



2020 Interim
Update
Comprehensive
Emergency Management Plan
(2018 ed.)

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Record of Policy Revisions

This plan is a living document that is subject to changes in defining procedural methods and techniques. A change to the plan does not require ratification by the Manatee County Board of County Commissioners unless there is a major change in policy. Authority for changes to this plan is delegated to the Manatee County Public Safety Director and/or the Chief of Emergency Management. The Manatee County Emergency Management Chief is responsible for the coordination of changes with affected agencies, and after concurrence, may make changes to this plan. All major changes will be routed within thirty (30) days.

The Board of County Commissioners establishes policies to guide the functions of County government. Policies are created by ordinance in the Manatee County Code of Ordinances, by resolution or by adoption during a Board meeting.

The County Administrator is responsible for establishing procedures for implementing the policies adopted by the Board of County Commissioners to guide the administrative functions of County departments. Procedures are authorized by the County Administrator or his/her designee. Procedures apply to all County departments and are intended to serve as a comprehensive guide for all administrative personnel. Observance of the procedures is mandatory. In addition to these procedures, it is anticipated that Department Directors may promulgate internal policies regarding the operation of their respective departments.

Historical Evolution of the Plan

The tables below provide a complete account of the Plan's historical evolution regarding 4-year updates, as well as any interim updates to the Plan.

The **Adoption History Table** allows users of the Manatee County Comprehensive Emergency Management Plan to quickly and accurately determine which ordinance or resolutions have been considered for each 4-year update.

Res/Ord No.:	Date Adopted	Jurisdiction	Purpose	FDEM approval
Ord. 84-020	10/02/1984	Manatee County	Establish Emergency Management Powers in Manatee County	
Ord. 87-024	07/28/1987	Manatee County	Amending Ord. 84-20	
Ord. 98-027	08/04/1998		Supersedes and Replace Ord. 87-024	
R-00-038	02/01/2001	Manatee County	4-year Update	
R-05-10	01/04/05	Manatee County	4-year Update	
R-09-123	09/15/2009	Manatee County	4-year Update	
R-14-056	05/06/2014	Manatee County	4-year Update	05/20/2014
R-14-22	05/14/2014	City of Bradenton	4-year Update	
R-14-02	05/13/2014	City of Holmes Beach	4-year Update	
R-2014-01	03/20/2014	West Manatee Fire Rescue	4-year Update	
R-18-118	08/21/2018	Manatee County	4-year Update	06/27/2018

The **4-Year Update Summary Table** summarizes substantial changes to the Plan as part of each 4-year update period.

1984 - 2014 Updates

Section/ Appendix	Summary of revision to the Plan
	No record of specific revisions during each 4-year update period.

2018 Update

Section/ Appendix	Summary of revision to the Plan
	Substantial change and re-organization of the entire plan to meet the standards and requirements set forth in Florida Administrative Code Rule 27P-6. While the document's format underwent extensive review and changes, no policy-level revisions were made.

The **Interim Update Summary Table** summarizes revisions, amendments or updates to the Plan as part of any update deemed necessary since the Plan is meant to be a living document.

Year	Summary of revision to the Plan
June 2020	Revisions are considered an interim update of non-substantial change and are for consistency purposes with 5-year update to Local Mitigation Strategy Plan (LMS), as well as Ordinance 19-47.

Administrative Handling Instructions

The title of this document is **2020 Interim Update - Manatee County Comprehensive Emergency Management Plan (CEMP) (2018 ed.)**. This plan is developed and submitted for review in accordance with the provisions of Rule Chapter 27P-5, Florida Administrative Code (FAC).

This CEMP supersedes all previous versions. The County will periodically review, exercise, and revise the plan as necessary to meet changing conditions. We solicit comments and recommendations to improve this plan. Please forward comments to Manatee County Emergency Management via email to emergency.management@mymanatee.org.

Point(s) of Contact:

Manatee County Emergency Management
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Bradenton, Florida 34203
Emergency.Management@mymanatee.org
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Executive Summary

Manatee County Government is committed to providing quality service with an emphasis on Accountability, Civility and Ethics. Manatee County Government's mission is to provide efficient, effective, responsive government that is mindful of sensitive natural environment while achieving the Commission's vision for the County: a premier place in which to live and work and play.

Florida law establishes the CEMP as the master operations document for the State of Florida and it is the framework through which the state handles emergencies and disasters. To the extent possible, the CEMP mirrors the State of Florida Division of Emergency Management (FDEM) plans to standardize documents that set forth the County's role in organizing and carrying out evacuations, sheltering operations, post-disaster response and recovery activities, deployment of resources, and emergency warning and communications coordination.

The Manatee County Department of Public Safety and the Division of Emergency Management encourages and facilitates planning processes through this CEMP. The CEMP establishes a framework through which Manatee County, Florida prepares for, responds to, recovers from, and mitigates the impacts of a wide variety of disasters that could adversely affect the health, safety and/or general welfare of the residents and visitors. The CEMP provides guidance to local officials on procedures, organization, and responsibilities. The document encourages standardization to facilitate an integrated and coordinated response among local, state, federal, nonprofit, and private entities.

This document defines the responsibilities of the government, private, volunteer and non-governmental organizations. This plan defines the scope of necessary preparedness and incident management activities, is sufficiently flexible and scalable for use in all emergencies. Where applicable, this CEMP references the procedures and process documents for functional areas, hazard-specific activities, a glossary, a list of acronyms, and a list of revisions to the document.

The CEMP describes the basic strategies, assumptions, and mechanisms through which the County mobilizes resources and conducts activities guiding and supporting local emergency management efforts through preparedness, response, recovery, and mitigation. The CEMP includes:

Preparedness -- A full range of deliberate, critical tasks and activities necessary to build, sustain, and enhance readiness and minimize impacts through pre-deployment of resources, establishing field operations, evacuation and sheltering, implementing structural and non-structural mitigation measures, using technology to predict potential impacts, and implementing continuity of operations plans.

Response -- Activities that address the immediate and short-term actions to preserve life, property, the environment, and the social, economic, and political structure of the community. Examples of response activities include emergency shelter; housing; food; water; search and rescue; emergency medical and mortuary services; public health and safety; decontamination from hazardous materials exposure; removal of threats to the environment; emergency restoration of critical services (electric power, water, sewer, communications); transportation; coordination of private donations; and securing crime scenes, investigating, and collecting evidence.

Recovery -- Actions and implementation of programs needed to help individuals and communities return to functional and operational after an incident. These activities typically continue long after the incident has occurred and usually involve the repair of damaged public facilities (e.g., roads, bridges, schools, municipal buildings, hospitals, and qualified nonprofits); debris cleanup; temporary housing; and facilitation of state and federal financial assistance for individuals and businesses, crisis counseling, disaster unemployment, and long-term recovery planning.

Mitigation -- Identifying potential threats and designing a long-term plan to prevent damages to individuals and property. Public education and outreach activities, structural retrofitting, code enforcement, flood insurance, and participation in the Community Rating System (CRS).





Introduction

The CEMP introduction describes the purpose, scope, methodology, and planning assumptions of the plan; and provides a general content description. Emphasis placed on actions for preparedness, response, recovery and mitigation from all levels of disasters (i.e., minor, major, or catastrophic). Preparedness requires a unified approach to emergency management and incident response activities. To achieve this, components of the National Incident Management System (NIMS) are integrated within a jurisdiction's emergency management and incident response structure.

Purpose

1. Develop an all-hazards planning approach that will be used for all threats to, and/or emergencies or disasters that may impact Manatee County.
2. Create the general framework of planning for preparedness, response, recovery and mitigation activities of the state.
3. Reduce the vulnerability of people and their communities, including the loss of life or injury, or the damage and loss of property resulting from natural, technological, and man-made disasters, by developing effective preparedness, response, recovery and mitigation plans.
4. Describe the County's role in supporting cities, towns, and our local government during an emergency or disaster.
5. Describe the state and federal relationship during an emergency or disaster.
6. Describe the types of disasters which are likely to occur in Manatee County, from local emergencies to minor, major or catastrophic disasters.
7. Describe the actions that the Emergency Management Division will initiate, in coordination with county, state, and federal counterparts, as appropriate, regardless of the magnitude of the disaster.
8. Describe the mechanisms to deliver immediate assistance, including direction and control of intrastate, interstate and federal response and recovery assistance.
9. Create a system that integrates, adopts, and applies (where applicable) the tenets of the National Incident Management System (NIMS) to ensure its interface with the National Response Framework (NRF) to maximize the integration of incident-related preparedness, response, recovery, and mitigation activities.

Scope

This plan describes the various types of emergencies that can occur within Manatee County. This CEMP also identifies selected tasks for response, establishes direction and control, coordination between municipal, county, state and federal agencies, outlines actions necessary for recovery and mitigation efforts following a disaster. This CEMP is designed for use in all natural and man-made disasters. The plan:

1. Establishes policies and procedures under which Manatee County Government, local governments and disaster organizations will operate in response to disasters and emergencies.
2. Addresses the various types of emergencies and disasters which could occur, and procedures for disseminating warnings and supplementary instructions regarding such events.
3. Establishes direction and control responsibilities for conducting disaster response and recovery operations.
4. Specifies the responsibilities of elected and appointed local government officials, county department directors and other responding agencies.
5. Provides a framework for expeditious, effective and coordinated use of all municipal and county resources.
6. Outlines procedures for requesting state and federal disaster assistance when the magnitude of a disaster has exhausted municipal and county resources.
7. Establishes a framework for short-term and long-term recovery and mitigation efforts.

Methodology

The Manatee Emergency Operations Workgroup (also known as *the MEOW Workgroup*) provides a holistic and integral development and implementation platform for the development, review, and dissemination of this CEMP. The Workgroup was previously known as the Disaster Preparedness and Planning Committee (DPPC). This title was updated in 2017 to reflect the ongoing and cooperative nature of the group and to better align the group's purpose for the comprehensive emergency management planning process. Manatee County's Emergency Management Division, in close partnership with three area hospitals, convenes meetings six (6) times per year. Meeting topics vary by current events, news, and community activities and usually feature a guest speaker – a member of the community or an emergency preparedness and response partner organization. The Workgroup includes representatives of the agencies that are listed within this CEMP, and – critically – the Emergency Support Function (ESF) Lead agencies and support agencies. Annual updates to the Workgroup membership roster ensure that necessary partner organizations are represented and the Emergency Management Division maintains accurate contact information for each member. Members of the Workgroup are outlined below, by organization:

Manatee Emergency Operations Workgroup Represented Organizations

Amateur Radio Emergency Services (ARES)	Manatee County Extension Service
American Red Cross Southwest Florida Chapter	Manatee County Fire Chiefs' Association
Blake Medical Center	Manatee County Mosquito Control District
Bradenton Beach Police Department	Manatee County Port Authority
Bradenton Fire Department	Manatee County Risk Management
Bradenton Police Department	Manatee County Rural Health Services
Braden River Animal Hospital	School District of Manatee County
Cedar Hammock Fire Control District	Manatee County Search and Rescue
Centerstone Hospital of Florida	Manatee County Sheriff's Office
City of Anna Maria	Manatee County Tax Collector's Office
City of Bradenton	Manatee Memorial Hospital
City of Bradenton Beach	Manatee Technical College
City of Holmes Beach	Meals on Wheels Plus of Manatee, Inc.
City of Palmetto	Medical Examiner's Office, District 12
Civil Air Patrol	Myakka City Fire Department
East Manatee Fire Rescue	New College of Florida
Florida Department of Health in Manatee County	North River Fire Control District
Florida Department of Law Enforcement	Palmetto Police Department
Florida Department of Transportation	Parrish Fire District
Florida Division of Emergency Management	Peace River Electric Cooperative
Florida Fish and Wildlife Conservation Commission	Salvation Army Manatee County
Florida Forest Service	Southern Baptist Disaster Services
Myakka River District	Southern Manatee Fire Rescue
Florida Highway Patrol	State College of Florida
Florida Power and Light	Town of Longboat Key
Florida Veterinary Medical Association	Town of Longboat Key Public Works
Holmes Beach Police Department	US Coast Guard
Lakewood Ranch Inter-District Authority	West Manatee Fire Rescue
Lakewood Ranch Medical Center	
Longboat Key Fire Rescue	
Longboat Key Police Department	
Manatee County Administrator's Office and Board of County Commissioners	
Manatee County, All Departments	

Resource Management and Coordination Processes

The CEMP is a dynamic and flexible document able to adapt to policy change, competing priorities, and external demands – such as updates to state and federal statutes, regulations, codes, standards, and laws. ~~Manatee County's Emergency Operations Workgroup (MEO)~~ fosters cooperation of all local agencies and entities participating or coordinating in the emergency management program. Manatee County agencies, municipalities and non-government entities involved in emergency management have provided input in the Manatee County CEMP through the Workgroup, ESF meetings, and other specialized plans within the various annexes.

Local involvement and participation:

- A promulgation letter from the Chairperson of the Board; and the approval by the Manatee County Board of County Commissioners in a four-year cycle and as necessary for substantive and policy change.
- Florida Division of Emergency Management (FDEM) reviews and approves the CEMP every four years. Participating agencies are encouraged to review, exercise, and provide feedback to the CEMP at least annually. Valid improvements will be incorporated following stakeholder review and approval.
- A distribution list of the various agencies and organizations receiving the CEMP is maintained within this document. The Emergency Management Chief, or designee, summarizes CEMP changes and distributes the updated document to the distribution list.

Assumptions

- An emergency or disaster event may occur with minimal notice or no warning and may escalate rapidly.
- ~~Emergency and disaster's n~~Negative consequences caused by disasters and emergencies may extend beyond Manatee County's boundaries and many areas of the state will experience casualties, property loss, disruption of normal life support systems, and loss of regional, economic, physical and social infrastructures.
- Emergency response personnel may become casualties and experience damage to their homes and personal property. Responders may themselves be disaster survivors.
- Disasters impacts happen across a continuum, varying in magnitude, severity, duration, onset, distribution, area affected, frequency, and probability.
- Florida's emergency management command and control structure is based on a bottom-up approach – 'all disasters are local.' Municipal organizations respond first, followed by the County, then to the State EOC (SEOC), and finally to the Federal government; with each level having exhausted all available resources prior to elevating to the next level.
- Disaster relief from agencies outside the county may take days or weeks to arrive.
- Effective disaster preparedness requires continual public awareness and education programs.
- Evacuation and shelter strategies must be based on resident and business cooperation.
- Convergent groups of responders, public, and outside resources could hinder the local effort, including traffic congestion, unsolicited supplies and donations, and strain on liveliness and facilities.
- Scarce availability of resources could result in competition among residents and business.
- Local municipalities will integrate their operations with the county.

- Some form of inter- and intra-county communications is available including communications with the SEOC.
- The Board of County Commissioners will convene to declare a local State of Emergency upon request by the County Administrator and Public Safety Department Director in conjunction with or support from the Emergency Management Chief.

Manatee County, our cities and towns, and our partner organizations use a variety of resource management processes and procedures for emergency management and incident response programs and activities using National Incident Management System (NIMS) Resource Management. NIMS Resource Management:

- Establishes a standardized approach for managing resources before, during, and after an incident. Resources include personnel, equipment, supplies, and facilities.
- Provides a platform for inventory and resource categorization of resource kind and type, including their size, capacity, capability, skills, and other characteristics.
- Exchanges information with mutual aid partners about resource assets and needs. Resource readiness and credentialing are maintained through periodic training and exercises.
- Standardizes procedures used to identify resource requirements, order and acquire resources, and mobilize and demobilize resources.
- Provides resource accountability to track, effectively use, and demobilize in a timely manner.

Manatee County works together in advance of an incident and develops plans for identifying, ordering, managing, and employing resources. The County's planning process:

- Identifies of resource needs based on our threats and vulnerabilities.
- Identifies strategies to obtain the needed resources.
- Encourages organizations to adopt an 'always ready' minimum standard of resources, and fosters resource pre-positioning to reduce strain on the emergency resource management process.
- Utilizes agreements to provide or request resources to enable effective and efficient resource management during incident operations.
- Provides a balance of tradeoffs between acquisition of stockpiled critical resources and opting for the 'just in time' procurement of event-specific resources.

Manatee County's **R**esource **M**anagement includes:

- Resource Management information systems – including redundant systems – to collect, update, and process resource data and track the status and location of resources. As of January 1, 2018, the County utilizes WebEOC web-based software system for resource management. Manatee County's Information Technology Services (IT) Department uses two server-based instances of the WebEOC software to ensure a backup or alternate system is available in the event of a system failure. Paper-based resource management forms are made available should all technology-based resource management systems fail.
- Use of standard government email, web-based text communications software; and office telephones, 700/800 MHz radios ([P25](#)), satellite telephones, voice over internet protocol (VOIP) telephones for voice communication

- Protocols for requesting resources, prioritizing requests, activating and mobilize resources to incidents, and returning resources to normal status.

Manatee County utilized the following federal planning guidance documents, doctrine, and policies in developing the CEMP: ~~County uses the following planning process approaches:~~

- Comprehensive Preparedness Guide (CPG) 101: Developing and Maintaining Emergency Operations Plans (2010) and Comprehensive Preparedness Guide (CPG) 201, Second Edition
- National Incident Management System (NIMS) (2017)
- National Response Framework (NRF), Third Edition (201~~9~~6)
- National Mitigation Framework, Second Edition (2016)
- National Disaster Recovery Framework, Second Edition (2016)
- A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action (2011)
- Homeland Security Exercise and Evaluation Program (20~~20~~13)

Manatee County promotes local participation in the emergency management program through:

In-Person, Remote Electronic Attendance, and Media Outreach:

- Workgroup and Branch-specific meetings
- Press briefings and conferences
- Traditional media announcements
- Social media posts on Facebook, Twitter, Nextdoor, and other platforms

Training and Education:

- Public outreach through expo events
- Community presentations
- First responder training
- Government employee training

The Manatee Emergency Operations Workgroup promotes local participation through targeting stakeholder groups, local governments, non-profit, and private sector representation from the community and the region.

Distribution of Changes and Plan Maintenance

Upon update or revision of this CEMP, the Emergency Management Division Chief notifies the Workgroup members, along with other stakeholder organizations, via email. The updated documents will also be placed in the WebEOC file library for access. Manatee County's Emergency Management Division is primarily responsible to update the CEMP and ensure the plan is current. Manatee County staff and Workgroup partner agencies will review and revise the plan each year or — if changes warrant (e.g., changes in administration or procedures, newly added resources/training, revised contacts lists) — more frequently.

Using the Homeland Security Exercise and Evaluation Program (HSEEP), Manatee County exercises and assesses the CEMP on an annual basis with at least one large-scale exercise,

participation in the State of Florida Division of Emergency Management exercises (at least one hurricane exercise annually). An after-action review and improvement plan is held after each exercise and following all emergency activations of the plan or parts of the plan. Additionally, Manatee County encourages and assists in the development, facilitation, and evaluation of organization, agency, and functionally-specific exercises. After-action documents are shared with the Workgroup and all organizations that played a role in the exercise or incident.

Each organization/agency (governmental, nongovernmental, and private sector) reviews and submits changes to its respective portion(s) of the plan. All organizations listed in this plan, the annexes, appendices, and referenced documents and activities are tasked with reviewing their assumptions, roles, expectations, guidelines, training, and implications and submitting changes and updates to the Emergency Management Division as part of an ongoing quality improvement cycle.

The CEMP, barring any sensitive information protected by Florida Statutes Chapter 119, will be made available upon request on Manatee County's website following State approval and the signed Letter of Promulgation by the Board of County Commissioners. The CEMP is a widely-distributed document and is shared with partners at all level of government, the local jurisdictions in Manatee County. A distribution list is outlined, below.

CEMP Distribution List

American Red Cross Southwest Florida Chapter	Lakewood Ranch Medical Center
Blake Medical Center	Lee County Emergency Management
Bradenton Beach Police Department	Longboat Key Police Department
Bradenton Fire Department	Manatee County Attorney's Office
Bradenton Police Department	Manatee County Administrator's Office and Board of County Commissioners
Cedar Hammock Fire Control District	Manatee County Government, All Departments
Centerstone Hospital of Florida	Manatee County Port Authority
Charlotte County Emergency Management	Manatee County Property Appraiser's Office
City of Anna Maria	Manatee County Sheriff's Office
City of Bradenton	Manatee County Supervisor of Elections
City of Bradenton Beach	Manatee County Tax Collector's Office
City of Holmes Beach	Manatee Memorial Hospital
City of Palmetto	Medical Examiner's, District 12
Clerk of the Circuit Court	Metropolitan Planning Organization
Collier County Emergency Management	Myakka City Fire Control District
DeSoto County Emergency Management	North River Fire District
Duette Fire Department	Okeechobee County Emergency Management
East Manatee Fire Rescue	Palmetto Police Department
Florida Department of Health in Manatee County	Parrish Fire District
Florida Department of Law Enforcement	Peace River Electric Cooperative
Florida Department of Transportation	People's Choice Gas Service
Florida Division of Emergency Management	Pinellas County Emergency Management
Florida Forest Service Myakka River District	Polk County Emergency Management
Florida Highway Patrol	Salvation Army in Manatee County
Florida National Guard	Sarasota County Emergency Management
Florida Power & Light	Sarasota/Manatee Airport Authority
Frontier (fka Verizon)	Sarasota/Bradenton Airport Fire Department
Glades County Emergency Management	School District of Manatee County
Hardee County Emergency Management	Southern Manatee Fire Rescue
Hendry County Emergency Management	Tampa Bay Regional Planning Council
Highlands County Emergency Management	Town of Longboat Key
Hillsborough County Emergency Management	United States Coast Guard Sector St. Pete
Holmes Beach Police Department	United States Coast Guard Station Cortez
Judicial Circuit Court, 12th	United Way of Manatee
Lakewood Ranch Inter-District Authority	West Manatee Fire Rescue
Longboat Key Fire Department	



Situation

Hazards Analysis

Airplane Crashes: The Sarasota-Bradenton International Airport is in the southwest mainland portion of the county and accommodates major commercial airlines and multiple aviation Fixed Based Operations (FBO). The airport has multiple runways that access air space over a wide portion of the county. The North Manatee Airport is in the northern mainland portion of the county and accommodates only small personal (non-jet) aircraft and has no FBO's. In 2017, a twin-engine plane crashed into a wooded area in eastern Manatee County, killing two and causing a 30-acre brush fire. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, airplane crash was determined to have an overall risk ranking of 16 when prioritizing hazards compared against others.

Animal Disease Outbreak: Biological hazards are those associated with insect, animal, or pathogen that could pose an economic and/or health threat to the agricultural community. The possibility exists for the importation of pathogens that could have a widespread effect on the livestock industries. In addition, there is the possibility of an adverse effect to the general population through naturally occurring pathogens (i.e. influenza, emerging infectious diseases or by way of terrorist action). Due to the large agricultural interests in the northern and eastern portions of the County, there may be vulnerability to animal-borne diseases such as Mad Cow and Foot and Mouth Disease; in addition to mosquito and other insect borne diseases. Emerging diseases that little to no counter measures currently exist also pose a serious threat to wildlife and livestock in the County.

Probability: Manatee County is not home to a large amount of livestock as neighboring counties are, thus there is a low probability of an outbreak an estimated 14% probability rate. Most animal agriculture is located in the eastern part of the County leaving less interaction with humans. This decreases the chances of pathogens transferring to livestock. The animals would most likely contract disease from insects. The part of the county that is home to livestock is very rural thus water management systems have not been installed creating the increased likelihood of large amounts of insects being able to breed rapidly. The County does target the areas with adulticide and larvicide to decrease amounts.

OUTBREAK CONTROL AREAS

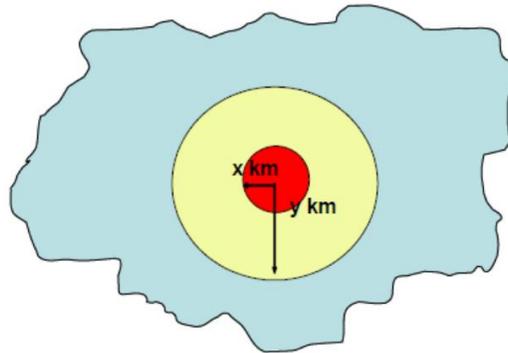


Figure – Illustration of movement control areas centered on a disease outbreak indicating an infected zone around an outbreak.

Source: OIE World Organization Protection Animal Health

Vulnerability: With increased aerial insecticide in the rural areas, the most vulnerable populations of livestock are in the areas less treated. These would be the most likely to contract diseases and spread them.

The distribution of infectious animal disease and the timing and intensity of disease outbreak is often closely linked to climate. Climate change may affect livestock disease through several direct, and indirect paths:

- a) Pathogens: higher temperatures and greater humidity generally increase the rate of development of parasites and pathogens. Changes to wind can affect spread of pathogens. Flooding that follows extreme climate events provides suitable conditions for many water-borne pathogens. Droughts have a tendency to affect most pathogens.
- b) Vectors: vector-borne diseases are especially sensitive to climate change. Changes in rainfall and temperature regimes may affect both the distribution and the abundance of disease vectors, as can changes in the frequency of extreme events.
- c) Hosts: climate stress (heat, inadequate food and water) can also lower immunity.
- d) Ecosystem services: climate change can also influence disease transmission by altering ecosystem structure and function.
- e) Humans: peoples' behavior may change as the result of climate change and this may affect how they keep animals, which in turn may affect the exposure or vulnerability of animals to pathogens.

The direct effects of climate on animal disease are likely to be most pronounced for disease that are vector-borne, soil associated, water or flood associated, rodent associated, or air temperature/humidity associated.

Over the past 20 years, headlines have documented an increasing number of emerging diseases; most have an animal source (zoonoses). Recent examples include West Nile virus, severe acute respiratory syndrome (SARS), avian influenza, and monkeypox. While some emerging diseases occur among both humans and animals, others affect only animals or only humans. Nevertheless, all these new or reemerging infections have societal implications, often tied to local and national economies. The economic losses caused are proportional to the scale of farming; (e.g. the greater the farm size, the higher are the losses.) The share of livestock income in total farm income is around 50%, which makes this sector vital to the survival of the farming community, especially the small farmers.

As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, animal disease outbreak was determined to have an overall risk ranking of 29 when prioritizing hazards compared against others.

Civil Disturbance: Manatee County is vulnerable to and has experienced civil disturbances in its history, creating a moderate possibility. Areas of high density and low income are potentially conducive to civil unrest and disorder; which may be expressed in large scale pre-planned or spontaneously generated acts of violence (i.e. arson, looting, vandalism, and attacks against government personnel or property). Manatee County has not documented any cases of civil disturbance but is keenly aware of these events in Florida and around the nation. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, civil disturbance was determined to have an overall risk ranking of 26 when prioritizing hazards compared against others

Coastal Oil Spills: Manatee County is susceptible to the impacts associated with port vessel collisions, on-water hazardous material spills and Gulf of Mexico off-shore oil drilling accidents. This conclusion is based on the amount of gulf coastline, its location at the mouth of Tampa bay, site of a major deep-water port, and location adjacent to the main shipping channel into the port of Tampa. Because of the latter two items, there is a substantial amount of maritime shipping involving ocean and barge traffic carrying a wide variety of fuel oil, gasoline and aviation fuel. Port Manatee is the closest U.S. deepwater port to the Panama Canal. There are two factors are present which contribute to the need for vigilance. First, hazardous materials will always be present, either in transit or storage. Second, the potential for accidents is always present, either in the transfer of hazardous materials from ship-to-shore, storage, or transfer from storage to overland transport. Given the amount of hazardous materials at the port and its location, should a spill or fire/explosion occur, the impact on the surrounding population and natural environment could be catastrophic. As the home to a major deep-water port, the probability of an accident involving hazardous materials does exist. However, mitigation measures for in-route transportation are in place to minimize exposure to the general populace and to the environment. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, coastal oil spill was determined to have an overall risk ranking of 6 when prioritizing hazards compared against others

Coastal and Riverine Erosion: Coastal or riverine erosion is defined as the gradual wearing away of the earth's surface by the natural forces of wind and water. In Manatee County, erosion along the Gulf of Mexico, Tampa Bay, Sarasota Bay, and river shorelines is most noticeable after a significant rain and/or tidal surge event. In general, erosion is the horizontal displacement of soil. Although this is a natural effect, shoreline development is at risk when erosion occurs at a rate greater than the natural rate of soil replenishment.

Probability: Erosion rates and occurrences vary by area and with time. However, the probability of erosion is identified as having a return period directly related to the return period of a coastal storm or tropical cyclone – 100-year storm event.

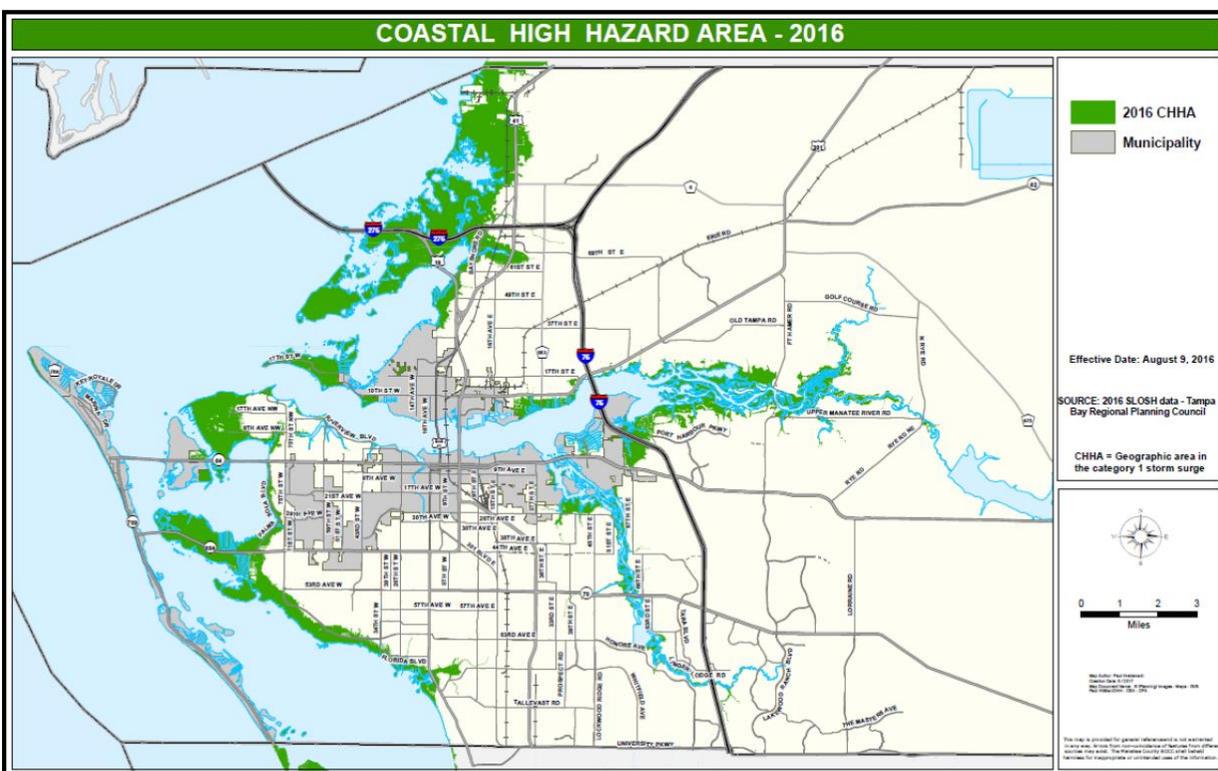
On Anna Maria Island, based on historical measurements going back to 1993, there has been on average of a 10 feet horizontal retreat of the mean high tide line (equating to beach loss) per year (Manatee County Parks and Natural Resources Department).

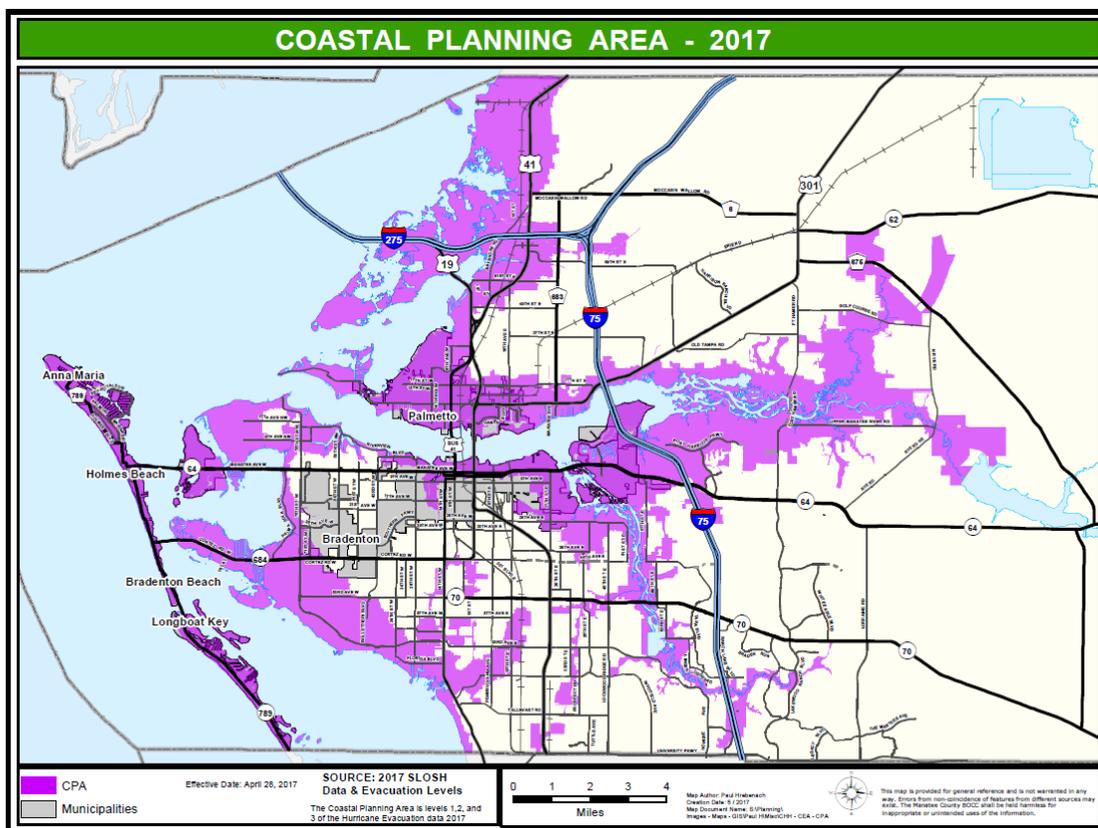
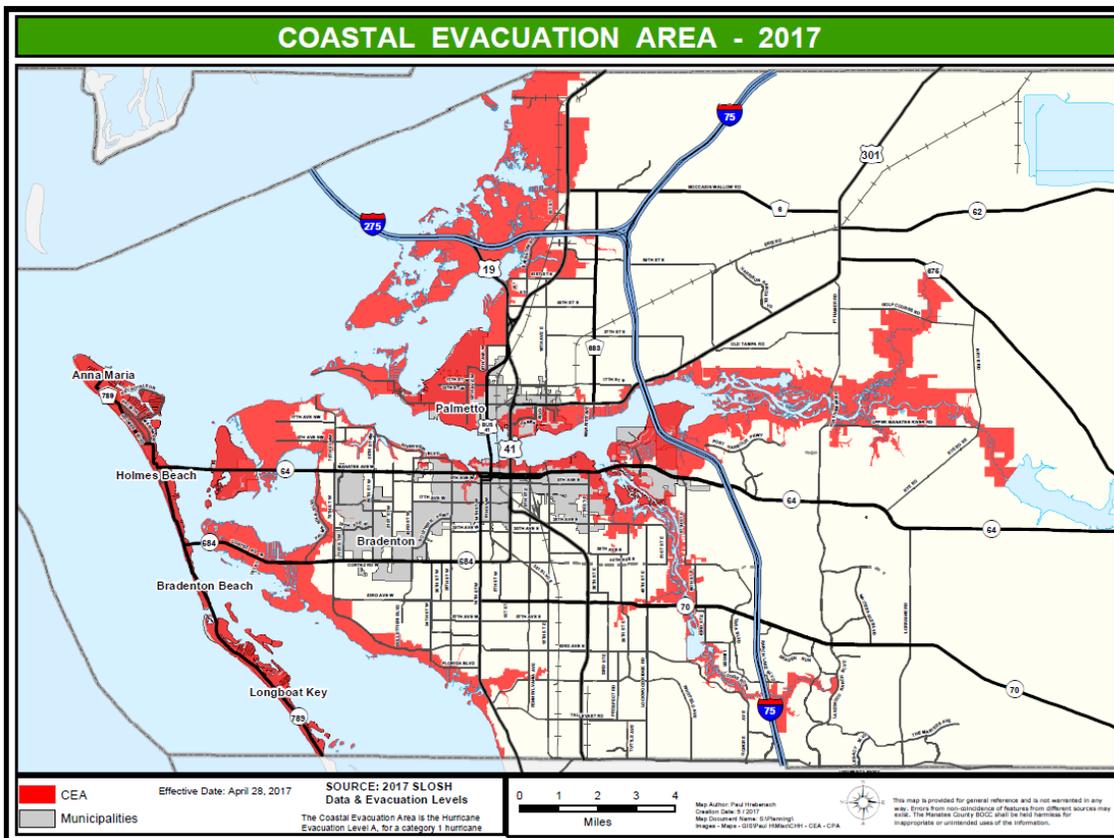
One storm event, depending on wind direction and surge, could erode up to 350,000 cubic yards on Anna Maria Island (Manatee County Parks and Natural Resources). In 2013, Tropical Storm Debby eroded approximately 348,000 cubic yards of beach, on average 20-30 feet of width approximately 3 feet deep along the 7-mile long island. The impacts cost the state and Federal government an additional \$37.5 million to restore the dunes and vegetation along with the beach sand. It has been estimated that by the year 2040 the cost on the re-nourishment projects could increase to as much as \$1.7 billion due to the rate of sea level rise, not taking into account severe weather that could cause greater increases.

Riverine erosion has a 1% chance of occurring in any given year, up to 2 feet per year.

Vulnerability: While erosion itself is not an imminent threat to public safety, it does impact the quality of life through damage to buildings, roads/bridges, and infrastructure (lifeline systems). Because of the relationship of flooding to erosion, the same structures affected by one are affected by the other.

The local governments in Manatee County identified the areas of greatest risks of erosion within their respective adopted Local Government Comprehensive Plans as follows: Coastal High Hazard Area; Coastal Planning Area; Coastal Evacuation Area; areas found along the Manatee, Braden, and Little Manatee Rivers and associated tributaries; Bowless Creek, Wares Creek; and areas illustrated as being within the velocity zones on the Federal Insurance Rate Maps.





The County has experienced several severe storms in the last 25-years: Tropical Storm Debby in 2012 caused significant damage to county beaches. Since Tropical Storm Debby, roughly 600,000 cubic yards were eroded on the County beaches. Thirty to forty feet of beach, 2-3 feet deep was lost along Anna Maria Island during Tropical Storm Debby alone. In 2014, 1.2 million cubic yards were placed with a nourishment project according to the County Parks and Natural Resources Department which oversaw the project. Hurricanes Dennis caused 250,000 cubic yards beach erosion. Hurricane Gordon in 2000 eroded an estimated 100 feet of beach. In 2015, the County started a \$4.41M project to replace the groins in the water off Cortez Beach near Coquina Beach. These groins will protect the sand (short term) and keep it in place during storms.

Areas along Braden River in Lakewood Ranch overflow caused the erosion of the banks. In 2013, after Tropical Storm Andres, the Community Development District (CDD) brought in 400 tons of fill dirt to cover the slope and mounted articulated concrete, a mat of black blocks on top of the fill dirt to slow down the erosion at the Greenbrook Adventure Park. Over a ten-year period, the banks of Pearce Canal in the Garden Lakes community lost eight feet in the back yards of the over-55 community located south of State Road 70 East. Manatee County has reinforced the bank with riprap and concrete blocks.

Commercial Nuclear Power Plant Incidents: The nearest fixed nuclear facility to Manatee County is the Crystal River Nuclear Power Plant located 150 miles north. The County is not in the 50-mile ingestion pathway from this nuclear plant and has no tasking under the Florida Radiological Emergency Management Plan for Nuclear Power Plants, but does support Counties within the pathway. Minor amounts of radioactive materials are carried on numerous vehicles during the transit of Manatee County road network (I-75, I-275, US 19, US 41, US 301 and SR 62, SR 64, SR 70 and SR 675). Due to the low probability of a radiological release being a major factor, the relative threat factor is 15%.

Critical Infrastructure Disruption: Manatee County has several Critical Infrastructure Systems. The Port of Manatee is a major destination for numerous shipping companies from around the world. There is also a distribution point for the Louisiana Gulf high-pressure natural gas transmission pipeline owned by Gulfstream Natural Gas Systems located in Manatee County. This gas pipeline provides gas to fourteen (14) electric generating plants in Florida. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, critical infrastructure disruption was determined to have an overall risk ranking of 15 when prioritizing hazards compared against others.

Cyber Incidents: Cyber-attacks include the use of electronic devices to attack, cripple or damage information systems held by governmental or private institutions, as well as individual citizens. Cyber-attacks are largely achieved through one of three means: 1) through wired and wireless Internet connections, 2) through the uploading of malicious software, and 3) through hardware transfer devices such as thumb drives. The sources of cyber-attacks include criminal groups seeking financial gain, nation states involved with espionage and plans to undermine foreign governments through a weakening of national defenses, activist groups bent on gaining public opinion or punishing those who disagree with their agenda as well as lone individuals seeking fame or fortune. Terrorist groups can also be a source of cyber-attacks; however, their current capabilities are somewhat limited. A sharp increase in the number of cyber intrusions into government and corporate

computer networks has caused the United States to launch a number of new initiatives in cyber security. Many of the initiatives have focused on protecting critical infrastructure control and command systems, preventing access to sensitive government information, and thwarting acts of fraud and theft targeting business financial systems. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, cyber incidents was determined to have an overall risk ranking of 25 when prioritizing hazards compared against others

Dam or Levee Failure: Dam/Levee failure is a collapse or breach in the dam or levee. When the term “dam” is used, it is normal to think only of structures associated with the impounding of rivers for use as drinking water reservoirs, the production of electricity or flood control. In Florida, the term can take on an additional meaning, that of impounding clay settling ponds or phosphogypsum stacks associated with the mining and processing of phosphate. Both types of dams can be found within Manatee County. The Lake Manatee Dam is located along the Manatee River, approximately 10 miles east of I-75. Built between 1965 and 1967, this dam forms the 2,400-acre Lake Manatee Reservoir. With a depth of 40 feet and containing approximately 7.5 billion gallons of water, this reservoir serves as the primary source of drinking water for approximately 330,302 residents of Manatee County (U.S. Census Bureau 2012 estimate) and Sarasota County.

In August 2003 following several days of intense rainfall, a flood gate at the Manatee River Dam jammed opened. This resulted in the evacuation of several residences downstream as a precautionary action. While roads and some yards flooded, there was no reported flood damage to buildings.

Located south of SR 70, the 359-acre Bill Evers Reservoir was built in 1939 to serve the water needs of the City of Bradenton. The reservoir was created by the construction of Ward Dam across the Braden River. Ward Dam is located approximately five miles south of the junction of the Braden and Manatee Rivers.

Located approximately five miles east of US 301 and one-half mile north of SR 62 is the Florida Power and Light Manatee generative facility. Constructed in 1977, Lake Parrish is a 4,000-acre diked lake which serves as the cooling pond for this facility.

Probability: The construction and safety of dams and levees in Florida is governed by 62-672 FAC and 373, FS. There have been no threats of failure associated with Ward Dam. In 2014, contract engineers inspecting Lake Manatee Dam, determined the dam to be in a severely distressed state due to erosion and has since been repaired at a cost of \$15 million. This remediation should extend the life of the dam 50 years. Phase 1 was the emergency phase which required the re-establishment of the core of the dam and was completed 2014. Phase 2 will address downstream issues but is not considered emergency remediation. This work will be defined and start in November 2021.

Active phosphate mining areas in Manatee County are in the Lake Manatee watershed area, specifically clay settling areas and there is no mining within the Evers Reservoir watershed. It is unlikely that a dam failure would impact the watersheds of Lake Manatee or the Evers Reservoir.

The closing of the Piney Point processing plant has raised concerns regarding the maintenance of the phosphogypsum stack. Of particular concern is the capacity of the stack being exceeded following major or long-duration rainfall events.

Per the Florida Department of Environmental Protection (FDEP) the closure activities will be complete by 2010. The owner "...will take over long-term care responsibilities as portions of the stack system are closed."

According to information from Manatee County Utilities Department, Lake Manatee Dam holds enough water to flood approximately 14.5 square miles of land in the event of a dam breach. Flood elevations range from 21 feet above the banks of Manatee River at the Rye Bridge crossing as the topography at this location is deeply incised. As the water moves downstream the topography becomes flatter and the flood depth becomes much less (Map 29). Lake Parrish is located in an area that even a full breach of the dyke would not pose a flooding impact to residents.

Vulnerability: County residents living downstream from the Lake Manatee and Ward Dams are the most vulnerable should there be a dam failure. The number of residents affected by such an event would depend on the degree of the failure. Due to their isolated locations, there is little likelihood that the failure of a clay settling pond would adversely impact county residents. The same would apply to a dike failure at Lake Parrish. The number of residents affected by such an event would depend on the area of the dike which failed and the direction of flow.

Concerns with the Piney Point phosphogypsum stack are centered primarily on the potential for the contaminated water flowing into Tampa Bay and its subsequent environmental impacts.

The FDEP reported the following "summary of key activities that have been completed and current status:

- All of the ponded process water that was contained within the compartments of the phosphogypsum stack system has been removed and disposed. The water was treated and discharged using a combination of traditional double lime treatment, and reverse osmosis treatment technologies. All phosphogypsum stack compartments have
- been lined with a synthetic, high density polyethylene (HDPE) liner. Stack side slopes have been amended and grassed for routing stormwater runoff to the outfall structures. The stack compartments can serve as reservoirs with a total storage capacity of up to 1.3 billion gallons for future environmental or compatible uses that may be beneficial to the State or local community.
- The discharge of treated process water to waters of the state from Outfall 003, ended on March 31, 2007. One of the lined compartments is currently being used for treatment of remnant process water that results from seepage collected at the base of the stack system. The seepage water is afforded the necessary pretreatment prior to being discharged into the Manatee County Sewer System.
- The at-grade cooling ponds previously used for the storage, cooling and recirculation of process water, have been lined with HDPE, covered with clean soil and grassed. Upon completion of all other closure activities, the NCP, which holds lime sludge used in treatment of process water, will be capped with a liner, covered with clean soil and grassed as the rest of the ponds.
- Plans for closure of the last portion of the Piney Point "plant area watershed" that includes the return channel and seepage ditch west of the OGS, the footprint of Aeration Ponds A-D, and the watershed area immediately north of Outfall 003 (and immediately east of the SCP Process Water Sump) have been prepared by the geotechnical engineering consultant Ardaman & Associates, Inc. These plan drawings reflect the full scope of work and can be used for HRK's review as well as CDM's initial quantity take-offs and pricing evaluation.

- A bentonite slurry cut-off wall has been installed on the North, and south property boundary, along Buckeye Road to isolate groundwater within the former process area. A wire fence with wood posts has been constructed between the road and the slurry wall to ensure security.
- Under the supervision of HRK personnel, the former chemical plant has been demolished and clean-up activities are ongoing. The maintenance building is undergoing renovation to serve as a trucking terminal.”

Phosphate mining activities can be found in the eastern portions of the County. As noted above, phosphate mining and processing requires the need for dams to impound water associated with clay settling ponds. The only phosphogypsum stack in the County is located at the closed Piney Point processing plant. As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, dam or levee failure was determined to have an overall risk ranking of 9 when prioritizing hazards compared against others

Drought: A drought is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people. Drought is a normal phenomenon of all climates. The technical identification is a water shortage caused by a deficiency of rainfall. A drought can also be aggravated by other factors, such as high temperatures, high winds and low humidity. The severity of drought depends on a multitude of factors, which include duration, intensity, geographic extent, water supply of the region, and demands by the local community on the existing water supply. FEMA has identified four types of droughts: meteorological, hydrologic, agriculture and socioeconomic.

Probability: There are no common techniques for determining the return of a drought event. For Manatee County, droughts are becoming more common, with a 40% chance of occurring per year. The area has experienced several drought events over the last twenty years. The National Drought Mitigation Center indicates that there was a drought that began in 2000 and did not end until 2003 ranging from mild to 14 months at the extreme level. In subsequent years 2004-2014, Manatee County went through cycles of normal to drought and then back to normal status with 2010 with 8 months of incipient dry spell and 17 months of mild to moderate drought beginning in 2011 and ending in 2012.

PALMER DROUGHT SEVERITY INDEX (PDSI)

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
.05 – 0.99	Incipient Wet Spell
0.49 to -0.49	Near Normal
-.50 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
-4.0 or less	Extreme Drought
<i>Source: National Drought Mitigation Center, http://drought.unl.edu/Planning/Monitoring/ComparisonsIntro/PDSI.aspx</i>	

Based on previous occurrences, Manatee County could see a drought of -4.0 on the PDSI for up to two years and temperatures as high as 105 degrees Fahrenheit.

Manatee County has a low probability, less than 1% chance, of experiencing a heat wave due to the sea breeze off the Gulf of Mexico as a coastal county.

Vulnerability: Droughts are weather events affecting Manatee County with some degree of regularity. Prolonged dry periods have spurred wildfires, a reduction in the water table, rationing of water, endangerment of wildlife and loss of crops. Economic impact to the community includes reduced farm revenue, and increased prices for produce and other farm-related items. In addition to a drought's social and economic risks, there is also the potential increase in the formation of sinkholes.

According to the 1992 Atlas of Florida, Florida is erroneously thought of as a state with excessively high temperatures. High maximum temperatures are far more frequent in the interior than along either coast. High temperatures are most frequent on the southwest side of the peninsula, where the warm season is long and distance from the Atlantic Ocean is relatively great. The National Weather Service at Ruskin states that we rarely get heat waves in Manatee County. They will issue a "heat warning" when the "heat index" is expected to reach 113 F or higher. The criteria are higher in Florida than the rest of the country as we are acclimated to the heat. Our Heat Index reaches 105 F most days in the summer, but rarely higher than that.

In Manatee County, the average high in June is 90 degrees Fahrenheit, July and August 91 degrees Fahrenheit. In 1998, Manatee County experienced an 18-day period with temperatures 5 -10 degrees above normal and a heat index reaching 110 F. This information was located on the Southern Region Headquarters for National Weather Service website at www.srh.noaa.gov/tbw/?n=tampabayoriginalclimatepage.

Heat waves can be deadly. NOAA reported that in a normal year, about 175 Americans succumb to the demands of summer heat. Among the large continental family of natural hazards, only the cold of winter, not lightning, hurricanes, tornadoes, floods, or earthquakes, takes a greater toll. In the 40-year period from 1936 through 1975, nearly 20,000 people were killed in the United States by the effects of heat and solar radiation.

According to FEMA, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than people living in rural regions. An increased health problem, especially for those with respiratory difficulties, can occur when stagnant atmospheric conditions trap pollutants in urban areas, adding unhealthy air to excessively hot temperatures. In addition, asphalt and concrete store heat longer and gradually releases heat at night, which produces significantly higher nighttime temperatures in urban areas known as the "urban heat island effect."

In May 2017, the County saw the driest dry season in the past 103 years, which recorded an 11-inch rainfall deficit. rivers and streams are the most impacted, flowing at the lowest rates in about five years.

As Manatee County's population increases and areas east of I-75 becoming more urbanized, such as Lakewood Ranch, the possibility of experiencing the urban heat island effect will increase. This will have to be monitored over the coming years

As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, drought was determined to have an overall risk ranking of 21 when prioritizing hazards compared against others.

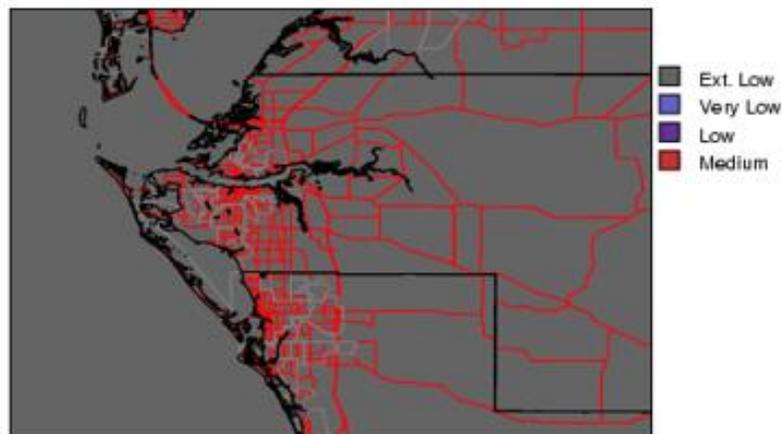
Earthquake: An earthquake is the result of a sudden release of energy in the Earth’s crust that creates seismic waves. The seismic activity of an area refers to the frequency, type and size of earthquakes experience over a period of time.

Earthquakes tend to occur in regions near the boundaries of underground plates or at weaknesses in the plates themselves. According to Douglas Smith of the University of Florida Geology Department, “Florida does not include any plate boundaries, and the plate the state occupies is very stable. ‘There are no recent volcanoes and there are no known active faults in Florida.’” Smith noted that the largest earthquake ever recorded in Florida shook the state on January 12, 1879. At 11:45 p.m., two 30-second tremors occurred, possibly centered in the Palatka area. The 1992 Florida Atlas reports that in 1905, an earthquake with its epicenter in west-central Manatee County was recorded. This earthquake registered as a I using the Modified Mercalli intensity scale (where VII equates to maximum damage); little to no damage at the surface was reported. The last earthquake happened on September 10, 2006 at 8:56 am approximately 251 WSW from Anna Maria, Florida. The magnitude of the earthquake was 6.0 with no aftereffects. (Source: USGS.gov). There have been no reported occurrences reported since 2006.

Probability: In an article by Anthony Randazzo and Douglas Smith, University of Florida Geology Department, it was noted that Florida is one of the few low-risk areas for earthquakes in the continental United States. This conclusion is verified by the following 2002 USGS map of seismic hazard probability.

“Although many historical events have been reported as earthquakes in Florida, and some descriptions conclusively suggest actual earthquakes, no damaging events are known to have occurred within the state.” The authors noted that reported earthquakes could have been law enforcement officials destroying confiscated explosive or, when atmospheric conditions are right, the vibrations of military jets breaking the sound barrier. Due to low probability of occurrence, this hazard will not be fully profiled.

EARTHQUAKE PROBABILITY MAP

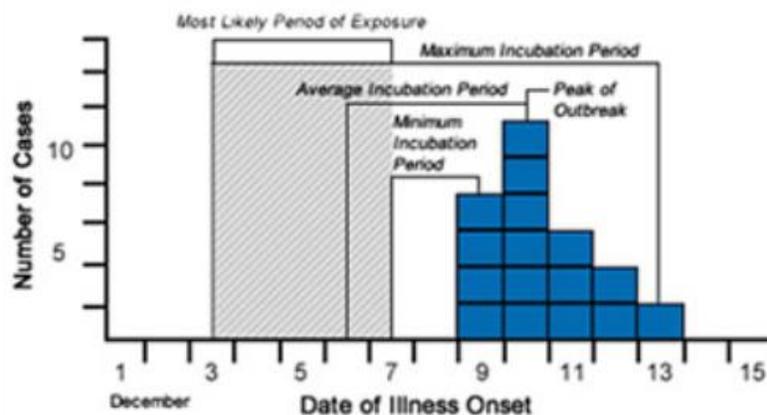


Vulnerability: In terms of vulnerability, Dr. Smith stated that “a region of north Florida bounded roughly by Jackson County in the west, Nassau County in the east, and Volusia and Levy counties in the south appears slightly more likely to experience earthquakes than other parts of the state.” Randazzo and Smith concluded their article by noting that the “continued monitoring and documentation of the seismic activity of the Florida Plateau, however small, is essential to the development of the long-term seismic characterization of the state.” As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, earthquake was determined to have an overall risk ranking of 5 when prioritizing hazards compared against others.

Epidemic/Disease and Pandemic Outbreaks: Biological hazards are those associated with insect, animal, or pathogen that could pose an economic and/or health threat. There is the possibility of an adverse effect to the general population through naturally occurring pathogens (i.e. influenza, emerging infectious diseases or by way of a terrorist action). Manatee County is potentially vulnerable to influenza outbreaks due to the large annual influx of seasonal residents and tourists. Also, as of July 22, 2016, the Florida Department of Health had identified 321 Zika virus disease cases among Florida residents and visitors, all occurring in either travelers from other countries or territories with ongoing Zika virus transmission or sexual contacts of recent travelers; however, aggressive mosquito control efforts, including aerial adulticide and larvicide, contributed to a decrease in Zika virus transmission. As of 2017, there have not been any reported cases in Manatee County.

Probability: As a coastal community with beaches, Manatee County has a large number of visitors. Accounting for visitors and seasonal residents, outbreak potentials are moderate to high with an estimated 20% occurrence rate per year. The seasonal residents tend to be older in age and therefore are more susceptible to viruses and diseases. The main issues lie with the visitors possibly carrying harmful pathogens. These pathogens could then affect all of the public in service industry thus creating an outbreak.

EPIDEMIC VELOCITY FROM TIME-SERIES DATA



Source: CDC.gov

Vulnerability: The most vulnerable population in Manatee County are the elderly, infantile, and workers close to tourists. These populations would most likely be the first to either contract a virus or disease or be more susceptible to the effects of them. With annual tourism and seasonal residents increasing, Manatee County will face more issues with disease and viruses. Increased temperatures later in the year can result in the longevity of disease carrying insects increasing the vulnerability to the population.

Although the United States has made progress in preparing for an influenza pandemic, considerable challenges remain regarding preparations for populations whose individual and community-level risks lead to vulnerability in health and health care quality. Protection of these populations is essential to effective prevention and mitigation of an influenza pandemic. Because influenza is a highly contagious disease that is spread from person to person, inadequate preparedness or untimely response in vulnerable populations group, can increase the risk of infection for the general population.

Our vulnerable populations are at increased risk for severe epidemic infection because of underlying health conditions commonly associated with these groups. For example, persons with disabilities and our homeless population depend on support from others and may not be vulnerable if they have sufficient support – the loss of support, access to private space, and lack of financial resources for health care, medications, and basic nutritional resources places them at greater risk.

In July 2016, there was one case of the Zika Virus found in Manatee County. The cause was identified as travel related.

A drug epidemic was on the rise in 2019 when Manatee saw 601 overdoses and 61 deaths — more than twice as many deaths as reported during the year prior. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, an epidemic was determined to have an overall risk ranking of 8 when prioritizing hazards compared against others.

First identified in December 2019 as emerging from Wuhan, China, a novel strain of coronavirus (COVID-19) was declared the an outbreak and Public Health Emergency of International Concern on January 30, 2020 and a pandemic on March 11, 2020. Local transmission of the disease has occurred in most countries as an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease has since spread globally, resulting in more than 3.24 million cases being reported across 187 countries and territories, resulting in more than 230,000 deaths. On March 1, 2020, the Florida Department of Health (FDOH) announced that the first resident with a confirmed laboratory positive test result in Florida, resided in Manatee County. As of April 30, 2020, Manatee County has had 577 residents test positive, with 148 of those being hospitalized and sadly, 55 have died.

While the majority of cases result in mild symptoms, some progress to viral pneumonia, multi-organ failure, or cytokine storm. The virus is primarily spread between people during close contact, often via small droplets produced by coughing, sneezing, or talking. People may also become infected by touching a contaminated surface and then touching their face. On surfaces, the amount of virus declines over time until it is insufficient to remain infectious, but it may be detected for hours or days. It is most contagious during the first three days after the onset of symptoms, although spread may be possible before symptoms appear and in later stages of the disease.

Recommended measures to prevent infection include frequent hand washing, maintaining physical distance from others (especially from those with symptoms), covering coughs, and keeping unwashed hands away from the face. Currently, there is no available vaccine or specific antiviral treatment for COVID-19.

On April 1, 2020, the Governor of Florida issued Executive Order #20-91 which limited the movement of Florida residents and their personal interactions outside of their home to only those necessary to obtain or provide essential services or conduct essential activities. On April 29, the Governor issued

Executive Order #20-112, which supersedes much of EO #20-91 and includes Phase 1 of the plan to re-open Florida. The Executive Order contains elements that, as of May 4, 2020:

- opens restaurants (up to 25% capacity)
- opens retail, museum, and libraries (up to 25% capacity)
- allows elective surgeries to resume

During the timeframe of mid-March to late-April, the Manatee County Board of County Commissioners and all participating jurisdictions took many actions to help mitigate the spread. Mitigation measures such as, but not limited to, closing public beaches, boat ramps, basketball and tennis courts, skate parks, playgrounds, libraries, public government buildings, gyms, etc., in addition to enacting a temporary curfew to limit movement between the hours of 11:00 p.m. and 5:00 a.m. for a span of 18 days.

Manatee County in coordination with FDOH, operated a minimum of three drive-through testing facilities during the month of April and early-May, in addition to a State operated testing facility on the grounds of the UTC Shopping Center.

Since the pandemic occurred during the final stages of the 5-year update to the Plan, and is still an ever-changing event, the exact extent of the economic and social impacts is not known at this time. Further information on impacts will be provided in subsequent updates to the Plan.

As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, epidemic was determined to have an overall risk ranking of 8 when prioritizing hazards compared against others.

Exotic Pests and Diseases: Manatee County is subject to infestation of Mediterranean Fruit Flies, Citrus Canker, and Red Ring Disease due to the large agricultural base and the profusion of fruit trees. The county is susceptible to Red Tide along the coastlines.

Flooding: Background: A flood is a general or temporary condition of partial or complete inundation of normally dry land from the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source. Floods can occur in most communities in the United States. Flooding can result from the overflow of major rivers and their smaller tributaries, storm surge from hurricanes and other coastal storms, or inadequate local drainage. Historically, floods have been a factor in over 80 percent of all Presidential-declared disasters. The Nation's strategy for reducing flood damages has evolved from a reliance almost solely on structural flood control projects to a more comprehensive approach that emphasizes non-structural measures such as local land-use planning and zoning, building codes, and acquisition or relocation of flood prone buildings.

The importance of a sound flood management policy is evident when flood and water related damage account for 75% of Federal disaster declarations.

The National Flood Insurance Program (NFIP) has played a critical role in fostering and accelerating this change. NFIP was established by the National Flood Insurance Act of 1968, which makes federally backed flood insurance available in those states and communities that agree to adopt and enforce floodplain management measures that meet or exceed minimum Federal criteria. The NFIP was broadened and modified by the Flood Disaster Protection Act of 1973, which requires the purchase of

flood insurance as a condition of receiving any form of federal or federally related financial assistance. The National Flood Insurance Reform Act of 1994 strengthened NFIP by providing for mitigation insurance and establishing a grant program for state and community flood mitigation planning and projects. Forty percent (40%) of the total flood insurance policies are within Florida, with 12% of flood claims made throughout the state. In Manatee County and the incorporated cities, there are 37,806 policies in force, with coverage in excess of 10.5 billion. This information was from the Policy and Claim Statistics for Flood Insurance on the Federal Emergency Management Agency (FEMA) website at <https://www.fema.gov/policy-claim-statistics-flood-insurance/policy-claim-statistics-flood-insurance/policy-claim-13>.

Probability: Manatee County, due to its topography, has suffered from island flooding from hurricane strength storms and numerous tropical systems since 1922. In addition, severe winter weather systems have caused significant coastal and inland flooding. In Manatee County, flooding can occur from the ocean or rising water of the Manatee River, Little Manatee River, Bowless Creek, Wares Creek, Terra Ceia Bay, Palma Sola Bay and Sarasota Bay. The majority of the land east of I-75 comprises part of the Manatee River Valley floodplain.

The type of flooding events that have occurred within Manatee County include short duration flooding, freshwater flooding, drainage, and coastal tidal.

- Short duration flooding – this is typical of a frontal system, short period of rain, or very intense thunderstorm.
- Freshwater flooding – this type of flooding may occur when an excessive amount of rainfall accompanies a tropical storm or hurricane.
- Drainage – the topography and high-water table of Manatee County can make a small amount of rainfall very significant. Man-caused alterations to the land have disrupted natural flow patterns and can lead to shallow flooding over a large area.

Coastal tidal – this type of flooding is generated from high tides and wind action and is a chronic problem within the coastal shoreline of Manatee County.

FLOOD ZONES

Zone	Description
A	An area inundated by the 1% annual chance flooding, for which no Base Flood Elevations (BFEs) have been determined. Depth for the 1% probability is not provided on the Flood Insurance Rate Map (FIRM), Flood depths range from 6 to 94 feet North American Vertical Datum of 1988 (NAVD 1988) which are elevations above mean sea level.
AE	An area inundated by the 1% annual chance flooding, for which BFEs have been established. Depth for the 1% probability is provided on the FIRM. Depths range from 6 to 94 feet NAVD 1988 depending on the area being reported.
VE	An area inundated by 1% annual chance flooding with velocity hazard (wave action). The BFEs have been determined. Depths for 1% probability event range from 10 to 17 feet NAVD 1988.
X500	An area inundated by 0.2% annual chance flooding.
X	An area that is determined to be outside the 1% and 0.2% annual chance flood plains

Vulnerability: Heavy rains and flooding have long been a factor of life in Manatee County. In the past, most residents were familiar with Florida Weather patterns, and built their homes accordingly – at least somewhat elevated with shutters. With the population explosion in the past half century, developers have come to Manatee County with little knowledge of its terrain and weather and have, as a result, created serious flooding problems throughout the County. The influx of new residents to the new development areas, have caused a strain on the infrastructure, and drainage problems have resulted countywide. Although coastal areas of the County have had requirements to elevate structures since the mid-1970s, no such restrictions were placed on inland development. Manatee County is experiencing more widespread flooding in residential areas and increased residential flooding due to a combination of rapid development, insufficient infrastructure, and ground-level homes being built in the newly developing areas.

Severe weather over August 26th and 27th of 2017 caused flooding after 23.28 inches of rain fell within a 24-hour period. Over 130 buildings were impacted, a small tornado struck the County Public Work Compound on 26th Ave E, and there was over \$1 million in damage to canals and stormwater pipes. Over a 7-day period in August 2019, heavy rain brought upwards of 10 inches to portions of the County that filled storm drains and flooded one home.

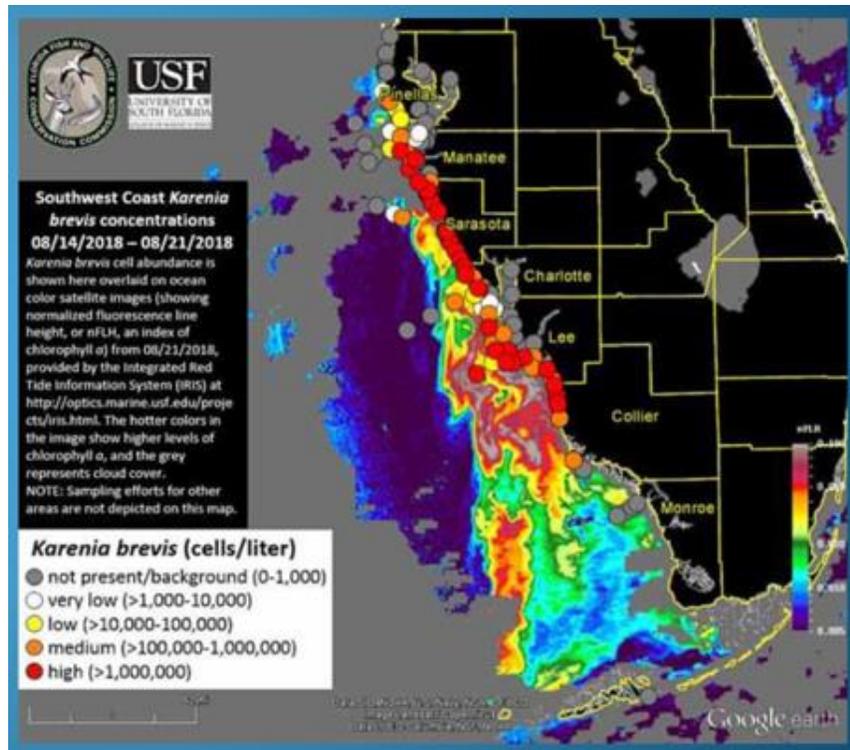
As outlined in the Threat and Hazard Identified Risk Assessment found at the conclusion of the hazard analysis, when comparing over 30 hazards that the County has the potential to experience impacts from, flooding was determined to have an overall risk ranking of 3 when prioritizing hazards compared against others.

Harmful Algal Blooms (HABs): Harmful algal blooms (HABs) occur when algae — simple photosynthetic organisms that live in the sea and freshwater — grow out of control while producing toxic or harmful effects on people, fish, shellfish, marine mammals, and birds. There are many kinds of HABs, caused by a variety of algal groups with different toxins. The HABs in fresh and marine waters are usually very different, but they overlap in low salinity estuaries (places where rivers meet the sea). The human illnesses caused by HABs, though rare, can be debilitating or even fatal. Manatee County has seen annual blooms in the form of Red Tide (the largest from a discoloration of seawater caused by a bloom of toxic red dinoflagellates) -one of the largest occurring for two months in 2018.

CURRENT STATUS OF ALGAL BLOOM

Description	K. brevis abundance	Possible effects
Not present - background	background levels of 1,000 cells or less	no effects anticipated
Very Low	> 1,000 - 10,000 cells/L	possible respiratory irritation; shellfish harvesting closures when cell abundance equals or exceeds 5,000 cells/L
Low	> 10,000 - 100,000 cells/L	respiratory irritation; shellfish harvesting closures; possible fish kills; probable detection of chlorophyll by satellites at upper range of cell abundance
Medium	> 100,000 - 1,000,000 cells/L	respiratory irritation; shellfish harvesting closures; probable fish kills; detection of surface chlorophyll by satellites
High	> 1,000,000 cells/L	as above, plus water discoloration

Source: <https://myfwc.com/research/redtide/statewide/>



Probability: Being a coastal county in the Gulf of Mexico the probability of occurrence is moderate to high with an estimated 20% occurrence rate per year. Gulf waters contain the correct balance of organisms for blooms to occur, especially in summer months when waters are the warmest.

Vulnerability: The highest vulnerabilities come to those communities along the coast, bay and near estuaries, as well as the population of those living in these communities or part of the County. In 2018, the severity of the red tide and the impacts on fish and wildlife greatly affected the economy in the County, as well as many other counties in Florida. Hotels and restaurants depend on clean air and water to bring visitors to their businesses, and the health concerns created by harmful algal blooms (HABs) kept people away. Residents in these areas suffer when the toxins get blown into the air, constricting the lungs' bronchioles and sending people with asthma and other health issues to emergency rooms with coughs and shortness of breath. While usually not fatal, the HABs can cause serious health concerns and respiratory issues for humans.

The vulnerability in economic loss comes to those that rely on tourism and seafood for income due to lack of marine life and tourism. Even algal blooms that don't release toxins can harm wildlife by depleting oxygen from coastal waters, causing massive fish kills in numbers too vast to count – this is devastating to marine wildlife.

Between August 1st and September 10th, 2018, Manatee County's coastline experienced negative impacts from Red Tide. Over 315 tons of debris was removed from the beaches into dumpsters and transferred to the County landfill. While the economic damage may be hard to calculate — a single, definitive source is lacking — but informal local and state studies show the environmental disaster caused by the harmful algae inflicted millions of dollars in damages to Manatee businesses and took a toll on Florida's tourism. Not-surprisingly, the industries most impacted by the event were rentals such as vacation homes and charter boats, hotels and restaurants. Those restaurants, real estate agents, vacation rentals, marine-based

businesses and other establishments reported about \$9 million in losses.

The Red Tide event receded after months of significant damage to marine life and coastal businesses. While scientists do not anticipate a return of Red Tide impacts of this magnitude in the near future it is highly likely to impact Florida communities again in the coming years as harmful algal blooms are a regular occurrence in Florida due to combined pollution from septic tanks, fertilizer runoff (from lawns and agriculture) and increased development which all put pressure on the ecosystem.

As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, harmful algal blooms was determined to have an overall risk ranking of 10 when prioritizing hazards compared against others.

Hazardous Material Spills: Manatee County has identified sites where hazardous materials are stored, processed, used for industrial purposes, and otherwise handled. A large concentration of hazardous materials can be found associated with Port Manatee and at Tropicana. Smaller amounts can be found associated with such commercial establishments as dry cleaners, pool services and hardware stores. Industry has taken great steps to minimize the risk associated with the storage and transportation of hazardous materials. Although every precaution is taken and all safety and reporting regulations followed, spills, seepage and leaks can still occur because of human error or natural phenomena.

Probability: The probability of a hazardous material spill or release is high based on the county's transportation system and the type of industries located within the county requiring transportation. Manatee County has nine (9) major transportation highways, I- 75, I-275, US 19, US 41, US 301 and SR 62, SR 64, SR 70 and SR 675, as well as other local thoroughfares which are regularly utilized by cargo transportation companies. Hazardous material releases pose short and long- term toxicological threats to humans, to terrestrial and aquatic plants and to wildlife. Toxic materials affect people through inhalation, ingestion and/or direct contact.

Vulnerability: The population directly impacted by a hazardous materials accident will be dependent upon the specific location of the accident and the climatic conditions at the time of the accident. Since these are unknown factors, mitigating the extent of the area impacted requires continued dialogue between industry and emergency responders. Port Manatee is in the Northwest mainland portion of the county on Tampa Bay and services full sized, ocean-going vessels. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, hazardous spill was determined to have an overall risk ranking of 12 when prioritizing hazards compared against others.

Hurricanes and Tropical Storms: These storms called "tropical cyclones" which forms over tropical or subtropical waters. It is a rotating low-pressure weather system that has organized thunderstorms but no fronts (a boundary separating two air masses of different densities). Tropical cyclones with maximum sustained surface winds of less than 39 miles per hour are called "tropical depressions". Those with maximum sustained winds 39 miles per hour or higher are called "tropical storms". When a storm's maximum sustained winds reach 74 miles per hour, it is called a "hurricane". The higher the category, the greater the hurricanes potential for property damage. Hurricanes originate in the Atlantic basin, which include the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico.

On average, seven hurricanes strike the United States every four years per the NOAA Technical Memorandum NWS TPC-5. Eighteen states along the east and gulf coasts, Hawaii, the U.S. Virgin Islands, the Territories of Guam and American Samoa, and the Commonwealths of Puerto Rico and the Northern Mariana Islands are all affected by hurricanes. More than 50 million people reside along hurricane-prone coastlines with 36 million residing along the Gulf of Mexico and Atlantic coast (Multi-Hazard Identification, FEMA 1997). Powerful wind is only one of the dangerous forces associated with a hurricane. Storm surges, storm tides and heavy rains may lead to flooding and tornadoes. According to the NOAA Technical Memorandum NWS TPC-5, Hurricane Katrina demonstrated that depending on the point of impact, a category 3 storm can be as or more devastating than a category 5. This hurricane was the costliest storm event ever recorded in the United States with \$81 billion of damage. Katrina is ranked third in two categories, the third highest number of deaths (1,500) and the third lowest central pressure ever noted at 920 millibars. An event like Hurricane Katrina can help a community analyze its vulnerability to hurricanes. Hurricane Sandy (unofficially known as “Superstorm Sandy”) was the deadliest and most destructive hurricane of the 2012 Atlantic hurricane season, as well as the second costliest in United States history at \$65 billion. Much of the impact in the United States was to the Mid-Atlantic and New England States with major impacts to New Jersey and New York coastlines.

Probability: Due to its subtropical location and long coastline, the entire county is particularly susceptible to hurricanes and tropical storms and could experience a Category 5 storm with winds of 156 mph or greater. Information located on the Atlantic Oceanographic and Meteorological Laboratory/National Oceanic and Atmospheric Administration website places the probability of a tropical storm/hurricane striking Manatee County at 36-42 percent annually. The probability of a major storm (Category 3+) is at 2 percent annually.

Hurricane Wilma caused wind damage with 143 insurance claims. Hurricanes Jeanne, Frances and Charley in 2004 caused flooding and wind damage to homes and businesses. Tropical Storm Gabrielle in 2001 had rain up to 9 inches, flooding roads, homes and businesses from Anna Maria Island to Parrish with many downed trees and power lines. Hurricane Gordon flooded homes and businesses in Bradenton Beach. Tropical Storm Josephine in 1996 caused flooding, the heaviest on Anna Maria Island along with road damage in Longboat Key and Bradenton Beach. Tropical Storm Marco in 1990 had up to 6.14 inches of rain, causing flooding with damage to both public and private properties.

According to information from the Manatee County’s Emergency Management Division has been affected by eight tropical storms and eleven hurricanes since August 2, 1995. These storms caused an estimated \$50,532,089 in property damage.

The greatest threat posed by hurricane or tropical storm to Manatee County is storm surge along the barrier islands, wind damage to homes, businesses, and coastal lands and inland flooding. Storm surge relating to the storms between January 1998 and June 2012 caused \$8.050M in property damage in Manatee County and its jurisdictions. (National Climatic Data Center, NOAA). Depending on location within the County, storm surge could vary from 19’ at the barrier islands, 18.9’ at Manatee Memorial Hospital along Manatee River and 8.8’ at Lake Manatee Dam.

Heavy rain associated with a tropical storm or hurricanes can cause flooding of riverine and low-lying areas. Tropical Storm Gabrielle in 2001 caused \$3.3 million in flood damages due to heavy rain from Anna Maria Island to Parrish.

SAFFIR/SIMPSON HURRICANE WIND SCALE

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
Tropical Depression	<38 mph	Winds can produce some damage
Tropical Storm	39 to 73 mph <64 kt <119 km/h	Dangerous winds can produce some damage
1	74-95 mph 64-82 kt 119-153 km/h	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding, and gutters. Large tree branches will snap, and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last several days.
2	96-110 mph 83-95 kt 154-177 km/h	Extremely dangerous winds will cause extensive damage: Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3	111-129 mph 96-112 kt 178-208 km/h	Devastating damage will occur: Well-constructed framed homes may incur major damage or removal of roof, decking, and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156 mph 113-136 kt 209-251 km/h	Catastrophic damage will occur: Well-constructed framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted, and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5	157 mph or higher 137 kt or higher 252 km/h or higher	Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

Source: <http://www.nhc.noaa.gov/climo>

DEPTH AND STORM SURGE AT SELECTED POINTS OF REFERENCE

Location	Elevation	C1 Depth ¹	C2 Depth	C3 Depth	C4 Depth	C5 Depth	C1 Surge ²	C2 Surge	C3 Surge	C4 Surge	C5 Surge
North approach to Desoto Bridge	6.7	0.0	1.7	4.9	8.3	11.3	3.7	8.3	11.6	14.9	18.0
South approach to Desoto Bridge	15.3	0.0	0.0	0.0	0.0	2.7	3.2	8.8	12.0	15.2	18.0
East approach to Manatee Ave. – Lift Bridge	8.4	0.0	0.3	4.0	7.1	10.4	4.8	8.7	12.4	15.5	18.8
West approach to Manatee Ave. – Lift Bridge	10.1	0.0	0.0	2.2	5.3	8.6	4.8	8.7	12.4	15.4	18.7
East approach to Cortez Bridge	11.7	0.0	0.0	0.9	4.0	7.3	5.0	8.9	12.6	15.7	19.0
West approach to Cortez Bridge	9.7	0.0	0.0	2.8	5.9	9.2	5.0	8.8	12.5	15.6	18.9
Manatee Memorial Hospital	5.3	0.0	2.9	5.8	9.2	12.8	2.3	8.2	11.1	14.5	18.1
Anna Maria City Hall	5.5	0.0	2.9	6.3	9.5	12.7	4.6	8.3	11.8	15.0	18.1
City of Bradenton Beach City Hall	4.0	1.0	4.8	8.4	11.6	14.8	5.0	8.8	12.5	15.6	18.8
City of Bradenton City Hall	9.5	0.0	0.0	1.1	6.4	8.5	3.7	7.2	10.6	15.9	18.0
Manatee County Administration Center	14.8	0.0	0.0	0.0	1.3	3.2	2.7	5.6	9.0	16.1	18.0
City of Palmetto City Hall	15.3	0.0	0.0	0.0	0.5	2.8	3.1	7.9	12.0	15.8	18.1
Lake Manatee Dam	4.4	0.0	0.0	0.0	0.0	4.4	0.8	2.0	2.8	3.6	8.8
City of Holmes Beach City Hall	3.3	1.2	5.2	8.8	11.9	15.1	4.6	8.6	12.1	15.2	18.5
DeSoto Square Mall	16.2	0.0	0.0	0.0	0.0	1.0	0.8	2.0	2.8	13.1	17.2
¹ Depth refers to depth of inundation at the site (storm surge value minus the ground elevation)											
² Surge refers to the storm surge value from the SLOSH Model											
<i>Source: Florida Statewide Regional Evaluation Study Program, Storm Tide Atlas, Manatee, 2010</i>											

Vulnerability: The barrier islands of Longboat Key and Anna Maria Island are most susceptible to the effects of storm surge created by tropical systems and severe winter storms. The combination of high tides and wind action can create coastal flooding and saltwater inundation of the barrier islands and is considered a significant risk factor. Secondary areas susceptible to these same impacts are the low-lying areas along the Manatee and Braden Rivers. Storm surge can range from 6 feet for a Category 1 storm to 28 feet for a Category 5 storm. Based on the study done by Tampa Bay Regional Planning County, storm surge could go as far inland as Lake Manatee, with a surge of almost 9 feet.

Storm surge, enhanced by a squall line, of 3.0 to 4.0 feet above astronomical tides caused flood damage to 50 homes and pushed a few dry-docked boats into coastal streets, flooding portions of coastal road on Longboat Key, causing \$200K in damage in January 1999. Hurricane Dennis, July 10, 2005, produced a storm surge of approximately 3 feet at Port Manatee, with waves eroding an estimated 20 percent of the shoreline on Anna Maria Island. Storm surge from Hurricane Ike in September 2008 caused minor flooding of roads in Holmes Beach. Storm surge and waves associated with Tropical Storm Debby in June 2012 eroded half the sand dunes at the south end of Anna Maria Island, an estimated \$5.9M in damage.

EVACUATION LEVELS AND STORM SURGE (FEET IN NAVD 1988)

Legends	Evacuation Levels	Instructions	Storm Surge Height
■	Level A	Evacuate red areas and all manufactured homes	Up to 11 ft.
■ ■	Level B	Evacuate red and orange areas and all manufactured homes	Up to 15 ft.
■ ■ ■	Level C	Evacuate red, orange and yellow areas and all manufactured homes	Up to 18 ft.
■ ■ ■ ■	Level D	Evacuate red, orange, yellow and green areas and all manufactured homes	Up to 28 ft.
■ ■ ■ ■ ■	Level E	Evacuate red, orange, yellow, green and blue areas and all manufactured homes	Up to 34 ft.
<i>Source: Florida Statewide Regional Evacuation Study Program, TBRPC</i>			

The damage from the storm itself is related to wind speed and the accompanying “pressure” exerted on structures. Wind damage may also occur from hurricane spawned tornadoes. Tornadoes often form on the leading edge of a hurricane and have the potential to cause more destruction than the hurricane itself. Tornadoes are a threat in conditions ranging from tropical storms to the most powerful hurricanes. All of Manatee County is in danger from the cyclone winds of tornadoes, tropical storms and hurricanes. The greatest threat is to the large number of manufactured homes, 29,959, based on information provided by the Manatee County Property Appraisers, throughout the County and to the numerous structures constructed prior to building code changes that resulted from the devastation created by Hurricane Andrew.

The coastal regions of the United States are associated with intense winds from tropical storms and thunderstorms. It is not uncommon to have winds that exceed 100 mph within these areas. Florida, including Manatee County, is susceptible to winds of greater than 100 mph on a regular basis. According to data from the American National Standards Institute – (1982), the Tampa Bay area is identified as having winds in excess of 100 mph return at an annual probability of 0.2% (a 50-year storm event). The probability is greater for occurrence of a storm with 70 mph winds.

The National Weather Service will issue a wind advisory with sustained winds at 31-39 mph for at least one hour or any gusts to 46-57 mph; a high wind warning will be issued with sustained winds 40-73 mph for at least one hour or any gusts greater than 58 mph. On the National Climatic Data Center website, the strongest wind gusts were 81 mph in 1969 and 1977.

Tropical Storm Colin made landfall in rural Taylor County, Florida on June 7, 2016, which resulted in 1.3 inches of rain and winds up to 50 mph for Manatee County. Anna Maria Elementary School was closed for one day, private property damage exceeded \$300,000, County property damage exceeded \$300,000 and the city of Bradenton reported over \$200,000 in damages. Hurricane Hermine intensified into an 80 mph Category 1 hurricane just before making landfall in the Florida panhandle September 2, 2016. As a result of Hermine, Manatee County precipitation totals generally ranged from 5 to 10 inches, inundating streets in the eastern parts of the county. Residents in Bradenton, located in the

western side of the county, evacuated their homes due to freshwater flooding. Coastal flooding also occurred due to tides of 2–3 ft above average. Winds reached tropical storm force at the Sarasota–Bradenton International Airport, with damage to roofs and porches, especially in Bradenton and Ellenton. Throughout the county, impacts from the storm left 72 homes with minor damage and 21 others with major impact. Damage in Manatee County reached \$5.1 million. Tropical Storm Emily was a “pop up” storm on July 31, 2017, which formed and made landfall with 45 mph winds on Anna Maria Island. Local heavy rain caused flooding and a weak tornado caused minor damage. On September 10th/11th, 2017, Hurricane Irma weakened to a Category 3 prior to making landfall in Marco Island, Florida, which dissipated into a Category 2 or 1 by the time the eye wall was near Myakka City. This storm caused Manatee County to open all shelters (first time in history) and dispense the highest number of sandbags ever. This was also the first time in history that Manatee Memorial Hospital was evacuated. There were over 330 structures damaged or destroyed, 85% of the residents went without power for 10 days past the storms occurrence and there was one direct casualty from the storm. Before making landfall near Mexico Beach, Florida, as a Category 5 hurricane, Michael skirted the west coast of Florida. This storm brought wind gusts of 40 mph with high wind surf and rip tide warnings to the County.

Major Transportation Incidents: Manatee County is susceptible to major transportation incidents. With two Interstate Highways (I-75 and I-275), two US Highways (US 41 and US 301) and four Florida State Roads (SR 62, SR 64, SR 70, SR 684 and SR 675) traversing Manatee County, the combined volumes on these roads are approximately 300,00 vehicles per day or more accurately known as Average Annual Daily Traffic (AADT). On June 4, 2008, an eight thousand (8,000) gallon gasoline tanker was involved in an accident that resulted in a fire, damage to the bridge supports over the Manatee River and closure of the three (3) south bound lanes of I-75 from mile marker 123 to mile marker 120 for 3 months. This caused a daily major vehicle delay as the south bound lanes of traffic (45,000 VPD) from I-75 were rerouted through the City of Palmetto and City of Bradenton which already had 55,000 VPD traveling the two bridges and city streets. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, hurricane was determined to have an overall risk ranking of 1 when prioritizing hazards compared against others.

Mass Migration: Manatee County is susceptible to mass migration from the Caribbean countries because of the its 27 miles of beaches and 150 miles of waterfront property; however, the risk is considered lower compared to counties located in the more southern portion of the state. Manatee County has had one (1) documented case where a single boat carrying 12 refugees from Cuba was detected on a Longboat Key beach. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 31 when prioritizing hazards compared against others.

Mass Shootings: The Manatee County School Board has had numerous incidents on their campuses or near their campuses the past couple of years. This is a problem that has been increasingly discussed and efforts are underway to develop specific plans to address this situation. Lock-down procedures are presently implemented when a threat has been recognized however the security of the schools themselves is still being addressed. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 14 when

prioritizing hazards compared against others.

Power Failure: As growth continues in Manatee County, there is an increasing demand for electrical power. Through the 10-year Site Plan process, Florida Power and Light (FP&L) addresses growth in their expansion plans. Still, there may be situations where their power generating capability may not meet total demand during extreme weather conditions or after a severe storm.

Probability: It is difficult to predict when a power outage may occur, as the northeast power failure showed in 2003. What can be predicted are the types of situations which could contribute to such a failure. This situation was highlighted during the Christmas weekend of 1989 as the extremely cold weather caused extended outages throughout the state. Although the cold weather scenario is the only most likely to result in power shortage emergencies, similar problems may occur during extremely hot weather as well.

Vulnerability: While a power failure is most likely to occur during an extreme weather event, local governments and FP&L must be prepared to respond in order to maintain the public safety and health and welfare of the County's residents.

As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 23 when prioritizing hazards compared against others.

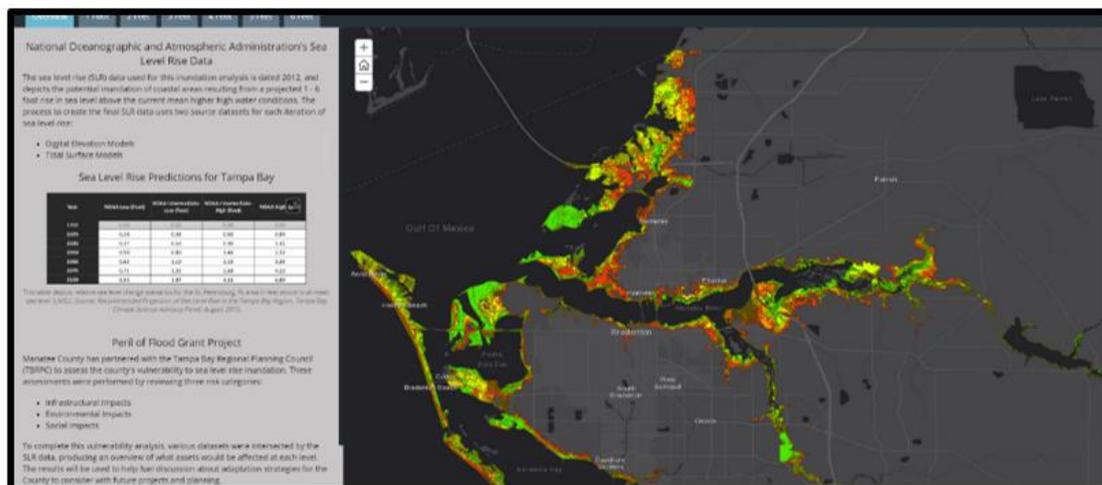
Port Vessel Collision or On-Water Hazardous Materials Spill: Manatee County is susceptible to the impacts associated with port vessel collisions or on-water hazardous material spills. This conclusion is based on its location at the mouth of Tampa Bay, amount of Gulf coastline, site of a major deepwater port, and location adjacent to the main shipping channel into the Port of Tampa. As a consequence of the latter two items, there is a substantial amount of maritime shipping involving ocean and barge traffic carrying a wide variety of hazardous materials such as fuel oil, gasoline, aviation fuel, and ammonia.

Probability: Because Port Manatee is an active port, two factors are present which contribute to the need for vigilance. First, hazardous materials will always be present, either in transit or storage. Second, the potential for accidents is always present, either in the transfer of hazardous materials from ship-to-shore, storage, or transfer to storage to overland transport. Given the amount of hazardous materials at the port and its location, should a spill or fire/explosion occur, the impact on the surrounding population and natural environment could be catastrophic.

Vulnerability: As the home to a major deepwater port, the probability of an accident involving hazardous materials does exist. However, mitigation measures for in-route transportation are in place to minimize exposure to the general populace and to the environment. Thus, the probability of a serious event is considered to be low.

Sabotage: Sabotage is a deliberate act aimed at weakening another entity through subversion, obstruction, disruption, or destruction. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 24 when prioritizing hazards compared against others.

Sea Level Rise: Sea level rise can have serious adverse effect to our coastal communities and ecosystems. Melting glaciers and ice sheets, contributing to an increase rate of sea level rise, together with expansion of warmer ocean, are causing coastal extreme events to increase in frequency and be more severe.



Probability: As a coastal community, Manatee County is concerned with the changes in the Gulf of Mexico thus we are monitoring SLR. While SLR has risen globally, it is currently rising more than twice as fast – 3.6 mm per year – and accelerating. Manatee County has already experienced about 7 inches of SLR over the past 67 years of records. Even small amounts of SLR make rare floods more common by adding to tides and storm surge. Climate Central has estimated risk by combing local sea level rise projection with historical flood statistics from the NOAA water level station at St. Petersburg, FL, 26 miles from the center of Manatee County. The extreme values analysis indicates that the 100-year flood height is 4.9 feet above local mean higher high water (high tide line). The highest observed flood at this location, in records from 1994 to 2015, reached 4 feet MHHW in 1985. Taken all together, these values suggest that floods above 5 feet likely pose significant concerns.

(Source: Climate Central (2016). Sea level rise and coastal flood exposure: Summary for Manatee County, FL. Surging Seas Risk Finder file created July 21, 2016. Retrieved from http://ssrf.climatecentral.org.s3-website-us-east-1.amazonaws.com/Buffer2/states/FL/downloads/pdf_reports/County/FL_Manatee_C)

WHEN COULD A 5-FOOT FLOOD HAPPEN?

Year	Likelihood
by 2030	20-28%
by 2050	46-71%
by 2100	93-100%

Source: U.S. National Climate Assessment, 2017 NOAA Technical Report

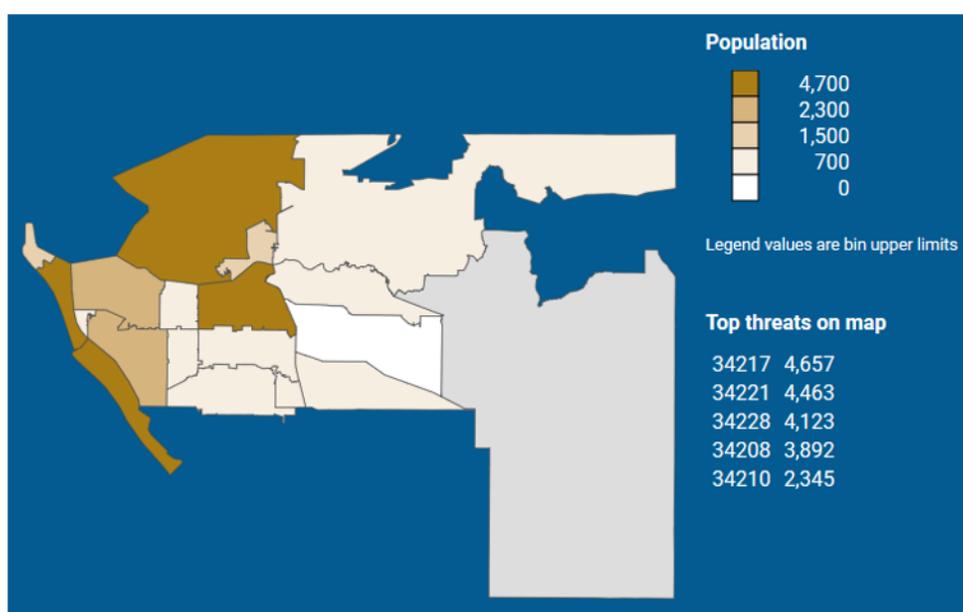
Vulnerability: As sea level rises, the coastal areas and areas around the Manatee River, Braden River, Palma Sola Bay, Terra Ceia Bay and our island community are most at risk. Approximately 31,000 people in the County live on exposed land below 5 feet. Some island nations are likely to become uninhabitable due to climate-related ocean and cryosphere change. These areas are shown to be impacted by 24-inches of rise in sea level by 2030 based on the NOAA models.

WHAT'S AT RISK ON LAND BELOW 5 FT IN MANATEE COUNTY

Population	Total in people
Acres of land	16,663
Population Total	30,978
Housing units	23,020
Property value (\$ billions)	9.2
High social vulnerability population	8,133
Road miles	210
Schools	2
Hazard waste sites	7

Source: U.S. Census, raw population data, elevation data, lidar

TOTAL POPULATION BELOW 5 FT IN COUNTY BY ZIP CODE



Source: U.S. Census, raw population data, elevation data, lidar

The Center for Climate Integrity states that the fiscal threat that climate change and the impacts of sea level rise could cause the need for upward of almost \$2 billion in new sea walls for Manatee County by 2040. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, sea level rise was determined to have an overall risk ranking of 17 when prioritizing hazards compared against others.

The total amount of water on the earth is not increasing but as the atmospheric temperature rise the temperature of the oceans does also and it causes it to expand. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 17 when prioritizing hazards compared against others.

Severe Storms: It has been estimated by FEMA that the nation receives approximately 100,000 thunderstorms annually with approximately 10% identified as severe. Florida leads the country with the number of thunderstorms and lightning strikes; however, Florida's thunderstorms are shorter in

duration than thunderstorms that develop over western states (Arizona, Utah, and Nevada). Thunderstorms in Florida routinely last approximately 30 minutes and rarely affect an area greater than 15 miles. However, in other areas of the country, multiple storms can develop together and act as a singular system. The total amount of water on the earth is not increasing but as the atmospheric temperature rise the temperature of the oceans does also and it causes it to expand.

Hazardous conditions associated with thunderstorms include tornadoes, lightning, hailstorms, downburst and microburst winds and flooding. Strong “downburst” (winds) exist with thunderstorms. These winds are concentrated, straight-line, winds created by falling rain and sinking air and can have winds that exceed 125 mph. A separate wind phenomenon is the “microburst,” which is comprised of narrowly concentrated downdrafts that can exceed speeds of 150 mph. Lightning occurs in all thunderstorms and can strike anywhere (air and ground). The air through which lightning passes reaches temperatures of up to 50,000° F. Hail is a form of precipitation that occurs when updrafts in thunderstorms carry raindrops upward into extremely cold areas of the atmosphere when they freeze into balls of ice. Hail can damage aircraft, homes and cars, and can be deadly to livestock and people. Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges build up enough, the insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning. Lightning can occur between opposite charges within the thunderstorm cloud (intra-cloud lightning) or between opposite charges in the cloud and on the ground (cloud-to-ground lightning). Lightning is one of the oldest observed natural phenomena on earth. It can be seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms in large hurricanes, and obviously, thunderstorms.

Probability: The probability of a thunderstorm occurring depends on atmospheric and climatic conditions. Information collected by the National Weather Service states that the Manatee County has between 100 and 110 days per year with thunderstorms. The principal season for thunderstorms is similar to that associated with hurricanes – the warmer tropical climate results in unstable air, which is conducive to the development of thunderstorms.

Manatee County’s location on the Gulf of Mexico contributes to a high probability of severe thunderstorms, especially in the summer months. The beaches, extensive outdoor parks and recreation areas, Lecom Park, airport, and golf courses are all areas where lightning strikes are more likely to impact residents and tourists alike. Further, lightning is a leading cause of wildfires in the more rural areas of the County. Manatee County’s almost 30,000 mobile homes are highly vulnerable to high winds experienced during severe thunderstorms. While hail does not usually cause infrastructure damage, larger sized hail can impact open areas, windows, vehicles parked in open parking lots, and airplanes outside of their hangars.

THUNDERSTORM CLASSIFICATIONS

Types Characteristics	Single Cell Storm	Multi-Cell Cluster	Multi-Cell Line (Squall Line)	Super-Cell
Severe Weather Occurs As:	Brief, isolated downburst; small hail; heavy rain; weak tornadoes	Downbursts, moderate size hail; flash floods; weak tornadoes	Downbursts; small-moderate sized hail; occasional flash floods; weak tornadoes	Strong downbursts; large hail; occasional flash floods; weak-violent tornadoes
Severe Event Predictability	Low	Moderate	Moderate	High (Once identified as Super-Cell)
Danger to Public	Low	Moderate	Moderate	Extreme

Source: National Oceanic and Atmospheric Agency

Manatee County has about 11-13 lightning strikes per square kilometer a year, about 27,800 a year mainly from June - August based on information from the National Weather Service in Ruskin, FL.

Manatee County could experience hail as large as ping pong ball size or 1-1/2" in diameter. The National Weather Service rates the probability for damaging hail in Manatee County as low, with less than a 1% chance per year, as demonstrated on the NCDC website with only 2 reports of damages due to hail in 45 years, from 1969 to 2019.

Vulnerability: Manatee County is vulnerable to thunderstorms due to the availability of the ingredients needed to create thunderstorms. There is plenty of sunlight which warms the air, and updraft caused by approaching fronts or a sea breeze boundary off the Gulf of Mexico and many inland rivers, creeks, sloughs and lakes to provide a source of water vapor to feed thunderstorms.

As a result of its subtropical climate, Manatee County is also susceptible to damaging winds associated with thunderstorm activity. These damaging winds can be associated with either tornadoes or downburst (straight-line winds). Both forms of wind can cause a similar degree of damage. Tornado damage is often highly concentrated over a narrow width in relation to its damage length. Downburst damage is normally spread over a broader width but has a shorter damage length. In either case, both can cause substantial damage to structures.

When the right climatic conditions are present, severe thunderstorm/wind events can occur at almost any time during the year in any part of the County. Surprisingly, some of the most severe storms have occurred during the winter due to the dramatic climatic conditions that can arise between warm and cold weather systems. Therefore, it is not surprising that the NCDC reported that between August 14, 1958 and June 27, 2014, there were 115 severe storm/wind events in Manatee County. This is a 48% chance of occurring in a given year. These events resulted in one death and more than \$2.63M in property damage.

In addition to heavy rains, winds and tornadoes, there are two additional damaging components of a severe thunderstorm – hail and lightning. Hailstorms occur in every state, but primarily within the mid-western area of the United States. Hailstorms cause more than one billion dollars of damage each year. In Florida, hailstorms occur mostly with the more severe thunderstorms, which occur from early summer through fall. Florida does not routinely receive hailstone greater than two inches in diameter.

Large hailstones can be damaging to property and at times life threatening.

Lightning is an extremely dangerous threat to the residents of Manatee County. Lightning striking an individual or property is nearly a totally unpredictable event and it can occur with or without the presence of a storm event. Lightning can occur anywhere in the County.

The greater the number of thunderstorms and/or their duration, the higher the number of lightning and hail occurrences. According to the NOAA National Climatic Data Center (NCDC), central Florida (including portions of the Tampa Bay area) has the greatest probability of lightning strikes within the continental United States and is known as “Lightning Alley”. In Manatee County the most dangerous severe storm period is from June 1st through November 30th. It is during this period that the majority of lightning strikes occur. Injuries or deaths from lightning strikes have occurred primarily on golf courses or while fishing at the beach.

Lightning is an everyday occurrence with Florida’s thunderstorms, which can result in property damage, injury and death. Since September 10, 1996, the NCDC reports 33 lightning strikes directly related to over \$8.7M in property damage, \$40,000 in crop damage, 12 injuries, and three deaths in Manatee County.

TORRO HAILSTORM INTENSITY SCALE

	Intensity Category	Typical Hail Diameter (mm)*	Probable Kinetic Energy, J-m²	Typical Damage Impacts
H0	Hard Hail	5	0-20	No damage
H1	Potentially Damaging	5-15	>20	Slight general damage to plants, crops
H2	Significant	10-20	>100	Significant damage to fruits, crops, vegetation
H3	Severe	20-30	>300	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-40	>500	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-50	>800	Wholesale destruction of glass damage to tiled roofs, significant risk of injuries
H6	Destructive	40-60		Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	55-75		Severe roof damage, risk of serious injuries
H8	Destructive	60-90		Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100		Extensive structural damage. Risk of severe/fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

*Approximate range (typical max size in bold), since other factors (e.g. number and density of hailstones, hail fall speed and surface wind speeds) affect severity.

HAIL DIAMETER AND SIZE DESCRIPTION

Hail Diameter	Size Description
1/4"	Pea size
1/2"	Mothball size
3/4"	Penny size
7/8"	Nickel size
1" (severe criteria)	Quarter size
1-1/4"	Half Dollar size
1-1/2"	Walnut or Ping Pong Ball size
1-3/4"	Golf Ball size
2"	Hen Egg size
2-1/2"	Tennis Ball size
2-3/4"	Baseball size
3"	Teacup size
4"	Grapefruit size
4-1/2"	Softball size

Source: National Weather Service

According to the NCDC, between May 27, 1969, and June 25, 2014, there were 56 hail events reported in Manatee County. Hail can occur anywhere in Manatee County. On May 20, 2009 quarter size hail was reported in downtown Bradenton and penny size reported in west Bradenton. January 17, 2011 quarter size hail was reported near Parrish. June 8, 2012 nickel to half dollar size hail was reported in West Samoset. May 25, 2014 nickel size hail was reported near the City of Bradenton. The worst occurrence of hail was reported as ping pong sized hail on May 4, 1996. This caused significant crop damage from Parrish southeast to Lake Manatee and north to the Hillsborough County line. Most of the cucumber, bell pepper, green bean and tomato crop was destroyed by the large hail.

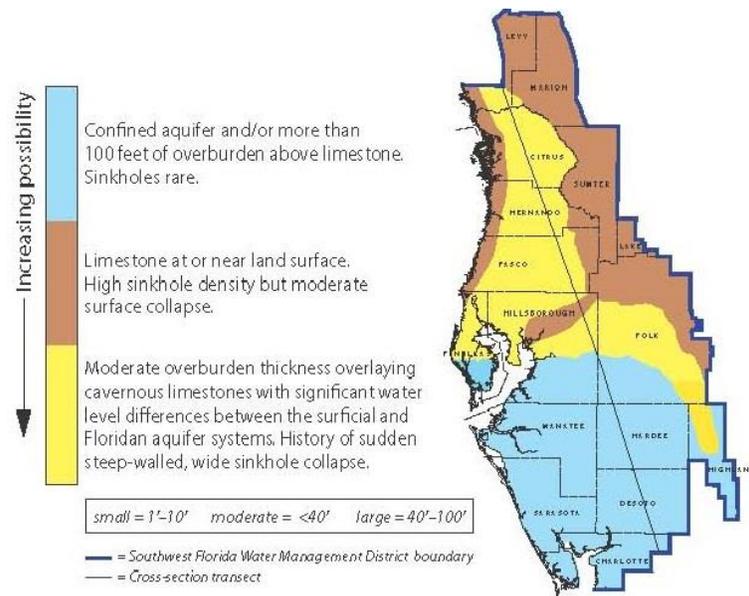
As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this severe storm was determined to have an overall risk ranking of 19 when prioritizing hazards compared against other.

Sinkholes: For the residents of Florida the sudden appearance of sinkholes is not an unusual occurrence. The potential magnitude of these occurrences is exemplified by the creation of Paynes Prairie at Gainesville, the loss of the automobile repair facility in downtown Winter Park and the recent de-watering of Lake Jackson north of Tallahassee. Fortunately, most sinkholes are not of the size of these examples. Even so, the destruction resulting from even the smallest sinkhole cannot be underestimated.

Taken from an Issue Paper, the Southwest Florida Water Management District (SWFWMD) noted that sinkholes are "as common in Florida as lakes, rivers and warm weather. In fact, many lakes in central Florida were formed by sinkholes." As the name suggests, sinkholes result from the ground "sinking" and creating a depression. The cause of the depression is underground in the porous limestone base. As rainfall is filtered through the ground to the limestone, it erodes and dissolves the soluble rock and creates cavities in the subsurface. Another cause of sinkholes is the lowering of underground water levels, either by lack of rainfall or over-pumping for water supply. In this case, the water in the underground cavities helps support the layers holding up the land surface.

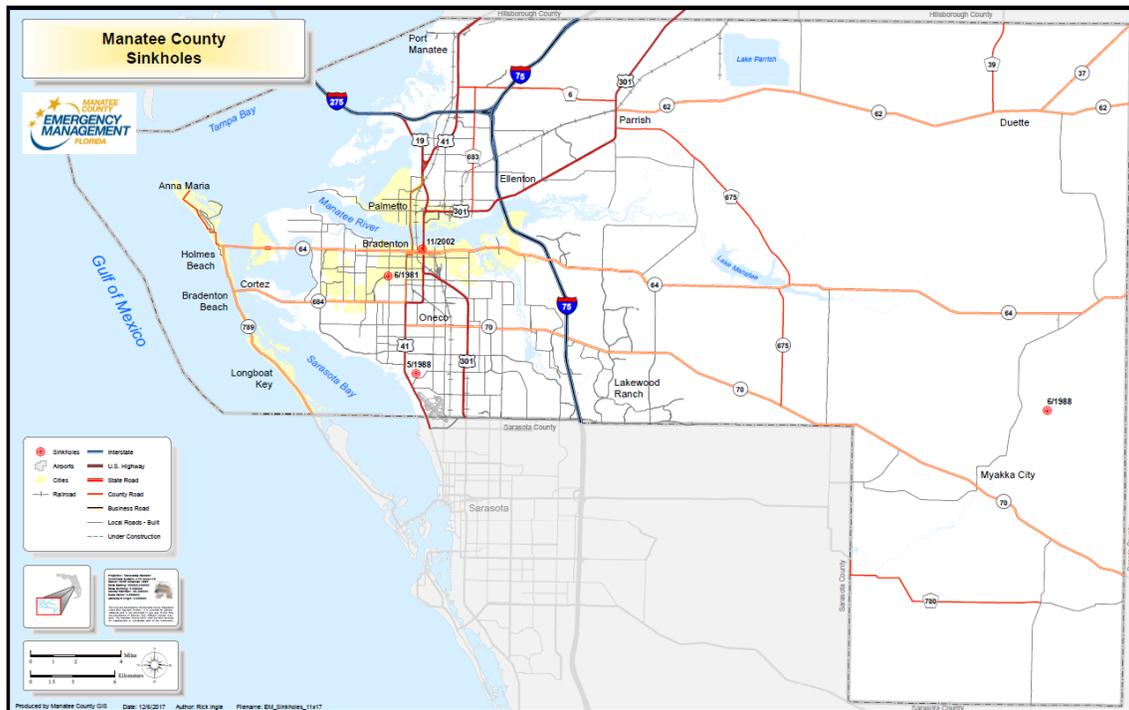
Probability: Within the 17 counties which comprise SWFWMD, sinkholes develop more frequently north of Tampa Bay where the limestone base is closest to the land surface and the supporting sand and clay layers are thin. The following graphic identifies the increasing possibility of sinkhole activity within the SWFWMD. And as also seen in the following graphic, all of Manatee County falls in the area identified as an area where sinkholes are a rare occurrence having a less than 1% chance of occurring in any given year. When they do occur, they are typically 10' in diameter and 6-10 feet in depth though larger ones could occur.

This is validated by the fact that Manatee County has 4 reported sinkholes, according to the Florida Department of Protection/Florida Geological Survey Subsidence Incident Report.



A sinkhole reported June 20, 1981 in West Bradenton was caused by drought or low water table and measured less than 10 feet in diameter. In May 1988, in southwest Manatee County, a sinkhole was reported, caused by drought or low water table. This sinkhole measured at 20' x 20' with a depth of 1' and caused subsidence to the home, with damage estimated at \$6,000. On June 1, 1988 a sinkhole was reported. While drilling a well in Myakka City, they hit a cavity and caused a sinkhole that measured 80' x 80' and a depth of 10'. On November 15, 2002 a sinkhole was reported in the incorporated City of Bradenton that measured 10' x 10' with a depth of 15'. The impact to the house was listed as drought or low water table and there was no impact the house on the property. There have been no recorded sinkholes since 2002.

As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this sinkhole was determined to have an overall risk ranking of 27 when prioritizing hazards compared against others.



Vulnerability: Sinkholes may impact structures, damaging them. To date only one structure has been impacted, causing the home to subside, walls and floor cracking. The home was repaired. The difficulty in emergency planning for sinkholes is not being able to know exactly where and when they will occur. Geologists have a good idea where sinkholes are likely to form geographically, but it's much more difficult to accurately predict specifically where sinkholes will occur. While the damage could range from low to high, it is almost impossible to predetermine in Manatee County which individual property could be affected by sinkhole activity.

Space Weather: This is a relatively new field of science dedicated to the understanding of interactions between the sun and Earth, and to the forecasting of solar flares, magnetic storms and other space-related phenomena.

The sun is the main source of space weather. Space weather can produce electromagnetic fields that induce extreme currents in wires, disrupting power lines, and even causing wide-spread blackouts. Severe space weather also produces solar energetic particles, which can damage satellites used for commercial communications, global positioning, intelligence gathering, and weather forecasting. According to the National Weather Service Space Weather Prediction Center, Manatee County has not experienced effects of space weather, but the potential exists. Loss of critical systems could severely hinder normal activities in the County.

Manatee County Emergency Management has begun monitoring space weather. As information becomes more available, this will be incorporated into the Local Mitigation Strategy.

Special Events: Manatee County has numerous Special events that draw large crowds of people. The venues include: High School Football Stadiums (5) with 4000 seats; the Annual Desoto Heritage Festival Parade with an estimated 100,000 viewers along the parade route; the Rubonia Mardi Gras Parade with 10,000 to 15,000 viewers along the parade route; LECOM Park Field is the spring training

home of the Pittsburgh Pirates and the Florida League Bradenton Marauders and seats 6,000; IMG Academy (world renown athletic development program) has year-round events at their new 5000 seat stadium; the annual 4th of July fireworks on the Manatee River between the cities of Bradenton and Palmetto attract close to 25,000 viewers along the riverbank; and the Braden River Soccer Club hosted several state-wide tournaments that drew large crowds to the eastern part of the county. In 2015, the cities of Bradenton and Palmetto hosted the first Bradenton Area River Walk Regatta. In 2017 this event brought over 100,000 spectators.

Sarasota County held the 2017 World Rowing Championships, bringing thousands of athletes and spectators to use Manatee County's hotels and restaurants. Even though the probability of an incident occurring during a special event is high, local authorities are well prepared to respond and manage most possible situations. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this special event was determined to have an overall risk ranking of 28 when prioritizing hazards compared against other

Terrorism: Any violent or dangerous act done to intimidate or coerce any segment of the general population to include government or civilian for political or social objectives constitutes terrorism. Historically, there have been few successful acts of terrorism committed in the State. With the exception of Port Manatee and the Florida Power and Light Manatee Generating Station, there are no facilities in the County which could be considered of strategic importance. Hence, the vulnerability to a terrorist attack would have to be considered low. However, as recent history has shown, this may in fact not be the case. It cannot be forgotten that Manatee County is located in proximity to MacDill Air Force Base and the main shipping channel for the Port of Tampa. Thus, while the threat of a direct attack may be considered low, the vulnerability to the effects of an attack on a target outside of the County must be recognized as a possibility. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this terrorist acts was determined to have an overall risk ranking of 2 when prioritizing hazards compared against other.

Tornadoes: A tornado is a violently rotating column of air that is in contact with both the surface of the earth and a cumulonimbus cloud or, in rare cases, the base of a cumulus cloud. Tornadoes come in many shapes and sizes, but they are typically in the form of a visible condensation funnel, whose narrow end touches the earth and is often encircled by a cloud of debris and dust.

Tornadoes materialize at the trailing edge of large frontal cyclones that result from the clash of high pressure and low-pressure weather systems moving at continental scales across North America. Because of climatic difference, southern states like Florida experience their most violent tornadoes in winter. A tornado event is not limited to winter, they can also be generated during the summer in association with afternoon thunderstorms. Most tornadoes are of short duration and do not touch down as the Category 4 or 5 events that make national headlines. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, tornado was determined to have an overall risk ranking of 4 when prioritizing hazards compared against other.

ENHANCED FUJITA SCALE FOR TORNADOS

Rating	Wind Speed	DAMAGE
EF-0	40 to 72 MPH	Light Damage: Branches broken from trees; chimneys damaged; shallow-rooted trees pushed over; signs and billboards damaged.
EF-1	73 to 112 MPH	Moderate Damage: Surface peeled off roofs; mobile homes pushed off of foundations or overturned; moving vehicles pushed off roadways.
EF-2	113 to 157 MPH	Considerable Damage: Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
EF-3	158 to 206 MPH	Severe Damage: Roofs and walls torn off well-constructed homes; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.
EF-4	207 to 260 MPH	Devastating Damage: Well-constructed homes leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated.
EF-5	261 to 318 MPH	Incredible Damage: Strong frame homes lifted off foundations and carried large distance to disintegrate; automobile size missiles fly through air in excess of 300
<i>Source: National Weather Service</i>		

Probability: According to the NOAA website the United States averages approximately 800 tornadoes per year. Over the last two decades there have been more than 106 federally declared disasters due to tornado damage. Although Florida has between 50 and 100 tornadoes annually, it is not considered within “Tornado Alley.” It should be noted that during severe storms, multiple tornadoes can form. Using probabilities of tornadoes based on the total number of tornadoes reported may be somewhat higher than by using the number of storms in which a tornado formed.

The National Weather Service ranks the Tampa Bay area as one of the highest areas in Florida for the occurrence of tornadoes. One of the deadliest tornado events in Tampa history occurred on October 3, 1992 when four people died and more than \$100M in property damage occurred. In Manatee County the probability for an F0/F1 tornado is high, but most are the width of a house and on the ground for less than 1 mile, mainly in June-August. The probability of an F3/F4/F5 is very low during the dry season and the probability of an F2/F3 tornado is medium during tropical storms and hurricanes according to the National Weather Service in Ruskin, Florida.

There is a 2% chance in any given year that Manatee County will experience a tornado. While an F5 is possible during a hurricane, Manatee County historically has experienced up to F3 tornadoes.

Since 1955, the National Climate Data Center has recorded 88 tornadoes in Manatee County. These tornadoes resulted in two deaths, 25 injuries and nearly \$4.25M in property damage.

According to the Storm Prediction Center, NOAA/NWS, the state of Florida has recorded approximately 3,478 tornadoes since 1950, with 172 fatalities and 3,413 injuries.

The northern portion of the Gulf Coast, between Tampa and Tallahassee as well as the Panhandle region has generally experienced more tornadoes. This is primarily due to the high frequency of thunderstorms making their way east through the Gulf of Mexico.

Vulnerability: As storm events with wind speeds ranging from 40 mph to greater than 318 mph, tornadoes can be expected to inflict a considerable amount of damage over a wide area. Consequently, tornadoes generate a tremendous amount of debris, which becomes airborne and creates additional damage to other structures. Because of extreme winds and the amount of airborne material generated, people living in manufactured or mobile homes are most exposed to damage from a tornado. Pillared and/or unanchored businesses and residential units are at greater risk of damage from a tornado as well. All of Manatee County is susceptible to the possibility of a tornado.

The following observation from the State of Florida Enhanced Hazard Mitigation Plan, August 2013, is particularly relevant to Manatee County, especially considering the County's anticipated continued growth, particularly in those unincorporated areas east of I-75.

There have been many tornadoes in Florida that could have killed scores of people and caused millions of dollars in property damage, but most of these tornadoes did not hit heavily populated areas. On January 17, 2016, a tornado touched down near Albritton Road and 66th Street NW in Myakka/Duette. There were 7 people injured with one deceased. Damage was estimated at \$173,876. The deadliest tornado event in the state's history occurred on February 22 and 23, 1998, in which 45 people were killed. As the state's population continues to increase, particularly in the interior part of the state, the threat of a devastating tornado event grows.

Train Derailment: CSX railroad operates a small switching yard within the Manatee County industrial complex of Tropicana Products Inc. CSX provides daily transportation of juice and other types of cargo out of Manatee County. The area that the train traverses is mostly commercial neighborhoods. The tracks cross a 7-lane US Highway (US 41/301), a 6-lane State Road (SR 64) and a trestle bridge over the Manatee River before it reaches an area where it can increase speed. The train moves at 30 miles per hour or less through the urban area. There are several major roads that allow traffic to continue to flow if a train derailment occurs and response capabilities are high. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, train derailment was determined to have an overall risk ranking of 20 when prioritizing hazards compared against other.

Tsunamis: When a person hears the term "tsunamis" odds are that they will think of a large wall of water resulting from a major earthquake somewhere in the Pacific Ocean. The unfortunate truth is that this is only partially correct. While tsunamis can be very large, they can also be only a few meters tall. Tsunamis may be generated by any event which results in the vertical displacement of the water column. Although generally associated with earthquakes, tsunamis may also be caused by underwater landslides, volcanic eruptions, explosions, and even the impact of cosmic bodies, such as meteorites.

Probability: Since tsunamis generally result from earthquakes, it is not surprising they occur most frequently along the boundaries of tectonic plates found along the continental Pacific coast, Alaska and Hawaii. This assumption may not be totally true, however. In an article entitled "Tsunamis and Tsunami-Like Waves of the Eastern United States" (Science of Tsunami Hazards, Volume 20, 2002) it was noted that since 1600, "40 tsunamis and tsunami-like waves have occurred in the eastern United States." The Atlantic coast of Florida was included among those areas feeling the effects of tsunamis.

According to some scientists, certain submarine conditions exist which increase the likelihood of the east coast of the United States experiencing a major tsunami. This belief is not shared by all, however. Tom Hilde of Texas A & M University notes in an article entitled "Tidal Waves Not Likely In Atlantic" that

“most of the world’s tsunamis are generated at convergent plate margins...the Atlantic margin of the United States is a passive margin, not a plate boundary, and so is not tectonically active. This area has few, and generally low magnitude, earthquakes...” Even so, some scientists, such as George Maul, professor of oceanography at Florida Tech, has noted that “it’s not a matter of if; it’s a matter of when” the Atlantic will experience a tsunami. In a “Florida Today” article, it was noted that “although tsunamis are rare in Florida and the Caribbean, geologists say the threat is real.”

Due to low probability of occurrence, this hazard will not be fully profiled.

Vulnerability: Since Florida is not located along the convergent margins of the tectonic plates, there is no likelihood of earthquake-generated tsunamis. While history has shown that Florida’s east coast has experienced some tsunami activity, there is no such record for the Gulf coast due to the large continental shelf located in the Gulf of Mexico, even when the latest 6.0 earthquake happened on September 10, 2006 at 8:56 a.m. approximately 251 WSW from Anna Maria, Florida. There were documented flooding or aftereffects from this event. Consequently, it can be assumed that the Gulf coast has little to fear from this natural occurrence, however there is still a possibility that it could happen.

Of perhaps equal concern would be the danger of a rogue wave. Rogue waves are sudden, extreme waves with wave height well above the background waves. They generally occur in rough sea conditions. A rogue wave estimated to be 18 feet tall, hit Daytona Beach on July 3, 1992. It is believed that this particular wave was the result of a series of thunderstorms off the Georgia coast. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 7 when prioritizing hazards compared against other.

Urban Conflagration: A conflagration is a large and destructive fire that threatens human life, animal life, health, and/or property. It may also be described as a blaze or simply a large fire. A conflagration can begin accidentally, be naturally caused wildfire, or intentionally created arson. Arson can be for fraud, murder, sabotage or diversion, or due to a person's pyromania. A very large fire can produce a firestorm, in which the central column of rising heated air induces strong inward winds, which supply oxygen to the fire. Conflagrations can cause casualties including deaths or injuries from burns, trauma due to collapse of structures and attempts to escape, and smoke inhalation. The County has very little areas where wildland and urban interfaces are joined lowering concern for wildfire to urban conflagration. The Cities of Bradenton, Palmetto, Holmes Beach and Bradenton Beach have commercial downtown areas that are older construction, in proximity to each other and have large areas of combustible material for conduction of fire. Most the residential subdivisions in the cities and unincorporated areas have sufficient spacing between structures that inhibit the spread of fire. The capability of the eleven (11) Fire Districts in Manatee County to work collaboratively provides an umbrella of protection that would limit the extent of fire damage and spread within the commercial neighborhoods of the four (4) cities that have a possible site for an Urban Conflagration. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this hazard was determined to have an overall risk ranking of 22 when prioritizing hazards compared against other.

Wildfires: As people search for a place to live, they often desire two conflicting conditions: Live in the country but have urban services readily available. This desire for urban/rural living has been given the name “wildland/urban interface.” As described by the Florida Forest Service, the wildland/urban interface “refers to that geographical point where two diverse systems, wildland and urban meet and affect each

other and give rise to conflicts between societal values and expectations concerning the management of natural resources.” The major problem resulting from the wild/urban interface is wildfire.

Wildfire is the term applied to any unwanted, unplanned, damaging fire burning in forest, shrub, or grass and is one of the most powerful natural forces known to people. While sometimes caused by lightning, looking back over the last 20 years in Manatee County, seven out of ten wildfires are human-caused. Many factors are involved as to why the number of acres burned including past fire suppression policies which allowed for the accumulation of fuel in the form of fallen leaves, branches, and excessive plant overgrowth in forest and wildland areas; increasingly dry, hot weather; changing weather patterns across the country; and increased residential development in the wildland/urban interface. (Source: smokeybear.com)

Per the National Interagency Fire Center, since 1960, there have been over 6.06 million wildfires which have destroyed 226.8 million acres of forests. This is an average of 114,322 wildfires per year and 4.7 million acres burned.

Wildfires in Florida are not an unusual occurrence. According to the Department of Agriculture and Consumer Services website, from 1981 to 2002, there was an average of 218,000 acres impacted by wildfire each year. Between 2002 and 2009, there were 25,847 wildfires that burned over 1,064,500 acres.

Wildfires can be a natural occurrence and costly for example the Mallory Swamp fire in May 2001 was started by a lightning strike, burning more than 60,000 acres and causing over \$10 million in timber losses. The 2007 Bugaboo Scrub Fire raged from April to June, becoming the largest fire in both Georgia’s and Florida’s history, burning over 600,000 acres, forcing closure of three major highways and blanketing areas from central Florida to Atlanta, Georgia, with heavy smoke.

Between 1980 and 2013, Manatee County has experienced 1,250 wildfires which burned a total of 34,335.1 acres. During 2001, over 2,000 acres were lost to wildfires per the Florida Forest Service Reporting System. Manatee County has a three percent (3%) chance any given year of experiencing a wildfire. In recent years, the average size of the wildfires in Manatee County have been kept relatively small. This is in a large part because of the very active prescribed burning program on both public and private lands. These burns are necessary for the ecological health of the preserves and ranches and also reduce the buildup of accumulated fuel on these lands making wildfire control much easier.

Probability: As the population of unincorporated Manatee County continues to grow, particularly east of I-75, the number of residents residing within the wildland/urban interface also grows. The University of Florida’s Institute of Food and Agricultural Science has identified the fire characteristics of nine ecosystems found in Florida’s wildland/urban interface. There is a 50% chance in any given year a wildfire could occur. A 100-acre fire is realistic for populated areas where residents could be threatened within the wildland/urban interface. A wildfire could grow to 500-acres, but this would be in one of the parks or preserves and would not involve structures at risk (Florida, Forest Service, Florida Department of Agriculture and Consumer Services). As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, this wildfire was determined to have an overall risk ranking of 11 when prioritizing hazards compared against other.

WILDFIRE BY ECOSYSTEM

Ecosystem	Frequency (yrs.)	Wildfire Hazard
Scrub Pine	10 - 1000	Extreme
Pine Rockland	3 - 10	Extreme
Pine Flatwood	1 - 8	Extreme
Dry Prairie	1 - 4	High
Marsh	1 - 5	High
High Pine/Sandhill	1 - 8	Medium
Swamp	5 - 200	Medium
Hardwood Hammock	30 - 50+	Low
Hardwood Rockland/Tropical Hammock	59+	Low
<i>Note: Three of these ecosystems can be found in Manatee County: Pine Flatwood, High Pine/Sandhill, and Swamp.</i>		

Fire events are a recurring threat in Manatee County, with approximately 49 fires on average occurring between 1981 and the end of 1999. Prior to 1981, Manatee County recorded 127 fires in 1977 impacting 3,354.6 acres; 54 fires in 1978 impacting 268.1 acres; 55 fires in 1979 impacting 1,566 acres; and 63 fires in 1980 impacting 553.3 acres. Since 1999 the number of Wildland fires are as follows:

WILDLAND FIRES IN MANATEE COUNTY

Year	Number of fires	Acres
2000	59	1,235
2001	35	2,069
2002	27	730
2003	14	97
2004	21	225
2005	18	65
2006	34	436
2007	32	658
2008	22	416
2009	26	496
2010	22	161
2011	28	236
2012	26	463
2013	11	119
2014	21	60
2015	11	483
2016	12	146
2017	28	153
2018	23	211
<i>Source: Florida Department of Agriculture & Consumer Services, Division of Florida Forest Service</i>		

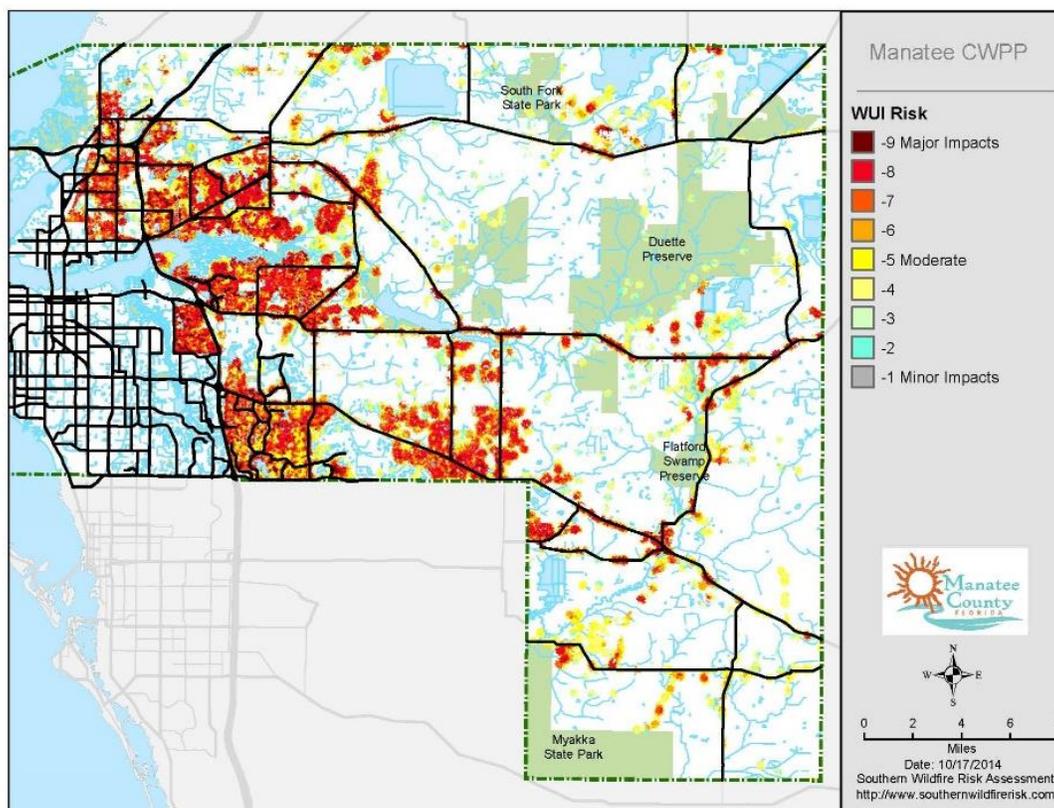
A wildfire burned five acres along I-75 northeast of SR 64 on March 13, 2009. While unsure of the cause, it was felt that it might have been a cigarette butt or spark from a passing vehicle. The fire came within 500 feet of homes in the Heritage Harbour subdivision. The Verna Bethany Fire on March 2, 2011 was started by an unattended campfire and burned 19 acres in a wooded area surrounded by 8 homes. Thirty acres were burned by wildfire causing the evacuation of 10 homes in Myakka City on April 15, 2012.

Vulnerability: While the conditions favorable for wildfires are well known, where and when they will occur cannot be predicted. The three principal ingredients for wildfires are topography, fuel, and weather.

According to the Florida Forest Services, Florida is unique in that weather and topography are different from other parts of the country. Florida has a relatively flat terrain and abundant rainfall. These factors normally afford firefighters an opportunity to control interface fires in a timely and effective manner. When rainfall is below normal, a killing frost has decimated vegetation or vegetation can accumulate, the likelihood for a wildfire increase.

Manatee County, particularly east of I-75 in both North County and South County, is susceptible to wildfires throughout the year, particularly during the months with minimal rainfall amounts. The major cause of brush and forest fires is due to lightning and occurs during the months with higher thunderstorm activity. In recent years, homes and businesses have been threatened by encroaching wildfires. Manatee County is developing a Community Wildfire Protection Plan and this area is generally from I-75 east to CR 675 and from University Parkway to Moccasin Wallow Road. This area includes approximately 88,215 acres with an estimated population of 76,727. The Wildfire Urban Interface area of the County has fifty-one percent of the land in the moderate to high risk areas and 69.7% of the population resides in these moderate to high risk areas.

RISK ASSESSMENT MAP



WILDLAND URBAN INTERFACE RISK TABLE

Class	Acres	Percent
-9 Major Impacts	3,750	3.9%
-8	22,678	23.8%
-7	18,908	19.9%
-6	8,354	8.8%
-5 Moderate	12,669	13.3%
-4	15,455	16.2%
-3	7,892	8.3%
-2	4,943	5.2%
-1 Minor Impacts	479	0.5%
Total	95,128	100.0%

SOURCE: Southern Wildfire Risk Assessment Summary Report

FIRE BY CAUSES

Years 1980-2013				
Cause	Fires	Percent	Acres	Percent
Campfire	31	2.48	268.2	0.78
Children	50	4.00	399.6	1.16
Debris Burn*	255	20.40	8,330.9	24.26
Debris Burn-Authorized Broadcast/Acreage	8	0.64	422.4	1.23
Debris Burn-Authorized Piles	13	1.04	94.5	0.28
Debris Burn-Authorized Yard Trash	3	0.24	20.5	0.06
Debris Burn-No auth Broadcast/Acreage	3	0.24	21.5	0.06
Debris Burn-Non auth Piles	28	2.24	49.8	0.15
Debris Burn-Non auth Yard Trash	4	0.32	42.0	0.12
Equipment Use*	42	3.36	559.00	1.63
Equipment-Agriculture	13	1.04	150.6	0.44
Equipment-Logging	0	0	0.0	0
Equipment-Recreation	5	0.40	80.5	0.23
Equipment-Transp.	15	1.20	214.4	0.62
Incendiary	162	12.96	4,309.4	12.55
Lightning	281	22.48	11,903.1	34.67
Miscellaneous-Breakout	5	0.40	73.6	0.21
Miscellaneous-Elec. Fence	0	0	0.0	0
Miscellaneous-Fireworks	1	0.08	1	0.00
Miscellaneous-Power Lines	6	0.48	17.0	0.05
Miscellaneous-Structure	0	0	0.0	0
Miscellaneous-Other	140	11.20	3,621.2	10.55
Railroad	5	0.40	4.5	0.01
Smoking	65	5.20	1,543.4	4.5
Unknown	115	0.20	2,207.3	6.43
Total	1,250		34,335.1	

Years 1914-2019				
Campfire	5	4.72	10.3	.91
Children	3	2.83	3.8	.33
Debris Burn*	0	0	0	0
Debris Burn-Authorized Broadcast/Acreage	3	2.83	49	4.31
Debris Burn-Authorized Piles	5	4.72	28.5	2.51
Debris Burn- Authorized Yard Trash	4	3.77	2.2	.19
Debris Burn- Non auth Broadcast/Acreage	2	1.89	13	1.14
Debris Burn-Non auth Piles	15	14.15	187.3	16.46
Debris Burn-Non auth Yard Trash	6	5.66	14	1.23
Equipment Use*	0	0	0	0
Equipment-Agriculture	10	9.43	69.6	6.12
Equipment-Logging	0	0	0	0
Equipment-Recreation	4	3.77	29.4	2.58
Equipment-Transp.	5	4.72	43.9	3.86
Incendiary	4	3.77	1.7	.15
Lightning	24	22.64	627.7	55.17
Miscellaneous-Breakout	2	1.89	6	.53
Miscellaneous-Elec. Fence	0	0	0	0
Miscellaneous-Fireworks	0	0	0	0
Miscellaneous-Power Lines	2	1.89	4.5	.4
Miscellaneous-Structure	0	0	0	0
Miscellaneous-Other	6	5.66	22	1.93
Railroad	0	0	0	0
Smoking	0	0	0	0
Unknown	6	5.66	24.8	2.18
Total	106		1,137.7	
<i>Source: Florida Forest Service, FL Depart. of Agriculture and Consumer Services</i>				

Winter Storms: Severe winter storms can affect the Tampa Bay area. Although Manatee County is not affected by snow, significant freezes have occurred and are expected to occur again. Winter storms are accompanied by other hazards, such as coastal flooding, strong winds (tornadoes), wind-chill, and power outages. These effects disrupt commerce, transportation and may result in the loss of life. The winter “No-Name” storm that affected Tampa Bay in March 1993, is considered one of the worst non-tropical storms in United States history. Equivalent to a Category 2 hurricane, it caused a significant amount of flooding and power outages within the Tampa Bay area and accounted for more than \$2 billion of damage across the eastern United States. In Manatee County, the storm caused over \$1.75M in damage throughout the entire county. In Manatee County, freezes are caused by a dip in the jet stream allowing a cold Canadian front to descend with a strong northeast wind producing wind chills.

Probability: According to the National Climatic Data Center, the chances of a winter storm in Manatee County are rare, typically less than 1% per year. Winds can reach as high as 100 mph, but more typically not higher than 60 mph. Temperatures could get as low as 20 degrees Fahrenheit, but it is noted that typically the winters are mild with low temperatures ranging around 50 degrees. Freezing temperatures can occur on one to two mornings per year during December through February. In some years no freezing temperatures occur. Snowfall is very rare. A wind chill advisory is issued by National Weather Services for wind chills of 26-35 degrees Fahrenheit for 3 or more hours, and a wind chill warning is issued for wind chills of 25 degrees Fahrenheit or lower for 3 or more hours.

Vulnerability: Freezing temperatures in the County have their impact on the citrus and agricultural industry located generally in the northern portion of the County and east of I-75. If temperatures reach freezing level for extended periods of time, combined with other climatic factors, crop damage may occur.

This would have a significant impact on the economy and employment base. According to the NCDC, since January 1996, the County has experienced 33 freeze events, seven of which caused crop damage estimated at \$15.26M. This amounts to 39% chance of a freeze in any given year. In January 2010, Manatee County experienced an extended period of nights below 40 degrees (14 nights below 40 degrees) with Myakka City as low as 21 degrees and in December 2010 there were two nights that broke records at the Sarasota/Bradenton International Airport with temperatures of 31 and 27 degrees. Myakka City recorded 27 degrees and Duette 20 degrees at that time. Damage estimates to crops was \$6.9M. On February 26, 2010 temperatures as low as 27 degrees caused \$900,000 in crop damage in East Manatee County. In December 2010, sub-freezing temperatures for 2 to 5 hours, the lowest 23 degrees in Duette caused \$4.32M in crop damage. Also, consumer demand for electricity during periods of extreme cold weather may require the electric utility to implement rolling blackouts to selected areas in order to avert a total electrical grid overload.

According to Suncoast Partnership to End Homelessness, with the help of Turning Points, Manatee County has 570 homeless. At times of extreme cold, The Salvation Army opens its doors to single men and the Family Lodge in Bradenton opens up for single women. As outlined in the Risk Assessment found within Subsection G of this section, when comparing over 30 hazards that the County has the potential to experience impacts from, winter storm was determined to have an overall risk ranking of 33 when prioritizing hazards compared against others.

Threat and Hazard Identification and Risk Assessment (THIRA)

Hazard	Total Risk Value (R)	Overall Risk Ranking	Probability Value (P)	Consequence Value (C)	Hazard/Threat Value (T)	Vulnerability Value (V)
Natural Hazards						
Hurricane	375.4	1	41.4	9.1	6.7	6.2
Flood	203.9	3	30.1	6.8	6.5	4.6
Tornado	186.5	4	28.3	6.6	6.0	4.7
Earthquake	169.9	5	22.6	7.5	5.3	4.3
Tsunami	153.9	7	22.4	6.9	5.0	4.5
Epidemic	131.1	8	21.2	6.2	6.1	3.5
Harmful Algal Blooms	126.6	10	21.8	5.8	6.0	3.7
Wildfire	125.3	11	21.9	5.7	5.9	3.7
Sea Level Rise	100.5	17	17.6	5.7	5.3	3.4
Severe Storm	95.0	19	20.8	4.6	6.7	3.1
Drought	89.5	21	19.1	4.7	5.9	3.2
Sinkholes	71.5	27	16.0	4.5	5.2	3.1
Animal Disease Outbreak	68.3	29	14.2	4.8	5.2	2.7
Space Weather	38.9	32	9.0	4.3	4.3	2.1
Winter Storm	27.2	33	7.9	3.4	3.5	2.2
Technological Hazards						
Dam/Levee failure	127.3	9	20.9	6.1	5.4	3.8
Hazardous Materials Release	122.4	12	23.0	5.3	5.9	3.9
Radiological Release	117.9	13	20.0	5.9	5.3	3.8
Critical Infrastructure Disruption	109.9	15	19.6	5.6	6.4	3.1
Airplane Crash	103.0	16	19.4	5.3	5.5	3.5
Major Transportation Incidents	99.5	18	20.2	4.9	6.2	3.3
Train Derailment	91.4	20	18.6	4.9	5.3	3.5
Urban Conflagration	87.1	22	18.3	4.8	5.1	3.6
Power Failure	80.2	23	17.6	4.6	6.5	2.7
Human Caused Hazards						
Terrorist Acts	220.7	2	28.3	7.8	6.3	4.5
Coastal Oil Spills	156.0	6	23.2	6.7	6.2	3.8
Mass Shooting	116.9	14	20.8	5.6	5.8	3.6
Sabotage	79.4	24	15.5	5.1	5.2	3.0
Cyber Incidents	79.2	25	16.0	4.9	6.1	2.6
Civil Disturbance	78.5	26	15.8	5.0	5.4	2.9
Special Events	69.3	28	15.2	4.6	4.9	3.1
Mass Migration	62.3	31	12.5	5.0	4.9	2.6

Hazard Vulnerability

Natural and Man-caused Hazards	Manatee County	Anna Maria	Bradenton	Bradenton Beach	Holmes Beach	Longboat Key	Palmetto
Hurricane/Coastal Storms	H	H	H	H	H	H	H
Severe Storms	H	H	H	H	H	H	H
Tornadoes	M	M	M	M	M	M	M
Floods	H	H	H	H	H	H	H
Coastal and Riverine Erosion	M	M	M	M	M	M	M
Winter Storms/Freezes	M	M	M	M	M	M	M
Drought	M	M	M	M	M	M	M
Sinkholes	L	N	L	N	N	N	L
Wildfires	H	N	H	N	N	N	H
Earthquakes	N	N	N	N	N	N	N
Space Weather (no data to report)							
Sea Level Rise	H	H	H	H	H	H	H
Harmful Algal Bloom	M/H	H	M/H	H	H	H	M/H
Epidemic	M/H	M/H	M/H	M/H	M/H	M/H	M/H
Animal Disease Outbreak	M	L	L	L	L	L	L
Hazardous Materials	M	M	M	M	M	M	M
Dam/Levee Failures	L	N	L	N	N	N	L
Port Vessel Collision or Open Water Hazardous Material Spill	H	M	M/L	L	L	L	L
Terrorism/Homeland Security	L	L	L	L	L	L	L
Utility Failure/Power Outages	M	M	M	M	M	M	M
Key:							
H = High – Likely to experience threat of vulnerability, effect, or reoccurrence of event. Most of the population affected, major damage to old, poorly maintained, and mobile home structures, some damage to newer structures built to code likely.							
M = Moderate – Average to better than average likelihood of experiencing threat of vulnerability, effect, or reoccurrence of event. Around 50% of the population affected, mobile homes and poorly built or maintained structures most at risk.							
L = Low – Below average likelihood of experiencing threat of vulnerability, effect, or reoccurrence of event. Special portions of the population affected, day-to-day operations not affected, minor cosmetic damage expected to some structures.							
N – Very little or no likelihood threat will occur.							
Source: Manatee County Emergency Management, updated 10/1/2019							

Geographic Info

Manatee County Geography

Manatee County is located in west-central Florida, bounded on the north by Hillsborough County, the south by Sarasota County, the east by Hardee and DeSoto Counties and the west by Tampa Bay, Sarasota Bay, and the Gulf of Mexico. The County is approximately 25 miles in length from north to south, 45 miles wide from east to west, and contains a total of 893 square miles. Of this 743 is land and 150 is water (55 inland, 46 coastal, and 49 territorial). In addition, there are 150 miles of waterfront and 27 miles of beaches. The average elevation is 12 feet.

Area in square miles: Manatee County is 743 square miles in land area.

Water area in square miles: Water area in square miles: 150 square miles

Land topography: The topography of Manatee County is diverse with barrier islands and miles of coastal areas to scrub brush and farmland stretching from less than 5 feet to 160 feet in height.

Land use patterns: Land use patterns are influenced by the waterways and road system and are divided in six regions.

Northern Mainland: The area consists of Port Manatee, commercial/agricultural areas, and is moderately populated with residential areas. There are some tourist facilities and mobile home parks in the area which is a rapid growth area quickly being developed into large residential tracts.

Western Mainland: This area has a very heavy population load with residential, commercial and tourist accommodation facilities.

Eastern Mainland: The eastern area of the county is mainly agriculture in nature with some mining activities. There is a rapid growth area quickly being developed into large residential tracts.

Southern Mainland: This area is a rapid growth area with some industrial development, an airport, college campuses and a growing number of tourist accommodations and service facilities.

Barrier Islands and Beaches: This area includes the barrier islands from Rattlesnake Key north to the county's southern limits with Sarasota County on Longboat Key and contains the natural and spoil islands found along the Inter Coastal Waterway and Bays.

Residential land uses account for most the area and the coastal beach area is characterized by a series of medium density residential and resort development. The island areas within Manatee County are predominately low density residential development. Commercial uses in the West Beaches account for sizable area, located along the resort and tourist area of the island.

Drainage patterns: In Manatee County, floodplains are associated with the Myakka River and the Manatee River, their many tributaries, Lake Manatee, Braden River, Bowlees and Gamble Creeks and the Gulf of Mexico. A dominant feature of Manatee County is the expansive marsh between the mainland and the DeSoto and Hardee County boundary lines.

Environmentally sensitive areas: Manatee County is comprised of approximately 20% of wetland areas, which are environmentally sensitive and are primarily the low land areas near lakes and rivers. Detailed maps and data are available from the Manatee County GIS Department, the Southwest Florida Water Management District and the Tampa Bay Regional Planning Council.

Flood Prone Areas: In Manatee County are identified as those areas within the 100-year floodplain, and other areas subject to repetitive flooding along the rivers and lakes. Flooding occasionally occurs in localized areas because of inadequate drainage. The largest part of flood plain lies in the 25-year flood elevation. The 100 year encompasses that part of the County which is under the greatest pressure for development. Manatee County occupies approximately one third of the Tampa Bay water shed area which encompasses 4,090.5 square miles. Manatee County's Local Mitigation Strategy contains additional information on flood prone areas.

BUILDING BY FLOOD ZONES

Land Use Category	High Risk (A or V)	Low Risk (X)	*Mixed	Moderate Risk (X-shaded)	Moderate & Low
Residential	26,016	99,869	2,699	2,800	936
Mobile Homes	7,516	17,407	996	289	146
Multi-Family	1,898	6,094	169	78	25
Commercial	1,025	3,213	131	68	36
Industrial	347	1,640	44	70	21
Agricultural	466	3,286	60	38	21
Institutional	239	1,221	45	37	10
Government	363	1,652	46	51	19
Mixed	1,285	2,755	105	27	9
Other	443	512	10	7	7
Source: Manatee County GIS, 2019 *Mixed – property encroaches in High Risk Zones (A or V)					

Climate: Manatee County has a humid subtropical climate. The large bodies of water in or near the county have a tempering influence on the climate, reducing the temperature range, and contributing to the high humidity. Per the U.S. Climate Data, the average temperature in Manatee is 73.35 degrees. Annual average rainfall ranges from 56.21 inches near the coast to 60 inches inland with most the rainfall occurring from June through November. Summers in Manatee County are long, warm, and relatively humid with little day to day variation in temperature. Afternoon temperatures generally reach the high 80's or low 90's with great regularity. Temperatures above 95 degrees occur occasionally, and 100 degree days occur rarely. Winters are mild and relatively dry and afternoon temperatures usually reach 70 degrees. Winter minimums range primarily from 45 to 60 degrees and rarely fall below 30 degrees. Locations in the colder areas experience a temperature of 26 degrees or lower approximately every four years. The rainy season (June through October) produces about 67% of the annual average rainfall with the majority falling in the months of June, July and August occurring in frequent short-duration afternoon and evening thundershowers. Our annual average thunderstorms are approximately

one hundred days per year. Showers are occasionally heavy and can produce three or more inches of rainfall in a short period. Day long rains are normally associated with a tropical weather system in the summer and are infrequent. The chances of tropical storms with wind speeds between 40 – 73 mph or hurricane force winds 74 mph or greater, in any given year, are approximately one in seven. When tropical storms do occur, they normally produce large amounts of rainfall over several days. Twenty-four hour rains of 26 inches or more may be expected on average of once every five years. Rainfall amounts equal to a 100-year event have occurred in the recent past causing severe inland flooding.

Demographics

County Population

In 2010 the United States Census determined Manatee County’s population to be 322,833 while the County’s six jurisdictions were: 1,503 Anna Maria; 49,546 Bradenton; 1,171 Bradenton Beach; 3,836 Holmes Beach; 6,888 Longboat Key (total based of entire jurisdiction located in both Manatee and Sarasota Counties); and 12,606 Palmetto.

Manatee County has experienced an incredible growth rate since 2012. Current population is estimated to be 394,855 (Manatee County, FL, 2018 U.S. Census Bureau July 2018 Estimate), - rising from 258,211 in 2012, and making Manatee County the 15th largest county in Florida. The Metropolitan Planning Organization’s 2035 Long Range Transportation Plan estimates approximately 1,500 dwelling units will be built each year through to 2035. Approximately 15% of the County’s population resides in the county seat with most the population living in unincorporated areas.

Population

Population estimates	394,855
Population, percent change – 2010-2018 (estimates)	22.3%
Population, Census, April 1, 2010	322,833
Veterans	32,682
Foreign born persons, percent	12.6%
Persons under 5 years, percent	4.7%
Persons under 18 years, percent	18.3%
Persons 65 years and over, percent	27.4%
Female persons	51.7%
Female persons	51.7%
White alone	86.2%
Black or African American alone	9.1%
American Indian and Alaska Native alone	0.5%
Asian alone	2.3%
Native Hawaiian and Other Pacific Islander alone	0.1%
Two or More Races	1.8%
Hispanic or Latino	16.7%
White alone, not Hispanic or Latino	70.9%

Households	143,652
Persons per household	2.57
Living in same house 1 year ago	84%
Language other than English spoken at home	17.3%
High school graduate or higher	89.2%
Bachelor's degree or higher	29.3%

Population Distribution by Age

Age Group	Population	Percentage
Under 5	18,781	5.0
5 – 9	18,136	5.26
10 – 14	18,527	5.33
15 – 19	18,100	5.20
20 – 24	16,031	4.96
25 – 29	16,627	5.43
30 – 34	16,126	5.12
35 – 39	17,484	5.14
40 – 44	19,243	5.15
45 – 49	21,723	5.99
50 – 54	22,325	6.56
55 – 59	21,713	7.27
60 – 64	23,367	7.35
65 – 69	21,602	7.93
70 – 74	17,383	6.57
75 – 79	14,633	4.72
80 – 84	11,563	3.41
85 and over	9,928	3.56

Source: U.S. Census Bureau, Population Est. Program

Area, Population and Density by City

Jurisdiction	Area (per sq. mile)	Population (2018)	Persons (per sq. mile)
Anna Maria	0.86	1,749	2,366
Bradenton	17.16	57,644	4,010
Bradenton Beach	1.19	1,278	2,481
Holmes Beach	1.91	4,261	2,000
*Longboat Key	16	7,326	1,773
Palmetto	5.75	13,717	2,490
Manatee County	893	394,855	431.7

**Numbers based on entire jurisdiction located in both Manatee and Sarasota Counties.*
Source: United States Census Bureau, Population Estimates Program (2018)

Manatee County Emergency Management facilitates the database of individuals requiring special needs transportation assistance and/or sheltering assistance and/or sheltering assistance in the event of an evacuation order. Information is accumulated from the Health Department, Health and Medical Providers, Manatee County School Board, durable medical equipment suppliers, home health agencies and other sources. A Special Needs Plan supports this endeavor.

Special Needs Population Distribution At-Risk Evacuation Level

Evacuation Level	Special Needs Population
A	68
B	41
C	67
D	122
E	118
N/A	5
<p><i>*Numbers are registered persons as of June 1st each year and do not include the number of persons transported to general population shelters.</i></p> <p>Source: Manatee County Emergency Management Special Needs Registry</p>	

The Manatee County Migrant/Seasonal Farm Worker Needs Assessment Report identifies that more than 18,000 farm workers and family members consider Manatee County home (based on a profile completed in 2000). “Seasonal workers” and their family members, who reside in the county year-round account for approximately 41% of the total. “Migrant workers”, who follow the crops north once the harvest season ends, account for approximately 43% of the population; while most migrant family members, remaining in the area year-round, account for the remaining 16%. Florida is the primary “sending state” of the eastern migrant stream. The agricultural season in Manatee varies by crop but in general extends over a nine-month period from late September to mid-June. Migrant families with children tend to remain in the area throughout the school year.

Manatee County saw more than three million tourists in 2016, a 2.7 percent increase over 2015, and the total economic impact of tourism increased 7.3 percent between 2015 and last year, per the Bradenton Area Convention and Visitors Bureau. Manatee County tourism generated \$49.7 million in state sales taxes in 2016, up 6 percent from 2015, while the total number of tourism-related jobs in the county increased by 2.4 percent, to 25,300.

Tourism-heavy geographic areas of Manatee County focus on the barrier islands – Longboat Key, Bradenton Beach, Holmes Beach, and Anna Maria Island. These island jurisdictions also experience some degree of seasonal residential populations. Seasonal visitors occupy various parts of the County and are not necessarily bound to a single housing type or location. However, many of the County’s larger mobile home parks and manufactured home parks have a higher percentage of visiting and seasonal residents – especially in Winter months. Winter residents from northern states and Canada generally begin arriving in October and stay until April. This population is generally over the age of 55.

***Manatee County Hotel and Motel
Inventory***

Hotel/Motels	Total Units	Average Occupancy Rate
147	7,000	73.4%

Manatee County's transient population is considered for planning purposes to be part of the tourist population. Per the 2016 community report based on a count conducted the night of Jan. 25, there were 497 homeless people counted in Manatee.

Of the people residing in Manatee County from 2007-2011, 12.3% were foreign born and 87.7% were native to the United States, including 28% who were born in Florida. Among people at least five years old residing in Manatee County in 2012, 16.3% spoke a language other than English at home. Of those, 65% spoke Spanish and 35% spoke some other language; 51% of the 16.3% non-English speaking reported that they did not speak English "very well."

Approximately 38,000 people in Manatee County suffer some degree of hearing loss. Deaf and hard of hearing individuals' needs are met through the Emergency Communications Center (ECC, 911) and through partnership with the Sarasota Manatee Chapter of the Hearing Loss Association of America; in addition to TDD equipment and the 711 services.

Health, United States Census QuickFacts: Manatee County (2016)

With a disability, under age 65 years, percent, 2012-2016	8.9%
Persons without health insurance, under age 65 years, percent	18.1%

Manatee County Sheriff's Office jail can house 1,880 inmates with an average of 1,100 inmates daily.

The greatest population concentration in Manatee County exists in the areas most vulnerable to impact from specific hazards, such as hurricanes and transportation accidents/hazardous material spills. The Manatee County LMS addresses vulnerable areas, population and recommends specific mitigation projects to avoid, minimize or reduce damage. Awareness of the population in vulnerable areas assists in planning for response and recovery. The at-risk population has been identified by their evacuation zone.

POPULATION BY EVACUATION LEVELS

2017	Level A	Level B	Level C	Level D	Level E
Site-built Homes	53,574	19,822	32,257	74,951	39,571
Mobile/Manuf. Homes	11,262	4,526	6,870	13,109	2,537
TOTAL	64,836	24,348	39,127	88,060	42,108
2020	Level A	Level B	Level C	Level D	Level E
Site-built Homes	45,051	17,982	29,391	68,576	41,056
Mobile/Manuf. Homes	9,495	3,781	5,793	11,159	2,434
TOTAL	54,546	21,763	35,184	79,735	43,490
<i>Source: Florida Statewide Regional Evacuation Study Program – Evacuation Transportation Analysis (2017 update)</i>					

Vulnerable Population by Destination 2017

	A	A + B	A + B + C	A + B + C + D	A + B + C + D + E
To Friends and Family, Cumulative	39,465	54,215	77,905	131,396	156,787
To Hotel / Motel, Cumulative	12,404	16,036	21,875	35,084	41,400
To Public Shelter, Cumulative	3,805	6,050	9,631	18,437	22,648
To Other Destination, Cumulative	9,162	12,883	18,900	31,454	37,643
CUMULATIVE TOTAL	64,836	89,184	128,311	216,371	258,478

Economic Profile

Housing by Jurisdiction

Description	Manatee County	City of Anna Maria	City of Bradenton	City of Bradenton Beach	City of Holmes Beach	*Town of Longboat Key	City of Palmetto
Total Housing Units	183,774	1,435	26,780	1,866	4,561	9,347	6,735
1-unit, Detached	95,267	1,174	11,369	278	1,935	2,352	2,482
1-unit, Attached	14,799	80	2,464	170	539	596	487
2 Units	4,350	66	606	173	551	113	211
3 or 4 Units	6,150	51	1,333	181	446	208	162
5 to 9 Units	8,885	38	2,861	146	337	718	90
10 or More Units	9,133	9	2,200	265	270	802	209
Mobile Home or RV	29,959	0	1,543	233	0	210	2,092
<i>*Numbers based on entire jurisdiction located in both Manatee and Sarasota Counties.</i>							
<i>Source: American Community Survey, U.S. Census Bureau -2013-2017 data</i>							

Economy

Category	Manatee County	Florida	United States
Labor Force	179,493	10,421,251	164.94 million
Labor Force % of County Population	45.46%	n/a	n/a
Unemployment Rate	3.4%	3.5%	4.0%
<i>Source: United States Bureau of Labor Statistics, July 2019</i>			

Transportation

Mean travel time to work (minutes), workers age 16 years+, 2012-2016	25.1
Income & Poverty	
Median household income (in 2016 dollars), 2012-2016	\$51,483
Per capita income in past 12 months (in 2016 dollars), 2012-2016	\$29,140
Persons in poverty, percent	12.7%

Businesses

Total employer establishments, 2015	8,480
Total employment, 2015	94,811
Total annual payroll, 2015 (\$1,000)	3,435,100
Total employment, percent change, 2014-2015	6.0%
Total non-employer establishments, 2015	29,731
All firms, 2012	29,957
Men-owned firms, 2012	14,680
Women-owned firms, 2012	11,104
Minority-owned firms, 2012	6,555
Nonminority-owned firms, 2012	22,087
Veteran-owned firms, 2012	3,250
Nonveteran-owned firms, 2012	24,882

Utility Providers

Electrical	Florida Power & Light Peace River Electrical Cooperative
Natural Gas	TECO / People's Gas
Telephone and Cable	Frontier (formerly known as Verizon) Spectrum (formerly known as Brighthouse)
Water & Sewer	Bradenton Public Works Palmetto Public Works Manatee County Utilities

Major Employment Sectors

EMPLOYMENT ESTIMATES BY TYPE OF INDUSTRY

Employment Sector	Total Establishments	# of Employees
Agriculture, forestry, fishing & hunting	16	1,592
Mining, quarrying, oil and gas	1	Not avail
Utilities	10	Not avail
Construction	999	6,832
Manufacturing	275	8,002
Wholesale trade	390	3,165
Retail trade	1,273	19,583
Transportation and warehousing	163	2,567
Information	105	1,410
Finance and insurance	507	2,498
Real estate, rental and leasing	587	2,068
Professional, scientific and technical	997	4,309
Management of companies & enterprise	76	1,954
Administrative support	673	6,369
Educational services	124	2,274
Health care and social assistance	912	16,031
Arts, entertainment and recreation	141	2,069
Accommodations and food services	651	13,703
Other services (except public admin)	818	4,240
Industries not classified	11	10
Total for all sectors	8,729	99,027

Source: United States Census Bureau, 2016 County Business Patterns

Largest Employers

Private Sector	Full-Time employees
Bealls Inc	1,786
IMG Academy	1,000
Publix	989
Tropicana Products Inc.	910
Sun Hydraulics	700
Feld Entertainment	600
TriNet	600
SYSCO West Coast Florida Inc.	468
Public Sector	Full-Time employees
Manatee County School District	6,800
Manatee County Government	2,012
Manatee Memorial Hospital	1,651
Manatee County Sheriff's Dept	1,226
Blake Medical Center	1,486
City of Bradenton	543
State College of FL Manatee Sarasota	475

Source: Bradenton Area Economic Development Corporation

In 2015 universities in Manatee County, FL awarded 3,127 degrees. The student population of Manatee County, FL is skewed towards females, with 1,210 male students and 1,917 female students. Most students in Manatee County, FL are White (1,903 and 60.9%), followed by Unknown (442 and 14.1%), Hispanic or Latino (428 and 13.7%), and Black or African American (204 and 6.52%). The largest universities in Manatee County, FL by number of graduates are State College of Florida-Manatee-Sarasota (1,709 and 54.7%), Manatee Technical Institute (768 and 24.6%), and University of South Florida-Sarasota-Manatee (529 and 16.9%). The most popular majors in Manatee County, FL are Liberal Arts & Sciences (1,173 and 37.5%), Registered Nursing (96 and 3.07%), and Information Technology (26 and 0.83%).



Educational Institutions – Higher Education

University of South Florida	State College of Florida
New College	Ringling College of Art & Design
Argosy University	Lake Erie College of Osteopathic Medicine (LECOM)
Eckerd College	Manatee Technical College

Average property values

Single Family Home, average just value, 2016	\$241,300
Florida state average just value of a single-family home in 2016	\$219,681
Mobile Home, average just value, 2016	\$48,729
Condominium, average just value, 2016	\$15,6586

The average sales price for a single-family home was \$331,258 in 2016. The median sales price that year was \$266,500, compared to a statewide median sales price of \$212,000.

Per capita income

A strong socio-economic status enables communities to quickly absorb and recover from losses whereas a weak one hampers their recovery and return to normalcy. As per the U.S. Census Bureau 2017 American Community Survey 5-year Estimates, approximately 32% of Manatee County households had a household income less than \$25,000 and around 5.8% had less than \$10,000. Moreover, in 2017 approximately 13.4% of the population was below the poverty line in

comparison to 12% in 2010.

Low-income and lack of enough affordable housing choices are two factors that can drastically limit our ability to recover quickly from a major disaster. Low-income households are most likely to suffer greater relative losses and face difficulty in finding enough shelter options after a disaster as the available housing stock becomes limited, uninhabitable or too costly to afford.

Concept of Operations

This section describes the methods for the management of emergency activities during the response, recovery and mitigation phases of a disaster. Major elements include the structure of the organization, direction and control, resource management, and those actions necessary under the four phases of emergency management to ensure an effective emergency management program. This section addresses organizational structures, roles and responsibilities, policies, and protocols for providing emergency support. The Concept of Operations describes and defines the scope of preparedness and incident management activities necessary for Manatee County.

The CEMP establishes pre-designated jurisdictional and/or functional area representatives to the Incident Command or Unified Command whenever possible to facilitate responsive and collaborative incident management.

Organization

County Daily Management and Operational Structure

The Board of County Commissioners (BCC) together with the constitutional officers comprise Manatee County Government. The Board of County Commissioners establishes policy for County departments and appoints the County Administrator who carries out the day-to-day business of the County. The Board of County Commissioners consists of seven elected officials: five are elected within districts and two at large commissioners are elected by the entire county.

The County Administrator is appointed by the Board of County Commissioners and is responsible for carrying out the policies and directives of the Commission and for the development and management of the County's annual operating and capital improvement budgets.

The Public Safety Director is empowered with the authority to execute the emergency management program on behalf of the jurisdiction. The Public Safety Director provides policy level assistance and guidelines in disaster preparedness functions and activities, including planning, public information and training programs; serves as coordinator and liaison between the Board of County Commissioners and State and Federal agencies in times of disaster (Ordinance 19-47).

Direction and Control Day-to-Day Operations: The Manatee County Emergency Management Chief, during normal operations, shall report to the Director of Public Safety who reports directly to the County Administrator. The Emergency Management Chief oversees the normal day-to-day operations of the Emergency Management Division. The EOC maintains a Level III

activation (monitoring) daily. Communications is-will be maintained between the EOC and the State Emergency Operations Center (SEOC) via the County Warning Point to the State Watch Office.

Emergency Management Duty Officer: The Emergency Management Chief, or designee, serves as the Emergency Management Duty Officer. The Emergency Management Duty Officer (EMDO) supports the day to day operations with EOC Level III Monitoring Activities. The EMDO is the initial point of contact 24/7 for emergencies that may escalate and require activation of the EOC

External agencies outside of the Board of County Commissioners include the Clerk of Court, Manatee County Sheriff's Office (MSO), Property Appraiser, School Board, Tax Collector and the State Attorney.

Manatee County Government organizational charts are included as an addendum to this document.



**Key Government Officials: Manatee County's Policy Group
Multi-Agency Coordination Committee (MACC):**

Manatee County has identified key government officials who are responsible for ensuring continuous leadership authority and responsibility during emergency situations

The Policy Group, members described below, participates in the decision-making process to ensure that recommendations to the Board and amendments to the local emergency declarations will be coordinated and reflect broad county-wide concerns based on all available information and technical data.

The Multi-Agency Coordination Committee (MACC) shall have the following roles:

- a. To share information among the County, municipalities and County partners in a unified manner during an emergency.
- b. To provide a coordinating mechanism and to provide input to the County Administrator on issues related to preparation for, response to and the recovery from emergencies and disasters.

- c. The participants of the MACC will perform fact-finding to-for prioritizing incident response and resource allocation among the County, municipalities and County partners.
- d. Coordinate the emergency support functions among the County, municipalities and County partners as outlined in the State Plan utilizing the National Incident Management System (NIMS).
- e. Promotes information sharing to minimize conflicts between the emergency response personnel, the private sector, neighboring jurisdictions and the state and federal government in order to establish full situational awareness related to emergency operations.

The Multi-Agency Coordination Committee (MACC) shall not:

- a. Possess any delegated decision-making authority.
- b. Take votes or poll members on any matters discussed by the MACC.
- c. Make recommendations to any governing body.

Composition of Multi-Agency Coordination Committee (MACC):

The MACC shall be a fluid group depending upon the nature and geographic extent of the specific emergency or disaster and shall include the following individuals or their designated representatives: County Administrator, the Deputy County Administrators, Public Safety Director, Clerk to the Board of County Commissioners, the Chairperson of the Board of County Commissioners, Manatee County Sheriff, Manatee County Health Department, School Board representative, and a representative from each municipality in Manatee County. The MACC may include representatives of agencies having hazard specific expertise, such as the applicable Fire Districts.

The Public Safety Director coordinates and Chairs the MACC meetings.

Board of County Commissioners: The process to declare a local state of emergency is codified in Section 2-13-17, Manatee County Code of Ordinance. Under the provisions of Florida Statutes, Section 252.38(1), the Board of County Commissioners is responsible for safeguarding the life and property of the citizens of Manatee County, and providing for the effective and orderly governmental control and coordination of government operations. The Manatee Board of County Commissioners, as a body, establishes policies for the County. The Board has designated delegated to the Chairperson as the Board representative on the MACC, certain responsibilities including representing the Board to participate in the Policy Group. The Board delegates the authority to declare emergencies, but only if in the event a quorum of the Board is not available, either in person or via telecommunications and as codified in Article II of Chapter 2-13 of the Manatee County Code.

County Attorney: The County Attorney or designated representative functions as an advisor to the Board Chairperson or designee during the Policy Group meetings. The County Attorney drafts necessary County ordinances, orders and proclamations for emergency situations.

County Administrator: The County Administrator is the ~~Chair for the Policy Group and the~~ administrative lead of emergency county government and county resources. Certain responsibilities including ~~chairing the Policy Group and~~ declaration of emergencies, if a quorum of the Board is unavailable, have been delegated to the County Administrator by the Board.

Deputy County Administrators: The Deputy County Administrators are members of the ~~Policy Group~~ MACC and support the County Administrator. ~~In the absence of the County Administrator, the Deputy takes the Chair for the Policy Group along with other duties as delegated.~~ This position serves as a Governmental Liaison designee in the EOC ~~the primary EOC Government Liaison.~~

Public Safety Director: The director is empowered with the authority to execute the emergency management program on behalf of the jurisdiction. The Public Safety Director provides policy level assistance and guidelines in disaster preparedness functions and activities, including planning, public information and training programs; serves as coordinator and liaison between the Board of County Commissioners and State and Federal agencies in times of disaster (Ordinance ~~19-4705-29~~). The Director is the Chair of the a member of the Policy Group MACC, and is charged with coordinating meetings of the MACC. ~~The Director also and~~ supports the administration as a Governmental Liaison designee in the EOC.

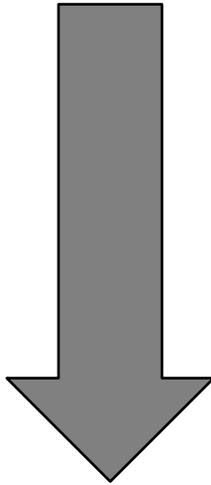
If the Director determines that a state of local emergency should be declared, the Director, or designee as established in Article II of Chapter 2-13 of the Manatee County Code, shall report to the Board, ~~or designee as established in Article II of Chapter 2-13 of the Manatee County Code~~, the facts and circumstances concerning the state of local emergency and the Director's recommendations in connection therewith.

Upon a finding of the occurrence or imminent threat of a disaster emergency, the Board may declare a state of local emergency and thereafter issue orders or adopt resolutions dealing with all matters necessary to protect the public health, safety and welfare due to the disaster emergency and may amend or rescind said orders and resolutions in its discretion, and said orders or resolutions shall have the force and effect of law during the period for which they are effective. In time of disaster or emergency the Board's authority includes the power to suspend the enforcement of any Ordinances of Manatee County, Florida, where the emergency is of such nature that immediate action outside said Ordinance(s) is required.

In the event the Director determines that there exists a disaster emergency and finds that a quorum of the Board cannot be attained either in person or via telecommunications within a reasonable time to take needed action the Board hereby delegates authority to declare a state of local emergency and to issue emergency orders necessary to protect the public health, safety, and welfare during the disaster emergency: (1) to the Chairperson; or, (2) if the Chairperson is unavailable, to the highest ranking Vice Chairperson available; or, (3) if the Chairperson and all Vice Chairmen are unavailable, to the County Administrator.

During the continuance of a state of local emergency the Director shall have direct responsibility for the coordination of all disaster emergency relief activities and efforts, subject only to the direction and control of the Board or such direction and control as delegated by the Board to the

County Administrator as codified in Article II of Chapter 2-13 of the Manatee County Code. The operational policies and procedures for response to disaster emergencies shall be consistent with the Manatee County Comprehensive Emergency Management Plan and supporting documents. ~~Policy Group Flow Chart and Line of Succession~~



~~Policy Group Chair: County Administrator~~

~~Policy Group Members (Representative may appoint a designee):~~

~~Board Chairperson~~

~~County Attorney~~

~~Public Safety Director and Department Directors~~

~~Manatee County School Board Superintendent~~

~~Health Department Director~~

~~Sheriff~~

~~County Fire Chiefs' Association President~~

~~Jurisdiction Leads (Mayor, Chief, other)~~

~~Emergency Management Chief~~

Emergency Management Chief: Section 252.38, Florida Statutes, directs each county to establish an Emergency Management Office with specific provisions and responsibilities. The provisions of section 252.31 - 252.60 as outlined in the Emergency Management Chief's job description include:

- Organizing and overseeing the administration and operation of the Emergency Management Division, the County Emergency Operations Center and other related operational facilities.
- ~~May Sserveing~~ on the ~~Policy Group~~MACC and in the capacity of advisor to the Board of County Commissioners during emergency or disaster operations.
- Coordinating activities, services and programs for emergency planning and emergency response throughout Manatee County.
- Maintaining liaison relationships with State, Federal, and other local emergency management agencies.
- Development and maintenance of operational planning for emergency responses.
- Instituting training and public information programs.
- Ascertaining the needs of the County to implement appropriate emergency response operations.
- Taking preparatory steps necessary, including the partial or full emergency mobilization of agencies within County and municipal governments.
- Coordinating with the Governor's Authorized Representative, the State of Florida Division of Emergency Management, and all other Federal and relief agencies in matters pertaining to emergency management.
- Assisting municipalities in emergency operations activities.
- Carrying out any actions deemed necessary by the Public Safety Director.
- Activating the EOC.
- In lieu of a state of local emergency, the Emergency Management Chief can activate this Comprehensive Emergency Management Plan.

~~**Emergency Management Duty Officer:** The Emergency Management Chief serves as the Emergency Management Duty Officer. The Emergency Management Duty Officer (EMDO) supports the day-to-day operations with EOC Level III Monitoring Activities. The EMDO is the initial point of contact 24/7 for emergencies that may escalate and require activation of the EOC.~~

~~**Senior Operations Group:** The Senior Operations Group is called together as needed by the Emergency Management Chief for the purposes of having stakeholder discussions regarding an event or activity. Agencies involved in this group include but are not limited to:~~

- ~~• Emergency Management~~
- ~~• Manatee County Administration~~
- ~~• Town of Longboat Key~~
- ~~• City of Bradenton Beach~~
- ~~• City of Holmes Beach~~
- ~~• City of Anna Maria Island~~
- ~~• City of Palmetto~~
- ~~• City of Bradenton~~
- ~~• Lakewood Ranch Community Development District~~
- ~~• Florida Department of Health Administration~~
- ~~• Manatee County School Board~~
- ~~• American Red Cross, Southwest Florida Region~~
- ~~• Manatee County Sheriff Office~~
- ~~• Manatee County Fire Chief's Association President~~
- ~~• Other (including regional) as deemed necessary~~

Emergency Activation Operation

Emergency Support Functions (ESFs): A functional area of response activity established to facilitate the delivery of county and/or state assistance required during the immediate response and recovery phases. The concept uses a functional approach to group response actions, which are most likely to be needed, under eighteen Emergency Support Functions (ESFs). Each Emergency Support Function has a department or agency designated as the Primary Agency or ESF Lead. Upon activation of the EOC, the primary agency will designate a representative in the EOC to coordinate activities.

ESF Lead or Primary Agency: The ESF Lead is responsible for correlating all information relating to their activities and requirements. This information will be forwarded to their Section Chief and ESF 5 upon request or at defined times. The primary agency for each ESF is responsible for establishing an EOC coverage plan with their support agencies. The goal for each ESF is to have at least three individuals operating in 12-hour shifts, who are fully trained with decision making authority for their respective areas. Each activation is unique and not all ESFs may be activated or require 24-hour staffing. It is anticipated that due to the size of the county and availability of personnel, outside resources may be necessary to support 24-hour coverage.

~~**Direction and Control Day-to-Day Operations:** The Manatee County Emergency Management Chief, during normal operations, shall report to the Director of Public Safety who, reports directly to the County Administrator. The Emergency Management Chief oversees the normal day-to-day operations of the Emergency Management Division. The EOC maintains a Level III~~

~~activation monitoring) daily. Communications is maintained between the EOC and the State Emergency Operations Center (SEOC) via the County Warning Point to the State Watch Office.~~

General Emergency Operations: The concept of operations focuses on emergency activation, response, relief efforts and measures to be taken for a smooth transition into long-term recovery from an emergency. The scope of these operational concepts and response actions may include:

- Providing emergency notification and warning to responders and the public.
- Describing emergency mobilization procedures.
- Establishing a Pre EOC activation meeting (when necessary) with the Multi-Agency Coordination Committee Senior Operations Group.
- Delineating emergency ~~decision-making~~ processes.
- Describing types and methods of implementation of emergency protective actions.
- Conducting rapid assessments of emergency impacts and immediate emergency resource needs.
- Disseminate relief information and instructions to the public.
- Conducting emergency relief operations to support survivors and their needs.
- Requesting resources which exceed the capability of the County, will be forwarded to the State EOC.
- Facilitating security to the affected areas.
- Conducting preliminary damage assessments.
- Activating and disseminating procedures for requesting federal disaster assistance.
- Determining protective actions and coordination of re-entry into evacuated areas.
- Facilitating the restoration of essential public facilities, infrastructure and services.
- Preparing for federal disaster assistance (public and individual).
- Coordination of volunteer organizations, resources and materials.

Manatee County Government organizational charts are included as an addendum to this document.

When provisions of this plan are in effect, the EOC serves as the central command and control point for emergency-related operations, activities and requests for deployment of resources. In the event the EOC is threatened or impacted, the Alternate EOC will be activated. Should both facilities become compromised, Manatee County Public Safety will work with the Property Management Department to locate and secure appropriate facilities and available resources.

The Primary and Alternate Emergency Operations Centers are located at:

<p>Primary EOC: Public Safety Center 2101 47th Terrace East Bradenton 34203 Lat 27 29 44.48126 Lon 82 34 22.24834 USNG 17R LL 44628 42324</p>	<p>Alternate EOC: Manatee County Public Works Department 1022 26th Ave East Bradenton 34208 N27.28.562 W82.33.221 USNG 17R LL 46788 40226</p>
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Emergency Management Organization Systems

Notification, Mobilization and Activation: Manatee County Public Safety serves as the County Warning Point and is responsible for notifying Department personnel and first responders with a primary emergency response and/or recovery tasking. The County Warning Point is in the Public Safety Center, 2101 47th Terrace East, Bradenton and is collocated with the Emergency Management Division. Notification and alerting procedures are provided by Emergency Management Division and maintained by the Emergency Communications Division for activation as required. Manatee County Emergency Communications Center provides primary dispatch for county **EMS**, fire and rescue and is the designated secondary communications facility for the county. The Emergency Management Division will be notified of disaster events that may necessitate the activation of the CEMP and the County EOC. Such notification may occur in many ways, e.g., from the County and/or State Warning Point, from a municipality or from the on-scene county or municipal incident command.

Telephone Systems: The Warning Point maintains listings of telephone numbers to be called for various emergency situations. Faxes can also be used for this purpose. Manatee County Emergency Communications Center uses AlertMedia for phone and text messages to responders, government representatives, and partner agencies. Manatee County uses Everbridge to alert the public to emergencies, with reverse telephone notification capable of text, telephone, TTY, and email services. Additionally, Manatee County uses the Integrated Public Alert and Warning System (IPAWS).

E-mail: Advisories can be sent electronically to multiple addresses by e-mail.

Two-Way Radio – The Warning Point has access to existing radio systems, e.g., police, fire, etc. to warn specific agencies.

Emergency Alert System (EAS) – the County Warning Point can request activation of the EAS by contacting the State Watch Office (SWO). The SWO will activate the system through the primary EAS station in the area. Upon appropriate authentication, participating broadcast stations (radio and television) as well as cable television companies, tuned to the primary EAS station will activate their alert tone transmitters and interrupt their broadcasts to pass the warning message.

Media – the County’s Information Outreach Manager (also the ESF-14 Public Information lead) maintains lists of traditional and social media contacts for information dissemination over television and radio broadcast, email, social media platforms, digital media (websites), mass notification systems such as #ManateeReady, and print media.

The Division of Emergency Management Chief, or designee, will, in consultation with the Director of the Public Safety and the County Administrator, determine the need for activation of the County EOC and the level of activation necessary. A guideline for activation of the County EOC activation is provided below in the following three levels:

Level III, Monitoring Activation. Routine county-wide monitoring. At this level, the County’s full-time Emergency Management Division staff provide necessary information to the respective state and local agencies regarding hazard materials incidents, adverse weather warnings, wildfires, road closures, plane crashes, or other critical events.

Level II, Partial Activation. A limited activation of core ESF personnel, Manatee 3-1-1 Surge Citizens Information Center (CIC)-personnel and as needed, municipality and support personnel to more closely monitor a developing situation and make initial plans to provide any necessary assistance.

Level I, Full Scale Activation. All county ESF representatives, Manatee 3-1-1 Surge CIC-personnel, municipality representatives and support staff report in shifts to the County EOC for 24-hour disaster response/recovery activities. All members of the Policy Group Multi-Agency Coordination Committee and the Senior Operations Group will be notified and will be prepared to meet as needed.

Upon notification of the lead agency of an ESF to activate, the lead agency is responsible for notification of the necessary support agencies for that ESF and for requesting, as indicated, mobilization of their staff and resources. Mobilization will be to the County’s EOC. Once staffed, the County EOC will serve as the single point of coordination and direction for the county’s emergency response and disaster recovery operations. An alternate EOC is available.

Response

For disasters with a defined incident scene, the responding county and/or municipal emergency services agencies will establish a command post in proximity to the scene, from which emergency operations will be directed using the incident command system. Emergency operations in the field will be classified based on the number of incident scenes and/or the size of the event.

If the incident scene is within or impacts one or more of the county’s municipalities, that jurisdiction may activate its municipal emergency operations procedures, or equivalent, to provide and coordinate municipal support to municipal response officials operating from the command post. The level of impact on the municipality may also necessitate that the jurisdiction’s governing body declare a municipal-local state of emergency.

Upon request of the command post, a municipal EOC, or for disasters without a defined incident scene or with numerous incident scenes, the County Emergency Operations Center (EOC) may be activated based on the size and characteristics of the event. This activation may be partial or full, with limited or complete staffing, respectively, depending on the characteristics of the disaster event. Because of the county's increased vulnerability to hurricanes, activation levels specifically for hurricane events have also been established, as has a timeline for hurricane response operations.

Once activated, county emergency operations will be coordinated from the County EOC directly, or provided in support of the command post. The County EOC will also serve as the point of coordination with municipal and state government response organizations.

County EOC operations will be directed by the ~~Policy Group, which is chaired by the County Administrator, with operations coordinated by the~~ Director of Public Safety. Emergency operations will be conducted by the staff ~~of emergency support functions from each~~ (ESFs). These ESFs, plus support and leadership staff, have been grouped into a specific organizational structure to facilitate response and recovery operations. There is a lead agency and one or more support agencies designated as responsible for activation and implementation of each county ESF. Responsibility for staffing of each ESF at the EOC is defined, as is the responsibility for providing general support staff for maintaining EOC operations.

Each ESF is under the direction of a lead agency, with additional assistance and capabilities provided by designated support agencies. The lead responsibility for each county ESF has been assigned to an appropriate local agency or organization, and placed into an overall structure that parallels the ESF organizational structure used at the state and federal level.

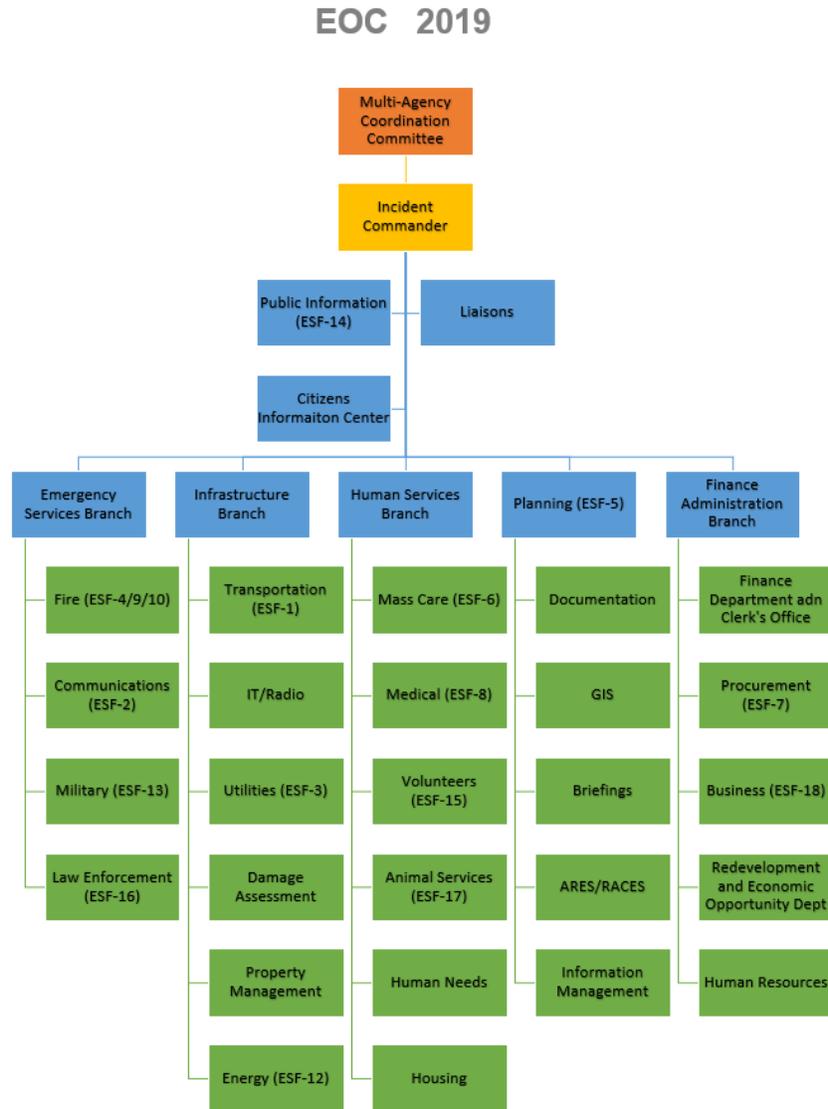
If indicated by the characteristics of the event, it may be necessary for the County to declare a "local state of emergency" and to recommend or require protective actions for public health and safety, e.g., evacuation, curfews, etc. The local State of Emergency is declared by the Chair of the Board of County Commissioners, ~~and, if indicated, the Policy Group and Senior Operations Group may be convened to coordinate such operations between the county and its municipalities.~~

Mission request and task assignments will be facilitated from and through the ESFs as necessary through the Emergency Management Division and the EOC operations staff. County ESFs have responsibility for mission completion and coordinating directly with the functional counterparts at EOCs of the county's municipalities, adjacent counties and the state.

Generally, this concept of operations will be utilized regardless of the type of disaster event, so long as it has reached a level and scale of impact and complexity that activation of this plan is needed. Nevertheless, if an individual event so indicates, the County Emergency Management Division may request activation of a single or very limited number of County ESFs to address specific missions without activation of the County EOC. In such cases, the Emergency Management Division will provide coordination with the activated ESF and operations may occur from facilities most convenient for completion of the mission.

Emergency response operations will continue to completion, and when indicated, the EOC will transition to disaster recovery operations. Disaster recovery operations may be conducted from the County EOC or other facilities.

Emergency Operations Organizational Chart (Response and Recovery)



Recovery

When the emergency response operations are nearing completion, activities that are classified as disaster recovery operations begin. These include both short-term recovery operations and long-term redevelopment activities. Short-term recovery establishes facilities and programs needed in the event's immediate aftermath to assist impacted individuals and organizations. Long-term redevelopment activities aim to return the community to normalcy, including reducing vulnerability to similar future disaster events. The guidance provided by the CEMP on disaster recovery operations is referenced in annexes to this plan.

Lead Agency by Hazard Type

Different incident types or severity may influence the management structure pertaining to who is in charge by type of disaster. Emergency events will be classified in the CEMP based on the number of incident scenes and/or the number of jurisdictions involved. Incidents may be typed to make decisions about resource requirements. Incident types are based on the following five levels of complexity.

Type 5 - The incident can be handled with one or two single resources with up to six personnel. Command and General Staff positions (other than the Incident Commander) are not activated. No written Incident Action Plan (IAP) is required. The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene. Examples include a vehicle fire, an injured person, or a police traffic stop.

Type 4 - Command staff and general staff functions are activated only if needed. Several resources are required to mitigate the incident, including a Task Force or Strike Team. The incident is usually limited to one operational period in the control phase. The agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated. No written Incident Action Plan (IAP) is required but a documented operational briefing will be completed for all incoming resources. The role of the agency administrator includes operational plans including objectives and priorities.

Type 3 - When capabilities exceed initial attack, the appropriate ICS positions should be added to match the complexity of the incident. Some or all the Command and General Staff positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions. A Type 3 Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources, an extended attack incident until containment or control is achieved, or an expanding incident until transition to a Type 1 or 2 IMT. The incident may extend into multiple operational periods. A written IAP may be required for each operational period.

Type 2 - This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. A Type 2 incident may require the response of resources out of area, including regional and/or national resources, to effectively manage the operations, command, and general staffing. Most or all the Command and General Staff positions are filled.

A written IAP is required for each operational period. Many of the functional units are needed and staffed. The agency administrator is responsible for the incident complexity analysis, agency administrator briefings, and the written delegation of authority.

Type 1 - This type of incident is the most complex, requiring national resources to safely and effectively manage and operate. All Command and General Staff positions are activated. Operations personnel often exceed 500 per operational period and total personnel will usually exceed 1,000. Branches need to be established. The agency administrator will have briefings, and ensure that the complexity analysis and delegation of authority are updated. Use of resource advisors at the incident base is recommended. There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

For minor events (lower complexity Types 5 and 4), the jurisdiction and agency having authority may determine the appropriate activities required without support from an external jurisdiction or agency. For the purposes of the table below, for all incidents major or catastrophic, it is assumed that all other agencies will be support agencies for the lead agency.

Complex will most directly involve the County EOC and County ESFs, as well as implementation of the CEMP for Incident Types 1, 2, and 3. In some types of emergencies there may be several individual sites such as multiple tornado touchdowns or a large-scale civil disturbance. Others, such as widespread flooding, have a major community impact with many smaller, “routine” incidents. The EOC will be the focus for strategic decision-making in complex incidents involving multiple sites or areas. Decision-making at this level involves such things as curfews, emergency ordinances, evacuations, government business closures, incident response priorities, external resource requests, and public information releases. Although most strategic decisions will be made at the EOC, decisions involving county government suspension of normal duties and policy-level administrative items will be made by the County Administrator regardless of location.

Hazard Type and Lead Agency

Hazard Type	Lead Agency
Airplane Crash	Bradenton Sarasota International Airport
Animal Disease	Manatee County Agricultural Extension Service, Manatee County Animal Services, Florida Department of Health in Manatee County
Civil Disturbance	Manatee County Sheriff's Office
Coastal Oil Spill	United States Coast Guard
Critical Infrastructure Disruption	Manatee County Utilities, Manatee County Information Technology, Manatee County Property Management, Manatee County Emergency Management
Cyber Incidents	Manatee County Property Management, Manatee County Sheriff's Office
Dam/Levee Failure	Manatee County Utilities, Manatee County Parks and Natural Resource, Manatee County Public Safety
Drought	Manatee County Agricultural Extension Service
Earthquake	Manatee County Public Safety
Exotic Pest & Disease	Manatee County Agricultural Extension Service, Florida Department of Health in Manatee County
Flood	Manatee County Public Safety
Hazardous Materials Release	Manatee County Fire Chiefs' Association
Hurricane	Manatee County Public Safety
Major Transportation Incidents	Manatee County Public Works
Mass Migration	Manatee County Sheriff's Office
Power Failure	Manatee County Property Management, Manatee County Public Safety
Radiological Release	Manatee County Fire Chiefs' Association
Sabotage	Manatee County Sheriff's Office
School Violence	Manatee County Sheriff's Office
Severe Thunderstorm	Manatee County Public Safety
Sinkhole	Manatee County Building and Development Services, Manatee County Public Safety
Space Weather	Manatee County Public Safety
Special Events	Manatee County Sheriff's Office, Manatee County Public Safety
Terrorism Acts	Manatee County Sheriff's Office
Tornado	Manatee County Public Safety
Urban Conflagration	Manatee County Fire Chiefs' Association
Wildfire	Manatee County Fire Chiefs' Association
Winter Storm	Manatee County Public Safety

ESF Lead and Support Agencies

Function	Primary or Lead Agency	Secondary Agencies
County Employee Support	Manatee County Human Resources	Manatee County Administration
Damage Assessment	Manatee County Building and Development Services	Municipal and agency building officials, planning departments
ESF-1 Transportation and Public Works (includes Fuel)	Manatee County Department of Public Works	Florida Department of Transportation, Florida Highway Patrol
ESF-2 Communication	Manatee County Emergency Communications Center (ECC, 911)	Manatee County Sheriff's Office, Amateur Radio Emergency Communications
ESF-3 Utilities	Manatee County Utilities	Municipal utility providers
ESF-4 Fire Fighting	Manatee County Fire Chiefs' Association (Fire Coordinators)	Manatee County Fire Services Agencies, Florida Forest Service, Florida Fire Chief's Association
ESF-5 Information and Situational Awareness	Manatee County Emergency Management	Manatee County Building and Development Services
ESF-6 Mass Care and Sheltering	Manatee County Emergency Management	Manatee County School Board, the Salvation Army, the American Red Cross
ESF-7 Procurement and Resource Support	Manatee County Financial Management, Procurement	Municipal and agency financial departments
ESF-8 Public Health and Medical Support	Florida Department of Health in Manatee County	Manatee County Community Paramedicine, area hospitals and major healthcare providers
ESF-9 Search & Rescue	Manatee County Fire Chiefs' Association (Fire Coordinators)	Manatee County Fire Services Agencies, Florida Forest Service, Florida Fire Chief's Association
ESF-10 Hazardous Materials	Manatee County Fire Chiefs' Association (Fire Coordinators)	Fire Departments, Florida Forest Service, Manatee County Hazardous Materials Team (Southern Manatee Fire Rescue)
ESF-11 Food & Water	Manatee County Financial Management, Procurement	Manatee County Emergency Management; additional organizations as necessary
ESF-12 Energy	Manatee County Property Management	Manatee County Emergency Management, electric and gas utility providers
ESF-13 Military Support	United States Coast Guard	Florida National Guard
ESF-14 Public Information	Manatee County Administration, Information Outreach	All other ESF Primary Agencies

ESF-15 Volunteers and Donations	Manatee County Neighborhood Services	Manatee County Community Organizations Active in Disasters (COAD)
ESF-16 Law Enforcement	Manatee County Sheriff's Office	Jurisdiction police departments, Florida Department of Law Enforcement, Florida Highway Patrol
ESF-17 Pets and Animal Services	Manatee County Animal Services	Manatee County Building and Development Services, Manatee County Sheriff's Office, Manatee County Agricultural Extension Service
ESF-18 Business & Industry	Manatee County Redevelopment and Economic Opportunity	Manatee County Visitors and Convention Bureau, Chambers of Commerce
Human Needs, Unmet Needs, and Individual Assistance	Manatee County Neighborhood Services	United Way of Manatee County, Salvation Army, Turning Points, Food Bank of Manatee
Mitigation	Manatee County Emergency Management	Manatee County Building and Development Services
Preparedness	Manatee County Emergency Management	Manatee County Administration
Prevention	Manatee County Sheriff's Office	Manatee County Emergency Management
Public Assistance	Manatee County Financial Management	Manatee County Administration, Manatee County Public Safety and Emergency Management, Manatee County Property Management
Recovery, Short/Long Term Recovery	Manatee County Administration, Infrastructure & Strategic Planning Official	Manatee County Building and Development Services
Response	Manatee County Emergency Management	Manatee County Public Safety
Temporary Housing and Economic Redevelopment	Manatee County Redevelopment and Economic Opportunity	Manatee County Visitors and Convention Bureau, Manatee County Building and Development Services



Preparedness Activities

Preparedness Activities Overview

The preparedness section outlines activities the county will undertake to prepare for a response, recovery, and mitigation effort. Also, this section addresses programs to fulfill the requirements for each step of the preparedness cycle (planning, training, equipping, exercising, evaluating, and acting to correct and mitigate). These programs adopt relevant NIMS standards, guidelines, processes, and protocols.

General Issues

Plan Development and Maintenance: The Manatee County Emergency Management Chief is responsible for the development and maintenance of the Comprehensive Emergency Management Plan. This plan is a living document that is subject to changes in defining procedural methods and techniques. A change to the plan does not require ratification by the Manatee County Board of County Commissioners unless there is a major change in policy. Authority for changes to this plan is delegated to the Manatee County Division of Emergency Management. The Manatee County Emergency Management Chief is responsible for the coordination of changes with affected agencies, and after concurrence, may make changes to this plan.

Preservation of Vital Records: The preservation of vital records for the continuation of government will be the responsibility of Manatee County Property Management, Records Division. The Records Division oversees the management of all paper and electronic records created by the County to include; maintenance, retention, preservation, reproduction and destruction as mandated by Florida State statutes. Records Division processes and procedures include the State of Florida General Records Schedule GS1-SL For State and Local Government Agencies under Rule 1B-24.003(1)(a) Florida Administrative Code (effective August 2017). A public record may be destroyed or otherwise disposed of only in accordance with retention schedules and disposal processes established by the State Division of Library and Information Services. Additional information on preservation of vital records can be found in the Board of

County Commissioners Administrative Procedures Manual, Procedure #605.001, Records Center Box Inventory Procedure (06/24/2013).

Special Needs Registration Process: The Special Needs Registry is designed to assist residents of Manatee County who will require transportation or sheltering assistance when the citizen is notified to evacuate their residence because of a storm and no other options are available. Residents may need to evacuate their homes from a pending hurricane if they are power dependent or live in an evacuation zone or in a mobile home. Manatee County and partner agencies promote the Special Needs Registry through media, social media, digital media, through partnerships with home health agencies working in Manatee County, and with the Community Paramedic Division.

Manatee County Emergency Management and the Florida Department of Health in Manatee County facilitates registration of Manatee County residents with special needs through an online database and through a paper application process. Residents complete the special needs survey form online (<https://snr.floridadisaster.org/>) or can download, print, complete by hand, and mail a paper form retrieved from the County website (www.mymanatee.org). Upon receipt of the survey/application, the Florida Department of Health in Manatee County reviews requests for the medical special needs shelter. If the client's needs can be met at the medical special needs shelter, the client is notified by mail. Clients requesting transportation assist to a general population shelter do not need to meet qualification guidelines; all requests for transportation assistance are accepted.

Public Awareness and Education

Public Information Methodology: Manatee County utilizes a variety of platforms and services to reach residents, visitors, and business owners with critical public safety information. Activities are encouraged year-round to address mitigation, preparedness, response, and recovery for all-hazards. Manatee County maintains a list of example public service announcements, media announcements, and other information based on hazard type and target audience – including special needs groups, pets, multiple spoken languages, children, elderly, and disabilities.

Traditional Media – Manatee County reaches the traditional media outlets for television, radio, and newspaper via the County Administrator's Office Information Outreach Division and through a variety of dissemination platforms, including email distribution lists and press releases. The Information Outreach Manager acts as the County's Public Information Officer and maintains an email distribution list for press releases and other announcements. Manatee County maintains a list of local [television](#) and radio stations ([FM](#) and [AM](#)). Information is also sent via [Media Alert](#), a press release dissemination system.

Social Media and Internet – Manatee County uses social media platforms to interact with the public and other organizations on [#ManateeReady](#), [Facebook](#), [YouTube](#), [Flickr](#), [Twitter](#), and [NextDoor](#). Information is regularly shared, such as disaster preparedness tips, local government events, and emergency information. [Manatee County's website](#) houses all county government information and is updated regularly.

Print Media – Manatee County prints and distributes a variety of brochures, handouts, and documents to the public on mitigation, preparedness, response, and recovery activities. The Disaster Planning Guide (or *hurricane guide*) is a one-stop-shop of information for the County’s emergency management program and includes hurricane evacuation maps. The guides are distributed in county government offices and municipal offices, along with being handed out at events, expos, and presentations. Local business, associations, and homeowners’ associations distribute the guide to their clients, members, and residents.

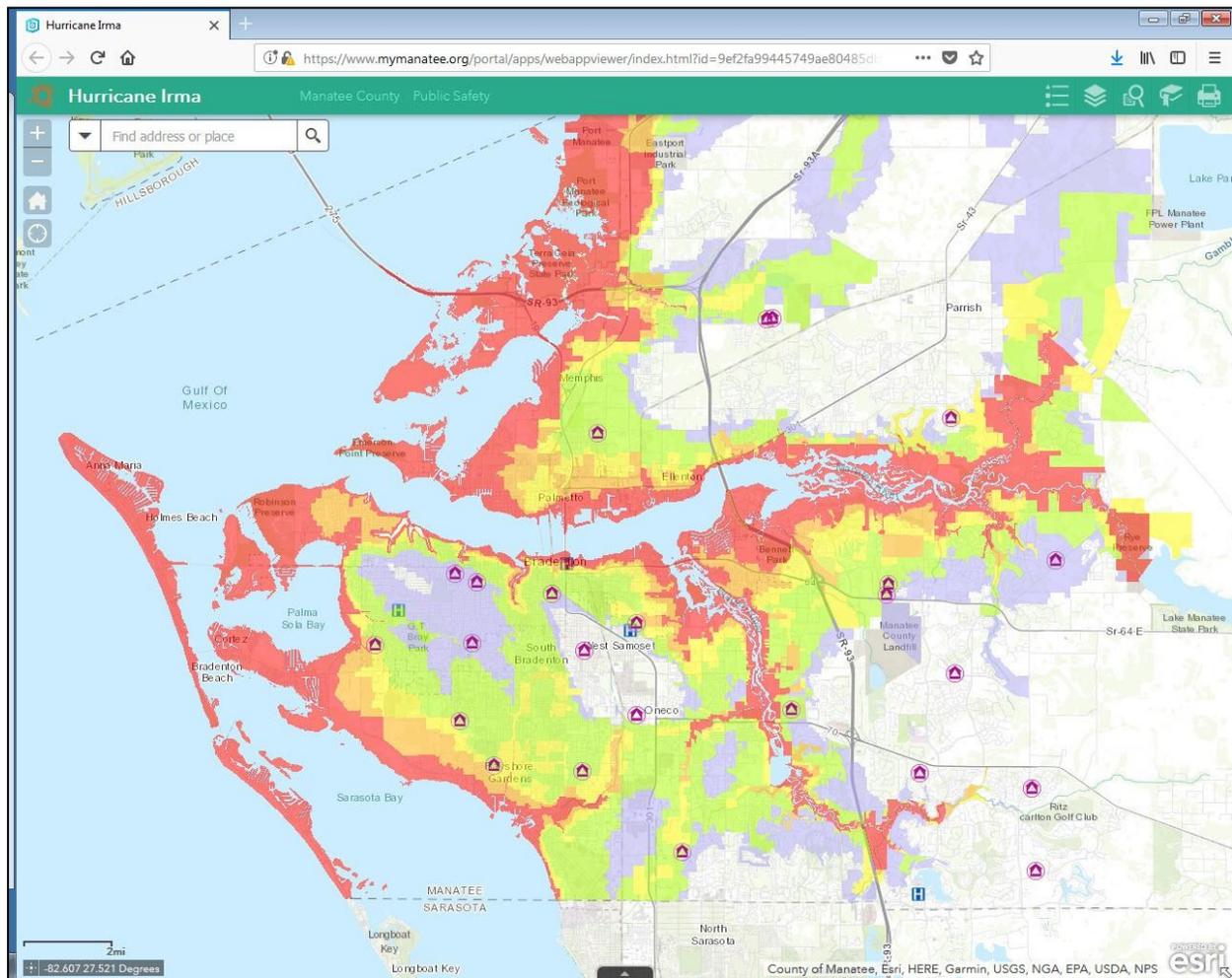
Presentations – Manatee County Emergency Management staff give in-person presentations on disaster preparedness topics to a variety of stakeholder groups – associations, residential organizations, and civic groups. Information is shared using a presentation, through interactive workshops, or providing a table at expo events. Manatee County Emergency Management gives more than 50 presentations annually.

Media Briefings and Press Conferences – Interaction with local media is facilitated via in-person media briefings and press conferences. Should the need arise, briefings and press conferences may be facilitated through remote electronic attendance. These delivery methods are used for training, preparedness, and response. Manatee County Emergency Management hosts media day events for the local news to test their equipment in the Emergency Operations Center. Press conferences are announced using the Public Information Officer (County Administrator’s Office Information Outreach Division) and Emergency Support Function (ESF) 14, Public Information. Press conferences are held on a regular schedule during Emergency Operations Center activations

Reverse Telephone Notification – Currently, the County utilizes CodeRed for the reverse notification system provider. This system calls individuals and businesses that have registered for the system. Additionally, individuals can request the CodeRed system notify them via email and/or text message. Manatee County uses the Public Information Officer (County Administrator’s Office Information Outreach Division) and Emergency Support Function (ESF) 14, Public Information to send information on the County’s emergency status; activities such as evacuation, sheltering, and debris; and how to obtain disaster assistance.

Integrated Public Alert and Warning System (IPAWS) and Wireless Emergency Alerts – Manatee County uses the Integrated Public Alert and Warning System (IPAWS) to send critical emergency information via mobile telephone and text messages. IPAWS provides public safety officials with an effective way to alert and warn the public about serious emergencies using the Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), the National Oceanic and Atmospheric Administration (NOAA) Weather Radio, and other public alerting systems from a single interface.

Hurricane Evacuation Maps: Hurricane evacuation maps are available on the Manatee County website (www.mymanatee.org) and through a variety of printed sources distributed to county and municipal facilities. Hurricane evacuation maps are updated when new information becomes available and in conjunction with the Tampa Bay Regional Planning Council hurricane evacuation study program. Manatee County. The digital version of the disaster planning guide is also available on the County website. Manatee County partners with local news media agencies to share the hurricane evacuation map with the Bradenton Herald and the Sarasota Herald Tribune newspapers. The newspapers print a special edition paper annually with critical hurricane preparedness information, including the full-color hurricane evacuation level map.



Evacuation maps can be found on www.mymanatee.org

Training and Exercises

Training provides first responders, homeland security officials, emergency management officials, private and non-governmental partners, and other personnel with the knowledge, skills, and abilities needed to perform key tasks required by specific capabilities. Manatee County Emergency Management uses data from assessments, strategies, and plans developed in previous steps of the Preparedness Cycle to make evidence-driven training decisions.

Manatee County adopted and uses the Department of Homeland Security (DHS) National Incident Management System (NIMS) to provide a consistent template to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents regardless of cause, size, location, or complexity. NIMS represents preparedness concepts, including communications and resource management, as well as the Incident Command System (ICS).

The Emergency Management Division team ensures county disaster plans and procedures are exercised and evaluated on a continuing basis. There are various computer programs that can assist in developing exercises if desired. Exercise after action reports will be accomplished and provided to participating agencies to ensure corrective action is taken. Subsequent exercises will ensure previous discrepancies are reevaluated.

As a key component of the County's emergency management system, exercises are the principal mechanism for examining and validating core capabilities nationwide across all preparedness mission areas (Prevention, Protection, Mitigation, Response, and Recovery). Exercise plans, procedures, and processes address the County's training and exercise program, allowing for the incorporation of after-action reviews, lessons learned, and corrective actions, with responsibility agreements following any major incident or exercise.

Participating Agencies and Inter-Agency Exercise Provisions: Holistic and comprehensive participation is encouraged for all programmatic activities and exercises. Manatee County Emergency Management extends exercise participation invitations to all participating agencies. Stakeholders engaged and represented in developing training/exercise plans. A complete list of stakeholders can be found in this document under Sections *I.C.1 Plan Formulation Methodology*, *Manatee Emergency Operations Workgroup Represented Organizations*; and *I.C.6 Plan Maintenance, CEMP Distribution List*. Additional agencies are invited to participate in varying exercises based on the nature of their organization. Using the Manatee Emergency Operations Workgroup (MEOW), the Emergency Support Function (ESF) Lead agencies ensure Manatee County includes critical partners in the planning, development, and implementation of exercises.

Exercise Schedule: Manatee County develops and participates in at least one comprehensive exercise annually, in accordance with requirements from the Florida Division of Emergency Management and the Multi Year Training and Exercise Program (MYTEP). The MYTEP is completed and submitted to the State for review annually. The State of Florida 2018 – 2020 Multi-year Training and Exercise Plan (MYTEP) document provides a basis for the countywide exercise program. Exercises are designed and implemented using the Department of Homeland Security's Homeland Security Exercise and Evaluation Program (HSEEP) guidance. The type and scope of exercise is determined using assessments and gap analyses.

While the schedule varies from year-to-year, the County participates in the Florida Division of Emergency Management/State Emergency Response Team annual hurricane exercise; and may develop an independent and supplementary Emergency Operations Center exercise at least annually each Spring.

Annual Exercise and Training:

- Conduct an annual hurricane exercise or other hazard-based exercise. The exercise may be held in conjunction with a state sponsored exercise.
- Conduct one or more ESF-based exercises involving mass casualties under various scenarios (e.g. Hazmat, transportation accident, natural disaster, terrorist act, etc.)
- Conduct hurricane briefings and training meetings with the County Administrator and staff, department heads, municipal officials and other governmental and private emergency response agencies.
- Brief elected and key appointed officials on emergency management activities and hurricane preparedness.
- Conduct hurricane and emergency management seminars as requested.
- Attend FEMA and state emergency management courses as subject matter and availability dictate.

Quarterly or Periodic Exercise and Training:

- Participate in regional planning sessions with adjoining county emergency management personnel through the Tampa Bay Regional Planning Council (TBRPC), Regional Domestic Security Task Force (RDSTF) and Local Emergency Planning Committee (LEPC).



Exercise and Improvement Methodology: Preparedness is a process involving constant change and the whole community. Keeping in mind the ever-changing environment around us and the increasing demand on limited funds we need to foster whole community interoperability in planning and training, therefore each stakeholder shall use the gap analysis approach to supplement the MYTEP process – ensuring the training is focused on the development and or sustainment of needed core capabilities. The MYTEP Gap Worksheet is used to document the steps of the gap analysis process. Manatee County maintains a list of exercise after action and improvement items. The follow-up is based on core capabilities, and improvement plans are driven from the involved parties and stakeholder organizations. After action and improvement items are reviewed when developing future training and exercise needs. The gap analysis process includes:

1. Identifying desired performance outcomes.
2. Identifying existing performance outcomes.
3. Identifying and documenting the gap (the difference between existing performance and desired performance).
4. Identifying the processes (Training or Exercise) to close the gap and achieve the desired outcomes.
5. Prioritizing the processes (Training or Exercise) to close the gap.
6. Developing the means to fill the gap by conducting training or exercises.
7. Conducting training or exercise then analyzing performance outcomes to determine if the gap can be considered closed or achieved.

Training Program: Manatee County Emergency Management’s ~~Emergency Management Coordinator~~ staff position is responsible for the coordination of the training program. County departments, agencies, municipalities and all other public and private emergency response agencies bear the responsibility of ensuring their personnel with emergency responsibilities are sufficiently trained. All agencies should take the necessary steps to ensure appropriate records are kept reflecting emergency training received by their personnel. Manatee County Emergency Management coordinates disaster prevention, preparedness, response, recovery and mitigation training provided to county personnel. Emergency Management staff provides and/or facilitates training for local emergency response personnel will be under the all hazards approach to emergency management. Training will ensure that current state and federal concepts on emergency prevention, preparedness, response, recovery and mitigation are provided. The Manatee Emergency Operations Workgroup is the forum for providing training on the latest county, state and federal disaster policies and procedures, to include mitigation activities. Representatives from county, municipalities, state and federal agencies in the local area, as well as volunteer agencies (e.g. American Red Cross, Salvation Army, United Way, Community Emergency Response Teams, etc.) will participate and share information on respective roles and responsibilities during disaster prevention, preparedness, response, recovery and mitigation operations.

Training Levels: Manatee County facilitates a variety of training levels to ensure that each audience and organization can access appropriate, timely, and effective training. Everyone involved in emergency management (to include emergency operation center personnel in support of the field), regardless of discipline or level of government, should take the NIMS baseline

curriculum courses (Independent Study courses IS-100 and IS-700). Fulfilling this training helps emergency management organizations, departments and agencies to develop preparedness capabilities for effective and efficient incident management.

Manatee County Emergency Management posts all classroom style training activities to the State's training portal, [SERT TRAC](#), to manage course registration, rosters, and course completion certificates.

Emergency Management Division – All division staff are required to meet a minimum training level including the most recently updated courses of IS-100, IS-200, IS-700, IS-800 and the [Professional Development Series](#) courses. Staff work toward completion of the [Advanced Professional Series](#) courses, ICS-300, ICS-400, G-191, and G-775.

Public Safety and Emergency Operations Center (EOC) Staff and Disaster Roles – Training includes WebEOC, EOC 101, NIMS requirements, and disaster duty role specific training such as shelter worker training. All County employees must complete Independent Study courses IS-100 and IS-700.

Administrators, Elected, and Appointed Officials – Leadership officials are encouraged to take G-402 Incident Command System (ICS) Overview for Executives and Senior Officials. Emergency Management also conducts hurricane briefings and training meetings with the County Administrator and staff, department heads, municipal officials and other governmental and private emergency response agencies. Emergency Management staff briefs elected and key appointed officials on emergency management activities and hurricane preparedness.

Agencies, Private Sector, and Non-Profits – All participating response agencies and affiliated organizations are strongly encouraged to complete IS-100, IS-200, IS-700, IS-800. Other, functional-specific courses are provided to promote more effectively trained staff. For example, Emergency Support Function (ESF) 8, Public Health and Medical staff are encouraged to undertake Independent Studies courses such as IS-808: Emergency Support Function (ESF) #8 – Public Health and Medical Services; and Utilities Department staff are encouraged to have completed IS-632.a: Introduction to Debris Operations

Community Emergency Response Teams (CERT) – Additionally, communities participate in the county-sponsored Community Emergency Response Team Program to form neighborhood teams. These teams work to provide critical preparedness and response services to their communities. Manatee County Emergency Management supports the community teams through critical stakeholder information dissemination and meetings to facilitate outcome-driven preparedness activities. Volunteer organizations report through Emergency Support Function (ESF) 15: Volunteers and Donations and play a critical role in Manatee County's Community Organizations Active in Disaster (COAD).

Manatee County Search and Rescue and the Manatee County Medical Reserve Corps (MRC) provide additional volunteer support through licensed and trained practitioners. These organizations work in conjunction with the NIMS-adopted structure. Licensed, background checked, and credentialed volunteers report to their respective organization to support emergency

services during all phases of preparedness, response, and recovery – including normal and daily operations. Search and Rescue operates under Emergency Support Function 4/9/10. The Medical Reserve Corps operates under Emergency Support Function 8. Both organizations operate independently of County Government and are able to receive notices to activate through the Emergency Communications Center (ECC) – Manatee County’s 911 Center.

Volunteers and Residents - Manatee County Emergency Management provides training and education to county residents, business owners, and visitors through presentations and through available courses such as the Community Emergency Response Team (CERT) class, Active Bystander class, and other layman responder courses when available. Volunteers and the public are strongly encouraged to take FEMA Independent Studies courses, Skywarn weather spotter class, and work with local agencies with disaster roles through ESF-15 Volunteers and Donations.

Mutual Aid Agreements and Memoranda of Understanding

The National Mutual Aid System is built upon the integration of all types of mutual aid that are most often described by geo-political boundaries, including: local, intrastate, regional, interstate, tribal, and international mutual aid into a single system. Each level utilizes the level below it to create a unified national system for response to significant incidents. When integrated and unified, the system strengthens overall preparedness and readiness.

Florida Statute 252 provides authority for Manatee County to participate in cooperative relationships to accept services, equipment, supplies, materials, or funds for emergency management efforts. Local mutual aid agreements and memoranda of understanding are essential components of emergency management planning, response, and recovery activities. These agreements provide reciprocal emergency aid and assistance during an emergency or disaster. Mutual aid agreements consider resources and capabilities across the whole community. Manatee County utilizes memoranda of understanding and agreements to provide resources, including personnel and facilities. Additional procedures for exchanges of goods and services under Interlocal Agreements, Memoranda of Understanding, or Memoranda of Agreements shall include the procedures for documentation and reimbursements within the respective contract or agreement.

Statewide Mutual Aid Agreement: In accordance with section 252.40, Florida Statutes, participating parties are authorized to participate in cooperative relationships (the Statewide Mutual Aid Agreement) to accept services, equipment, supplies, materials, or funds for emergency management efforts. All special districts, educational districts, and other local and regional governments can participate in the agreement. Any participating party may request assistance (oral or written) during an emergency or disaster.

Florida Statutes, 252.40(1), Mutual aid arrangements: The governing body of each political subdivision of the state is authorized to develop and enter mutual aid agreements within the state for reciprocal emergency aid and assistance in case of emergencies too extensive to be dealt with unassisted. Copies of such agreements shall be sent to the division. Such agreements shall be consistent with the state comprehensive emergency management plan and program, and in time of emergency it shall be the duty of each local emergency management agency to render assistance in accordance with the provisions of such mutual aid agreements fully.

Manatee County may request mutual aid through the Statewide Mutual Aid Agreement. Counties will request mutual aid assistance from other counties through the Statewide Mutual Aid Agreement (SMAA), and will use available resources and mutual aid before requesting state assistance. Manatee County will coordinate the emergency management needs of all municipalities within the county and work to establish mutual aid agreements to render emergency assistance to one another. Manatee County will activate mutual aid agreements with neighboring counties and among municipalities within the county in accordance with the State Mutual Aid Agreement (SMAA). Manatee County will also maintain cost and expenditure reports associated with emergencies and disasters, including resources mobilized because of mutual aid agreements.

The County and municipalities are signatories to the Statewide Mutual Aid Agreement. Under this agreement, requests for assistance can be made to the Florida Division of Emergency Management or any other signatory. The requesting party will be responsible for reimbursement of all reimbursable expenses to all assisting parties. The assisting party will bill requesting parties for all reimbursable expenses as soon as practicable after the expenses are incurred, but not later than 60 days following the period of assistance, unless the deadline for identifying damage is extended in accordance with 44 CFR Part 206. The requesting party will pay the bill, or advise of any disputed items, not later than 60 days following the billing date.

Assisting agencies should maintain detailed records and submit invoices for reimbursement to the requesting party or FDEM using a format used or required by FEMA publications, including 44 CFR Part 13 and applicable Office of Management and Budget Circulars. Requesting parties and FDEM finance personnel will provide information, directions and assistance for record keeping to assisting parties. Agencies or departments that are tasked by the FDEM must retain the mission tracking number received for the task. FDEM shall assign mission numbers to the agency or department when requested to respond. If an agency responds and does not have a mission tracking number, costs associated with the response may not be compensated.

Emergency Management Assistance Compact

In accordance with Chapter 252, Part III, Florida Statutes, the state adopted the Emergency Management Assistance Compact (EMAC), which provides for the mutual assistance between states during any emergency or disaster when the state has depleted its resources, supplies or equipment. In the event a request for disaster assistance comes from another state, the Governor may order the mobilization of state resources under EMAC to be deployed to the impacted state. Similarly, Florida can request and receive assistance from other states through EMAC. The management and coordination of these resources will be administered through the Operations Section of the SERT under the direction of the Operations Section Chief. This process is highlighted in Annex 3 (Mutual Aid) of the State Unified Logistics Plan. Emergency Management Assistance Compact (EMAC) is the nation's state to state mutual aid system. EMAC has been ratified by U.S. Congress (PL 104-321) and is law in all fifty states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands.

For the EMAC program, the State of Florida Emergency Operations Center (SEOC) shall document each requested EMAC mission assignments on an EMAC Req-A form that includes a description of the requested assistance with cost estimates provided. Each completed EMAC

Req-A should be executed by both the requesting State and assisting State prior to the performance of the mission. The Req-A form simplifies and streamlines the paperwork necessary to request aid through EMAC. When Authorized Representatives of both the Requesting and Assisting States duly execute the Req-A, the Req-A becomes a legally binding agreement between the two states. It also includes valuable information for the deploying personnel such as safety considerations. Generally, eligible costs for reimbursement may include personnel, travel, equipment, and commodities.



Financial Management

Manatee County provides training and guidance in basic financial management to all departments and agencies that respond under the provisions of the local Comprehensive Emergency Management Plan, including assistance provided under the Statewide Mutual Aid Agreement and under the Emergency Management Assistance Compact (EMAC). Manatee County Emergency Management's Emergency Management Coordinator staff position is responsible for training coordination with the Director of the Financial Management Department. This Department role may also be coordinated with the Budget Management Division Manager or the County Purchasing Official.

Due to the nature of most emergency situations, finance operations will often be carried out with compressed time frames and pressures, necessitating the use of non-routine procedures. This, in no way, lessens the requirements of sound financial management and accountability to safeguard the use of public funds from fraud, waste and abuse. A Presidential Disaster Declaration will permit funding from the Disaster Relief Fund under the provisions pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act in addition to the financial resources initiated and/or exhausted at the local and state levels.

Manatee County's Financial Management Department is the primary agency responsible for the collection and processing of data used to document expenses and claim reimbursement with assistance from all County Departments. Agencies secondary to financial management such as Risk Management and Property Management. Appropriate policies, regulations, and standards are referenced. The Financial Management Department is the primary agency responsible for the providing guidance and training. The Procurement Division offers a variety of training tools to

help County government staff perform their duties, including courses on purchasing cards, procurement, emergency purchases, and ensures compliance with State and Federal financial management.

Authority

In accordance with the Manatee County Procurement Ordinance, Chapter 2-26, Sec. 2-26-20. - Establishment and appointment, duties and authority:

Purchasing official. There shall be a purchasing official appointed by the county administrator, who shall have initial primary authority for oversight, interpretation and application of this purchasing code, who shall be responsible for the procurement of goods, services, and construction in accordance with this code, and who shall, along with the county administrator, exercise such other duties and authority to award and execute contracts as the board may delegate from time to time.

Contract administration oversight. Notwithstanding any other provision of this Code, the purchasing official shall have the authority to issue on behalf of the county demands for specific performance, notices of breach or noncompliance, demands for cure, or any other similar formal action related to any contract entered or negotiated by the purchasing division. The purchasing official shall also have the authority to review and approve requests of county departments to terminate any executory contract to procure any good or service prior to its expiration date. In exercising this authority, the purchasing official shall, where appropriate, seek relevant legal advice from the county attorney's office.

Authority to execute. All rights, powers, duties and authority relating to the procurement and contracting of goods and/or services for the board of county commissioners, including the authority to approve all purchases and sign those agreements, contracts, change orders and purchase orders for the purchase of goods and/or services governed by this chapter, provided they are in conformance with the law and all applicable ordinances, resolutions and administrative policies, are vested in the purchasing official. The purchasing official may execute contracts resulting from quotations, proposal requests or invitations for bids for contract amounts below Category Four regardless of the expiration of any protest period which may be provided in this Code if that official finds such early execution is in the best interest of the county. The purchasing official may, unless otherwise prohibited by law, delegate the rights, powers, duties and authority granted herein to other county officials designated to act for the purchasing official in his or her unavailability, or when the purchasing official otherwise deems such delegation as necessary. To create a more standard method of contract execution, procurement or concession contracts, including those to be approved by the commission, shall as a matter of course be drafted for execution by the purchasing official unless the county attorney's office advises that the signature of the commission Chairperson or some other official is required by law, the terms of a grant, or for similar reasons. Additionally, any contracts for personal professional services to be provided to the county commission, or which will report directly to the commission, and in which trust and confidence is of paramount importance, including, but not limited to, contracts with a county administrator, county attorney or lobbyist firms, shall be executed by the Chairperson. Notwithstanding any of the foregoing, the county commission reserves the right to reject and not ratify any contract executed in violation of this subsection. _____

Unless otherwise precluded by federal or state law or agency regulations or the terms of the grant application itself, the County Administrator is hereby authorized to approve, sign and submit applications for financial assistance and grant funds. All grant awards and agreements will be presented to the Board of County Commissioners for approval and signed by the Chairperson. Unless otherwise precluded by federal or state law or agency regulations, the County Administrator is hereby authorized to sign amendments to award documents for financial assistance and grant funds. Amendments that would require the County to provide additional matching funds not previously approved by the Board or that would require the County to adopt or amend an ordinance or resolution or enter an agreement with a third party not previously approved by the Board, or undertake action that is not consistent with County policy, shall be referred to the Board for approval. The County Administrator shall be authorized to execute all subgrant awards/agreements related to the grant. Subgrant awards/agreements that would require the County to provide additional matching funds not previously approved by the Board or that would require the County to adopt or amend an ordinance or resolution or enter an agreement with a third party not previously approved by the Board, or undertake action that is not consistent with County policy, shall be referred to the Board for approval. The County Administrator or designee shall provide a quarterly report to the Board of County Commissioners as an agenda item listing all amendments, subgrant and interlocal agreements executed during the previous quarter and shall include copies for acceptance into the formal record.

Roles and Responsibilities

In concert with federal guidelines, officials of primary and support agencies will give approval for expenditure of funds for response operations. Each agency is responsible for establishing effective administrative controls of funds and segregation of duties for proper internal controls. They monitor the actions taken and costs incurred to ensure they are consistent with the missions identified in this plan. The Clerk of the Court is the county comptroller and Financial Accounting Officer for Manatee County. The Clerk of the Court is responsible for implementing, maintaining and tracking all financial projects and matters during and after a disaster. The EOC Finance Administration Section Chief will act as an agent for the Clerk of the Court implementing and maintaining daily records during activation of this plan. The Financial Management Department Director and the County Purchasing Official, working in conjunction with the Division of Emergency Management, provides guidance and training to the department, the County employees involved in financial management activities.

The Financial Management Department consists of two programs: Management & Budget, and Procurement. The Management and Budget program develops, reviews and implements the county budget, the Capital Improvement Program (CIP) and related county policies. This program works closely with county departments and the County Administrator and advises the Board of County Commissioners in areas of financial management. The Procurement Division is the designated legal authority for securing commodities and services for county departments and constitutional offices. The Procurement Division acquires goods and services in an open, competitive and fair manner without conflict of interest or other impropriety. In addition, the Procurement Division makes policy and procedural recommendations to the County Administrator and the Board of County Commissioners that promote fair and open competition. The Financial Management Department's Management and Budget Division provides for reimbursement of costs incurred by the General Fund on behalf of programs funded by other

sources, primarily enterprise accounts. Staff assigned to this program provides oversight for the Federal Emergency Management Agency (FEMA) reimbursement process following authorized storm events.

The Procurement Division is the designated legal authority to advise, plan, obtain, deliver and evaluate expenditures for acquisitions of goods and services that are used to fulfill the mission, objectives, obligations and activities in pursuit of desired policy outcomes on behalf of Manatee County. The Procurement Division administers the procurement process in an open, competitive and fair manner and without conflict of interest or other impropriety or the appearance of impropriety. Our vision is to continually implement and improve best practices, expertise and approaches and to maintain a high quality and efficient procurement program. The Procurement Division includes minor and complex acquisition activities, spend and value analysis, dispute resolution, supplier performance, procurement training, vendor relations, planning and procurement consulting, purchasing card program administration, contract development and guiding negotiations from strategy through contract execution. The Procurement Division's goal is to obtain goods and services for the county in the needed quantity for delivery at the right time from a dependable source offering quality services at competitive pricing. The Procurement Division creates, distributes and manages bids, proposals, replies, contracts, quotations, change orders, amendments and addenda for services of a wide and diverse variety and nature. While some acquisition activities are price driven, others are qualification based, requiring a diverse set of skills to manage the many acquisitions appropriately. The Procurement Division manages and administers a county-wide Purchasing Card Program to provide for the efficient acquisition of small dollar purchases.

Documentation and Reimbursement

Documentation is the process of establishing and maintaining accurate records of events and expenditures related to disaster recovery work. The information required for documentation basically describes the "who, what, when, where, why, and how much" for each item of disaster recovery work. All documentation pertaining to a project should be filed together with the corresponding Project Worksheet and maintained by the County as the permanent record of the project.

Documentation may include:

- ICS-214 Activity Log Reports for all staff working on an event/project
- Situation reports, media announcements, and incident action plans developed for an event
- Timeline and event summaries including documentation of telephone calls, meeting attendance, or other message exchanges
- Checklist for each project
- Completed Project Worksheet
- Completed Special Considerations Questions form
- Estimated and actual costs
- Force account labor
- Force account equipment
- Rented equipment
- Materials and purchases
- Photographs of damage, work underway, work completed

- ❑ Insurance information
- ❑ Environmental and/or historic alternatives and hazard mitigation opportunities considered for large, improved or alternate projects
- ❑ Environmental Review Documents
- ❑ Records of donated goods and services

Manatee County will assist parties under the mutual aid agreement and provide the documentation required for billing the receiving party. All Mutual aid requests from outside or within Manatee County will be coordinated through Manatee County EM as referenced in the State Wide Mutual Aid Agreement. The Clerk of the Court will maintain original agreements with working copies at the department level. Within Manatee County, all six cities, all fire districts, the School Board, and the Port of Manatee are signatories to Statewide Mutual Aid Agreements. The Public Safety Department Director and/or the Incident Commander has responsibility for overseeing the mutual aid process in a disaster. Reimbursement procedures are outlined in their respective documents and programs, such as the Emergency Management Assistance Compact (EMAC) and Florida's Statewide Mutual Aid Agreement (SMAA). These procedures should be referenced in the most current documentation – as the programs' procedures may change. The Financial Management Department, Purchasing Official, the Emergency Management Division, and all other participating agencies shall reference and abide by the EMAC or SMAA documentation and reimbursement procedures.

Each municipal agency is responsible for establishing effective administrative controls of funds and segregation of duties for proper internal controls. They monitor the actions taken and costs incurred to ensure they are consistent with the missions identified in this plan. Municipalities are responsible for providing guidance and training to their organizations.

FEMA's Public Assistance Grant Program assists in the restoration of community infrastructure. It is a supplemental cost reimbursement program with specific eligibility requirements. The FEMA share of eligible costs will be awarded to the grantee for disbursement to the applicants. This document, and county procedures and processes, must be flexible to adapt to changes to this and other federal programs. Reimbursement program procedures will be made available from FEMA.

Funding Sources

The Financial Management Department received budget requests from county departments and most of the constitutional officers prior to May 1st. Budget requests were reviewed, analyzed, and discussed with each department director or officer submitting the request. Each budget was then reviewed by the County Administrator and the Financial Management Department Director. The County Administrator and the Financial Management Department Director finalized the adopted budget with property tax proceeds based on estimated taxable values, which were submitted to the Board of County Commissioners on May 30th.

The Manatee County budget is developed via a biennial, zero-based program budgeting process. County departments are broken down into programs and each program is divided into increments (i.e. decision units) representing ascending levels of service. The first increment is referred to as

the “base” decision unit, which represents the most critical portion of the program’s activities or highest priority functions. Each additional ascending unit represents a descending priority level. Each decision unit represents a discrete level of service and includes the positions and operating funding that goes along with that level of service. Manatee County Government funding sources include revenue from property taxes; other taxes; charges for services; licenses, permits, fines, interest, and miscellaneous; and intergovernmental revenues. In 2016, Manatee county voters supported the passage of a half-cent Infrastructure Sales Tax for a 15-year period, creating financial support to address aging infrastructure by establishing a dedicated revenue source to address our infrastructure challenges.

Manatee County’s Emergency Management Program is funded through the Board of County Commissioners under general fund, and through state and federal grants. Current available grants include the Emergency Management Preparedness and Assistance Trust Fund (EMPA) and the Emergency Management Performance Grant (EMPG).

	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017
General Fund & Revenue	\$549,168	\$466,745	\$571,002
Uses of Funds			
Personnel	\$311,327	\$295,733	\$353,513
Operating	\$225,303	\$171,011	\$217,489
Grant Awards	\$249,749	\$250,900	\$238,058

Grant Processing Procedures and Administration

To ensure a consistent documented process for the application, award and administration of grant funding from any source to any County Department reporting to the Board of County Commissioners. Unless otherwise precluded by federal or state law or agency regulations or the terms of the grant application itself, the County Administrator is hereby authorized to approve, sign and submit applications for financial assistance and grant funds.

All grant awards/agreements will be presented to the Board of County Commissioners for approval and signed by the Chairperson. Unless otherwise precluded by federal or state law or agency regulations, the County Administrator is hereby authorized to sign amendments to award documents for financial assistance and grant funds. Amendments that would require the County to provide additional matching funds not previously approved by the Board or that would require the County to adopt or amend an ordinance or resolution or enter into an agreement with a third party not previously approved by the Board, or undertake action that is not consistent with County policy, shall be referred to the Board for approval.

The County Administrator shall be authorized to execute all subgrant awards/agreements related to the grant. Subgrant awards/agreements that would require the County to provide additional matching funds not previously approved by the Board or that would require the County to adopt or amend an ordinance or resolution or enter into an agreement with a third party not previously approved by the Board, or undertake action that is not consistent with County policy, shall be referred to the Board for approval.

The County Administrator or designee shall provide a quarterly report to the Board of County Commissioners as an agenda item listing any and all amendments, subgrant and interlocal agreements executed during the previous quarter and shall include copies for acceptance into the formal record.

The County's Grant Processing Procedure (Procedure 502.000) ensures a consistent documented process for the application, award and administration of grant funding from any source to any Manatee County Department. A grant is a formal agreement between agencies (federal or state agencies or non-profits and local governments) by which the grantee agrees to perform a certain service (program) and the grantor agrees to fund or reimburse the approved expenses of the grantee for implementing the service. Department Directors will designate a point of contact (POC) or multiple POC's when deemed necessary that will coordinate all aspects of departmental grant projects.

When the application is complete, it should be forwarded to the County Administrator under a cover memo requesting execution of the application. If a cash match is required, the match amount should be clearly delineated on the cover memo including the source of funds of said match. No grant application shall obligate the County for funding the required matching funds unless approved by the Board of County Commissioners. Unless otherwise precluded by federal or state law or agency regulations, the County Administrator or designee will have the authority to sign and submit applications (paper or electronic) for grant funds. This authority will include signature of any application amendments needed.

Any grant awarded for funding will be presented to the Board of County Commissioners for acceptance (this action will insure that there is an official record for future reference). When notification of a grant award is made and documents received, the department of interest shall forward a Request for Legal Services to the County Attorney's Office for review of the award documents. If the grant award is identical to a previous award from the same agency and is not older than 24 months, a new Request for Legal Services is not necessary. A copy of the CAO response will be attached to the agenda memo.

The department of interest will prepare an agenda memorandum authorizing the acceptance of the grant by either the Chairperson or a specified designee. The agenda memorandum will include all agreement documents and formal correspondence. Instructions to Board Records shall include a request to transmit the information to the Grants Accountant in the Clerks Finance Office. Any needed budget amendment will be coordinated with and prepared by the Financial Management Department concurrent with the department of interest's agenda memorandum.

If a cash match is required, or if the award required the County enter into other agreements with third parties or adopt or amend any ordinance or undertake action that may be controversial, it shall be clearly indicated on the agenda memo both in the narrative as well as the funding source notation box, and will include the source of the match funds. Upon approval by the Board of County Commissioners, copies of the signed documents will be retained by the department of interest and the originals shall be forwarded to the grantor agency.

Resolution 10-099 authorizes the County Administrator to sign grant amendments and subgrant awards/agreements including interlocal agreements related to the grant. Any amendment or subgrant award or interlocal agreement that would require the County to provide additional matching funds not previously approved by the Board, or that would require the County to adopt or amend an ordinance or resolution or enter into an agreement with a third party not previously approved by the Board must be referred to the County Commission for approval.

The Department POC will coordinate the signing of grant amendments with the County Administrator's office staff. The Department POC will provide a quarterly report to the Administrator's office with a listing of all grant amendments, subgrant award/agreements signed by the Administrator during the previous quarter so this information can be provided in a cohesive report to the County Commission. Copies of the signed amendments and/or agreements will be included.

Departments will be responsible for the implementation/administration of their grants, including, but not limited to the following:

- Coordination with the Purchasing Division (Procurement Division) to ensure that mandated language is included in all solicitation documents.
- Coordination with the Financial Management Department for budget amendments including assignments of account keys with the Clerk's Finance Department.
- Timely submission of programmatic and financial reports.
- Coordination with the Clerk's Finance Department for grant drawdowns and financial reporting. Specific reporting requirements based on the grant or award requirements will be followed by the department. Deadlines must be met completely.

Departments will designate staff, which may or may not be the POC, to be the responsible party for complying with the financial and programmatic reporting requirements for a specific grant or award. All original documents providing support for the reported information as well as the signed/initialed approval for transmittal will be retained by the Department for audit purposes.



Recovery

The ability of a community to successfully manage the recovery process begins with its efforts in pre-disaster preparedness, mitigation, and recovery capacity building. These efforts result in resilient communities with an improved ability to withstand, respond to, and recover from

disasters. Pre-disaster recovery planning promotes a process in which the whole community fully engages with and considers the needs and resources of all its members. The community will provide leadership in developing recovery priorities and activities that are realistic, well planned, and clearly communicated.

Successful community recovery is broader than simply restoring the infrastructure, services, economy and tax base, housing, and physical environment. Recovery also encompasses re-establishing civic and social leadership, providing a continuum of care to meet the needs of affected community members, reestablishing the social fabric, and positioning the community to meet the needs of the future. Encouraging a town or city to make progress toward recovery efforts may be difficult, particularly after a catastrophic disaster. Preparation efforts are critical to ensuring that leadership, government, and nongovernmental organizations (NGOs) are ready to act quickly. A community comprises a variety of partners, including economic development professionals, business leaders, affordable housing advocates, faith-based organizations, and functional and access needs populations, and each has a significant part to play in recovery.

After an event takes place, the Manatee County Emergency Operations Center (EOC) becomes the central coordinating point for local agency response activities. As response activities begin to wind down, the focus changes to Recovery operations. Recovery operations include reviewing damage assessments, beginning the appropriate declaration process, determining sites for Disaster Recovery Centers, deploying preliminary damage assessment teams, and providing resources to the Recovery Section. To ensure complete coordination, response and recovery functions and programs are generally collocated in the Emergency Operations Center unless another facility is deemed available and a better fit for the activities and coordination. During the transition from response to recovery, the Recovery functions share information, request resources for deployment and work with other EOC functions to determine what needs should be prioritized when transition occurs.

Short-Term Recovery: begins immediately after the event and is the transition from response to recovery. The priorities include provision for basic human needs—food, clothing, shelter and medical assistance. The goal is to restore critical infrastructure and facilities —power, communications, water, sewage and transportation; and to meet societal needs—rule of law, crisis counseling.

Short term recovery priorities are assessed through:

- Life safety, search and rescue
- Debris removal to effect higher priority missions (life, safety, evacuation)
- Main transportation and evacuation routes
- Secondary transportation routes and staging areas
- Tertiary transportation routes and staging areas
- Implementation and maintenance of site security
- Temporary restoration of critical infrastructure (order of priority)
- Power restoration
- Potable water
- Waste water collection and treatment facilities and equipment
- Telecommunications (plain old telephone system, fiber, voice, data)
- Debris removal not required for immediate life, safety, and evacuation missions
- Temporary health and welfare

- Shelter, food, and medical assistance
- Permanent debris removal and relocation
- Debris categorization
- Debris estimation
- Site selection, approval and disposal
- Preservation and securing of crime scene evidence or localized areas of interest
- Delivery of Critical Incident Stress Debriefing (CISD) to responders and citizens

Short Term Recovery Implementation Guidance

- Life safety issues are the highest priority for residents and responders. Timeframe for Life Safety, Search and Rescue Response: Immediate upon arrival of assets - Event + 12 Hours.
- Timeframe for debris removal to effect higher priority missions: immediate upon arrival and as needed throughout the response and recovery.
- Timeframe for implementation and maintenance of site security: immediate upon arrival and, as needed throughout the response and recovery.
- Timeframe for Temporary Restoration of Critical Infrastructure Response: Event +72 Hours
- Timeframe for temporary health and welfare: Event + 8 Hours
- Timeframe for shelter, food and medical assistance: Event + 8 Hours
- Timeframe for debris removal and relocation: Event +144 Hours
- Timeframe for preserving and securing of crime scene evidence or localized areas of interest: Immediate, as required
- Timeframe for delivery of critical incident stress debriefing to responders and citizens: As necessary or upon demobilization

Long-Term Recovery is a sustained period of recovery that may last for months or years depending on the nature of the event. Manatee County aims to promote economic recovery; restore individual housing through repair, rebuilding and replacement; repair and restore infrastructure and community facilities; and ensure unmet needs are addressed.

The priority for long-term recovery following major disasters in the state is to aid the affected local governments that will lead to restoring all essential services; repairing or replacing private and public property to pre-disaster condition; and, where possible, increase the community's potential for a sustainable future. Allstate, federal, private sector and non-governmental organizations with the ability to contribute to the long-term recovery effort will be invited and encouraged to participate on the Long-Term Recovery Team established for the specific disaster recovery operation.

Manatee County's strategy to fully recover from all disasters includes using all means possible. It is well understood that due to economic conditions, availability of programs and other environmental or social factors, that a single process or approach to long-term disaster recovery cannot be established and implemented without considerable flexibility. All long-term recovery efforts have been successful and lessons learned have been incorporated into subsequent operations and will continue to be a key factor in the recovery strategy.

Recovery Coordination

Manatee County's Recovery Program is managed by the County's Infrastructure & Strategic Planning Official in the County Administrator's Office. This position is responsible for coordinating recovery activities. This position oversees or appoints a position to oversee the provision of county liaisons to the Joint Field Office and State Recovery Staff with assistance from the Public Safety Department Director. This positions also coordinates with county recovery activities with municipalities through the ~~Multi-Agency Coordination Committee-Policy Group~~. Roles, duties, and responsibilities for the Recovery Section are outlined in this CEMP and in the Emergency Support Function (ESF) planning documents.

Primary agencies in recovery include the Manatee County Government, Administration, the Building and Development Services Department, and the Redevelopment & Economic Opportunity Department. Supporting agencies include all other Manatee County Departments, partnerships with municipalities, the public and private sector, and the State and Federal agency partners. Manatee County works with the municipal partners in the recovery phase in a similar method as the response phase in the EOC. ~~As members of the Policy Group, t~~The impacted municipal official works closely with the County ~~to execute~~ effective and timely recovery from disaster. Using the EOC structure, the Recovery Section will coordinate its efforts with federal and state Joint Field Office operations.

Manatee County Emergency Operations Center (EOC), Recovery Section has primary responsibility for coordinating recovery efforts. The Incident Commander (IC) will request the State establish a DRC and the Recovery Section Chief or designee will act as local liaison from the Recovery Section to support state recovery personnel. Individual Recovery support functions, teams, and activities will coordinate with their State and Federal counterparts during response and recovery phase.

Recovery activities are coordinated through the Recovery Section. The below information sources are reviewed and monitored to identify priorities for damage assessment and human needs assessment.

- Situation reports;
- Mission assignments;
- Municipal status reports;
- EOC briefings;
- Conference calls;
- Impact assessment data,
- Public and social media reports of damage

Undeclared Disasters (Non-Stafford Act)

Disaster assistance is a bottom up process. The first response and recovery resources come from the local level. Local authorities play a vital role in the recovery process after a disaster. Utilizing local resources, such as force account equipment and labor, they can help speed the community on the road to recovery by restoring critical infrastructure and resources. In addition to this, they also play an important role in identifying damages and vulnerable populations and coordinating information with the State and other aid organizations. For disaster events that are not eligible for federal financial assistance, Manatee County will seek to utilize local resources.

Manatee County may seek to establish a local committee to help aid survivors and ensure that unmet needs are addressed and receive follow-up. The Community Organizations Active in Disaster (COAD) Unmet Needs Committee may be an additional source of recovery resources and will convene to identify survivor needs and possible recovery assistance. While non-federally declared disasters limit the amount of funds available, all possible efforts are made to assist the recovery of individuals and communities. Voluntary agencies play an integral role in ensuring survivors' long and short-term recovery, offering aid to help survivors meeting basic needs. Depending on available resources, assistance from voluntary agencies may range from food and shelter to home rebuild projects.

Robert T. Stafford Act

Following a disaster, Manatee County may become eligible to apply for and obtain state and federal disaster assistance. Working closely with the State Emergency Response Team (SERT) and with the SERT Regional Coordinator and SERT Liaison Officers, Manatee County will request state and federal assistance through the Robert T. Stafford Act.

All emergency and major disaster declarations are made solely at the discretion of the President of the United States. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 §§ 5121-5207 (the Stafford Act) §401 states in part that: "All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State." A State also includes the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. The Republic of Marshall Islands and the Federated States of Micronesia are also eligible to request a declaration and receive assistance through the Compacts of Free Association. A presidential Major Disaster Declaration puts into motion long-term federal recovery programs, some of which are matched by state programs. FEMA's disaster assistance programs help public entities (public assistance) and disaster victims (individual assistance), and help individuals and organizations minimize future risk (hazard mitigation).

There are two types of disaster declarations provided for in the Stafford Act: emergency declarations and major disaster declarations. Both declaration types authorize the President to provide supplemental federal disaster assistance. However, the events related to the two different types of declaration and scope and amount of assistance differ.

Emergency Declarations

The President can declare an emergency for any occasion or instance when the President determines federal assistance is needed. Emergency declarations supplement State and local or Indian tribal government efforts in providing emergency services, such as the protection of lives, property, public health, and safety, or to lessen or avert the threat of a catastrophe in any part of the United States. The total amount of assistance provided for in a single emergency may not exceed \$5 million. The President shall report to Congress if this amount is exceeded.

Requirements: The Governor of the affected State or Tribal Chief Executive of the affected Tribe must submit a request to the President, through the appropriate Regional Administrator, within 30 days of the occurrence of the incident. The request must be based upon a finding that

the situation is beyond the capability of the State and affected local governments or Indian tribal government and that supplemental federal emergency assistance is necessary to save lives and protect property, public health and safety, or to lessen or avert the threat of a disaster. In addition, the request must include:

- Confirmation that the Governor or Tribal Chief Executive has taken appropriate action under State or Tribal law and directed the execution of the State or Tribal emergency plan;
- A description of the State and local or Indian tribal government efforts and resources utilized to alleviate the emergency;
- A description of other federal agency efforts and resources utilized in response to the emergency; and
- A description of the type and extent of additional federal assistance required.

Public Assistance (PA) – Only Categories A (debris removal) and B (emergency protective measures) may be authorized under an emergency declaration. Categories C-G (permanent work) are not available under an emergency declaration. Emergency declarations often include only Category B and will typically be limited to DFA, absent damage assessments showing significant need for financial assistance. This assistance is generally provided on a 75% federal, 25% non-federal cost sharing basis.

Individual Assistance (IA) – The Individuals and Households Program (IHP) is the only form of IA that may be authorized under an emergency declaration. Authorization of IHP under an emergency is rare. Housing Assistance under IHP is provided at a 100% federal share, while Other Needs Assistance under IHP requires a 25% non-federal cost share.

The Hazard Mitigation Grant Program (HMGP) - is not available for emergency declarations.

Pre-Disaster Emergency Declarations: A Governor or Tribal Chief Executive may request an emergency declaration in advance or anticipation of the imminent impact of an incident that threatens such destruction as could result in a major disaster. Such requests must meet all the statutory and regulatory requirements for an emergency declaration request. Requests must demonstrate the existence of critical emergency protective measure needs prior to impact are beyond the capability of the State and affected local governments or Indian tribal government and identify specific unmet emergency needs that can be met through DFA. Such DFA may include, but is not limited to, personnel, equipment, supplies, and evacuation assistance. Pre-positioning of assets generally does not require a declaration. Assistance made available under a pre-disaster emergency declaration will typically be Category B (emergency protective measures), limited to DFA. FEMA may require damage assessments and/or verified cost estimates if additional types of assistance are requested.

Emergency Declarations with Federal Primary Responsibility: When an emergency exists for which the primary responsibility rests with the Federal government, the President may declare an emergency without a request from the Governor of the affected State or the Tribal Chief Executive of the affected Tribe. Such an emergency declaration does not prevent the Governor or Tribal Chief Executive from subsequently requesting a major disaster declaration for other unmet needs caused by the event.

Major Disaster Declarations

The President can declare a major disaster for any natural event, including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought, or, regardless of cause, fire, flood, or explosion, that the President determines has caused damage of such severity that it is beyond the combined capabilities of state and local governments to respond. A major disaster declaration provides a wide range of federal assistance programs for individuals and public infrastructure, including funds for both emergency and permanent work.

Requirements: The Governor of the affected State or Tribal Chief Executive of the affected Tribe must submit the request to the President through the appropriate Regional Administrator within 30 days of the occurrence of the incident. The request must be based upon a finding that the situation is beyond the capability of the State and affected local governments or Indian tribal government and that supplemental federal assistance is necessary. In addition the request must include:

- Confirmation that the Governor or Tribal Chief Executive has taken appropriate action under State or Tribal law and directed execution of the State or Tribal emergency plan;
- An estimate of the amount and severity of damage to the public and private sector;
- A description of the State and local or Indian tribal government efforts and resources utilized to alleviate the disaster;

Preliminary estimates of the type and amount of Stafford Act assistance needed; and

- Certification by the Governor or Tribal Chief Executive that the State and local governments or Indian tribal government will comply with all applicable cost sharing requirements.
- Assistance Available Under Major Disaster Declarations: Not all programs, however, are activated for every disaster. The determination of which programs are authorized is based on the types of assistance specified in the Governor or Tribal Chief Executive's request and the needs identified during the joint PDA and subsequent PDAs.

FEMA disaster assistance programs are as follows:

Individual Assistance - Assistance to individuals and households, which may include:

- Individuals and Households Program;
- Crisis Counseling Program
- Disaster Case Management
- Disaster Unemployment Assistance
- Disaster Legal Services
- Disaster Supplemental Nutrition Assistance Program

Public Assistance - Assistance to State, Tribal, and local governments and certain private nonprofit organizations for emergency work and the repair or replacement of disaster-damaged facilities, which may include the following Categories:

- A - Debris removal
- B - Emergency protective measures
- C - Roads and bridges
- D - Water control facilities

- E – Buildings and equipment
- F – Utilities
- G – Parks, recreational and other facilities

Hazard Mitigation Assistance – Assistance to State, Tribal, and local governments and certain private nonprofit organizations for actions taken to prevent or reduce long term risk to life and property from natural hazards.

When evaluating requests for major disasters and making recommendations to the President, FEMA considers the following factors:

Public Assistance Program

- 1) Estimated cost of the assistance – FEMA evaluates the estimated cost of Federal and non-Federal public assistance against the population to give some measure of the per capita impact. FEMA uses a per capita amount as an indicator that the disaster is of such severity and magnitude that it might warrant Federal assistance, and adjusts this figure annually, based on the Consumer Price Index.
- 2) Localized impacts - FEMA evaluates the impact of the disaster at the county and local government levels, as well as at the American Indian and Alaskan Native Tribal Government levels, because, at times, there are extraordinary concentrations of damages that might warrant Federal assistance even if the statewide per capita is not met. This is particularly true where critical facilities (such as major roadways, bridges, public buildings, etc.) are affected or where localized per capita impacts are extremely high. For example, localized damages may be in the tens or even hundreds of dollars per capita, even though the overall per capita impact is low.
- 3) Insurance coverage in force – FEMA considers the amount of insurance coverage that is in force or should have been in force as required by law and regulation at the time of the disaster, and reduces the amount of anticipated assistance by that amount.
- 4) Hazard Mitigation – To recognize and encourage mitigation, FEMA considers the extent to which mitigation measures contributed to the reduction of disaster damages. This could be especially significant in those disasters where, because of mitigation, the estimated public assistance damages fell below the per capita indicator.
- 5) Recent-multiple disasters – FEMA also considers the disaster history within the last twelve-month period to better evaluate the overall impact. FEMA considers declarations under the Stafford Act as well as declarations by the Governor or Chief Tribal Executive and to the extent they have expanded their own funds.
- 6) Other federal agency assistance programs – FEMA also considers programs of other Federal agencies because at times their assistance programs more appropriately meet the needs created by the disaster.

Individual Assistance Program

- 1) Concentration of damage – High concentrations of damages to individuals, such as

destroyed or damaged housing, may indicate a greater need for Federal assistance than widespread and scattered damages.

- 2) Trauma – The degree of trauma to the community is considered, with special attention to large numbers of injuries and deaths, large scale disruptions to normal community functions and services, and emergency needs, such as extended or widespread losses of power or water.
- 3) Special populations – FEMA considers the impact of the disaster on special populations, such as the low-income, the elderly, and the unemployed.
- 4) Voluntary agency assistance – The capabilities of voluntary, faith, and community-based organizations are taken into consideration, as these entities play an important role in meeting both the emergency and recovery needs of individuals impacted by disasters.
- 5) Insurance – Stafford Act assistance is supplemental in nature, and therefore the level of insurance coverage is considered; primarily to qualify the scope of necessary assistance.
- 6) Damaged residences – severity and number. – severity and number – When conducting joint Preliminary Damage Assessments, FEMA evaluates the total number of homes destroyed and damaged, as well as evaluates the accessibility and habitability of the dwellings and the community.

Add-ons: The Governor, the Governor’s Authorized Representative (GAR), or Tribal Chief Executive can request designation of additional counties and programs within 30 days of the declaration or the end of the incident period, whichever is later. The Governor, GAR, or Tribal Chief Executive may submit an extension request within the 30-day period, providing a valid reason supporting an extension.

Cost Share Adjustments: The authority to adjust the Public Assistance cost share resides with the President. FEMA will recommend an increase in the federal share to not more than 90% for Public Assistance when a disaster is so extraordinary that actual federal obligations under the Stafford Act, excluding administrative cost, meet or exceed a qualifying threshold.

Appeals: Post declaration determinations are generally subject to a one-time appeal. Such appeals must be submitted within 30 days of the denial letter. This deadline may be extended by FEMA, upon request of the State or Indian tribal government. Extension requests must be submitted within the 30-day deadline.

Infrastructure and Public Assistance

Manatee County’s Financial Management Department has the primary responsibility for coordinating the activities required by the Public Assistance program, to include project formulation, project management, and grant closeout with ongoing participation from each County Department’s financial liaison. FMD provides the overarching PA grants management, documentation maintenance, and accounting procedures. Each of the County Departments act in the support role for the Public Assistance program.

Manatee County will utilize the most current information from the Public Assistance Grant Program in concert with the State of Florida and FEMA to identify and fund PA projects after an event, including reporting, tracking, progress, and documentation. As of publication of this document, Manatee County will use the “[Public Assistance Program and Policy Guide \(PAPPG\) \(FP 104-009-2 ,V3.0, January 2018\)](#).”

Manatee County has pre-identified potential applicants for federal infrastructure assistance and the PA Program. These organizations also participate in the PA kick-off meeting, applicant briefings, and other federal assistance meetings. The stakeholders are pre-identified using ~~Manatee County’s Policy Group~~, County Agencies, the Manatee Emergency Operations Workgroup, the Council of Governments, and using the local Statewide Mutual Aid Agreement (SMAA) contact list. Manatee County Emergency Management maintains the list and provides updates on an annual basis. The pre-identified stakeholder organizations are contacted via email notification daily during a disaster event through the Emergency Support Function (ESF-5): Information and Planning, Situation Report (Sit Rep) email, and/or through WebEOC. Following eligibility determination for PA, these stakeholders are emailed the information about the program and the next steps provided from the State Emergency Response Team Recovery Chief.

Potential Public Assistance Applicants

American Red Cross
 Cedar Hammock Fire Rescue
 City of Anna Maria
 City of Bradenton
 City of Bradenton Beach
 City of Holmes Beach
 City of Palmetto
 Civil Air Patrol
 East Manatee Fire Rescue
 Manatee County Government
 Manatee County Mosquito Control
 Manatee County Port Authority
 Manatee County Rural Health Services
 Manatee County School Board

Manatee County Search and Rescue
 Manatee County Sheriff’s Office
 Manatee County Tax Collector’s Office
 Meals on Wheels Plus of Manatee, Inc.
 Myakka City Fire Department
 North River Fire District
 Parrish Fire District
 Salvation Army
 Southern Baptist Disaster Services
 Southern Manatee Fire Rescue
 State College of Florida
 Town of Longboat Key
 West Manatee Fire Department

Recovery Activities

Post Disaster Redevelopment Plan (PDRP)

Manatee County has an adopted Comprehensive Plan and Land Development Code. These are the guiding documents for rebuilding, building and planning. Recovery actions for short and long term are generally addressed in the Comprehensive Plan. A post-disaster redevelopment plan identifies policies, operational strategies, and roles and responsibilities for implementation that will guide decisions that affect long-term recovery and redevelopment of the community after a disaster. The plan emphasizes seizing opportunities for hazard mitigation and community improvement consistent with the goals of the local comprehensive plan and with full participation of the citizens. Recovery topics addressed in the plan should include business resumption and economic redevelopment, housing repair and reconstruction, infrastructure restoration and mitigation, short-term recovery actions that affect long-term redevelopment, sustainable land use, environmental restoration, and financial considerations as well as other long-term recovery issues identified by the community. Manatee County's PDRP can be found on www.mymanatee.org.

Initial and Joint Damage Assessment

If it is apparent that a Presidential disaster declaration may be necessary to assist in the recovery of the impacted area, the State or Indian tribal government should contact their FEMA Regional Office and request a joint Federal, State/Tribal Preliminary Damage Assessment (PDA). Local government representatives should be included, if possible. Together, the team will conduct a thorough assessment of the impacted area to determine the extent of the disaster, its impact on individuals and public facilities, and the types of federal assistance that may be needed. This information is included in the Governor or Tribal Chief Executive's request to show that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments or Indian tribal government and that supplemental federal assistance is necessary.

Manatee County's Building and Development Services (BADs) Department is the primary agency responsible for coordinating initial damage assessments and joint preliminary damage assessments. Timely and accurate damage assessment of both public and private sector is essential to:

- Determine types of assistance to request;
- Prioritize resource distribution for disaster survivors;
- Prioritize infrastructure restoration; and
- Gather supporting information for a state of local emergency declaration and requesting presidentially declared disaster.

The EOC is the county's single point for receiving, evaluating, consolidating and reporting damage assessment information. The information is collected by the Manatee County Building and Development Services assessment teams, submitted to the Recovery Chief or his designee for evaluation using Manatee County Damage Assessment Forms, added to the Situation Reports and Essential Elements of Information (EEI), it is submitted to the State Division of Emergency

Management using EM Constellation

Dollar cost damage is calculated in the damage assessment program based on the team rating and actual value of the property. There are several damage assessments conducted in the aftermath of a disaster. The extent and scope will vary depending on the type of disaster, and extent of physical damage.

Preliminary Damage Assessment - This preliminary assessment is a rapid County wide impact assessment to determine the magnitude and severity of damage to structures and infrastructure. Preliminary Damage Assessment is conducted during the initial response and immediate recovery phase to support a local declaration and request for the State to request a Presidential declaration. This phase mission includes identifying the immediate needs and resources required to assist disaster survivors, generally assessing the boundaries of the disaster area, status of the transportation systems, status of communication systems, status of critical facilities and systems, and substantiating requests for supplemental assistance. The damage results are correlated and mapped to provide a visual overview of the most significantly impacted areas and support a discussion at the Emergency Operations Center for establishing a prioritization for resource requests and allocation. The EOC produces a preliminary damage assessment (with dollar figures) for the Situation Report and submission to the State EOC. Should the preliminary damage assessment indicate that the damage is severe and widespread (catastrophic), a declaration of a State of Local Emergency may be possible without a detailed written damage assessment. In a catastrophic disaster when damage assessment has been waived, information and data on damages must still be compiled for briefings, planning for additional resources and prioritizing recovery efforts. In this case, state and federal teams may be dispatched to assist with a Joint Damage Assessment.

Initial Damage Assessment - Individual, business and government damage assessments are essential to gauge the physical and economic status of the community. This assessment is more detailed than a preliminary, to include estimates of financial losses of public and private properties, and other Information not readily available during the preliminary stage. The goal is to complete the Initial Damage Assessment within 24 hours of an event. Disaster Assessment Teams are composed of local, County, municipal, and non-profit organizations working individually to conduct the assessment. The Manatee County Building & Development Services Department Director is the overall coordinator. Assessments are made in accordance with the Handbook for Disaster Assistance from the Florida Division of Emergency Management and appropriate federal documents and include private residences and businesses; public facilities and service; assessing economic injury; and preservation of historic properties. Assessments will be conducted to gauge the overall damage to homes and businesses, critical public facilities, and infrastructure and critical services. Initial assessments may indicate the necessity for outside assistance.

Joint Preliminary Damage Assessment - The Joint Preliminary Damage Assessment Team(s) with Ground Support Team (GST) will establish a base of operations when requested by Manatee County EOC. The Incident Commander and Damage Assessment Team Leader will conduct a situation briefing. Team members will conduct the assessments in accordance with the applicable state and local agency checklists.

Aerial Reconnaissance – The Windshield Survey -- This process allows for the team to quickly record the number of homes and businesses destroyed or damaged over a large area. The raw figures acquired by this method can be extrapolated to give a good overview of the extent of the disaster.

Walk Through – This method is most often used when the assessment needs to be very detailed and specific to assess the extent to which the jurisdiction is eligible for state or federal disaster assistance.

State of Florida Preliminary Damage Assessment Team can deploy immediately following a catastrophic emergency or disaster to assist local officials in determining the extent of the damage and needs of its citizens. The Team will coordinate with Manatee County Emergency Operations Center and liaisons of affected municipalities. They are equipped to be self-contained and prepared to conduct assessments independently, if required. The Manatee County Building and Development Services property damage assessment teams, Manatee County Public Works infrastructure assessment teams, Manatee County Utilities infrastructure teams and Manatee County Agriculture and Resource Extension team will assist the State of Florida Preliminary Damage Assessment Teams.

Disaster Recovery Centers

A Disaster Recovery Center is a readily accessible facility or mobile office where survivors may go for information about our programs or other disaster assistance programs, and to ask questions related to your case. Representatives from the Governor’s Office of Homeland Security and Emergency Preparedness, the Federal Emergency Management Agency, U.S. Small Business Administration (SBA), volunteer groups and other agencies are at the centers to answer questions about disaster assistance and low-interest disaster loans for homeowners, renters and businesses. They can also help survivors apply for federal disaster assistance.

Some of the services may include:

- Guidance regarding disaster recovery
- Clarification of any written correspondence received
- Housing Assistance and Rental Resource information
- Answers to questions, resolution to problems and referrals to agencies that may provide further assistance
- Status of applications being processed by FEMA
- SBA program information if there is a SBA Representative at the Disaster Recovery Center site
- Crisis Counseling Program
- Disaster Legal Services
- Disaster Unemployment
- Funeral Assistance - Individuals and Households Program

Manatee County Emergency Management (position of Emergency Management Coordinator), in close coordination with the Manatee County Property Management Department (the Director or designee, Construction Services Division Manager or the Building Division Manager) facilitates the DRC establishment. Emergency Management provides the lead responsibility for

coordination with the State, before and after a disaster event, to locate potential sites for DRCs and to facilitate the mobilization and demobilization of the facility and resources.

The overall management of Disaster Recovery Centers for the State Emergency Response Team lies within the Bureau of Recovery and Mitigation, Human Services Section. The State Disaster Recovery Manager is a designed employee who co-manages this function with their counterpart with the Federal Emergency Management Agency. Both the Federal and State Disaster Recovery Managers interface with the local governments at the County level. There, Disaster Recovery Center sites are requested by local officials in close coordination with the Federal/State Disaster Recovery Co-Managers. Given the desire to have Disaster Recovery Centers up and running virtually immediately after an event has occurred, the State Disaster Recovery Manager may seek assistance for locating assets for a Disaster Recovery Center from the Logistics Section. In most probabilities, this assistance would come in the form of locating either mobile vehicles that could be used as a temporary Disaster Recovery Center, or in the form of more fixed assets, such as large tents, chairs, and table. Normally, this is the responsibility of the local government to provide, but given the unique circumstances of an event, it may require the assistance of the Logistics Section. State and Federal DRC roles are outlined in documentation from SERT and FEMA, respectively. Florida's State Logistics Plan outlines additional information for DRCs and Points of Distribution (PODs). In addition to these State of Florida and Federal agency services, local organizations provide services at the DRC.

Local DRC Roles

Organization	Role
Manatee County Property Management	Assist in finding appropriate DRC facilities, electrical power, and building services such as parking and access, janitorial services
Manatee County Utilities Department, municipal utilities, ESF-3 Utilities, Manatee County Public Works, ESF-1 Public Works and Transportation	Provide information related to restoration of services including trash pick-up, water, sewer, storm water, and transit bus services
Manatee County Building and Development Services and municipal building and permitting offices	Provide information related to building and remodeling projects when permits are necessary
Manatee County Neighborhood Services Department (Community Services Department)	Provide support to Human Needs with Community Relations teams by canvassing impacted neighborhoods
Manatee County Redevelopment & Economic Opportunity Department	Support temporary housing through housing needs, available accommodations
Manatee County Information Outreach, ESF-14 Public Information	Coordinate information release to the public, promote the DRC location and services through the media
Manatee County Sheriff's Office, local law enforcement agencies, ESF-16 Law Enforcement	Provide security and safety for personnel and facilities
Volunteer organizations (American Red Cross, Salvation Army, United Way, and others) and ESF-15 Volunteers and Donations	Local volunteer agencies provide a variety of survivor-focused goods and services, when available

Manatee County Information Technology Department, ESF-2 Communications	Assist in installing and maintaining communications, telephone, internet, and audio-visual needs at the DRC
Florida Department of Health in Manatee County, Manatee County Medical Reserve Corps, Manatee County Rural Health Services, ESF-8 Public Health and Medical	Provide health and medical information, referrals, and public health support
Manatee County Animal Services, ESF-17 Animal Services	Provide support for pets, lost/found pets, and coordinate information for care of pets and livestock

Manatee County Property Management (Land Acquisition Division Manager, Building Division Manager, Construction Division Manager, or GIS) is responsible for maintaining a list of multiple government-owned facilities throughout the County that meet federal site requirements and can be utilized as potential DRC locations.

Additional local programs may be available to serve Manatee County survivors, including informational or referral services. Local chambers of commerce, volunteer organizations, neighborhood teams, schools and colleges, industry associations, and civic groups may be able to provide additional support to the DRC.

Though the Emergency Operations Center, Manatee County Emergency Management will request a DRC from SERT (EM Constellation or WebEOC). The State Disaster Recovery Manager may request assistance from the Logistic Section to help secure needed assets to open a Disaster Recovery Center before Federal or local assets can be arranged. In those circumstances, the Logistics Section will take the request from the State Recovery Manager to ascertain the feasibility of securing resources. This process will not be used if local and Federal assets are readily available, given this activity is not eligible for reimbursement under the Stafford Act. Regardless of it being eligible or not, there could be situations where such assistance is warranted, and necessary to quickly serve local survivors. When this request is made, the Logistics Section will determine what assets are available, where they would originate from, and estimated costs. This information will be forwarded to the State Recovery Manager and the State Disaster Recovery Manager. Concurrence for securing these funds would be granted by the State Coordinating Officer, or the State Emergency Response Team Leader. Asset management would be the responsibility of the State Recovery Manager, in coordination with the Logistics Section. Cost incurred would be managed by the Finance and Administration Section of the Division of Emergency Management.

Debris Management

Manatee County's Utilities Department, acting as Emergency Support Function 3 (ESF-3) Utilities, oversees the county's debris management plan and has the responsibility for emergency debris removal and long-term debris management, including procedures for coordination of federal and state financial assistance and oversight. The Debris Management Plan:

- outlines positions, roles, and responsibilities;
- describes the planning process;
- describes legal issues, including the legal authority to conduct private property debris removal and the right of entry process;
- outlines coordination for debris removal with municipalities;
- defines contractual terms for debris removal entities;
- identifies debris clearance and collection priorities for roads and critical facilities;
- describes the debris collection, reduction, and disposal processes, including monitoring, pre-identification of debris management sites, and final disposition locations;
- includes special debris removal for hazardous waste and white goods; and
- provides consideration for environmental plans.

Community Response

~~As a member of the Policy Group~~, Manatee County's Administration or the Department Director of Neighborhood Services is responsible for coordination with the State Community Response Coordinator. The State Community Response Coordinator reports to the Individual Assistance Branch Director and is responsible for collecting and disseminating information to the communities affected by the disaster. This function should not be confused with Community Emergency Response Teams (CERT). At the local and state level, specific responsibilities include overseeing the establishment of outreach functions, briefing the Individual Assistance Branch Director and the Deputy Federal Coordinating Officer for Recovery on the status of the outreach and community concerns, coordinates with the Speaker's Bureau through the Information Outreach Division and through ESF-14 Public Information, liaising with local officials through the ~~Multi-Agency Coordination Committee Policy Group~~, and liaising with the External Affairs Officer. Additional groups, organizations, and agencies that may provide information to support the County Community Response include members of the Manatee County Emergency Operations Workgroup.

Unmet Needs Coordination

The purpose of the Unmet Needs Committee is to maximize the utilization of local resources to assist disaster survivors address serious, disaster related needs that cannot or have not been met through established disaster relief procedures and when normal federal and state assistance is exhausted. ESF-15 Volunteers and Donations Lead will ask the Manatee County Community Organizations Active in Disasters (COAD) to convene the Unmet Needs Committee. The Unmet Needs Committee is comprised of county and jurisdictional government agencies, non-profit, faith-based and private organizations and individuals with the intent to assist individuals and families to recover from the devastating effects of a declared or non-declared disaster. The Unmet Needs Committee is a Standing Committee of the Manatee County COAD. Committee membership is encouraged and open to all private, faith-based and civic groups and governmental agencies that can offer disaster recovery assistance.

Committee members include:

- Manatee County United Way
- Florida West Coast Region American Red Cross
- The Salvation Army
- Manatee Religious Services
- Network of Hope
- Manatee County Habitat for Humanity
- Manatee County Emergency Management
- Manatee County Department of Neighborhood Services
- Meals-On-Wheels
- Florida Department of Health in Manatee County
- Florida Department of Children and Families
- Municipal Liaisons

The Unmet Needs Coordinator identifies survivor needs and coordinates resources, funding, and other kinds of assistance to fill gaps not covered under other priorities in addition to administering the Other Needs Assistance of FEMA's Individuals and Households Program. State and Local Unmet Needs Coordinator closely with the Long-Term Recovery Committees to address survivor's continuing recovery needs.

The Chair of the Unmet Needs Committee is the point of contact responsible for connecting disaster survivors into the unmet needs process for both declared and undeclared events. The committee will meet at least annually, prior to June of each year, to review and revise this guideline as necessary and to provide current representative contact information. Post-disaster, the committee will convene within one week after a major event or as soon as the need is identified during an on-going disaster, to assist disaster survivors. Committee membership includes additional faith-based groups, civic and community-based organizations, non-profit organizations or government agencies that will support the County's unmet needs.

Unmet needs are identified using a variety of inputs, including self-reported requests for help through the Citizen Action Center, the ~~Manatee 3-1-1 Surge Citizen Information Center~~; representation at the Disaster Recovery Center, and community and neighborhood canvassing by local groups or FEMA's Disaster Survivor Assistance Teams. Referrals may also come from community organizations such as the United Way, Salvation Army, 211, and other service providers. The Unmet Needs Committee communicates through in-person meetings, using WebEOC, by telephone and email on an ad-hoc basis, and in close working relationships with the ESF-15 Volunteers and Donations function in the EOC. The Committee will utilize case management practices to avoid duplication of efforts or benefits.

Emergency Temporary Housing

Manatee County is dedicated to supporting a safe, sanitary, and functional living environment for all community members in the aftermath of a disaster. The intent of the Disaster Housing Strategy is to foster consensus and collaboration among stakeholders with the aim of building a common approach for carrying out the disaster housing mission and, thereby, expediting community recovery. In the aftermath of natural or manmade disasters, community members may be displaced due to damage or loss of residential structures, environmental contamination, or other environmental factors. The emergency temporary housing strategy will detail a framework for providing safe, sanitary, and functional temporary housing options for displaced residents to expedite long-term community recovery. Within the broader recovery framework, the Strategy primarily addresses interim housing solutions for residents. Manatee County Government continues to demonstrate its commitment to the housing needs of county residents through the establishment of the Manatee County Local Housing Assistance Plan. It is through this plan that the county seeks to meet the affordable housing needs of its citizens by developing key housing partnerships among public, private and non-profit agencies.

Manatee County's Departments and Partners work together to:

- Protect survivors and recovery workers from health hazards associated with unhealthy or unsafe housing.

- Preserve and promote social connectedness in plans for immediate response, short-term housing, and long-term rebuilding.
- Consider needs for access to health and social services during all phases of housing recovery.
- Incentivize the use of healthy and/or green criteria for the rebuilding of homes, buildings, and neighborhoods.
- Engage community members, including representatives of and advocates for vulnerable populations, in the development of post-disaster housing plans to ensure that the needs of all community members are met.

Under the Department of Redevelopment & Economic Opportunity, the Community Development Division Manager, or other designee, acts as the designated local temporary Disaster Housing Coordinator to work directly with the Disaster Housing Task Force to coordinate all local housing operations. The Disaster Housing Coordinator reports to the Individual Assistance Branch Director and prior to impact is responsible for preparing and disseminating a projection of displaced families and maintaining liaison with community housing authorities and agencies. The Disaster Housing Coordinator shall also be the contact for the Federal Emergency Management Agency Housing Officer in the event of a Presidential declaration.

Housing Task Force Members include representatives from:

- Manatee County Redevelopment & Economic Opportunity Department (Chairperson)
- Manatee County Neighborhood Services
- Bradenton Housing Authority
- City of Anna Maria
- City of Bradenton
- City of Bradenton Beach
- City of Holmes Beach
- City of Palmetto
- Florida Health Department in Manatee County
- Goodwill of Manasota (Good Homes Division)
- Habitat for Humanity
- Manatee County Building and Development Services Department
- Manatee County Housing Authority
- Manatee County Parks and Natural Resources Department
- Manatee County Property Management Department
- Manatee County Public Safety Department
- Manatee County Public Works Department
- Manatee County School Board
- Manatee County Sheriff's Office Manatee County Utilities Department
- Palmetto Community Redevelopment Agency
- The Salvation Army
- Town of Longboat Key
- United Way and 211

Determining the community need for disaster housing in the aftermath of a disaster is a challenging task. The following informational components are needed to quantify the disaster housing need and will be coordinated through the EOC with the Recovery Section, the representatives from the Redevelopment and Economic Opportunity Department, Building and Development Services, Emergency Management, and the Housing Task Force:

- Total number of residential structures (by type) with major damages classified as destroyed or deemed uninhabitable from Damage Assessment
- The estimated number of residential structures which might be made habitable with minimal repairs
- The status of available hotel and motel units
- The status and availability of public housing units
- The status and availability of privately-owned, vacant rental properties, which could be used for disaster housing
- Status and availability of manufactured housing units or other fabricated dwellings which could be used for disaster housing
- Available useable land meeting the suitability criteria for emergency community sites, including available space in existing/vacated manufactured home parks
- Status of restoration of utilities
- Availability of community services including fire, EMS, law enforcement, healthcare, schools, etc.
- Location of available one or two-family zoned lots of sufficient size to place temporary units onsite

Uninsured homeowners whose homes are destroyed or have major damage may require disaster housing assistance. Uninsured residents of multi-family units that are damaged or destroyed will likely need Direct Housing Assistance in commercial manufactured home parks or community sites. Non-seasonal, permanent manufactured home residents whose units are damaged or destroyed will likely require disaster housing assistance. Homeowners who have insurance will not be eligible for Direct Housing Assistance. Owners of secondary homes will not be eligible for direct housing assistance.

Mass care and human services are necessary for providing the most immediate and long-range needs of disaster survivors which include shelter and feeding, transient and interim housing, care of unaccompanied children, the elderly, and others unable to care for themselves, disaster welfare inquiry, and provision of various types of human services assistance to survivors. These services are provided through the coordinated efforts of governmental, non-profit and volunteer agencies. The purpose of this section is to outline coordinating guidelines for planning, mass care, disaster housing, and related emergency human services in the short and long-term recovery phases.

Residents in the declared area apply for housing under FEMA's Individuals and Households Program (IHP) by calling one of FEMA's disaster hotline or completing registration applications online. The U.S. Small Business Administration (SBA) may send a disaster loan application after the applicant applies to FEMA for disaster assistance. It is important to complete and return the application to SBA as soon as possible. If the application is not filled out and returned, the applicant may not be eligible for other types of federal assistance. SBA low-interest loans are

available to eligible renters, homeowners, businesses of any size and non-profit organizations that suffered losses due to a disaster.

Homeowners must prove they owned and occupied the home at the time of the disaster and that the damage was disaster related. Renters must prove that they lived in the disaster damaged house at the time of the disaster. If necessary, a FEMA inspector will call to arrange a visit to the damaged home or apartment to assess disaster-related damages for FEMA's Individuals and Households Program. Following review, the applicant receives a determination letter from FEMA with the eligible/ineligible decision. Qualified applicants will receive a check in the mail or a direct deposit to their bank, along with a separate letter explaining how to use the assistance.

Direct Housing Assistance may be available when local existing housing options have been exhausted or deemed infeasible. Manufactured housing units may be used once the appropriate options have been determined by the State. Temporary housing can be placed on an eligible family's private property, on a pre-existing commercial pad or, as a last resort, on a new community site approved by local officials and constructed and maintained by FEMA.

Disaster Case Management is a tool to aid those impacted by disasters, by providing a Case Manager who is knowledgeable about disaster recovery and can assist the individual or household create a plan to achieve realistic goals for recovery. Manatee County has delegated the handling of local long-term housing recovery and transition to permanent housing to the Director, Neighborhood Services Department. Under this position and with the collaboration of the LTRO, an effective local Client Management System must be established to address comprehensive disaster-related housing recovery needs and the coordination of available resources in the community. The Community Services Department, Human Services Division along with the LTRO will conduct the following tasks to capture the needs, determine what assistance has been provided, and identify any gaps in resources.

The Disaster Housing Mission is designed to provide temporary disaster housing for a period of up to 18 months. Restoration of the community is the best way to return a disaster affected area to normal. Community sites should be located and developed so residents can make maximum use of existing community facilities. Disaster housing mission implementation, including housing strategies, expedited permitting process, and commercial manufactured home parks with pad counts, can be found in the Manatee County Disaster Housing Strategy.



Mitigation

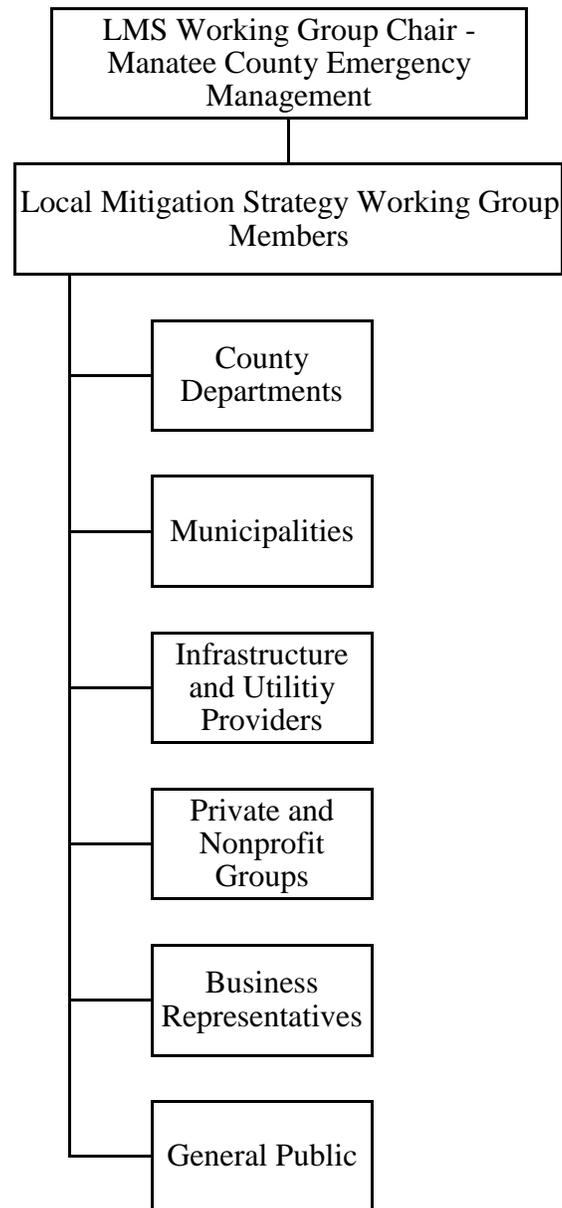
This section clarifies emergency management responsibilities regarding local mitigation activities. Florida Rule 27P-22 directs counties to have a Local Mitigation Strategy (LMS) and a formal LMS Working Group.

Manatee County's Local Mitigation Strategy

Our County has a State & FEMA-approved Local Mitigation Strategy, which expires on September 1, 2020. Manatee County's LMS is located on the County website (www.mymanatee.org). The most recent LMS was adopted by the Board of County Commissioners' Resolution R-15-123 on August 11, 2015. The Manatee County Local Mitigation Strategy is federally compliant, and was originally adopted in 1999 with updates in 2004, 2009, and 2014.

Manatee County Emergency Management Division staff (position title of Emergency Management Coordinator) are responsible for coordinating mitigation activities with the Local Mitigation Strategy Working Group. The Emergency Management Coordinator works with the LMS on local mitigation activities through convening stakeholder and planning meetings; documenting the meeting discussion, outcomes, and next steps; providing technical assistance to stakeholders; promoting interaction and holistic participation of all stakeholders; researching and documenting historical and potential mitigation activities and hazards; and ensuring compliance with local, state, and federal mitigation activities. Hazard mitigation planning and programming is conducted in Manatee County by a wide variety of agencies and organizations. One of the key planning and programming efforts is the maintenance and implementation of the countywide local mitigation strategy (LMS), which is done by a cooperative inter-jurisdictional and inter-organizational group. Mitigation and the LMS are referenced in annexes to this plan.

Emergency Operations Organizational Chart (Mitigation)



The Emergency Management Coordinator serves as LMS working group chair for local mitigation activities. The Coordinator regularly meets with local Floodplain Managers to identify damaged structures in Special Flood Hazard Areas (SFHAs) for substantial damage determination. More information on this program can be found in Manatee County's LMS (www.mymanatee.org).

Record of Policy Revisions

This plan is a living document that is subject to changes in defining procedural methods and techniques. A change to the plan does not require ratification by the Manatee County Board of County Commissioners unless there is a major change in policy. Authority for changes to this plan is delegated to the Manatee County Public Safety Director and/or the Chief of Emergency Management. The Manatee County Emergency Management Chief is responsible for the coordination of changes with affected agencies, and after concurrence, may make changes to this plan. All major changes will be routed within thirty (30) days.

The Board of County Commissioners establishes policies to guide the functions of County government. Policies are created by ordinance in the Manatee County Code of Ordinances, by resolution or by adoption during a Board meeting.

The County Administrator is responsible for establishing procedures for implementing the policies adopted by the Board of County Commissioners to guide the administrative functions of County departments. Procedures are authorized by the County Administrator or his designee. Procedures apply to all County departments and are intended to serve as a comprehensive guide for all administrative personnel. Observance of the procedures is mandatory. In addition to these procedures, it is anticipated that Department Directors may promulgate internal policies regarding the operation of their respective departments.

In 2017-2018, this CEMP was reorganized to meet the standards and requirements set forth in Florida Administrative Code Rule 27P-6. While the document's format underwent extensive review and changes, no policy level revisions were made. This Record will not address revisions of grammar, format, font, layout, and updates to names, dates, or locations that have changed unless the scope or authority requires policy level changes.