYN LN	PORT ST JOE
BONUS DOLLAR STORES	217 W RIVER RD	WEWAHITCHKA
BRIDGE OF ST JOE BAY	220 NINTH ST	PORT ST. JOE
CAPE SAN BLAS INN	4950 Cape San Blas Rd	Port St. Joe
CAPITAL CITY BANK	504 MONUMENT AVE	PORT ST. JOE
CAPTAIN'S COVE MARINA	1617 GROUPER AVE	PORT ST. JOE
CENTENNIAL BANK	202 MARINA DR	PORT ST. JOE
CHURCH OF CHRIST	2247 HWY 71 S	WEWAHITCHKA
CHURCH, BEACH BAPTIST CHAPEL	311 Columbus St	PORT ST. JOE
CHURCH, BODY OF CHRIST JESUS	106 Harbor St	PORT ST. JOE
CHURCH, CARTER'S TEMPLE FIRST BORN	308 WILLIAMSBURG RD	WEWAHITCHKA
CHURCH, Church of Christ	2241 Hwy 71 S	Wewahitchka
CHURCH, Church of Christ	741 Twentieth	Port St. Joe
CHURCH, CHURCH OF CHRIST WRITTEN IN HEAVEN	101 HWY 22	WEWAHITCHKA
CHURCH, Church of God In Christ	163 Avenue D	Port St. Joe
CHURCH, Church Of God -Port St. Joe	482 Pompano	Port St. Joe
CHURCH, DALKEITH BAPTIST CHURCH	2223 CR 381	WEWAHITCHKA
CHURCH, FAITH BIBLE	801 Twentieth ST	PORT ST. JOE
CHURCH, FAMILY LIFE CHURCH	323 REID AVE	PORT ST. JOE
CHURCH, FIRST BAPTIST CHURCH	436 N Highway 71	WEWAHITCHKA
CHURCH, FIRST BAPTIST CHURCH OF PORT ST. JOE	102 THIRD ST	PORT ST. JOE
CHURCH, FIRST BORN CHURCH OF THE LIVING GOD	222 AVENUE E	PORT ST. JOE
CHURCH, FIRST CHURCH OF THE NAZARENE	2420 LONG AVE	PORT ST. JOE
CHURCH, FIRST PRESBYTERIAN CHURCH	508 Sixtenth ST	PORT ST. JOE
CHURCH, First United Methodist	335 Hwy 71 S	Wewahitchka
CHURCH, FIRST UNITED METHODIST CHURCH, PORT ST. JOE	1001 Constitution Dr	PORT ST. JOE
CHURCH, GLAD TIDINGS ASSEMBLY OF GOD	138 EAST ORANGE AVE	WEWAHITCHKA
CHURCH, HIGHLAND VIEW ASSEMBLY OF GOD CHURCH	125 DOLPHIN ST	PORT ST. JOE
CHURCH, HIGHLAND VIEW BAPTIST CHURCH	310 LING ST	PORT ST. JOE
CHURCH, HIGHLAND VIEW CHURCH OF GOD	482 POMPANO ST	PORT ST. JOE
CHURCH, HOPE FAMILY WORSHIP CENTER	1609 PALM BLVD	PORT ST. JOE
CHURCH, HOWARD CREEK BAPTIST CHURCH	7230 DOC WHITFIELD RD	WEWAHITCHKA
CHURCH, JEHOVAH'S WITNESSES KINGDOM HALL	335 SELMA ST	PORT ST. JOE
CHURCH, LONG AVENUE BAPTIST CHURCH	1601 LONG AVENUE	PORT ST. JOE
CHURCH, Mt. Carmel Baptist Church	300 Avenue D	Port St. Joe

Facility Name	Address	City
CHURCH, NEW BETHEL A.M.E. CHURCH	146 AVENUE C	PORT ST. JOE
CHURCH, NEW BETHEL MISSIONARY BAPTIST CHURCH	208 N PARK AVE	PORT ST. JOE
CHURCH, NEW COVENANT CHURCH- THE MIRACLE CENTER	252 AVENUE E	PORT ST. JOE
CHURCH, NEW HARVEST FELLOWSHI CHURCH	1800 HWY 71 N	WEWAHITCHKA
CHURCH, New Hope Missionary Baptist Church	133 Freeman Rouse Dr	Wewahitchka
CHURCH, NEW LIFE CHRISTIAN CENTER	504 Sixth ST	PORT ST. JOE
CHURCH, OAK GROVE CHURCH	613 MADISON ST	PORT ST. JOE
CHURCH, PHILADELPHIA PRIMITIVE BAPTIST CHURCH	274 AVENUE D	PORT ST. JOE
CHURCH, ST. JAMES AME CHURCH	137 FAISON ST	WEWAHITCHKA
CHURCH, ST. JAMES EPISCOPAL CHURCH	800 TWENTY-SECOND ST	PORT ST. JOE
CHURCH, ST. JOHN'S EPISCOPAL CHURCH	4060 HWY 71 N	WEWAHITCHKA
CHURCH, ST. JOSEPH'S CATHOLIC CHURCH	202 TWENTIETH ST	PORT ST. JOE
CHURCH, TRIUMPH CHURCH OF GOD	1378 W RIVER RD	WEWAHITCHKA
CHURCH, UNITED PENTECOSTAL CHURCH	619 HWY 71 S.	WEWAHITCHKA
CHURCH, UNITED PENTECOSTAL CHURCH	309 Sixth ST	PORT ST. JOE
CHURCH, VICTORY TEMPLE FIRST BORN HOLINESS	315 Martin Luther King BLVD	PORT ST. JOE
CHURCH, WESTSIDE BAPTIST CHURCH	842 W. RIVER RD	WEWAHITCHKA
CHURCH, WEWAHITCHKA CHURCH OF CHRIST	2241 HWY 71 S	WEWAHITCHKA
CHURCH, WHITE CITY BAPTIST CHURCH	7210 HWY 71	WEWAHITCHKA
CHURCH, ZION FAIR BAPTIST CHURCH	280 AVENUE C	PORT ST. JOE
CITY OF PORT ST JOE, POLICE STATION	410 WILLIAMS AVE	PORT ST. JOE
COMFORTER FUNERAL HOME	601 LONG AVE	PORT ST. JOE
COSTIN AIRPORT	167 CESSNA DRIVE	PORT ST. JOE
CREEK STOP & DELI	3050 HWY 71 N	WEWAHITCHKA
DALKEITH FOOD MART INC.	110 COUNTY ROAD 381	WEWAHITCKHA
DIXIE BELLE MOTEL	3155 W HWY 98	PORT ST. JOE
DIXIE DANDY	236 HWY 22	WEWAHITCHKA
DOLLAR GENERAL COPRORATION PSJ	210 MONUMENT AVE	PORT ST JOE
DOLLAR GENERAL CORP # 04465	309 HWY 71 N	WEWAHITCHKA
DR. MICHEAL BARNES	412 Hwy 71 N	WEWAHITCHKA
DR. VINCENT IVERS	301 Twentieth ST	PORT ST. JOE
EMERALD COAST FEDERAL CREDIT UNION	502 WOODWARD AVE	PORT ST. JOE
EMERALD WASTE SERVICES LLC PST TRANSFOR STATION	1420 INDUSTRIAL RD	PORT ST. JOE
EXPRESS LANE #77	8220 W. HWY 98	PORT ST. JOE
EXPRESS LANE #79	701 MONUMENT AVE	PORT ST. JOE
EXPRESS LANE #80	111 HWY 71	WEWAHITCHKA
FAIRPOINT - BEACON HILL	212 COWRIES ST	PORT ST. JOE
FAIRPOINT- PSJ CENTRAL OFFICE	502 CECIL G COSTIN SR BLVD	PORT ST. JOE
FAMILY DOLLAR STORE # 4866	510 CECIL G COSTIN SR BLVD	PORT ST. JOE
FISHER'S BULDING SUPPLY	848 HWY 22	WEWAHITCHKA
GULF AIRE LIFT STATION WWTP	8270 W HWY 98	PORT ST. JOE

Facility Name	Address	City
GULF AIRE WWTP	351 SEA SHORES DRIVE	PORT ST. JOE
GULF CO EMER MED SVC	140 LIBRARY DR	PORT ST. JOE
GULF COAST COMM COLLEGE-GULF/FRANKLIN CE	3800 GARRISON AVE	PORT ST. JOE
GULF COAST ELECTRIC COOP, INC.	934 W RIVER ROAD	WEWAHITCHKA
GULF CORRECTIONAL INST	500 IKE STEELE RD	WEWAHITCHKA
GULF CORRECTIONAL INSTITUTION - ANNEX	699 IKE STEELE RD	WEWAHITCHKA
GULF COUNTY ADULT SCHOOL PSJ	2853 LONG AVE	PORT ST. JOE
GULF COUNTY ADULT SCHOOL WEWAH	514 E RIVER RD	WEWAHITCHKA
GULF COUNTY COURTHOUSE-WEWAHITCHKA	222 N. 2nd STREET	WEWAHITCHKA
GULF COUNTY EMERGENCY MANAGEMENT	1000 CECIL G COSTIN SR BLVD BLDG 500	PORT ST. JOE
GULF COUNTY HEALTH DEPT/PSJ	2476 Garrison Avenue	PORT ST. JOE
GULF COUNTY HEALTH DEPT/WEWA	807 HWY 22	WEWAHITCHKA
GULF COUNTY JAIL	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
GULF COUNTY LANDFILL FIVE POINTS	2400 HWY 71 S	PORT ST. JOE
GULF COUNTY SHERIFF'S DEPT HEADQUARTERS	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
GULF COUNTY SHERIFF'S OFFICE - SUBSTATIO	310 N Hwy 71	WEWAHITCHKA
GULF COUNTY SUPERINTENDENT'S OFFICE	150 MIDDLE SCHOOL DR	PORT ST. JOE
GULF COUNTY TRANSPORTATION	122 WATER PLANT RD	PORT ST JOE
GULF COUNTY WATER TANK - HIGHLAND VIEW	348 MARLIN STREET	PORT ST. JOE
GULF COUNTY WATER TANK - ST JOE BEACH	6100 AMERICUS AVENUE	PORT ST. JOE
GULF COUNTY WATER TANK - WHITE CITY	311 OSPREY ROAD	WEWAHITCHKA
GULF FORESTRY CAMP	3222 DOC WHITFIELD ROAD (WHITE CITY)	WEWAHITCHKA
GULF SANDS MOTEL	8042 W HWY 98	PORT ST. JOE
HAMMOND'S COUNTRY STORE	6987 HWY 71	WEWAHITCHKA
HELIO LZ (COURTHOUSE)	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
HELIO LZ (WALK TRACK/WEWA HS)	602 E. RIVER ROAD	WEWAHITCHKA
HELIO LZ (WALK TRACK-PSJ-HS)	CORNER OF GARRISON & MADISON	PORT ST. JOE
HONEYVILLE COMMUNITY CENTER	240 PARK DR	WEWAHITCHKA
HOWARD'S CREEK GROCERY	6407 DOC WHITFIELD RD	WEWAHITCHKA
J V GANDER FUEL DEPOT	302 GARRISON AVE	PORT ST. JOE
KFW597 ANR Railroad SITE 2	JCT OF HWY 71 & CHIPLEY AVE	PORT ST. JOE
KFW597 ANR Railroad SITE 7	300 FIRST ST	PORT ST. JOE
KIC734 STATE OF FL SITE 6 WHITFIELD, Fl Highway Patrol	3222 DOC WHITFIELD RD	PORT ST. JOE
KID'S CORNER PRESCHOOL & CHILDCARE	509 E RIVER RD	WEWAHITCHKA
KIK216 ANR Railroad SITE 1	JCT OF HWY 71 & CHIPLEY AVE	WEWAHITCHKA
KNCY669 PROGRESS ENERGY ST JOE MW BLDG	PORT ST JOE MW BLDG	PORT ST. JOE
KNDE676 GULF COUNTY SITE 2 ambulance service	HWY 71N 1.1 MI NE OF CITY LIMITS	WEWAHITCHKA
KNFX261 POWERSOUTH ENERGY COOP	AT GULF COAST ELECT CORP OFC	WEWAHITCHKA
KNGD531 CITY OF PORT ST JOE police dept	1 MI E OF INT OF HWY 98 & SR 6	PORT ST. JOE
KNKN584 Verizon ST JOE SITE 1	502 Fifth ST	PORT ST. JOE

Facility Name	Address	City
KNKN584 Verizon WEWAH SITE 2	601 S Hwy 71	WEWAHITCHKA
KNKO292 AMS SPECTRUM SITE 51	2763 LONG AVE	PORT ST. JOE
KNKQ290 AT&T WIRELESS PCS SITE 1	2763 LONG AVE	PORT ST. JOE
KNKQ290 AT&T WIRELESS PCS SITE 3	550 STONE MILL CREEK RD	WEWAHITCHKA
KOM877 STATE OF FL WILDLIFE CONSERVATION	OLD COUNTY COURTHOUSE AT INT OF SR 22 &	WEWAHITCHKA
KORNER STOP N GO	302 MARTIN LUTHER KING BLVD	PORT ST. JOE
KPF975 WJPT Sunny 106 Radio Station	LONG AVE EXTENSION	PORT ST. JOE
KRO288 GULF COUNTY BOARD OF COMM	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
KZN214 GULF COAST ELEC COOP SITE 1 WEWA	INT OF ST 22 & MORGAN LN	WEWAHITCHKA
LIGHTHOUSE WTP UTILITIES - SECONDARY	5610 CR 30-A	PORT ST. JOE
LIGHTHOUSE WTP BOOSTER STATION	7182 CAPE SAN BLAS RD	PORT ST. JOE
LIGHTHOUSE WTP UTILITIES - PRIMARY	7521 CR 30-A	PORT ST. JOE
MAIN STAY SUITES	3951 E HWY 98	PORT ST. JOE
MONTESORI MINUTES PRESCHOOL	525 THIRD ST	PORT ST JOE
NORTH FLORIDA CHILD DEV - HIGHLAND VIEW	153 RED FISH ST	PORT ST. JOE
NORTH FLORIDA CHILD DEVELOPMENT INC	103 E RIVER RD	WEWAHITCHKA
NORTH FLORIDA CHILD DEVELOPMENT INC	200 N 2ND ST	WEWAHITCHKA
PEOPLE HELPING PEOPLE -GULF CO	401 PETERS	PORT ST. JOE
PIGGLY WIGGLY	125 W Hwy 98	Port St. Joe
PORT ST JOE ELEMENTARY SCHOOL	2201 LONG AVENUE	PORT ST. JOE
PORT ST JOE HIGH SCHOOL	100 SHARK DRIVE	PORT ST. JOE
PORT ST. JOE CENTENIAL BLDG	2201 CENTENNIAL DR	PORT ST. JOE
PORT ST. JOE MARINA INC	340 MARINA DR	PORT ST. JOE
PORT ST. JOE MIDDLE SCHOOL	191 MIDDLE SCHOOL DR	PORT ST. JOE
PREFERRED MATERIAL INC	1145 INDUSTRIAL RD	PORT ST. JOE
PROGRESS ENERGY/BEACON HILL SUBSTATION	520 CR 386	PORT ST. JOE
PROGRESS ENERGY/INDIAN PASS SUBSTATION	8951 CR C30	PORT ST. JOE
PROGRESS ENERGY/INDUSTRIAL RD SUBSTATION	980 INDUSTRIAL ROAD	PORT ST. JOE
PROGRESS ENERGY/PSJ SUBSTATION	1011 Tenth ST	PORT ST. JOE
PSJ WATER BOOSTER STATION HIGHLAND VIEW	348 MARLIN STREET	PORT ST. JOE
PSJ CITY HALL	302 CECIL G COSTIN SR BLVD	PORT ST. JOE
PSJ CITY WAREHOUSE	1002 Tenth ST	PORT ST. JOE
PSJ LIFT STATION-10TH STREET	914 Tenth ST	PORT ST. JOE
PSJ LIFT STATION-16TH ST.	309 Sixteenth ST	PORT ST. JOE
PSJ LIFT STATION-1ST ST	499 E. First ST	PORT ST. JOE
PSJ LIFT STATION-20TH ST	604 Twentieth ST	PORT ST. JOE
PSJ LIFT STATION-BAREFOOT COTTAGES	3010 HWY 98	PORT ST. JOE
PSJ LIFT STATION-BAY ST. JOSEPH NURSING	220 NINTH ST	PORT ST. JOE
PSJ LIFT STATION-BRENT CIRCLE	100 BRENT CIRCLE	PORT ST. JOE
PSJ LIFT STATION-BRIDGEPORT	904 AVE A	PORT ST. JOE
PSJ LIFT STATION-CITY OF PORT ST JOE	1002 Tenth ST	PORT ST. JOE

Facility Name	Address	City
PSJ LIFT STATION-CLIFF SIMS	903 CLIFFORD SIMS DR	PORT ST. JOE
PSJ LIFT STATION-DUPONT DR. & 20TH ST	100 TWENTIETH ST	PORT ST. JOE
PSJ LIFT STATION-EAGLE HARBOR	477 PONDEROSA PINE	PORT ST. JOE
PSJ LIFT STATION-EAST US 98	3881 GARRISON AVE	PORT ST. JOE
PSJ LIFT STATION-GAUTIER	GAUTIER MEMORIAL LANE	PORT ST. JOE
PSJ LIFT STATION-GCCC	3953 E HWY 98	PORT ST. JOE
PSJ LIFT STATION-GULF COUNTY PUBLIC WOR	1001 Tenth ST	PORT ST. JOE
PSJ LIFT STATION-HODRICK	602 HODRICK ST	PORT ST. JOE
PSJ LIFT STATION-HOSPITAL	100 TWENTIETH ST	PORT ST. JOE
PSJ LIFT STATION-INDUSTRIAL ROAD	1180 INDUSTRIAL ROAD	PORT ST. JOE
PSJ LIFT STATION-JUBLILATION SUBDIVISIO	1390 CAPE SAN BLAS ROAD	PORT ST. JOE
PSJ LIFT STATION-MADISON ST	250 MADISON STREET	PORT ST. JOE
PSJ LIFT STATION-MADISON ST NEAR HIGH SC	995 MADISON STREET	PORT ST. JOE
PSJ LIFT STATION-MARINA DR	404 MARINA DRIVE	PORT ST. JOE
PSJ LIFT STATION-OAK GROVE	250 MADISON STREET	PORT ST. JOE
PSJ LIFT STATION-PORT ST JOE HIGH	100 SHARK DR	PORT ST. JOE
PSJ LIFT STATION-RHONDA DEL SOL SUBDIVI	610 CAPE SAN BLAS RD	PORT ST. JOE
PSJ LIFT STATION-SHALLOW REED SUBDIVIS	1261 COUNTRY CLUB RD	PORT ST. JOE
PSJ LIFT STATION-SUNSET VILLAGE #1	208 STINGRAY LANE	PORT ST. JOE
PSJ LIFT STATION-SUNSET VILLAGE #2	114 CONCH STREET	PORT ST. JOE
PSJ LIFT STATION-WARD RIDGE	100 BRENT CIRCLE	PORT ST. JOE
PSJ LIFT STATION-WINDMARK #1	3602 W. HWY 98	PORT ST. JOE
PSJ LIFT STATION-WINDMARK (PHASE 1)	416 WINDMARK WAY	PORT ST. JOE
PSJ POLICE DEPARTMENT	410 WILLIAMS AVE	PORT ST. JOE
PSJ WHITE CITY WATER SYSTEM BOOSTER STAT	311 OSPREY ROAD	PORT ST. JOE
PSJ WHITE CITY WATER SYSTEM BOOSTER STATION	311 OSPREY ROAD	PORT ST. JOE
PSJ WTP	360 WATER PLANT RD	PORT ST. JOE
PSJ WWTP	455 INDUSTRIAL ROAD	PORT ST. JOE
PUBLIC LIBRARY, PORT ST JOE	110 LIBRARY DR	PORT ST. JOE
PUBLIC LIBRARY, WEWAHITCHKA	314 S 2nd St	WEWAHITCHKA
RANDY'S DISCOUNT GROCERY	104 Hwy 71 N	Wewahitchka
READY MIX USA - PORT ST JOE PLANT	1001 CECIL G COSTIN SR BLVD	PORT ST. JOE
DAVI RICH'S IGA	201 W River Rd	Wewahitchka
RINKER MATERIALS - PORT ST JOE BATCH PLA	1145 Industrial Rd	PORT ST. JOE
RITZ STORE # 32	2080 W HWY 98	PORT ST. JOE
ROBERT MOORE ADMINISTRATION BUILDING	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
SACRED HEART CLINIC	2475 GARRISON AVE	PORT ST. JOE
SACRED HEART HOSPITAL	3801 E HWY 98	PORT ST. JOE
SCALLOP COVE BP	4310 CAPE SAN BLAS ROAD	PORT ST. JOE
SENIOR CITIZENS /PSJ	120 LIBRARY DRIVE	PORT ST. JOE
SHORELINE MEDICAL GROUP	419 BALTZEL AVE	PORT ST. JOE

Facility Name	Address	City
ST JOE BEACH WATER SYSTEM BOOSTER STATIO	6202 W HWY 98	PORT ST. JOE
ST. JOE ACE HARDWARE CO	201 WILLIAMS AVE	PORT ST. JOE
ST. JOE NATURAL GAS CO INC	301 LONG AVE	PORT ST. JOE
ST. JOSEPH BAY HUMANE SOCIETY	1007 Tenth St	PORT ST. JOE
St. Joseph Historical Society	142 Keepers Cottage Way	Port St. Joe
SUPERIOR BANK	418 CECIL G COSTIN SR. BLVD	PORT ST. JOE
TAUNTON SAND MINE	702 HWY 71 N	WEWAHITCHKA
TENTH STREET BED & BREAKFAST	605 Tenth St	Port St. Joe
THE CAPE TRADING POST	4975 CAPE SAN BLAS RD	PORT ST JOE
THE PORT INN	501 MONUMENT AVE	PORT ST. JOE
TIKI PALMS INN	517 E Fourth St	Port St. Joe
TURTLE BEACH INN	144 Painted Pony Rd	Port St. Joe
TYNDALL FEDERAL CREDIT UNION	501 CECIL G COSTIN SR. BLVD	PORT ST. JOE
US POST OFFICE PSJ	502 GARRISON AVE	PORT ST. JOE
US POST OFFICE WEWAH	432 HWY 22	WEWAHITCHKA
VFD DALKEITH	2731 CR 381	WEWAHITCHKA
VFD GULF COUNTY BEACHES	7912 ALABAMA AVENUE	PORT ST. JOE
VFD HIGHLAND VIEW	132 SNAPPER STREET	PORT ST. JOE
VFD HOWARD CREEK	523 S. MURPHY ROAD	WEWAHITCHKA
VFD OVERSTREET	580 PALMETTO DR	PORT ST. JOE
VFD PORT ST JOE	404 Williams Ave	PORT ST. JOE
VFD SOUTH GULF - STATION #1	240 CAPE SAN BLAS ROAD	PORT ST. JOE
VFD SOUTH GULF - STATION #2	7590 CAPE SAN BLAS RD	PORT ST. JOE
VFD STONEMILL CREEK FIRE DEPARTMENT	211 Ike Steele Road	WEWAHITCHKA
VFD WETTAPO CREEK FIRE DEPARTMENT	507 KEMP CEMETARY ROAD	WEWAHITCHKA
VFD WEWAHITCHKA FIRE DEPARTMENT	133 S. 2nd Street	WEWAHITCHKA
VFD WHITE CITY FIRE DEPARTMENT	140 Volunteer Avenue	WEWAHITCHKA
VISION BANK	529 CECIL G COSTIN SR. BLVD	PORT ST. JOE
VISION BANK	8134 W HWY 98	PORT ST. JOE
VISION BANK	125 HWY 71 N	WEWAHITCHKA
VITRO TECH. SERV. TEST SITE D-3	2151 CAPE SAN BLAS	PORT ST. JOE
W216BT WFSU-89.1FM, SWFQ-91.5FM & WFSW-FM	1001 LONG AVE	PORT ST. JOE
W298AN 107.5FM Way-FM Radio Station	601 S Hwy 71	WEWAHITCHKA
WALKER'S DIXIE DANDY	2176 HWY 98	PORT ST. JOE
WASHINGTON RECREATION CENTER/GYM	407 KENNY STREET	PORT ST. JOE
WETAPPO LANDFILL	4286 FLORIDA 22	WEWAHITCHKA
WEWAH LIFT STATION # 1	7TH ST.	WEWAHITCHKA
WEWAH LIFT STATION # 2	ADJACENT TO 337 PINE ST	WEWAHITCHKA
WEWAH LIFT STATION # 3	2ND ST. & MAGNOLIA AVE	WEWAHITCHKA
WEWAH LIFT STATION # 4	HWY. 71 S. & PINE ST.	WEWAHITCHKA
WEWAH LIFT STATION # 5	IN THE 300 BLOCK OF OCEOLA AVE	WEWAHITCHKA

Facility Name	Address	City
WEWAH LIFT STATION # 6	W. REID AVE & MCLON DR	WEWAHITCHKA
WEWAH LIFT STATION # 7	IN THE 200 BLOCK OF HWY. 22	WEWAHITCHKA
WEWAH LIFT STATION # 8	HWY 71 N & BRITT AVE	WEWAHITCHKA
WEWAH LIFT STATION # 9	HWY. 22 & WILLIAMSBURG RD	WEWAHITCHKA
WEWAH LIFT STATION #10	W. RIVER RD. & HILL CIR	WEWAHITCHKA
WEWAH LIFT STATION #11	JEHU RD & OLIVER DR	WEWAHITCHKA
WEWAH LIFT STATION #12	CENTRAL AVE.	WEWAHITCHKA
WEWAH LIFT STATION WWTP #1 EQUIPMENT	200 E. SYCAMORE ST	WEWAHITCHKA
WEWAH LIFT STATION WWTP #2 EQUIPMENT	200 E. SYCAMORE ST	WEWAHITCHKA
WEWAH WTP CITY OF WEWAHITCHKA	402 LAKE GROVE RD	WEWAHITCHKA
WEWAH WWTP CITY OF WEWAHITCHKA	200 E. SYCAMORE ST	WEWAHITCHKA
WEWAHITCHKA CITY HALL	109 2ND ST	WEWAHITCHKA
WEWAHITCHKA COMMUNITY CENTER	314 E 3RD STREET	WEWAHITCHKA
WEWAHITCHKA ELEMENTARY SCHOOL	514 E. RIVER RD	WEWAHITCHKA
WEWAHITCHKA ELEMENTARY SCHOOL PRE-K	130 E RIVER RD	WEWAHITCHKA
WEWAHITCHKA EMS AMBULANCE	237 W RIVER RD	WEWAHITCHKA
WEWAHITCHKA HIGH SCHOOL	754 E. RIVER RD	WEWAHITCHKA
WEWAHITCHKA MIDDLE SCHOOL	190 ALLIGATOR ALLEY	WEWAHITCHKA
WEWAHITCHKA SEARCH & RESCUE	237 W RIVER RD	WEWAHITCHKA
WFCT 105.5 FM	2911 Long Ave	Port St. Joe
WMT416 AT&T WIRELESS PCS SITE 1	550 STONE MILL CREEK RD	WEWAHITCHKA
WNJX710 GULF COUNTY Antenna SITE 1 ST JOE	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
WNJX710 GULF COUNTY Antenna SITE 2 BEACHES	COR OF COURT ST & ALABAMA AVE	PORT ST. JOE
WNKS375 NEXTEL ST JOE	HWY 71 N 1.1 MI NE	PORT ST. JOE
WNKV956 GULF COAST ELEC COOP SITE 2 WEWA	INT OF HWY 22 & MORGAN LN	WEWAHITCHKA
WNLN415 STATE OF FL SITE 1 WHITE CITY dept of corrections	HWY 71 2 MI N TO SR 387 4 MI E	WEWAHITCHKA
WNUL895 GULF COUNTY SCHOOL Maint SITE 2	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
WNUL895 GULF COUNTY SCHOOL Maint SITE 4	WEWAHITCHKA SCHS HWY 6 .05 MILES S OF WE	WEWAHITCHKA
WNVB456 STATE OF FL SITE 1 WEWAH Dept of Corrections	5 MI NW SECTIONS 32 & 33	WEWAHITCHKA
WNYS381 ANR Railroad SITE 2	300 FIRST ST	PORT ST. JOE
WPBH 94.5	2763 LONG AVE	PORT ST. JOE
WPEA468 TODD LAND DEVELOPMENT	OLD 2ND ST COUNTY COURTHOUSE AT WEWAHITC	WEWAHITCHKA
WPFB609 NEXTEL ST JOE	HWY 71 N 1.1 MI NE	PORT ST. JOE
WPFR829 SOUTHERN Link wireless	HWY 71 AND CHIPOLA	WEWAHITCHKA
WPKG590 JOHNNY MIZE SITE 1	1024 WOODWARD AVE	PORT ST. JOE
WPKV702 GULF COUNTY SITE 1 WEWAH Ambulance Serv	OLD 2ND ST COUNTY COURTHOUSE	WEWAHITCHKA
WPMZ455 NEXTEL ST JOE	HWY 71 AND CHIPOLA	PORT ST. JOE
WPNI604 POWERSOUTH ENERGY COOP	AT GULF COAST ELECT CORP OFC	WEWAHITCHKA
WPTQ581 PROGRESS ENERGY SITE 2	PORT ST JOE MW BLDG	PORT ST. JOE
WPTU416 CITY OF WEWAHITCHKA city court	OLD 2ND ST COUNTY COURTHOUSE AT WEWAHITC	WEWAHITCHKA

Facility Name	Address	City
WPXD840 STATE OF FL SITE 1 WEWAH State Law Enforcement	HWY 71 & CHIPOLA	WEWAHITCHKA
WPXD840 STATE OF FL SITE 3 ELLINGSON State Law Enforcement	3222 DOC WHITFIELD Rd	PORT ST. JOE
WPXD899 STATE OF FL SITE 1 WEWAH State Law Enforcement	HWY 71 & CHIPOLA	WEWAHITCHKA
WPXD899 STATE OF FL SITE 3 LANDFILL RD State Law Enforcement	LANDFILL ROAD	PORT ST. JOE
WPXD899 STATE OF FL SITE 4 ELLINGSON State Law Enforcement	WHITFIELD ROAD	PORT ST. JOE
WPXM817 STATE OF FL SITE 1 WEWAH State Law Enforcement	HWY 71 & CHIPOLA	WEWAHITCHKA
WPXM817 STATE OF FL SITE 2 ST JOE State Law Enforcement	LANDFILL ROAD	PORT ST. JOE
WPXP611 LIBERTY COMMUNICATIONS	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
WPXS659 STATE OF FL SITE 3 WEWAH State Law Enforcement	HWY 71 & CHIPOLA	WEWAHITCHKA
WPXS659 STATE OF FL SITE 5 ST JOE State Law Enforcement	LANDFILL ROAD	PORT ST. JOE
WPXS659 STATE OF SL SITE 6 ELLINGSON State Law Enforcement	3222 DOC WHITFIELD ROAD	PORT ST. JOE
WPXY334 NEXTEL WIP	NE OF GARRISON ST OFF SR 71 NE OF US 98	PORT ST. JOE
WPYN785 STATE OF FL ST JOE STATE PK ENVIROMENTAL PROTECTION DEPT	ST JOE STATE PK environment Protection	PORT ST. JOE
WQAE590 GULF COUNTY Sheriff's Office, SITE 4 WEWAH	OLD 2ND ST COUNTY COURTHOUSE	WEWAHITCHKA
WQAE590 GULF COUNTY sheriff's Office, SITE 1 ST JOE	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
WQAE590 GULF COUNTY Sheriff's Office, SITE 2 WEWAH SCHOOLS	HWY 6; 0.5 MI S OF WEWAHITCHA	WEWAHITCHKA
WQAS419 CITY OF PORT ST JOE Public Works	1000 CECIL G COSTIN SR BLVD	PORT ST. JOE
WQDW650 STATE OF FL DMS-DEITS SITE 4 WE	HWY 71 & CHIPOLA	WEWAHITCHKA
WQDZ591 STATE OF FL DMS-DEITS SITE 6 FRA	LANDFILL ROAD	PORT ST. JOE
WQDZ770 STATE OF FL DMS-DEITS SITE 4 WEW	HWY 71 & CHIPOLA	WEWAHITCHKA
WQGJ540 HARRIS CORP WEWAH SCHOOLS	HWY 6; 0.5 MI S OF WEWAHITCHKA	WEWAHITCHKA
WQGJ553 HARRIS CORP FRANKLIN2 SITE 1	LANDFILL ROAD	PORT ST. JOE
WQGJ826 HARRIS CORP ELLINGSON SITE 1	3222 DOC WHITFIELD ROAD	PORT ST. JOE
WQID618 FL DEP REC AND PARKS RANGER STAT	8899 CAPE SAN BLAS RD	PORT ST. JOE
WQIH754 FL DEP PARKS ST.JOE BUFFER PRESERVE	3915 HIGHWAY 30-A	PORT ST. JOE
WQJM416 SOUTH GULF COUNTY VFD	240 CAPE SAN BLAS ROAD	PORT ST. JOE
WQJM721 NEXTEL WEWAH	HWY 71 AND CHIPOLA	WEWAHITCHKA
WQLD519 STATE OF FL DMS SITE 2	LANDFILL ROAD	PORT ST. JOE
WQLD627 STATE OF FL DMS SITE 5	601 S Hwy 71	WEWAHITCHKA
WQLF945 SACRED HEART HOSPITAL ST JOE	3801 US HWY 98E	PORT ST. JOE
WQLL549 STATE OF FL DEPT OF CORRRECTIONS	500 IKE STREET ROAD: GULF CL	WEWAHITCHKA
WQNL606 MAIN STREET BROADBAND WEWA-127	601 S Hwy 71	WEWAHITCHKA
WQNW280 PROGRESS ENERGY ST JOE MW BLDG	PORT ST JOE MW BLDG	PORT ST. JOE
WQNX989 MAIN STREET BROADBAND PTSJ 128 F	502 Fifth ST	PORT ST. JOE
WSB741 WHITFIELD TIMBER CO	OLD CITY COURTHOUSE	WEWAHITCHKA
WSN618 ST JOSEPH LAND & DEVELOPMENT CO	.25 MI W ST Rd hwy 71	PORT ST. JOE
WZQ767 fairpoint SITE 1 WEWAH	HWY 71 & CHIPOLA	WEWAHITCHKA
WZQ767 fairpoint SITE 5 ST JOE	502 Fifth ST	PORT ST. JOE

Appendix I: Adoption Resolutions

[Gulf County Resolution – TBA]

[Port St. Joe Resolution – TBA]

[Wewahitchka Resolution – TBA]