



BAY COUNTY *Florida*

LOCAL MITIGATION STRATEGY PLAN 2020

Prepared by the Local Mitigation Strategy Working
Group for the Communities of Bay County

ABSTRACT

"The local mitigation strategy plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards. Local plans will also serve as the basis for the State to provide technical assistance and to prioritize project funding."
-44 CFR 201.6

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EXECUTIVE SUMMARY

The objective of the Local Mitigation Strategy Plan is to make Bay County and the community as a “whole”, safer and more disaster resilient. Understanding hazard mitigation at the local level enables the community to lessen vulnerability to the various threats and hazards, which, in turn better supports economic and social development. Through effective hazard mitigation programming, business disruption is lessened, and governmental financial outlay reduced. By addressing hazards in advance using mitigation initiatives, businesses and citizens recover and achieve normalcy sooner following a catastrophic event.

The strategy is multi-jurisdictional hazard mitigation document achieved through a coordinated, cooperative planning effort. Developing and maintaining the plan is extremely important to the Bay County community because of rapid population growth, seasonal population (tourism) influx, and expanding development. These factors contribute significantly to community vulnerability to natural and man-made disasters.

The Local Mitigation Strategy Plan is a combined effort of the Local Mitigation Strategy Working Group through identifying and executing mitigation goals and objectives including mitigation initiatives based on current community hazards and vulnerabilities. The Plan identifies mitigation initiatives that are cost effective, technically feasible and environmentally sound.

Included in the new plan is a complete revision of the Hazard Identification and Risk Assessment due to the devastating events experienced by Bay County during Hurricane Michael in 2018.

On Monday, October 8, 2018, Bay County realized that Tropical Storm Michael was taking a turn and intensifying into a fast-moving Hurricane. Bay County Emergency Management Division began response activities and evacuation orders were given though many residents chose to stay. By the early morning hours of October 10, 2018, Hurricane Michael, a catastrophic Category 5 Storm, was barreling towards the Florida panhandle with Bay County directly within its path.

By early afternoon, Michael, one of the strongest hurricanes ever to make landfall in the United States, came ashore with 160 mph winds and a 14 ft. storm surge, ripping homes from their foundations, flattening others, breaking trees like toothpicks and sending debris flying like missiles through the air. Leaving nothing in its wake but splintered wood, shattered glass, mountains of debris and downed utility lines as far as the eye could see.

Bay County had an experienced and dedicated team that worked tirelessly 24 hours a day/7 days a week at the Emergency Operations Center for over two straight months to ensure proper response and recovery efforts were made for the residents and businesses of the municipalities and Bay County. The County and Cities suffered significant damage to its infrastructure, potable water delivery, wastewater disposal, communication towers, traffic signals, fiber optic ring and critical roadway structure. The Communication Tower at Mexico Beach was destroyed, and communication was down for over two weeks. A National Guard Strike Team was sent in immediately after Hurricane Michael to oversee law enforcement and help with emergency response calls. The County’s 911 Communication 800-Megahertz Radio System was completely overwhelmed by the number of calls coming in during Hurricane Michael and calls were rolling over to other Counties such as Tallahassee and Okaloosa Counties. This caused major chaos in trying to answer the needs of the residents during the height of the storm and for several days

afterwards. It became quite apparent that a redundancy in fiber optics communication for 911 is a top future priority for mitigation measures for the County for life and safety measures.

Throughout the public involvement process, a common theme across the County and municipalities involved discussions of hardening structures, implementing redundant services, installing bypass pumps or generators at all lift stations and implementing telemetry systems with all remote sites (i.e., pump stations, booster stations and lift stations). This was particularly important as it applied to critical facilities within the community such as the Emergency Operations Center, Fire Stations, Sheriff's Office and Jail, Public Works and Utility Departments, and other critical facilities where continuity of services is imperative.

Six of the seven municipalities in Bay County were severely damaged from Hurricane Michael, with Panama City Beach being the only one that remained proportionately unscathed. Mexico Beach, a small seaside city of approximately 1,200, took the direct hit from Hurricane Michael wherein approximately 48% of the structures completely obliterated and 46% sustained severe damage. The Cities of Panama City, Springfield, Parker, Lynn Haven and Callaway saw massive destruction and devastation as well as unincorporated Bay County with a cost of approximately \$25.1 billion in damages leaving 22,000 of the then, 180,000+ residents of Bay County homeless.

Bay District School System estimated \$350 million in damages by Hurricane Michael. Springfield Elementary, Everitt Middle and Merritt Brown schools received heavy damage with every school building roof in the District receiving extensive damage. Bay County Schools have lost more than 1 in 8 students (approximately 13% of the student population) since Hurricane Michael, leaving over 5,000 of its current student population homeless or living away from their homes. This also has a negative impact on the amount of state education funding the schools will receive in future funding. Three of the local schools are slated to be closed. (Bay County Long Term Recovery Plan)

The Community as a whole is suffering from trauma and grief from the storm but especially the children are in need of mental health services more now than ever. In the school year directly after Michael, 125 students in Bay County were placed in custody for a mental health evaluation under the Florida's Baker Act. Because the hurricane left only one medical center standing that can receive Baker Act patients, students were sent to facilities as far as 580 miles away. The school district has a waitlist of 350 students in need of mental health services and the county at large lost over 40 percent of its behavioral health specialists after the storm. (Associated Press 10/11/19)

At the one-year anniversary, October 10, 2019, the recovery efforts are still ongoing with over 10+ million CY of debris being hauled in unincorporated Bay County, which is one-half of all debris in the affected area. Project applications are being prepared and submitted for funding and approximately 5000 residents are still without permanent homes while 1 in 6 insurance claims are still unresolved.

Destruction of over 3 million acres of timber, leaving 72 million tons of fallen trees on the ground. This equates to damages to the timber industry totaling \$3 billion, which is a significant portion of the regional economy. The loss of trees has left a significant ecological hole, impacting storm water drainage, air quality, and local aesthetics. Equally alarming is the significant fire hazard due to the overwhelming amount of downed and drying debris. Two major fires have already occurred in the County since Hurricane Michael. (Bay County Long Term Recovery Plan).

Tyndall Air Force Base, home to 11,000 airmen and 7,000 Civilians, provide an annual economic impact of over \$600 million. The Base suffered massive damage receiving over \$4.7 billion in damages where 240+ of their 484 buildings were left in complete ruin and every other building received severe damage. The devastating blows dealt from Hurricane Michael will have major economic impacts that will be felt by many for years to come.

Unemployment rates in Bay County have been steadily falling from 12.5% in 2011, to a low of 2.8% as of October 2018 showing a positive economic indicator for the County. One month immediately following Hurricane Michael, unemployment rates began to spike and jumped to 6.1% in November of 2018. Unemployment rates have remained above 5% since Hurricane Michael made landfall and the local economy seems to be finding its new short-term “normal” state as unemployment trends appear to be remaining steady at 5% since the beginning of 2019.

Hurricane Michael completely devastated the housing market in Bay County. Bay County has 8,308 multi-family units. Of this total, 3,069 units are classified as low-income qualified housing units. Immediately after the storm, of the 8,308 units only 3,387 were habitable with 4,544 families being displaced. Rental rates have spiked considerably with the post-event inventory compression.

Additionally, 47 houses of worship in Bay County were destroyed or significantly damaged.

The Emergency Management Division assessed the various hazards and vulnerabilities, including historical records and current data, to provide a community-based analysis. The Local Mitigation Strategy Working Group set forth and prioritized specific mitigation initiatives aimed at minimizing vulnerability based on the assessment.

This Plan will continue to evolve and expand in the future ensuring it addresses the changing conditions in the participating jurisdictions, experiences with disasters that do occur, and any changes in the characteristics of the hazards threatening the involved communities. The process of versioning and future editions of the Local Mitigation Strategy Plan will continue to inform and involve the public, including any other interested groups in making the community more resilient to the impacts of future disasters.

The initial draft was submitted to the Florida Division of Emergency Management for review in accordance with Florida Administrative Codes 27P-22. Additionally, the review includes a cursory look on behalf of the Federal Emergency Management Agency, particularly for comparison with the requirements outlined in the Disaster Mitigation Act of 2000, and Title 44 Code of Federal Regulations Part 201.6 regarding eligibility to apply for FEMA Hazard Mitigation Grant Programs.

Each participating jurisdiction has formally adopted and approved the updated Plan by Resolution. Copies of the executed Resolutions are available in Appendix H.

INTRODUCTION & OVERVIEW

The Bay County Local Hazard Mitigation Strategy Plan (Local Mitigation Strategy Plan) is established to make the population, neighborhoods, businesses, and institutions of the community more resistant to the impacts of future disasters.

Bay County faces challenges in accommodating incoming residents, tourists, and businesses. Since 2010, Bay County has seen a 0.097 % increase in population growth.

The Local Mitigation Strategy Working Group continues to undertake a comprehensive, detailed evaluation of the community vulnerabilities to all types of hazards identifying ways to make the communities more resistant to their impacts. This document substantiates the results of the planning process for the current planning period.

PURPOSE

The Bay County Local Hazard Mitigation Strategy Plan and the underlying planning process are intended by the Working Group to serve many purposes. These include the following:

- Provide a Methodical, Substantive Approach to Mitigation Strategy Planning
- Enhance Public Awareness and Understanding
- Create a Decision Tool for Management
- Promote Compliance with State and Federal Program Requirements
- Enhance Local Policies for Hazard Mitigation Capability
- Assure Inter-Jurisdictional Coordination of Mitigation-Related Programming
- Create Jurisdiction-Specific Hazard Mitigation Plans for Implementation
- Provide a Flexible Approach to the Planning Process

OVERVIEW

The Local Mitigation Strategy Plan provides a description of the mitigation-related characteristics of each participating jurisdiction, including land usage and population growth trends, the mitigation-related policies already in place, identified critical facilities present in the community, and properties repetitively damaged by past events. In addition, the Local Mitigation Plan:

- Includes the Threat Hazard Identification and Risk Assessment (Appendix K)
- Addresses the adequacy of the current policy basis for hazard management by the participating jurisdictions and organizations
- Documents the structural and non-structural mitigation initiatives proposed by the participating jurisdiction addressing the identified vulnerabilities
- Addresses the mitigation goals and objectives established by the Local Mitigation Strategy Working Group and the action to be taken to maintain, expand and refine the Local Mitigation Plan and the planning process and
- Identifies any past and planned efforts of the Local Mitigation Strategy Working Group for engaging the public and communities in the mitigation planning process.

COMMUNITY PROFILE

BAY COUNTY: On February 12, 1913, representatives from five towns on the bay, met at Panama City for the purpose of selecting a name for the proposed new County. After discussion, the name Bay was selected as one which would be satisfactory to the majority of the citizens, and as being distinctive of the territory that would be included. On July 1, 1913, Bay County was created by the Legislature from portions of Washington, Calhoun, and Walton Counties. The Nativity of Bay County was fittingly honored by a celebration in the City Park, now known as McKenzie Park. Picnic baskets were brought by the attendees while barbecued meats furnished by the city were served to all. Additional attractions were music, boat races, baseball, and swimming matches. Bay County is governed by the Bay County Board of County Commissioners, a



five-member governing board elected to represent the citizens of Bay County. The board guides the actions of the organization in ensuring the future of Bay County, establishing policies, and appointing a county manager to implement those policies while managing the operations of the county (History of Bay County).

AREA: 1,033 square miles

GEOGRAPHICAL PROFILE:

Bay County (including Cities of Callaway, Lynn Haven, Mexico Beach, Panama City, Panama City Beach, Parker, and Springfield)

TOPOGRAPHY:

Bay County is largely within the Coastal Plain area and is dominated by the terraced Coastal Lowland topographic region. There are multiple terrace levels with varying elevations from sea level along the coast to over 200 feet in certain inland parts of the county. In terms of land cover there are four physiographic regions: The Sand Hills, Sinks and Lakes, Flat-woods Forest, and Beach Dunes and Wave-cut Bluffs.

GEOLOGY:

According to the Natural Resources Conservation Service, all areas within the county, except for the Youngstown area, have sandy soils that range from excessively drained to poorly drained. There are numerous bays, swamps, and depressions throughout the county with little natural drainage. Generally, as elevation decreases the soils become more poorly drained and risk of flooding increases.

LAND USE:

Bay County is in the north-west region of Florida on the Gulf of Mexico and is bordered by Walton County to the west, Washington and Jackson Counties to the north, and Calhoun and Gulf Counties to the east. The county's area is comprised of 763.7 square miles of land and 269.6 square miles of inland and territorial waters. The area largely made up of a low elevation coastal

plain is dominated by beaches along the Gulf of Mexico and inland marshes surrounding Saint Andrews Bay. The Econfina Creek Water Management area is in the far north of the county and connects to the coastal area through North Bay. The primary resource of the area is its pristine coastal region and beaches, which is the main economic driver for the county.

EDUCATION:

Bay County is home to 18 elementary schools, 6 middle schools, 5 high schools, 2 multi-grade schools, 3 special purpose schools, 1 adult/technical school, 6 charter schools and one virtual school with more than 26,000 students attending the 42 area schools.

TOURISM AND ECONOMIC DEVELOPMENT *(including Military and Port):*

Bay County is home to seven municipalities, but Panama City, Panama City Beach and Mexico Beach are the three biggest municipalities that draw tourists for Bay County. Bay County has a population of over 180,000, with a growth rate that is double the national rate. Additionally, within a 60-mile radius, the population increases to 621,290. The major pillars of the economy include tourism, military, education, and a growing manufacturing base.

Many residents of Bay County have located and/or moved to the area because of the growing economy, opportunities for growth, quality education and quality of life.

Located within Bay are Tyndall Air Force Base and Naval Support Activity Services with a combined employment of 12,000 active duty military and civilian personnel. In Northwest Florida there are six major military installations with over 2,000 exiting military members annually. Additionally, Bay County is home to the country's newest international airport and international port, Northwest Florida Beaches International Airport (ECP) and Port Panama City, respectively. (bayeda.com)

COMMUNITY PROFILE

CALLAWAY: Callaway has a “small town” atmosphere with its own shopping district but is still within driving distance to many beaches and scenic bays. It is conveniently located east of Panama City, near Tyndall Air Force Base.



AREA: 5.69 Square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: Callaway’s pristine waterways, residential and recreational areas, and the Arts and Conference Center help make it a diverse community. There are many parks with something available for everyone. Some of the park amenities offered include: Veterans Park with a walking path, picnic area, playground, and is pet friendly; John B. Gore Park provides a boat ramp, floating docks, a Community Center with a meeting room and small kitchen, outdoor picnic area, and is conveniently located next to sports practice fields, a playground, and tennis courts; Brittany Woods has a walking park; Patterson and Collinfurst Parks both have beautiful and serene water views with picnic areas. The Arts and Conference Center, located at the Recreation Complex, features an auditorium, meeting rooms and a caterer’s kitchen, which are available for special events. Also located at the Recreational Complex are two t-ball fields, two youth baseball fields, three multi-use ball fields, five soccer fields, a football field, a fully stocked community fishing pond, a mile-long walking trail with exercise equipment and two playgrounds.

TOURISM AND ECONOMIC DEVELOPMENT: The Callaway Community Redevelopment Agency (CRA), established in 2007, seeks to revitalize the community and promote economic development. The purpose of the Callaway CRA is to enhance existing neighborhoods and to expand business activities within its main commercial areas. One of the main objectives is to fund new public infrastructure projects needed to accommodate businesses and development. The CRA has grant programs available for existing businesses and commercial property owners, including a façade improvement grant. More information on these CRA grant opportunities can be found on the city’s website.

The commercial districts in Callaway offer many services and amenities to citizens and visitors, including many financial services, dining opportunities at the many local diverse restaurants, lodging at its hotels, as well as other new commercial entities.

Callaway’s City Commission strives to protect the delicate balance between property rights and property values. It has approved legislative requirements, which ensure quality growth within the City of Callaway. The Public Safety Building houses the City’s Fire Department and a substation of the Bay County Sheriff’s Office. The City has expanded its water and sewer utility services outside of the city limits in order to accommodate new growth and business expansion. Public transportation is available through the Bay Town Trolley, which traverses the entire county. Callaway has a Historical Society that is home to the City’s historical artifacts a museum located next to the “Old School House” which has been designated as a Florida Heritage Site. Both are located inside John B. Gore Park (Communities).



COMMUNITY PROFILE

LYNN HAVEN: Lynn Haven is the second largest city in Bay County, with a population of 20,000 residents and maintains its identity as a family-oriented and business-friendly alike, including a vibrant downtown that preserves and values its local heritage. Our industry-friendly community in the Panama City Metropolitan Statistical Area is a center for manufacturing, healthcare, transportation, and distribution services. “Lynn Haven is a beautiful community, made up of beautiful and

diverse residents. Our goal is to continue to be progressive in our thinking and actions and give residents the best quality of life in our pristine and vibrant family-oriented city.”

AREA: 9.5 Square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: Residents enjoy the city’s many amenities and events. Sharon Sheffield Park, located in the heart of Lynn Haven, offers a wide range of events for the public. This includes Spring/Fall Concert Series, Trunk-or-Treat, and Winter Wonderland to name a few. The City is working to promote the historic downtown area, and ideas are in the works to host various events in the upcoming year.

Lynn Haven citizens are involved, caring, and active. They are engaged in civic and fraternal organizations, such as the American Legion, Rotary, Garden Club, Masonic Lodge, The Heritage Society, and many others. They support Lynn Haven Law Enforcement and Fire Department and serve on wide range of volunteer boards and committees that help city commissioners make better informed decision.

With beautiful parks and recreation facilities along the bay and throughout the city offering numerous amenities including splash pads, amphitheater, and a boat dock; the City continues to offer a variety of activities year-round including youth and adult athletic programs. Sharon Sheffield Park, located in the heart of Lynn Haven, offers a wide range of events for the public. This includes Spring/Fall concert Series, Trunk-or-Treat and Winter Wonderland to name a few for everyone to enjoy. Our Mission is to enrich the Citizen’s quality of life by attracting new businesses to Lynn Haven while promoting the retention and expansion of new businesses.

TOURISM AND ECONOMIC DEVELOPMENT: The City continues to attract many new businesses. Economic development activities include the promotion of the Lynn Haven Commerce Park and the Hugh Nelson Industrial Park. These parks are home to national companies such as General Dynamics, Trane, Merrick Industries and Jensen USA. Redevelopment efforts of its historic downtown area are being emphasized and supported by the Lynn Haven Community Redevelopment Agency (Communities).

COMMUNITY PROFILE

MEXICO BEACH: A small, coastal community located on the western end of the Florida Panhandle's Forgotten Coast and the eastern end of Bay County, Mexico Beach is approximately 3.5 miles long and 1.4 miles deep. It is currently home to 1,200 permanent residents, comprised primarily of retirees, base personnel from neighboring Tyndall Air Force Base and a number of business owners and their employees. During the summer months the City's total population reaches up to 10,000 due to the transient population associated with tourism.



AREA: 1.8 square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: The City of Mexico Beach is located in the southeastern portion of Bay County, in Northwest Florida approximately 22 miles southeast of Panama City. The City lies along the Gulf of Mexico coastline and the City's economy is largely based on tourism. The City also boasts approximately ¼ mile of dedicated public beach with unobstructed view and access to the beach. While much of Mexico Beach continues to convey a predominant spirit echoing a setting from the fifties and sixties, some change has begun in the community. A number of townhome developments, adhering to the height limitations are emerging where 1960s block style construction once stood. The results are more retirement/relocation living and investment opportunities, as well as additions to the community's vacation rental inventory.

On the near horizon, Mexico Beach anticipates potential expansion to the west end of the city to meet local housing demand, including Tyndall Air Force Base. Mexico Beach, with its intrinsic natural beauty, dedication toward managed growth and preservation of natural resources, is a superb community in which to vacation, relocate, or retire (Communities).

TOURISM AND ECONOMIC DEVELOPMENT: The City sits in close proximity to the beautiful, emerald green waters of the Gulf of Mexico, with sugar white sands and quiet, non-commercialized setting; making the community a natural pick as a vacation destination for families looking for a getaway to a more traditional, less busy destination. Many families choose to relocate to this area to enjoy the warm, sunny days of "Northwest Florida's Unforgettable Coast," where the Southern hospitality is as authentic as the Old Florida charm. Quaint Mexico Beach is situated far enough away from the crowds and congestion, yet strategically close enough to urban amenities such as medical facilities, airports, and libraries.

Due to its unique natural and social assets, Mexico Beach's economy is almost entirely dependent on tourism. The City's beautiful, pristine beaches are also the safest in the area due to the lack of rip currents, which are prevented by a sand bar that parallels the beach, adding to its attractiveness for those who like water activities. In addition to the beautiful public beaches, the City of Mexico Beach is working on developing a state-of-the-art fishing pier that will feature many amenities that fishermen and beachgoers will be able to utilize and enjoy.

COMMUNITY PROFILE



PANAMA CITY: More than 37,500 residents call Panama City home. The largest city between Pensacola and Tallahassee on the Florida Panhandle is located on the shores of St. Andrews Bay. Panama City retains the charm and beauty of a sleepy fishing village, while still enjoying the amenities of a busy metropolis.

AREA: 29.3 square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: It is the heart of the Panama City-Lynn Haven-Panama City Beach MSA which includes almost 170,000 people and is the anchor of a 60-mile workforce drive-time area of 621,290 people.

With more than 200 acres dedicated to leisure activities, Panama City features two walking parks, a large sports complex, a dog park, seven waterfront parks and eight clubhouses available for meetings, parties, and family events. With many miles of waterfront, Panama City is a boater's paradise.

Downtown Panama City serves as the area's art and theater district, anchored by the Martin Theatre and the Marina Civic Center. These venues host varied events ranging from local talent to national touring events and notable acts. Downtown is also home to the Panama City Center for the Arts and several private galleries, including the Paul Brent Gallery.

In addition to the Downtown area, Panama City encompasses a number of wonderful neighborhoods each with their own distinct character: Forest Park, Glenwood, the Cove, St. Andrews, and Millville are just a few. Many companies and major employers make their headquarters or major facilities in Panama City, including WestRock, Kraton Chemical, Eastern Shipbuilding, Berg Steel Pipe Corp., Jellyfish Health, and NantHealth to name a few. Panama City is dedicated to educating the next generation of skilled employees through its high-achieving public schools, numerous private schools and charter academies, Gulf Coast State College and Florida State University's Panama City campus and Troy University's Panama City campus which are all conveniently located within city limits.

TOURISM AND ECONOMIC DEVELOPMENT: The Panama City Community Development Council promotes and markets the city as a destination to tourists and business travelers, as well as bringing about improvements to the area to support these travelers and the community.

In addition to its status as the seat of Bay County, Panama City is served by five hospitals, diverse shopping, acclaimed restaurants and the kind of Southern hospitality that makes our city "The Great Place" as well as the best place to live, work and play (Communities).

MILITARY: For more than 60 years, Panama City has been home to the Navy, Air Force and one of the largest Coast Guard Stations the continental U.S. Tyndall Air Force Base is home to the 325th Fighter Wing. The Naval Support Activity Panama City serves as one of the nation's top Navy research development and training centers and houses the Navy's top laboratory for mine warfare systems, special warfare, diving, and life support.

EDUCATION: Schools in Panama City include elementary schools (k-5), middle schools (grades 6-8), and high schools (grades 9-12). Haney Technical Center is a designated post-secondary technical training institution and M.K. Lewis School serves as a special purpose school.

Currently, there are 19 elementary schools, 5 middle schools, 6 high schools, 1 adult education school and special purpose school.

CONNECTIVITY: For more than 60 years, Panama City has been home to the Navy, Air Force and one of the largest Coast Guard Stations the continental U.S. Tyndall Air Force Base is home to the 325th Fighter Wing. The Naval Support Activity Panama City serves as one of the nation's top Navy research development and training centers and houses the Navy's top laboratory for mine warfare systems, special warfare, diving, and life support.

PORT AND RAIL: Port Panama City is a growing deep-water gateway port that provides modern seaport facilities for bulk, break-bulk and container cargos. It is a Free Trade Zone and offers rail connectivity to the Continental U.S. on the Bay Line Railroad.
(pcb.gov.org)



Panama City Florida Port

COMMUNITY PROFILE

PANAMA CITY BEACH: The City is home to almost 13,000 permanent residents with over 17 million tourists visiting the area annually. Panama City Beach is considered the fastest growing of Bay County's seven cities in both population and area. With a population of young families, seniors and early retirees, Panama City Beach is considered an ideal place for relocation and vacation.



AREA: 19.5 square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: The City of Panama City Beach is approximately 19.5 square miles located in Florida's Great Northwest. Community life in the City involves various recreational and social areas including parks, Gayle's Trails, walking paths, swimming areas, senior and youth centers, golf courses and two fishing piers; a branch of the Bay County library; and numerous medical, vision and dental offices. The City is home to worship/gathering groups of various denominations and an abundance of financial institutions

EDUCATION: Panama City Beach is home to three elementary schools, two middle schools, and a high school.

TOURISM AND ECONOMIC DEVELOPMENT: Stretching 27 miles along the beautiful waters of the Gulf of Mexico, Panama City Beach's economy depends heavily on tourism. Tourism in Bay County contributes to around \$2.7 billion dollars in economic impact. For every 91 visitors to the area, one full-time job is created.

Approximately 20 percent of upland owner shoreline is classified recreational and public use. The remaining publicly accessible beachfront features

hotels, condominiums, restaurants, entertainment venues and personal homes. The City's re-nourishment project keeps the beaches along the Gulf of Mexico in pristine condition as the area continues to see

manageable growth with an industrial park, large Conservation Park and commercial office park, Pier Park, amphitheater, swimming area, walking paths and a large commercial/entertainment area. (Communities).



COMMUNITY PROFILE



PARKER: The beautiful and quiet City of Parker, known for its gorgeous sunsets, overlooks East Bay and St. Andrew's Bay. Parker is an incorporated municipality with a five-member city council including an elected mayor. Its landscape has changed dramatically due to Hurricane Michael. Many of the hundred-year-old oaks the city is known for are gone, yet there are plans to eventually replant the right kind of trees, ones that will better survive future storms.

AREA: 2 square miles

GEOGRAPHICAL AND COMMUNITY PROFILE: A small community of just over 4,400 citizens, Parker is nestled between the bays and Martin Lake. Although the City only comprises 2 square miles of land, residents and visitors enjoy 12 miles of shoreline. Its southern boundary is coastal and borders Tyndall Air Force Base. Parker is a neighborhood community with a large sports complex that will be rebuilt, a unique environmental/educational park, and two waterfront parks with boat launches and has its own fire/EMS and police departments.

Founded as a community in the early 1800's, the City of Parker celebrated its 50th anniversary as a municipality in 2017. The City is rich with history, being the earliest settled area in the County. If you are looking for a place to fish, water ski or just relax, this is the place. If you love to shop, there are many area stores within driving distance for your convenience (Communities).

EDUCATION: Parker Elementary School is home to 597 students at the K-5th grade school.

COMMUNITY PROFILE

SPRINGFIELD: On February 26, 1935, thirty-eight qualified voters met at W.B. Gray's Hardware and Lumber Company to select officers and organize a new municipal government. After the town officials had been elected, it was necessary to designate the official name of the municipality. There was only one name proposed: Springfield.



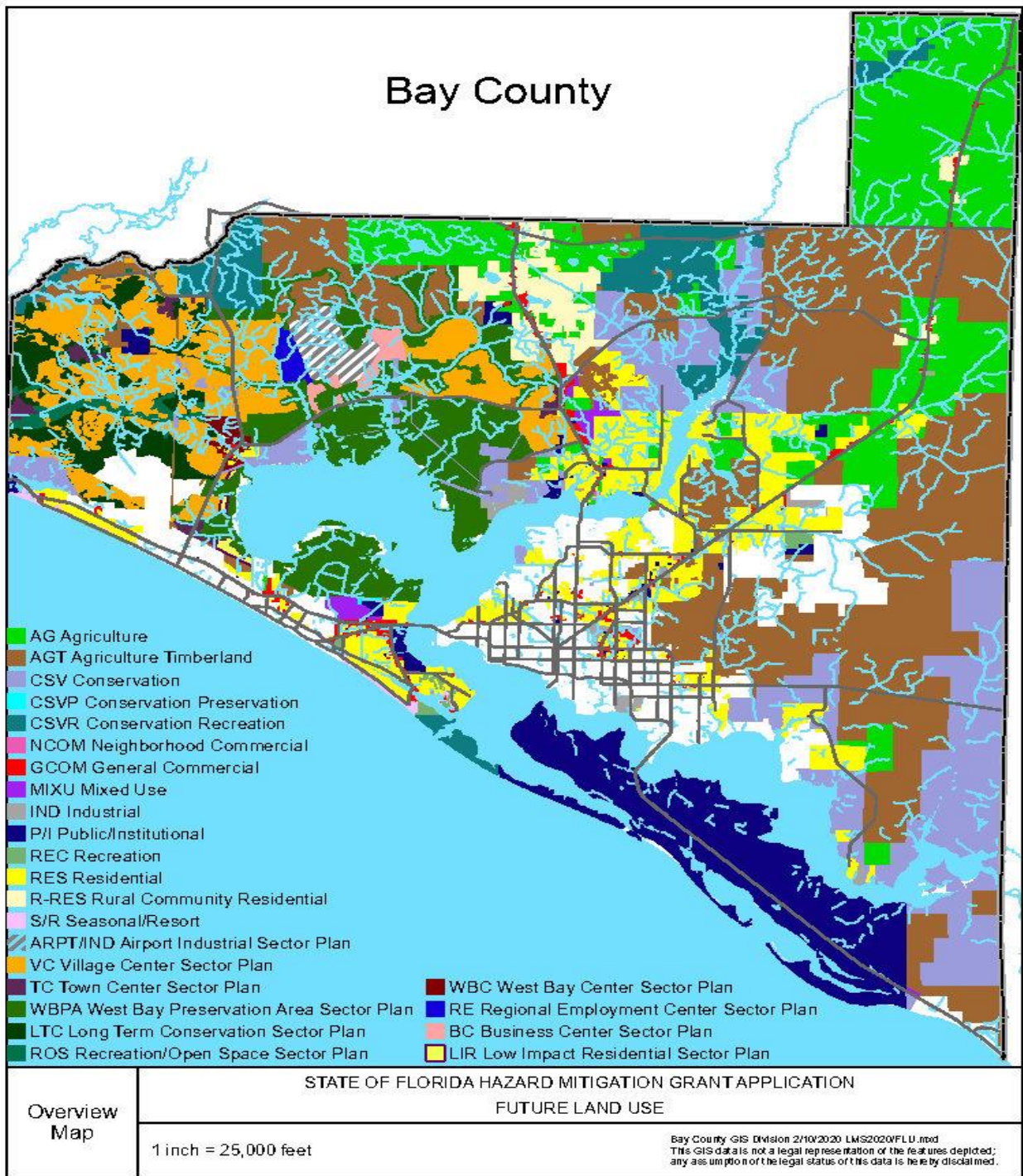
AREA: 4.6 square miles

GEOGRAPHICAL AND COMMUNITY PROFILE:

Springfield has grown into a thriving, mainly residential, city with an up-to-date water and sewer system, City Hall, innovative police and fire departments, a rentable community center, two beautiful walking parks, boat ramp access to Martin Lake, sports field, playground and a sports complex with two baseball fields and a soccer field.

Additionally, the City of Springfield has five medical facilities, a state veteran's home, three schools, (Springfield Elementary School, Everitt Middle School, Rutherford High School) and Shaw Police and Fire Training area utilized by our departments and other local municipalities. The city is located within 4 miles of Tyndall Air Force Base and borders the east side of Panama City. Over the years, Springfield has maintained its small-town appeal and is a great place to live. Springfield's leadership is proud of the friendly atmosphere and quality of life and feels confident that as you get to know it better, you will share the same opinion (Communities).

MAP 1. BAY COUNTY FUTURE LAND USE



Water Area:

(Florida Center for Instructional Technology, University of South Florida)

Bays/Lakes	Swamps	Branches/Tributaries	Creeks
East Bay	Bearthick Swamp	Goshum Branch	Sweetwater Creek
West Bay	California Swamp	Branning Branch	Reedy Creek
Deer Point Lake	Bear Swamp	Double Branch	Little Bear Creek
Court Martial Lake	Panther Swamp	Dave Branch	Bear Creek
Powell Lake	Old Camp Four Swamp	Long Branch	Juniper Creek
River Lake	Titi Swamp	Beefwood Branch	Moccasin Creek
		Parker Branch	Cat Creek
		Cooks Bayou	South Fork Bear Creek
		Eagles Nest Bayou	Clear Creek
		Mill Bayou	Bayou George Creek
		Clearwater Branch	Callaway Creek
		Doyle Bayou	Boggy Creek
		Kelly Branch	Oliver's Creek
		Tiller Branch	Mule Creek
		Three-mile Branch	Sandy Creek
		Sewell Branch	Burnt Mill Creek
		Ditch Branch	Pigeon Creek
		Dry Branch	Little Crooked Creek
			Crooked Creek
			Otter Creek
			Pine Log Creek
			Cedar Creek
			Econfina Creek

Drainage Patterns

The relatively flat terrain of Bay County and the large areas of wetlands and areas with a high water-table combine to present unique challenges for managing storm water runoff. In addition, the environmental regulations enacted in the past ten years have required storm water runoff treatment prior to its outflow to our natural waterways.

Frequently, where drainage systems exist, storm water runoff problems can be corrected by maintenance and repair efforts. Unfortunately, the County only has drainage easements for 30% of the existing primary drainage outfalls. As such, the County must secure permission from property owners prior to maintaining most outfall ditches.

The Roads and Bridges Division is responsible for the maintenance and repair of roadside drainage systems, primary drainage outfalls and traffic control. The existing infrastructure falls under the purview of this Division:

- Over 800 miles of roadside ditches/swales
- Over 50 bridges
- Over 84 box culverts
- Over 80.5 miles of pipe
- Over 9,301 inlets, headwalls, mitered ends
- Over 125 treatment facilities
- 51 beach outfalls (19 County)
- Over 1,311 Drainage Easements

Over the past several years, the Division has accomplished the following:

- Inventoried the Drainage System
- Revised the Land Use Code, Flood Plain Ordinance and Comprehensive Plan
- Completed 6 detailed sub-basin Master plans
- Completed 56/60 NOV's
- Completed 47 Drainage CIP projects totaling \$16.5 million
- Stabilized over 175 miles dirt roads (47%)
- Initiated an in-house dredging program
- Implemented a County Storm-water Utility
- In process of updating the County Storm-Water Master Plan and Strategic Plan

Future Joint Stormwater/Drainage Projects that Bay County along with Municipalities would like to undertake to ease flooding problems are:

- Transmitter Road Regional Stormwater Facility - (Joint Project between County and City of Springfield)
- Watson Bayou Regional Stormwater Facility - (Joint Project between County and City of Panama City)
- Redwood Avenue Drainage System - (Joint Project between County and City of Panama City)

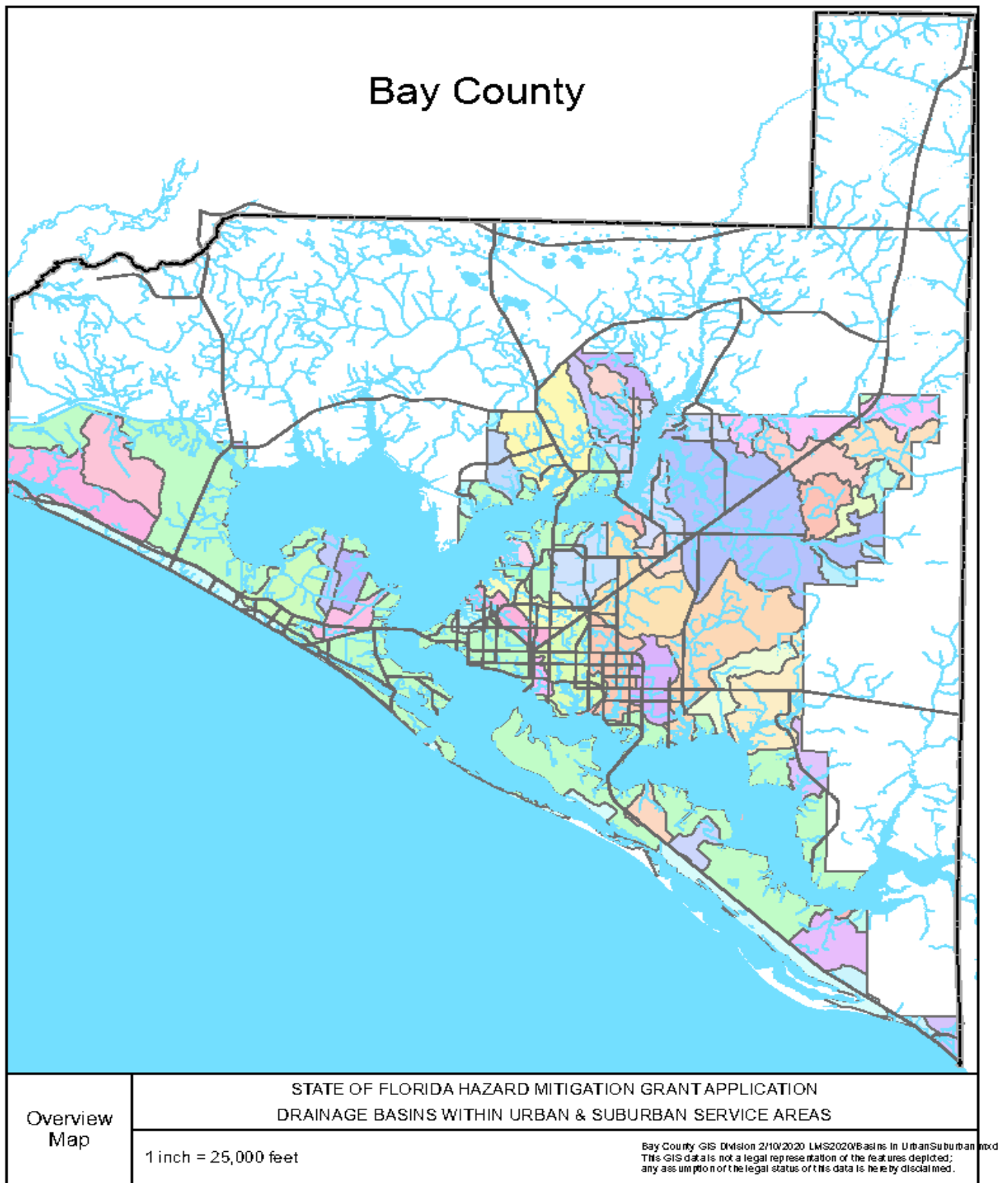
Storm water runoff problems are prioritized as follows:

- Environmental Problems
- Roadway Flooding
- Structural Flooding
- Yard Flooding

Due to the major vehicular traffic of over 180,000 residents and 17 million visitors annually, it takes a toll on the roadways throughout the County. The County's Road and Bridge Department is constantly working to maintain, repair and upgrade the roads throughout the County to ensure safe travel for all. Currently, the County has plans underway for joint projects with municipalities for the following projects to help alleviate traffic:

- 11th Street Realignment - (Joint Project between Bay County and City of Panama City)
- East Bay Parkway - (Joint Project between Bay County and Panama City Beach)

MAP 2. DRAINAGE FLOW PATTERNS



Environmentally Sensitive Areas & Conservation Lands

Bay County Conservancy (BCC) was formed in 1998 as a land trust dedicated to the preservation of environmentally sensitive lands in Northwest Florida in particular, Bay County. It initially started with title to 30 acres of wetlands in the middle of Panama City, Florida. (Bay County Conservancy)

The “*Audubon Nature Reserve*” is located off State Street in downtown Panama City. The Reserve includes Doctor’s Pond, which is encircled by cypress, Sweet Bay, and longleaf pine. During normal rain conditions, this area is home to wood ducks, wading birds, turtles, and other wetland species. The boardwalk and gazebo on the west side of State Avenue provide a short walk and a place for a picnic – or take the nature trail that begins at the gazebo.

“*Junipers Headwater Preserve*” is 40 acres of mixed upland and wetland on Silver Lake Road in unincorporated Bay County near the Fountain community. A short loop trail provides a peaceful setting for nature walks.

“*The Marjorie-Symone Preserve*” is an 11.5-acre parcel located on East Lakeland Drive off Highway 2311 east of Deerpoint Lake which consists of marsh grass and wildlife.

“*The Palm Reserve*” consists of 1/3 acre of property located on Beach Drive in downtown Panama City. With over 70 native palm trees on this little oasis of greenery, nestled between buildings and city streets, it is an important asset for storm water retention in the area. Native plants have been established as a wildlife garden and a picnic table and bench were installed for public use.

“*The Talkington Family Nature Reserve*” is a 10-acre site designed to provide habitat for the Panama City Crayfish and other wetland species. It is located just south of the intersection of 26th Street on Jenks Avenue in Lynn Haven.

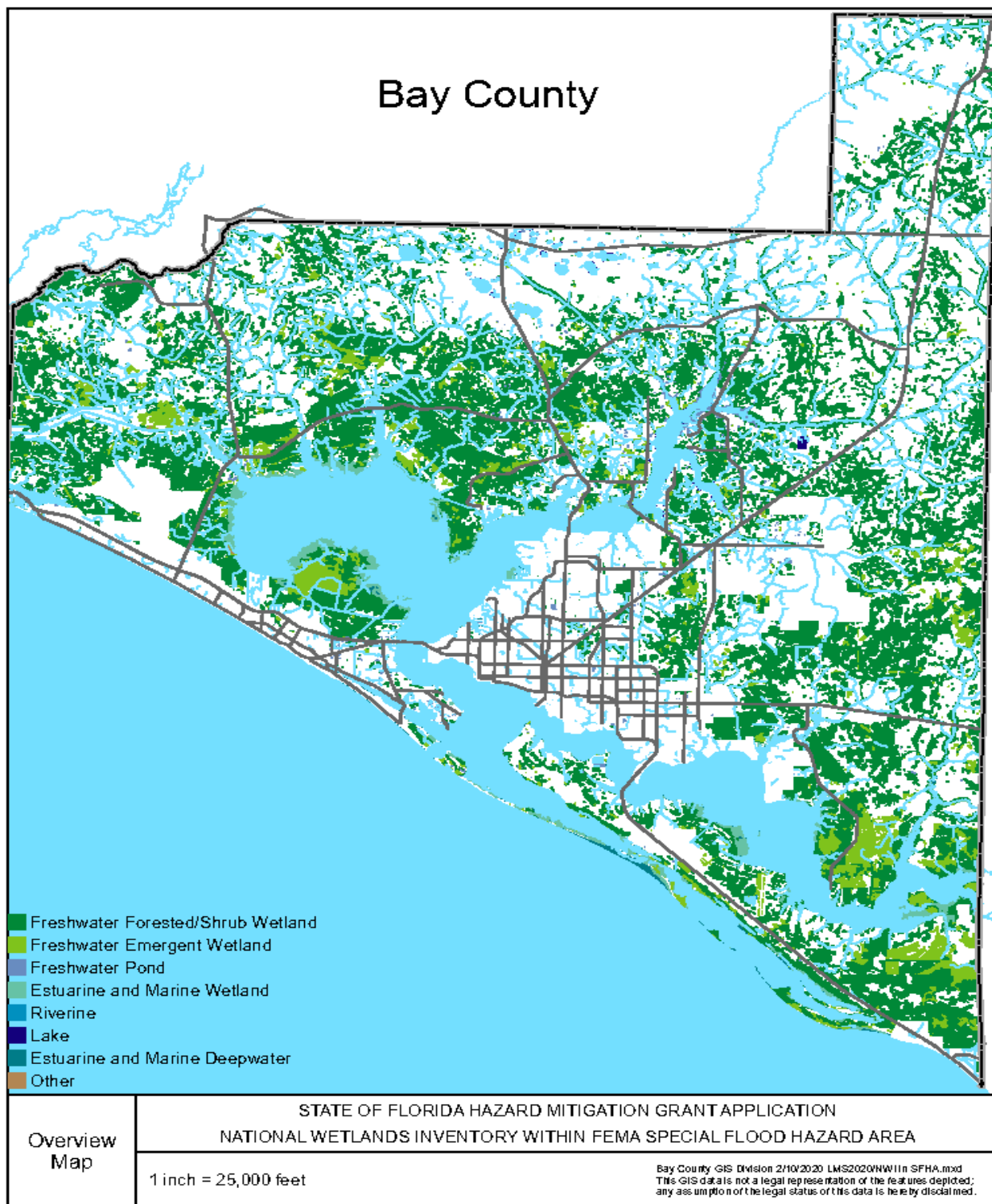
“The Jennings Preserve” is a 6-acre highly impacted city wetland preserve. It is a prime example of the usefulness of wetlands for storm water management. Vegetation absorbs and filters runoff, thus helping to protect St. Andrew Bay from pollutants. It is located between Highway 231 and 19th Street at Wilson Avenue.

The goal of Bay County Conservancy is to acquire land to preserve the present and future natural resources of the area due to the panhandle’s rapid growth rate and the constant pressure and threat of development of land and natural resources.

Preservation of such land areas provide many benefits to a community such as:

- wildlife habitat
- air cleansing
- storm water retention
- recreation and education
- aquifer recharge
- Green space for human renewal.

MAP 3. NATIONAL WETLAND INVENTORY & CONSERVATION LAND



Flood Zones

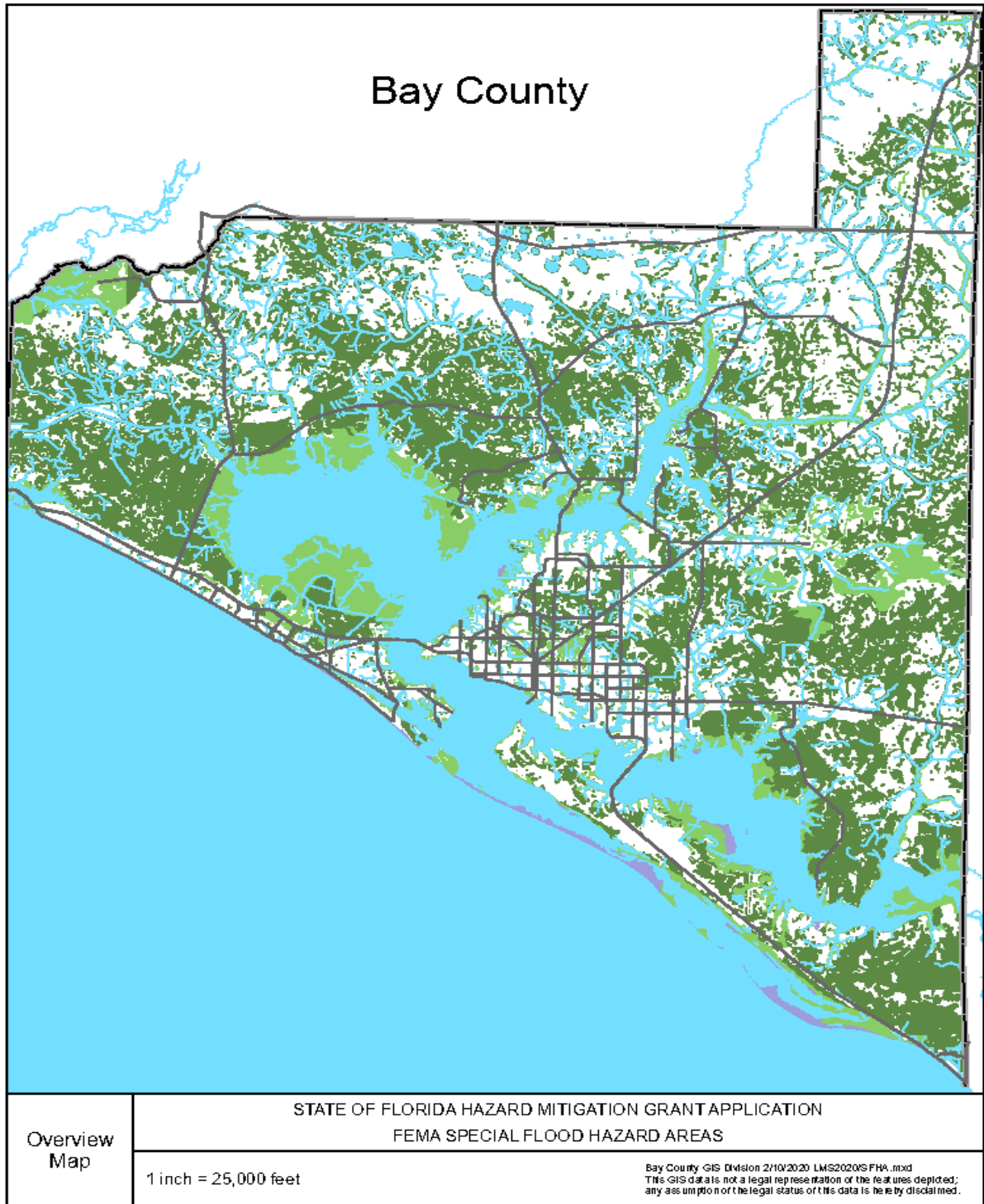
Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood hazard areas, labeled Zone B or Zone X (shaded) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded).

Bay County's Rating

In February of 2004, the Board of County Commissioners established the Bay County CRS Strategy Team to develop a course of action that would improve Bay County's rating. Implementation of a public awareness outreach program earned Bay County a class 7 rating, which provides for a 15% discount on flood insurance premiums. In 2008 Bay County increased their level of outreach programs and other activities and has improved their rating to a class 5. This increased Bay County residents' discount to 25%. In the last cycle evaluation conducted in 2016, Bay County retained a Class 5 rating. The next cycle evaluation is scheduled for 2020.

	<i>Description</i>
A	Zone "A" equates to a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because no detailed analysis exists within these areas, no depths or base flood elevations are shown within this zone. Flood insurance is required on federally insured mortgaged property. (100 Year Flood)
AE	The base floodplain where base flood elevations are provided.
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
VE	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

MAP 4. FEMA Flood Zones

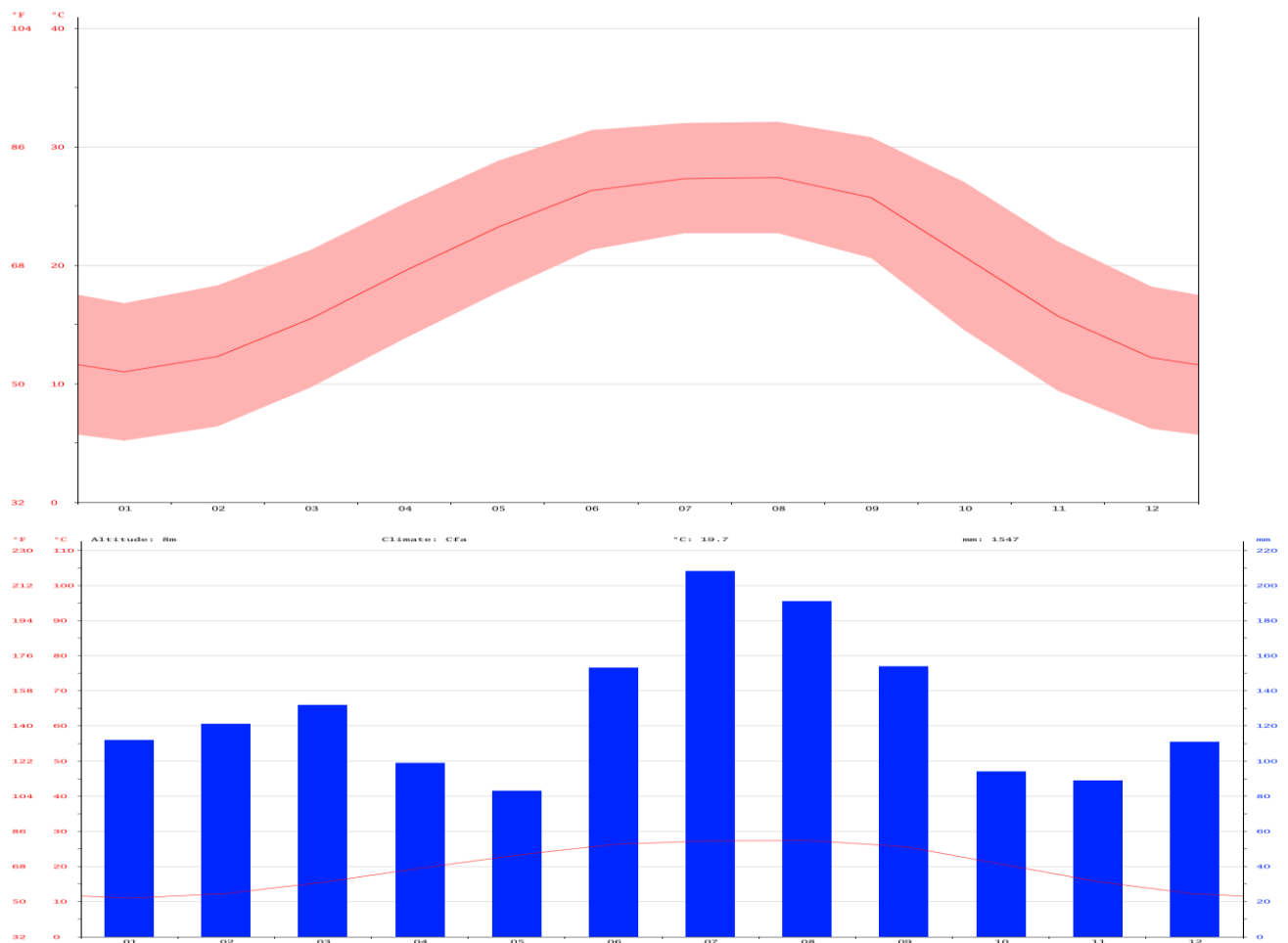


Climate

The average annual temperature of Bay County is 68.7 degrees Fahrenheit. Due to the large amount of inland bodies of water, the county experiences high relative humidity throughout the year.

Lying on the Gulf of Mexico causes daily sea breezes. These sea breeze enhance convective activity providing regular afternoon showers and thunderstorms. This occurs mainly in June through September. The dry season extends from October through December where the County is subject to frontal boundaries bringing cooler, dry air.

The average January temperature is 63 degrees F, and the average August temperature is 90 degrees F. The average annual rainfall is 61.06 inches.



DEMOGRAPHIC PROFILE

Total Population: The total population of Bay County, including the incorporated Cities is 185,287; an increase of 0.97% from 2010 (2018, Census).

Table 1. Total Population/Population Change (Source: Census, 2018 Estimates)

Total Population 2018	Total Population 2010	Population Change
185,287	168,852	0.097%

Population Density: Much of the population resides within Urban Growth Boundary, an area where urban scale development is concentrated and where public facilities, such as utilities, schools, transit, and other public facilities are provided.

Table 2. Jurisdictional Distribution of Population (Source: Census, 2018 Estimates)

Jurisdiction	Population 2010	Population 2018
Callaway	14336	15216
Lynn Haven	18474	21492
Mexico Beach	1072	1023
Panama City	34687	36908
Panama City Beach	11554	13065
Parker	4317	4584
Springfield	8902	9452

Table 3. Age Distribution (Percentage) of Population (Source: Census, 2018)

Age Cohort	Population 2010	Population 2018
0-19	25.1%	23.8%
20-44	33.4%	32.6%
45-49	8.1%	6.4%
50-54	7.3%	7.4%
55-59	6.5%	7.3%
60-64	5.4%	6.1%
65-69	4.5%	5.7%
70-79	6.3%	6.5%
80 +	3.2%	4%

Median Age 2018
39.6

Language Breakdown: Among people, at least five years old living in Bay County, 93.12 % speaks only English at home. 3.3% speak Spanish, other Indo-European 1.5%, Asian 1.6%, and other 0.5%

Race & Ethnicity:

Table 4. Race Distribution (Source: Census, 2018)

<i>Race</i>	<i>Percentage 2018</i>	<i>Population 2018</i>
White	147474	81.9%
Black	19740	11.0%
Asian	4196	2.3%
Other	1400	0.8%
Two or more	5864	3.3%
Hawaiian/ other	54	0.0%

Those Living in Poverty

According to the Florida Office of Economic and Demographic Research, 24,829 (13.4%) of the population lives below the poverty level. Those living in poverty are more likely to be living in vulnerable structures, such as mobile homes, as well as having increased difficulty in evacuating due to obstacles in obtaining means of transportation. This population is also more likely to require shelter provision.

Inmate Population – Bay County has one facility that houses prison inmates. Bay Correctional Facility is an adult male medium/minimum security facility. The average inmate population since 2013 for the Bay County Jail Facility evaluated by fiscal year is listed below:

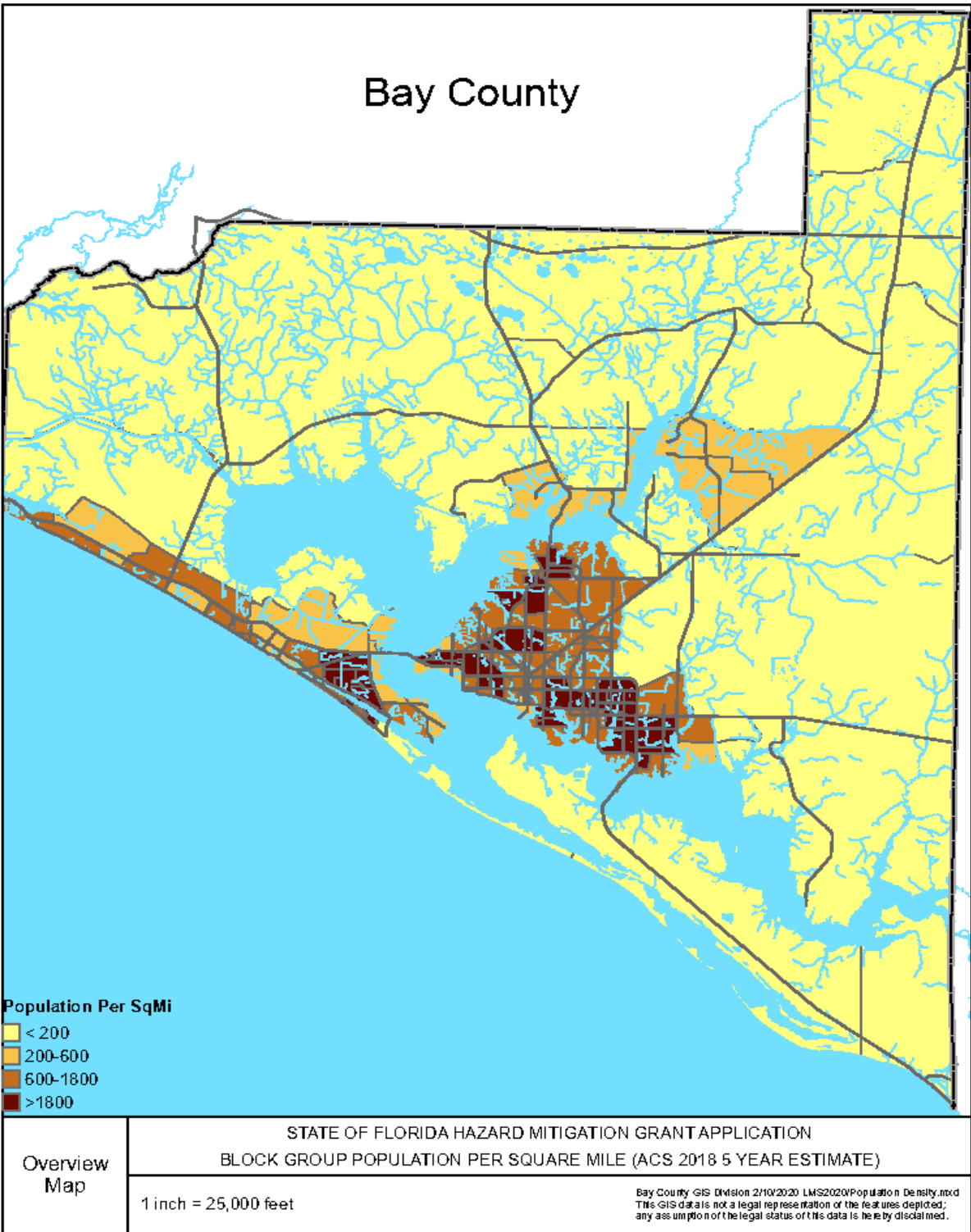
FY 2013-2014	877 inmates
FY 2014-2015	953 inmates
FY 2015-2016	1,038 inmates
FY 2016-2017	1,062 inmates
FY 2017-2018	1,114 inmates

Seasonal & Visitors Population - Bay County houses a seasonal and visitor population of approximately 17 million annually which equates to 1.4 million monthly. Patrons staying through the months of April through September average stays of 4-7 days; while patrons staying through the months of October – March average stays of 1-6 months. Bay County has many visitors that escape the harsh winter months of Canada and the northern United States and are considered “snowbirds” while they vacation for several months at a time during the winter in Bay County. Most of these individuals are over the age of 60 and are retired.

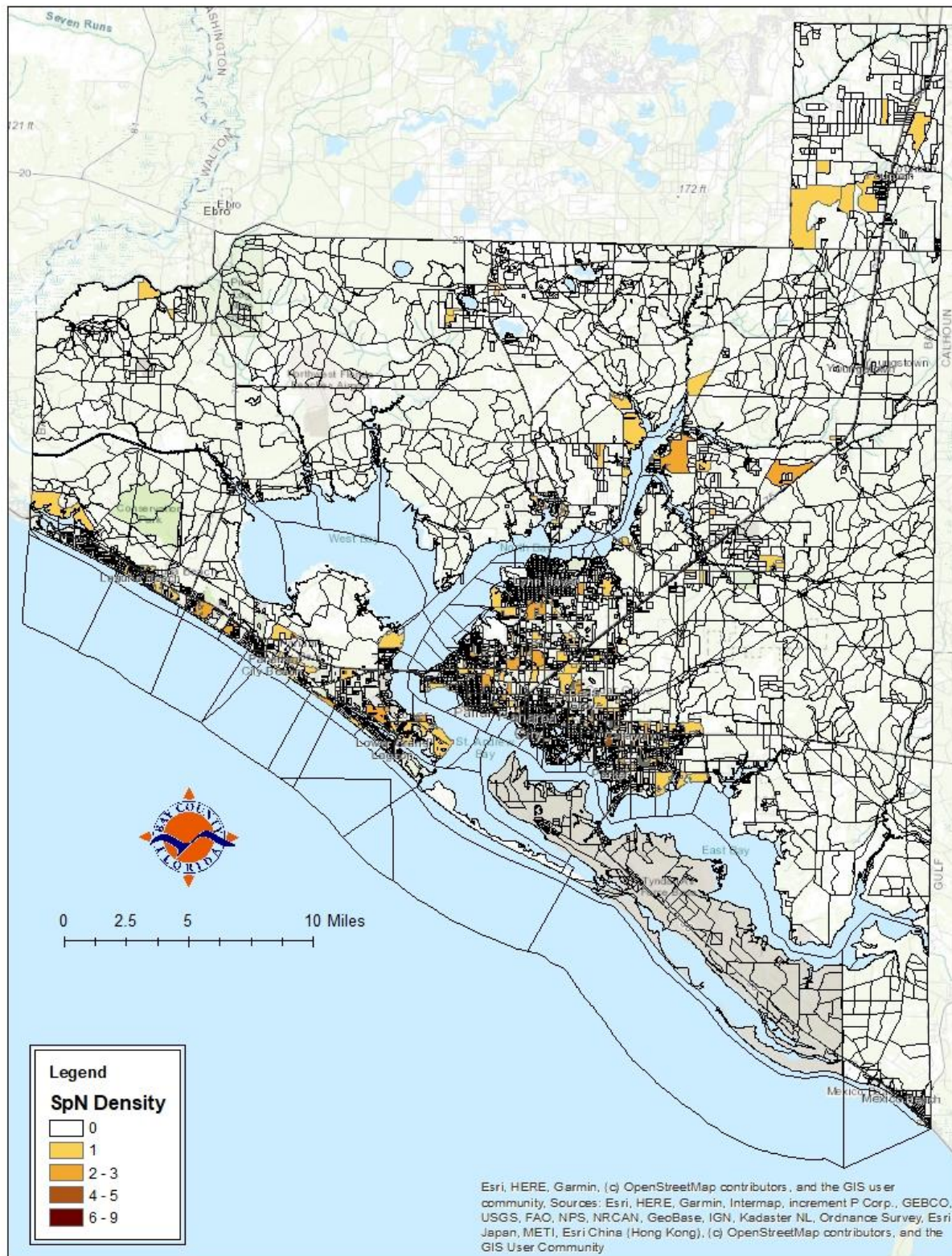
Special Needs Populations:

During periods of threatening conditions, Bay County provides special shelter accommodations for registered persons with special needs. Populations with special needs are identified as needing some assistance with the administration of medication, require oxygen or electricity for medical equipment, and suffer from emphysema, partial paralysis, heart problems, Parkinson's disease, dementia, or incontinence. As of October 2019, Bay County has a total of 328 registered persons with special needs.

MAP 5. POPULATION DENSITY MAP



MAP 6. SPECIAL NEED DENSITY MAP



ECONOMIC PROFILE

Bay County (including incorporated cities)

Income per Capita: \$26,742

Median Household Income: \$50,283 (July 2017)

Table 5. Residential Properties (10/19 BCPA)

Single Family	56,349 parcels
Vacant Single Family	21,130 parcels
Mobile/Mod/Manufac.	8,634 parcels
Condominium	18,928 parcels
Time share	323 parcels
Multi-Family >10du:	128 parcels
Multi-Family <10 du:	1,916 parcels

Retirement home	1 parcel
Improved commercial	3,352 parcels
Vacant commercial	2,379 parcels
Improved industrial	725 parcels
Vacant industrial	91 parcels
Improved timber/Agr	1,646 parcels
Church/hospital/lodge	614 parcels
Government	1,260 parcels
Vacant government	1,172 parcels

Table 6. Housing Characteristics: (US Census, 2017)

Total housing units	101,437 units
Occupied housing units	68,667 units
Owner occupied	42,881 units
Renter occupied	25,786 units
Vacant housing units	32,770 units

Average Property Values: According to the Property Appraiser's office, the average market or appraised (just) value of single-family homes in Bay County is \$165,425; the average assessed value, before exemptions is \$158,709. The average market or appraised (just) value of improved commercial properties in Bay is \$729,839, assessed \$725,653.

Employment Sectors: Among the most common occupations within the major industries in Bay County are trade, transportation and office & Administrative support (28.96%), professional and business services occupations (14.16%), leisure and hospitality occupations (8.98%), financial occupations (11%), education and health service occupations (8.61%), and construction occupations (5.44%).

Major Employers: Bay County's central location positions well for manufacturing, distribution, and corporate headquarters operations. A listing of Bay County's major employers is provided below.

Table 7. MAJOR EMPLOYERS

<i>Company Name</i>	<i>Employment Type</i>	<i>No. of Employees</i>
Tyndall Air Force Base	Military	6416
Naval Support Activity – Panama City	Military	3300
Bay District Schools	Government	3000
General Dynamic Information	Healthcare	2,300
Ascension Sacred Heart Hospital Bay	Medical	1,800
Wal-Mart and Sam's Club	Retail	1,500
Eastern Shipbuilding	Manufacturing	1000+
Trane	Air Conditioning	700
Ingersoll Rand/Trane	Air Conditioning	700
Gulf Coast Medical Center	Medical	631
Bay County Board of Commissioners	Government	608
Berg Steel Pipe Corporation	Manufacturing	405
Gulf Coast State College	Education	400
City of Panama City	Government	537
West Rock	Manufacturing	480
Sheraton Point Resort	Resort	250-500
Royal American Management	Construction	375
Sprint	Customer Care	365
Publix Super Markets	Grocery Store	355
Resort Collection of Panama City Beach	Resort	320
Target	Retail	300
US Post Office	Postal Service	300
Winn Dixie	Grocery Store	300
Life Management Center of NW Florida	Health Care	270
City of Panama City Beach	Government	262
BookIt.com	Travel	250
Health South Emerald Coast Rehabilitation	Health Care	235
Tyndall Federal Credit Union	Credit Union	200
Merrick Industries	Manufacturing	185
News Herald	Newspaper	184
Applied Research Associates	Research/Engineering	174
L-3 Communications	Communications Systems	165
Early Education and Care Inc.	Education	162
City of Lynn Haven	Government	156
Jensen USA	Manufacturing	150
Buffalo Rock/Pepsi	Bottling/Distribution	140
Gulf Power Company	Power Company	140
Comcast	Telecommunications/Media	133
Hancock Bank	Banking	130
Kohl's Department Store	Retail	130
Best Buy	Retail	125
Booz, Allen, Hamilton Engineering Services, LLC	Engineering	125
Chemical Addictions Recovery Effort	Health Care	117
Eye Center of North Florida	Manufacturing	110
GAC Contractors	Construction	105
Anchorage Family Counseling	Family Services	100

TRANSPORTATION PROFILE

Public Transit

Bay County Public Transit System is the County's main public transportation system, which includes the Bay Town Trolley and the Bay Area Transportation System. It serves the residents of Bay County along with the municipalities of Panama City, Panama City Beach, Lynn Haven, Callaway, Springfield, and Parker.

Bay Town Trolley provides a fixed route system with 10 buses daily for a total of 8 routes averaging 2,000 trips per day: totaling approximately 730,000 trips annually.

Bay Area Transportation (BAT), is a demand response system that picks riders up at an address or defined location and transports them to a specific address or location. This system requires riders to complete an application and be qualified prior to riding. The system typically is referred to as non-emergency transport and serves as curbside-to-curb, shared ride service for transportation for the elderly, disabled and those considered transportation disadvantaged who do not have access to transportation to medical appointments, work, school, shopping, and many adult day facilities. Riders are required to make reservations at least 24 hours prior to the trip. Fifteen buses operated daily with an average of 300 trips per day: totaling approximately 109,500 trips annually.

The Bay County Transportation Planning Organization is responsible for the fixed route system and the Bay County Board of County Commissioners is responsible for the demand response system. Bay County Board of County Commissioners is the Community Transportation Coordinator (CTC) for Bay County, Florida.

Public and Private Air

A complete list of airfields and landing areas in Bay County is provided below.

TABLE 8. MAJOR AIRFIELDS/HELIPORTS

Name	Location	Facility Usage
Northwest Florida Beaches Intl. Airport	Panama City	Commercial Air
Bay Helicopters Heliport	Panama City	Private Facility
Ascension Sacred Heart Hospital Bay	Panama City	Private Medical
Bay Seaplanes Seaplane Base	Panama City	Private Facility
Coastal Helicopters Inc. Heliport	Panama City	Private Facility
Coastal Systems Station Heliport	Panama City Beach	U.S. Military
Grand Lagoon Seaplane Base	Panama City Beach	Private Facility
Gulf Coast Medical Center	Panama City	Private Medical
Heli-Tech Inc. Heliport	Panama City	Private Facility
Post Electric Inc. Heliport	Panama City	Private Facility
Sandy Creek Airpark Airport	Panama City	Private Facility
Tyndall Air Force Base	Panama City	U.S. Military
Beach Mosquito Control Heliport	Panama City Beach	Local Government
Panhandle Helicopter LLC Heliport	Panama City	Private Facility
Yellow Whirley Bird Heliport	Panama City Beach	Private Facility
West Bay Creek Seaplane Base	Panama City Beach	Private Facility
Shands Cair	Panama City	Private Medical

LMS PLANNING PROCESS

The planning process used by Bay County is very flexible in meeting the analysis and documentation needs of the planning participants. It allows the planning participants to include data and information unique to their communities and planning capabilities into the Local Mitigation Strategy Plan. The process assists the Working Group by utilizing a full range of information in technical analysis and the formulation of proposed mitigation initiatives for incorporation into the Local Mitigation Strategy Plan.

This section of the Local Mitigation Strategy Plan discusses the organizational structure used to complete the planning process. It also provides a summary of the current status of planning activities by the participants, documenting the level of participation by the jurisdictions making up the Working Group. The Working Group's bylaws and operating procedures, located in Appendix C, further define how participation in the planning process is determined.

PLANNING PROCESS OVERVIEW

Planning efforts are conducted by a variety of methods in addition to the formal committee meetings documented, e.g., through phone contacts and electronic mail contacts among jurisdiction representatives, support staff, and the LMS Working Group chair and vice-chair. All jurisdictions have provided planning data for Local Mitigation Strategy Plan and are considered to have participated in plan development. Efforts will continue to be made by the County to re-engage any organization that has not been active participants during the planning process. An ongoing goal of the Working Group is to ensure that the number of participating organizations and groups continues to grow.

The effort begins with developing a community profile of Bay County to document the basic characteristics of the community relevant to controlling the impacts of events. LMS Working Group Members are asked to submit mitigation initiatives that may be implemented if resources to do so became available.

Once the proposed initiatives are reviewed and coordinated, the Working Group can then decide to formally approve them by vote in order to incorporate them into the Bay County Local Hazard Mitigation Plan as part of the Local Mitigation Strategy (LMS). As soon as the Working Group approves a proposed mitigation initiative, it is considered to be officially a part of the Bay County Local Mitigation Strategy Plan, and expected to be implemented by the sponsoring organization as soon as the resources and/or opportunity to do so become available.

LOCAL MITIGATION STRATEGY WORKING GROUP

As a prerequisite for participating in the Hazard Mitigation Grant Program (HMGP), Bay County has established a formal Local Mitigation Strategy Working Group. Every January, the Chairperson of the Board of County Commissioners will submit a list of the members and the designated chairperson and vice-chairperson to the Florida Division of Emergency Management.

The purpose of the Working Group is to decrease the vulnerability of the citizens, governments, businesses and institutions of Bay County, Florida, to the future human, economic and environmental costs of disasters. The Working Group develops, monitors, and maintains a local strategy for hazard mitigation and post-disaster redevelopment. Participation in the planning process requires a consistent and active membership within the Working Group.

In accordance with 27P-22, Florida Administrative Code, the Working Group must include at a minimum:

- Representation from Planning and Zoning, Public Works, Emergency Management, Water Management Districts.
- Representation from all Interested Municipalities within the county.
- Representation from interested Independent Special Districts, Non-Profit Organizations, Native American Tribes or Authorized Tribal Organizations; and
- The Public

The Working Group meets in a duly noticed public meeting. Notice is provided in compliance with the State of Florida “*Sunshine Law*”. Meeting times and dates are subject to the approval of the Working Group Chairperson.

Role of the LMS Working Group

The role of the Working Group as defined by Article 27P-22 of the Florida Administrative Code states that it is the responsibility of the Working Group to maintain the Local Mitigation Strategy Plan. Specifically, the Working Group is responsible for the development and revision of the Local Mitigation Plan, coordination of all mitigation activities, setting and order of priority for local mitigation projects, and to submit an annual update to the Florida Division of Emergency Management by the last working day of each January. Annual updates shall include, at a minimum, any revisions to the following:

- Changes to the hazard assessment.
- Changes to the project priority list.
- Changes to the critical facilities list.
- Changes to the repetitive loss property list; and
- Revisions to any maps.

LMS Working Group Participating Entities

Participation in the Working Group is voluntary by all participating entities. Membership is open to all jurisdictions, organizations and individuals supporting its purposes. Bay County does not have an established jurisdictional body of Native Americans within its jurisdiction. No representation on the Working Group is required. The agencies and organizations currently represented in the planning process are listed in the table below entitled “Bay County LMS Working Group Membership”.

Table 9. Participating Entities of the LMS Working Group

<i>Entity</i>	<i>Contributing Department</i>
Public Representation	Citizen
Panhandle Engineering	Engineering Group
Gortemoller Engineering	Engineering Group
Bay County	Emergency Management Division
Bay County	Fire Department
Bay County	Public Works and Engineering Department
Bay County	Sheriff's Office
City of Callaway	City Manager
City of Callaway	Public Works Department
City of Lynn Haven	Fire Department
City of Lynn Haven	Public Works Department
City of Lynn Haven	Utilities Division
City of Mexico Beach	Administration Department
City of Mexico Beach	Public Works Department
City of Panama City	Engineering Department
City of Panama City	Fire Department
City of Panama City Beach	Administration Department
City of Panama City Beach	Fire Department
City of Panama City Beach	CRS Coordinator
City of Parker	Fire Department
City of Parker	Police Department
City of Springfield	Administration Department
City of Springfield	Public Works Department
Tyndall Air Force Base	Planning Inspection Department
Naval Support Activity Center	Emergency Management
Bay School District	Facilities Management
Bay School District	Energy and Conservation Management Div.
Team Rubicon	City Coordinator
American Red Cross	Disaster Services
Rebuild Bay County Inc.	Community Outreach
UF/IFAS Extension Bay County	Grants Division
Panama City Housing Authority	Administration
Gulf Coast State College	Administration & Facility Manager
NW Florida Beach Airport	Fire Department
Port of Panama City	Port Authority
NW Florida Water Management	Planning Division
Florida Division of Forestry	Administration Division

c

LMS Working Group Operating Procedures

The process described in the procedures mainly addresses how hazard mitigation initiatives are to be developed and processed. These procedures involve both a technical approach to the planning and an organizational methodology for incorporating mitigation initiatives into The Plan.

The planning process is an ongoing function of the Working Group. The planning work conducted to develop the Local Mitigation Strategy Plan relies heavily on the expertise and authorities of the participating agencies and organizations, rather than on detailed scientific or engineering studies. The Working Group is confident that the best judgment of the participating individuals, because of their role in the community, can achieve a level of detail in the analysis that is more than adequate for purposes of local mitigation planning. As the planning process described herein continues, more detailed and costly scientific studies of the mitigation need of the community can be defined as initiatives for incorporation into the Plan and implemented as resources become available.

The planning process used by the Working Group is based on the following concepts:

- A multi-organizational, multi-jurisdictional planning group establishes specific goals and objectives to address the community's vulnerabilities to all types of hazards.
- The planning procedure utilizes a logical process of hazard identification, risk evaluation and vulnerability assessment, as well as review of past events, that is consistently applied by all participants using common evaluation criteria.
- Mitigation initiatives are proposed for incorporation into the Plan only by those jurisdictions or organizations with the authorities and responsibilities for implementation.
- The process encourages participants to propose specific mitigation initiatives that are feasible to implement and clearly directed at reducing specific vulnerabilities to future events.
- Proposed mitigation initiatives are characterized in a substantive manner to assure cost effectiveness and technical merit. Initiatives are also coordinated among jurisdictions through a peer review process to assure that conflicts or duplications are avoided.
- All mitigation initiatives to be incorporated into the plan are prioritized.
- The Plan is periodically reviewed and adopted by the participating jurisdictions' governing bodies to ensure that the mitigation actions taken by their organizations are consistent with each community's larger vision and goals, as well as any unique needs and circumstances. The adoption process includes instructing the jurisdictions' agencies and organizations to continue to refine, expand and implement the Plan.

LMS Working Group Bylaws

The Working Group has adopted bylaws to establish purpose and responsibility, to create a structure for the organization, and to establish the other fundamental characteristics of the Working Group as a community organization. The current edition of the bylaws is enclosed in Appendix C.

PUBLIC INVOLVEMENT

Public participation is an important part of the Local Mitigation Strategy and will continue to be fostered. The Local Mitigation Strategy Working Group is committed to engaging the public in the planning process. Public participation is encouraged through the issuance of media releases, public hearing, and outreach efforts. Public notices are issued at least 15 days prior to a public hearing. These notices are posted on the Bay County Events Calendar, the Bay County Public Notices webpage and posted on each of the Public Notice Bulletin Boards in the County's Administration Building.

All Local Mitigation Strategy Working Group public hearings are noticed and open to the public. Representatives from the public participate as voting members of the Working Group. From the very beginning of the planning process, the Working Group engages the public in decisions that outline the framework of the Local Mitigation Plan.

A special public meeting was held on February 12, 2020 to provide the Working Group and members of the public an additional opportunity to review the draft Local Mitigation Plan and provide feedback. Non-Voting public partners such as Northwest Florida Water Management District and University of Florida Institute of Food and Agriculture played a vital role in the public process and implementation of writing this LMS Plan. Also, a resident of Bay County, attended the majority of the LMS Working Group meetings as the "public representative" and the official vote and was in complete participation, review, and implementation of the overall Bay County LMS Strategy Plan.

Copies of all public meeting documentation, including review of the Local Mitigation Strategy Plan, update can be viewed in Appendix D.

THREAT HAZARD IDENTIFICATION AND RISK ASSESSMENT

The LMS Working Group recognizes hazards that threaten the community and uses information to estimate the relative risk for each hazard as an additional method to focus analysis and planning efforts. The Working Group compares the likelihood or probability that a hazard will impact an area, as well as the consequences of that impact to public health and safety, property, the economy, government, and the environment. The comparison of the consequences of an event with the probability of occurrence is a measure of the risk posed by that hazard to the community. The complete Hazard Identification and Risk Assessment is available as a part of the Local Mitigation Plan found in Appendix K.

The Threat Hazard Identification Risk Assessment (THIRA) is completely revised for the current version of the Local Mitigation Strategy. New hazards in the Natural Hazard section include Climate Change and Geomagnetic Storms. Cyber events have been included in the Man-made hazard section. The following table on page 42 reflect an overview of the Bay County natural and man-made hazards depicting risk and impact.

The Local Mitigation Strategy did not specifically include drought and extreme temperatures, both hot and cold. While these may impact the entire County, the Local Mitigation Strategy Working Group

does not believe the hazard rises to the level of specific successful mitigation activity. The Emergency Management Division maintains the hazards as a recognizable risk, but they generally fall within the normal course of preparedness activity.

VULNERABILITY ASSESSMENT

Estimating the relative risk of different hazards is followed by the assessment of the vulnerabilities in the likely areas of impact to the types of physical or operational impacts potentially resulting from a hazard event. The table on the following page relates the recognized hazards to the community assets providing an impact rating based on each hazard.

The Plan states that changes in the community, such as growth and development, increase or change the vulnerability. This is true in that as the population increases, there is generally a greater exposure to hazards listed in the assessment. The Working Group strives to ensure that development does not occur within areas of recognizable risk including the Special Flood Hazard Areas. It is also true that as the demographics and business profiles change within the community there is naturally greater vulnerability simply by increased demand for service, as is the case for population sheltering.

The most recent shelter survey by the Florida Division of Emergency Management shows a shelter-space deficit in the county. This deficit is due to the devastation that Bay County encountered due to Hurricane Michael in 2018. The Working Group is keeping a watchful eye and working with local authorities to come up with new sheltering opportunities for the County. It is important to keep up with changes in the community.

A methodical, qualitative examination of the vulnerabilities from future events within Bay County occurs at least annually or, on an as needed basis, at the request of the Working Group. The process typically results in the identification of specific vulnerabilities that are addressed by specific mitigation initiatives which can be incorporated into the Local Mitigation Strategy Plan.

As an associated process, the Working Group also reviews experiences with past events to see if those events highlighted the need for specific mitigation initiatives. These experiences can also result in the recommendation of mitigation initiatives for incorporation into the Plan. The second avenue for assessment of community vulnerabilities involves comparison of the existing policy, program and regulatory framework promulgated by local jurisdictions to control growth, development and facility operations in a manner that minimizes vulnerability to future events. The Working Group can assess the individual jurisdictions' existing codes, plans, and programs to compare provisions and requirements against the hazards posing the greatest risk to that community. If indicated, the participating jurisdiction can then propose development of additional codes, plans or policies as mitigation initiatives for incorporation into Local Mitigation Plan for future implementation when it is appropriate to do so.

HAZARD/ASSET IMPACT TABLE

Community Asset	General Population	Special Need Population	Critical Facilities	Critical Infrastructure	Natural Resources – Rivers, Lakes,	Residential Buildings	Commercial Buildings	Agriculture & Livestock	Tourism	Business Industry Commerce	Environment	Public Confidence	Transportation Systems	Public Safety Services	Medical Healthcare	General Government Services
Hazard																
Tropical Cyclone	4	4	4	4	3	4	3	3	4	4	2	2	3	2	3	4
Flooding	4	3	1	2	4	4	3	3	3	3	2	2	3	3	3	4
Tornado	4	4	4	4	2	5	4	2	3	4	2	2	2	3	4	3
Wildfire	2	2	2	3	3	2	2	3	1	1	2	3	2	3	2	2
Severe Thunderstorm	3	3	3	3	3	3	3	2	2	2	1	1	1	2	2	1
Geomagnetic Storm	2	2	3	2	1	1	3	1	2	3	1	3	2	3	3	2
Sinkholes	1	1	2	3	1	3	3	1	2	2	1	3	2	2	2	1
Climate Change	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1
Terrorism	5	5	4	3	3	2	2	2	4	4	3	3	4	3	4	3
Nuclear Facility Incident	2	2	2	2	4	2	2	5	4	4	5	3	2	2	3	2
Pandemic	4	5	2	1	1	1	1	2	4	4	2	3	2	5	5	4
Agriculture/Livestock Disease	2	1	1	1	2	1	1	5	4	4	2	2	1	1	1	1
HazMat Release	3	3	3	2	4	3	3	4	3	4	5	2	4	3	4	2
Transportation Incident	2	2	1	2	1	1	1	1	3	3	3	2	5	3	3	1
Civil Unrest & Mass Migration														Blue	Natural Hazard	
Cyber Attack														Red	Manmade Hazard	

1 = Little or no impact – no loss of service

2 = Small impact, rare service interruptions, some small inconveniences throughout the asset categories with slight increase in response efforts

3 = Moderate impact, scattered service interruptions, increased demand for assistance, road closures, businesses interrupted, longer response times, some personnel missing from work, decreased productivity, buildings damaged

4 = High impact, widespread services loss, heavy demand for assistance, major road closures, many business halted, delayed emergency response, personnel absent, heavy damage, outside assistance required, shelters required

5 = Significant impact, most services down, overwhelming demand for assistance, buildings destroyed or compromised, response halted or deterred, personnel cannot travel, significant roads and infrastructure compromised, widespread geographical impact

MITIGATION STRATEGIES

This section of the Local Mitigation Strategy Plan identifies mitigation strategies that aim to reduce the community's risk from natural and man-made disasters. The Local Mitigation Strategy Working Group establishes the following goals and objectives to guide mitigation efforts and activities within the County to reduce the loss of life and property by lessening the impact of disasters. The goals and objectives are multi-hazard in scope and written to meet the needs and capabilities of all communities within Bay County.

Each goal provides objectives that define specific mitigation results that guide the development and implementation of proposed mitigation initiatives.

Goals & Objectives

1. To establish and continue local government capabilities for developing, implementing, and maintaining effective mitigation programs by:

- Making collected data and information needed for defining hazards, risk areas and vulnerabilities readily available
- Helping emergency services organizations develop preplanning capability to promptly initiate emergency response operations
- Supporting effective use of data and information related to hazard mitigation planning and program development
- Measuring and documenting the effectiveness of hazard mitigation initiatives implemented in the community
- Deriving and utilizing mitigation "lessons learned" from each significant disaster event occurring in or near the community
- Making community mitigation planning and programming assistance available to the community

2. To build toward a disaster resilient community with all sectors of the community working together by:

- Advocating for resources to establish and implement a business continuity and recovery program in the community for key community organizations
- Establishing and maintaining interagency agreements for local agencies and organizations, where possible, for the development and implementation of mitigation-related projects and programs
- Having governing bodies endorse and implement the Local Hazard Mitigation Plan and support community mitigation programming
- Establishing and continuing successful outreach programs, where possible, to gain participation in mitigation programs from key business, industry, institutions, and community groups and periodically updating the community regarding local efforts in mitigation planning.

3. To maximize capabilities for initiating and sustaining emergency response operations during and after a disaster by:

- Establishing and maintaining policies concerning the relocation, retrofitting or modification of evacuation routes
- Determining evacuation shelter priorities for the funding of shelter retrofit or relocation needed to ensure their operability during and after disaster events
- Retrofitting or relocating local emergency services facilities to withstand the structural impacts of disasters, as funding becomes available
- Providing response capabilities necessary to protect visitors, special needs individuals, and the homeless from a disaster's health and safety impacts as resources permit
- Retrofitting or relocating shelters or structures for vehicles and equipment needed for emergency services operations to withstand the impacts of disasters as funds become available
- Retrofitting or relocating utility and communications systems supporting emergency services operations to withstand the impacts of disasters as funds become available
- Prioritizing routes to and from key critical facilities and evacuation routes for accessibility

4. To minimize disruption to the continuity of local government operations by:

- Retrofitting or relocating buildings and other facilities used for the routine operations of government, where possible, to withstand the impacts of disasters
- Preparing community redevelopment plans to guide decision-making and resource allocation by local government in the aftermath of a disaster
- Working to protect important local government records and documents from the impacts of disasters
- Updating plans and identifying resources to facilitate reestablishing local government operations after a disaster
- Obtaining redundant equipment, facilities, and/or supplies, as needed funding becomes available, to facilitate reestablishing local government operations after a disaster

5. To minimize threats of disasters to the health, safety and welfare of the community's residents and visitors by:

- Establishing and maintaining systems for notifying the public at risk and providing emergency instruction during disasters
- Supporting effective structural measures to protect residential areas from the physical impacts of disasters
- Seeking to reduce the vulnerability of facilities in the community posing an extra health or safety risk when damaged or disrupted by the impact of a disaster

- Encouraging the retrofit or relocation of public and private medical and health care facilities in the community to withstand the impact of disasters
- Removing or relocating residential structures from defined hazard areas where feasible
- Encouraging the retrofit of residential structures by their owners to withstand the physical impacts of disasters
- Reducing the vulnerability of structures, facilities and systems serving visitors to the community in order to meet their immediate health and safety needs
- Providing resources, equipment and supplies to meet community health and safety needs after a disaster

6. To support effective hazard mitigation programming through establishment and implementation of applicable local government policies and regulations by:

- Identifying local government facilities that could be enhanced by mitigation techniques to minimize physical or operational vulnerability to disasters
- Reviewing and where appropriate, revising land use policies, plans and regulations in order to discourage or prohibit inappropriate location of structures or infrastructure components in areas of higher risk
- Ensuring that hazard mitigation needs, and programs are given appropriate emphasis in resource allocation and decision-making
- Establishing and enforcing building and land development codes that are effective in addressing the hazards threatening the community
- Avoiding high hazard natural areas for new or continuing development
- Participating in and supporting the National Flood Insurance Program (NFIP) and the associated Community Rating System (CRS)
- Locating new local government facilities outside of identified high hazard areas and/or designing them in a manner that minimizes their vulnerability to the impacts of such hazards
- Encouraging the use of appropriate hazard mitigation techniques in the reconstruction and rehabilitation of structures and utilities in the community
- Promoting private property maintenance that is consistent with minimizing vulnerabilities to disaster

7. To minimize the vulnerability of homes, institutions, and places of employment to the effects of disaster by:

- Identifying funding and providing economic incentive programs for the general public, businesses, and industry to implement structural and non-structural mitigation measure
- Supporting key employers in the community in the implementation of important mitigation measures for their facilities and systems

- Assisting with the removal, relocation or retrofitting of vulnerable structures and utilities in hazard areas including schools, libraries, museums, and other institutions important to the daily lives of the community

8. To minimize the threat to the economic vitality of the community from a disaster by:

- Strengthening where feasible components of the infrastructure needed by the community's businesses and industries from the impact of disaster
- Developing emergency response and disaster recovery plans that consider the needs of key employers in the community
- Encouraging community businesses and industries to make their facilities and operations more disaster resistant
- Helping to establish and maintain programs, facilities, and resources to support the resumption of business activities by local businesses and industry impacted by disasters
- Educating the public regarding the condition and functioning of the community in the aftermath of a disaster

9. To minimize disruption to the community's infrastructure from a disaster by:

- Encouraging hazard mitigation programming by private sector organizations owning or operating key community utilities including major energy sources, and telecommunications
- Supporting routine maintenance of the community's infrastructure to minimize the potential for system failure
- Strengthening transportation and utility services in the community to reduce failures

10. To promote community awareness and education by:

- Encouraging interested individuals to participate in hazard mitigation planning and training activities
- Providing public education, especially to those living or working in defined hazard areas, about their vulnerability to disasters and effective mitigation techniques
- Offering training to managers of public facilities about hazard mitigation techniques and the components of the community's mitigation plan
- Providing technical training in mitigation planning and programming to appropriate local government employees
- Encouraging information sharing about appropriate hazard mitigation techniques among owners and operators of businesses and industries in the community

Mitigation Projects

The Local Mitigation Strategy Working Group is responsible for identifying mitigation initiatives/projects from Bay County and all participating entities that support the mitigation planning program. Mitigation projects are intended to achieve the implementation of associated goals and objectives.

Developing Hazard Mitigation Initiatives enables the Working Group to highlight significant vulnerabilities that exist in Bay County and reduce the impacts during future events. Each mitigation initiative proposed for incorporation into the Plan is submitted to the Working Group for consideration by an agency, organization, business, or individual that has the authority or responsibility for implementation.

It is the job of the Working Group to ensure that each proposed mitigation initiative will be cost effective, feasible to implement, acceptable to the community, and technically effective in purpose. The Working Group prioritizes each initiative based on the following criteria:

- Economic benefit
- Protection of public health and safety
- Impact to valuable or irreplaceable environmental or cultural resources

Once the Initiatives have been identified based on the above criteria, a “cost to benefit” analysis is conducted for each initiative by the submitting agency. The purpose of the analysis is to demonstrate the benefit of each initiative to the community based on how much money is required to complete the project. Based on the “cost to benefit” analysis, each proposed mitigation initiative is prioritized in the Plan for future implementation.

The “cost to benefit” analysis is not specifically designed to meet any known or anticipated requirements from the State of Florida or any federal funding agency, due largely to the fact that such requirements can vary with the agency and type of proposal. Therefore, at any point when the organization proposing an initiative is applying for funding from any state or federal agency, or from any other public or private funding source, that organization will then address the specific informational or analytical requirements of the funding agency.

During routine updates of the Plan, each mitigation initiative is evaluated to determine if it is still valid and or should be removed from the Plan. The initiatives are reviewed to determine if the priority of each initiative still matches the vision of the Working Group. All proposed mitigation projects must be submitted to the Local Mitigation Strategy Working Group for review and approval. A project submission form must be completed in order to be eligible for candidacy. A complete listing of mitigation projects and copies of submittal completed forms for each of the approved mitigation projects can be viewed in Appendix B.

NOTE: Prioritizing flood mitigation measures provides immediate and controllable relief from a hazard capable of wide-reaching impact. Flooding is also a significant corollary effect from the number one-rated hazard, tropical cyclones. Projects like elevating roads and enhancing water conveyance creates less localized flooding on roads making them safer and more navigable. It also significantly reduces structural inundation potential. Increasing floodwater storage provides a natural way for water run-off to return to the natural earth without impact to the built and natural environments. Prioritizing the flood hazard through mitigation initiatives allows businesses and citizens the opportunity for a safer, stronger habitat promoting a quicker recovery and achieving normalcy sooner following a catastrophic flood event.

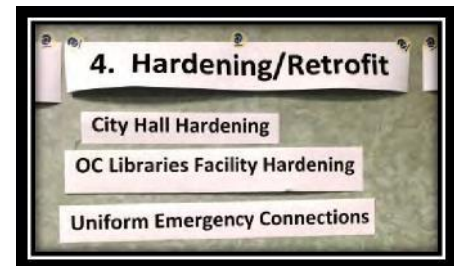
Prioritization Method

The Local Mitigation Strategy Working Group prioritizes each project based on a method that involves categorization and consensus. The Working Group has selected nine categories that meet the vision of the mitigation program. The following categories were selected by a majority vote from the Working Group as providing guidance towards alignment with the approved goals and objectives. The mitigation project categories are prioritized as follows:

1. Lift Station Elevation
2. Storm water/Drainage Mitigation/Road Elevation
3. Critical Infrastructure/Facility Protection & Mitigation to include Bridges and County roadways
4. Hardening/Retrofit
5. Floodplain Acquisition
6. Mitigation Planning
7. Mitigation Training, Education & Public Outreach
8. Traffic Signal - Mast Arm
9. Traffic Signal/Lift Station - Permanent Generator/UPS

Candidate projects brought before the Working Group must fall under one of the above categories to be considered. Each project is reviewed with careful consideration. Projects are approved by a majority vote and added to the corresponding category for final prioritization.

The Working Group then reviews the projects within each category to determine their level of priority. This determination is made based upon a combination of factors, including, but not limited to the project's level of impact to the community, cost effectiveness, and feasibility to implement. Once all projects have been prioritized the final mitigation project list is produced and approved by the Working Group by a majority vote. The approved list of mitigation projects can be viewed in Appendix B.



Benefit-Cost Summary

It is the responsibility of the Working Group to ensure that each mitigation project is cost effective, feasible to implement, acceptable to the community, and technically effective in purpose. The Working Group prioritizes each project based in part on the benefit-cost summary, provided on the project submission form. This summary should cover as many of the following criteria as possible:

- Assesses the impact of one action compared to another
- Shows how one type of action costs more than another to achieve the same benefit
- Shows that funding is available for one type of action but not another
- Demonstrates that the economic goals of the community are better served by one action rather than another

Implementation of Approved Mitigation Initiatives

Once an initiative has been incorporated into the Local Mitigation Plan, the agency or organization proposing the initiative becomes responsible for implementation. While the Working Group is responsible for setting the overall goals, strategies and initiatives as set forth in Local Mitigation Plan, only the jurisdiction or organization itself has the authority and responsibility to implement proposed mitigation initiatives. Each initiative must have a budget so that costs may be tracked, and accountability managed. Agencies are also responsible for providing applications to state and federal agencies for financial support for implementation.

Mitigation Project Funding Resources

Bay County, & Member Agency General Funds

The Bay County Emergency Management Division with other County departments and other jurisdictions may have funding available in the general fund budget for mitigation actions. Broadly inclusive, each department and agency participating in the Working Group, such as the jurisdictions' Storm water programs, regularly request funding for projects on the priority list as well as other projects that are not. This often includes the Capital Improvement Project budget list.

Each department or agency that is not part of the Working Group is regularly reminded of potential projects and programs ensuring a focused effort supporting mitigation measures. Funding is only available at the discretion of each agency or department's administrators. In certain cases, the elected officials as well as the executive leadership assist in support of mitigation opportunities and actions.

If mitigation opportunities become available through other funding mechanisms, the Bay County Emergency Management Division in partnership with the Working Group works to ensure that all jurisdictions are made aware of the grant opportunities. The LMSWG encourages collaboration between the County and municipalities to achieve, principally local funded, priority projects.

The Working Group also uses other available mitigation funding to implement projects on the priority list. FEMA's mitigation grant programs provide funding for eligible projects that reduce disaster losses and protect life and property from future disaster damages.

FEMA administers the Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance (FMA) program, the Pre-Disaster Mitigation (PDM) program, the Repetitive Flood Claims (RFC) program, and Severe Repetitive Loss (SRL) program. Below is a description of each of the programs.

Pre-Disaster Funding Options

Pre-Disaster Mitigation (PDM) Program

The Pre-Disaster Mitigation program provides funds to states, territories, tribal governments, communities and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are awarded on a nationally competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds.

Flood Mitigation Assistance (FMA) Program

The purpose of the Flood Mitigation Assistance Program is to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program, whether the structures is a repetitive loss or not. Therefore, any insured structure with or without losses is eligible to apply assistance. The program provides funding to states, territories, tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to the occurrence of a disaster event.

The Flood Mitigation Assistance Program was established pursuant to Section 1366 of the National Flood Insurance Act of 1968 (42 US Code 4104c), as amended by the National Flood Insurance Reform Act of 1994 (Public Law 103-325), and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (Public Law 108-264), with the goal of reducing or eliminating claims under the National Flood Insurance Program. The Flood Mitigation Assistance Program regulations are contained in Title 44, Code of Federal Regulations (CFR), Part 78. FMA grants are awarded on a nationally competitive basis.

Repetitive Flood Claims (RFC) Program

The Repetitive Flood Claims program provides funding to states and communities to reduce or eliminate the long-term risk of flood damage to structures insured under the National Flood Insurance Program that have had one or more claims for flood damages, and that cannot meet the requirements of the Flood Mitigation Assistance program for either cost share or capacity to manage the activities.

Severe Repetitive Loss (SRL) Program

The Severe Repetitive Loss program provides funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss structures insured under the National Flood Insurance Program.

Post-Disaster Funding Options

Hazard Mitigation Grant Program (HMGP)

The Hazard Mitigation Grant Program provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

The program is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Community Development Block Grant Disaster Recovery Program (CDBG-DR)

The United States Department of Housing and Urban Development provides flexible grants to help states and communities recover from Presidential declared disasters. The Community Development Block Grant for Disaster Recovery program provides funding to states, local governments, tribal governments, and insular areas designated by the President of the United States as disaster areas. Disaster Recovery grants often supplement disaster programs of the Federal Emergency Management Agency. The following is a list of mitigation activities eligible under the Disaster Recovery program.

- Purchase of damaged properties located in a floodplain and relocating residents to safer areas
- Rehabilitation of homes and buildings damaged from a disaster
- Purchasing, constructing, or rehabilitating public facilities such as streets, neighborhood centers, and water, sewer, and drainage systems
- Code enforcement
- Homeownership activities such as down payment assistance, interest rate subsidies and loan guarantees for disaster victims (if the original property was located in a floodplain) and
- Planning and administration costs

Public Assistance Program (PA)

FEMA's Public Assistance program provides assistance to state, tribal and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from Presidential declared disasters. The program encourages the protection of damaged facilities from future events by aiding for hazard mitigation measures, including protection, repair, replacement, or restoration of damaged publicly owned facilities during the recovery process.

Other Available Funding Options

Community Development Block Grant (CDBG)

The Community Development Block Grant program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD.

The program provides annual grants on a formula basis to 1,225 general units of local government and states. Entitlement communities, including Bay County, are required to prepare and submit a

“Consolidated Plan” that establishes goals for the use of CDBG funds. Grantees are also required to hold public meetings to solicit input from the community, ensuring that proposed projects are aligned with the community’s most urgent needs.

Stafford Act, Section 404

Section 404 of the Stafford Act authorizes funding for projects that eliminate repetitive losses. Repetitive loss is defined as numerous losses suffered to a particular property over a specific time period. For example, if a home floods three times in six years when there are heavy rains, that home would likely be deemed a repetitive loss structure. Funding for a project to eliminate or significantly reduce the threat of flooding would be eligible under Section 404 of the Stafford Act as long as the project is cost-beneficial; meaning that for every dollar spent for the project a minimum of one dollar is saved through avoiding future disaster assistance for that property.

Legislative Action

Legislative bodies can be called on to intercede when the needs it present. Bay County will petition the state or federal legislature for funding should the situation warrant such action.

JURISDICTIONS AUTHORITIES, POLICIES & PROGRAMS

Community Listing

Each member and associated jurisdiction provide specific authorities, policies, and programs Supporting mitigation activity. The following is a brief list and may also be found in Appendix I.

- Florida Building Code - 2017
- Florida Statute 252
- Florida Administrative Code 27P
- Bay County Comprehensive Emergency Management Plan
- Bay County Land Development Regulations
- Bay County Code Chapter 9, Article II “Floodplains”

The listed authorities support specific programs relating to mitigation. In each case, the intent is to direct the effort of building, development and living in a safer manner. Each jurisdiction works to enhance programs supporting a healthier and safer community by continuously reviewing and revising the programs.

Bay County and its Municipalities use the above funding options to enhance mitigation opportunities to recover, rebuild and sustain a more economic and viable community for the future.

The LMSWG reviewed the above documents as well as the After Action report from Hurricane Michael to ensure that each municipality is in compliance with regard to their Flood Ordinance, Building Codes and Land Development Codes. None of the smaller communities have their own Comprehensive Emergency Management Plans and fall under the County's CEMP. The City of Springfield is currently not participating in the Community Rating System but are in the process of getting certified for this program. Lessons learned from Hurricane Michael are essential to plan, stay resilient and build back a "stronger and more robust community" that can withstand future events without sustaining such devastating damage as in the past.

PLAN INTEGRATION

Mitigation has the potential to easily integrate into many day-to-day functions and existing plans throughout the county, such as the Comprehensive Emergency Management Plan (CEMP). Other ‘planning mechanisms’ that the mitigation plan can be integrated into include policies and procedures. For instance, mitigation can be incorporated during the recovery process of Presidentially declared disasters by simply including it when filling out a Public Assistance Project Worksheet to repair public facilities or infrastructure. Another process for incorporating mitigation would be to provide a policy or procedure for homeowner’s associations to incorporate wildfire mitigation activities into their by-laws.

One of the strongest ties that exists between two mitigation-related planning mechanisms is the one between the LMS and the CEMP. The CEMP must be updated every four years and relies heavily on the LMS—the county’s all-hazards risk assessment. As the LMS’s risk assessment is updated, it is integrated into the CEMP. On years when the CEMP must be updated prior to the 5-year update of the LMS, the risk assessment section will be reviewed and updated as necessary to meet the needs of the CEMP. The CEMP is adopted by resolution at the county while the other participating municipalities adopt it by promulgation; therefore, all municipalities provide their consent on this integration.

When it is time for plans to be updated, each municipality will take the lead in ensuring the LMS gets integrated appropriately into the revised plan. At a minimum, the plans being updated will be reviewed to ensure they are consistent with the LMS and places will be identified where mitigation can play a bigger role. That information will be relayed back to the LMS Coordinator so that it can be tracked in the LMS. As a part of the 2020 update, a review was conducted of each municipality’s Comprehensive Plan (Comp Plan). It was discovered that there is ample room for each of the Comp Plans to integrate mitigation concepts in the future. Between Comp Plan updates, mitigation will continue to be promoted at the local level through other policies, goals, and objectives, both new and existing.

Potential plans and planning mechanisms that the LMS can be integrated with include:

- Municipal Comprehensive Plans
- Flood Response Operations Guide (FROG) (CRS Section 610)
- Community Wildfire Protection Plans
- Comprehensive Emergency Management Plans
- Post-Disaster Redevelopment Plans (PDRPs)
- Municipal ordinances
- Land development regulations
- Floodplain ordinances
- Strategic Plans
- Capital Improvement Plans
- Hazard Specific Plans

Previously, the LMS was integrated with the CEMP via the risk assessment section. A summary table from the LMS was included into the CEMP and it was stated in the CEMP that the county's complete risk assessment can be found in the LMS. Also, the cities of Lynn Haven, Panama City and Mexico Beach used the LMS to gain points under section 510 of the CRS program. Bay County and the cities of Lynn Haven, Panama City and Mexico Beach used the LMS to help get points with section 610 of the CRS program. Bay County and Panama City will be using the 2020 LMS to assist them with obtaining points in section 610 at their next ISO review.

COMPLETED, DELETED OR DEFERRED MITIGATION INITIATIVES

Projects remaining on the list from the 2015 LMS Plan update were re-worded with more accurate descriptions and cost estimates. They were the only projects from the previous Local Mitigation Plan update that have not been deleted. The Working Group removed all other projects, either because they are complete, or were deemed no longer feasible to implement.

A complete list of projects of the Local Mitigation Strategy Group can be viewed in Appendix B.

CONFLICT RESOLUTION

At various points in a project's progress, the Working Group will be advised of project status and consulted on future actions. In the event of a conflict, Working Group members will participate in meetings to help reach a compromise. Every effort will be made to reach a compromise before proceeding to the next level of resolution. Progression to the next level will only occur if the Working Group deems it appropriate and necessary.

NON-CONTRACTUAL ISSUES

If any non-contractual issue is opposed by 50 percent or more of the voting Working Group, the item will be deferred and recorded for future planning and evaluation purposes. For any issue that is opposed by less than 50 percent of the voting Working Group, resolution will be attempted utilizing the steps below:

1. A separate meeting/conference call will be scheduled with those opposed to the issue. The meeting will focus on identifying the root cause(s) of the opposition and determine if a compromise is possible.
2. If the first meeting/conference call is unsuccessful, a second attempt will be scheduled. This meeting will include representatives from County administration and the Manager from the municipalities involved. The meeting will focus on confirming whether compromise is possible.
3. If a resolution appears possible, but further discussion is needed, a third meeting may be scheduled between a County BOCC representative and the Mayors of the municipalities opposed.
4. The last attempt at resolution will be a meeting with the entire County BOCC and Councils/Commissions involved. This step will only be utilized when a very small minority of the Working Group remains opposed to an issue and more than 75 percent of the voting Working Group recommends taking it to this level. Opposition to issues from non-governmental entities will be handled in a similar manner.

CONTRACTUAL ISSUES

If any contractual issue is opposed by any member of the Working Group, they will be provided a copy of the contract requirement. If 50 percent of the voting Working Group requests interpretation of the contract language or intent, the State Contract Coordinator will be contacted to provide clarification to the entire Working Group. If 50 percent of the voting Working Group recommends additional attempts be made, the Director of the Florida Division of Emergency Management will be contacted. Relief from contractual issues can only be approved by the Florida Division of Emergency Management.

LIST OF REVISIONS

In the previous Bay County Local Mitigation Strategy Plan, many hazards were not addressed properly or simply omitted. It was determined that the plan was not functional for Bay County and a complete re-write of the plan was needed.

In the 2015 LMS Plan, the main hazard focused on flooding from hurricanes and tropical storms. But Hurricane Michael completely changed that focus, coming in as a Category 5 storm and as a "strong wind event" changing the terrain and footprint of Bay County and its municipalities forever. Concrete slabs were left where buildings once stood, over 60,000 homes destroyed, 17 million cubic yards of debris strewn throughout the County and 330 million trees uprooted and left like matchsticks in a community that will never return as it once was.

The County along with its municipalities came together to prepare a strengthened, multi-jurisdictional overall hazard mitigation plan which encompassed all natural and man-made hazards that could affect the County and its municipalities. The "Bay County 2020 Local Mitigation Strategy Plan" currently identifies eight (8) natural hazards and eight (8) man-made hazards along with strengthened mitigation actions and efforts that can be undertaken to alleviate the effects if such hazards occur. Each jurisdiction had representation on the Local Mitigation Strategy Working Group (LMSWG) and took an active part in preparing the plan and the mitigation projects that are included as part of this plan. A current list of all LMS Mitigation projects can be found in Appendix B. The goals and objectives are to provide projects that will help recover, rebuild, and revitalize our County and municipalities to make them more sustainable and resilient in future storms and disasters.

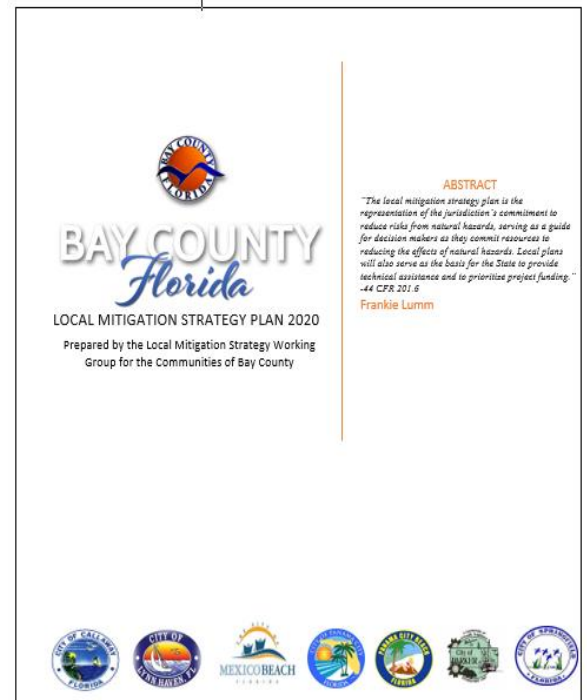
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PLAN ADOPTION & MAINTENANCE

The Bay County Board of County Commissioners and all incorporated jurisdictions included in this multi-jurisdictional plan formally adopt the Local Mitigation Plan by resolution. Projects on the proposed project list are executed based on priority and fund availability. Projects are prioritized based on the criteria established by the Working Group as presented in the Local Mitigation Plan.

PLAN INTEGRATION

The Plan has been created to integrate seamlessly with other plans at the County and local level. In particular, the Threat Hazard Identification and Risk Assessment and the Community Profile have been created to work cohesively into existing and future plans that are created by any of the partner communities. Incorporated jurisdictions within the County may choose to adopt and annex the Local Mitigation Plan's information in the manner that best suits them.



Community Profile

The Community Profile (Section I) provides a cohesive and comprehensive data set for the updating of demographics information within local community plans. The information can be used in planning for the cities of Callaway, Lynn Haven, Mexico Beach, Panama City, Panama City Beach, Parker, and Springfield as well as in the Bay County Comprehensive Emergency Management Plan (CEMP). As the data is updated in future Census runs, it can be integrated directly into the current formatting in the Local Mitigation Plan.

The Community Profile data is available to multiple agencies within the county including, local jurisdictions, utility providers, water management districts, the school district, nongovernmental organizations, and most importantly the public. This data provides a stable and comprehensive structure ensuring that consistent data exists across multiple plans, therefore reducing duplication of effort and conflict of information.

Threat Hazard Identification and Risk Assessment

The Threat Hazard Identification and Risk Assessment, much like the Community Profile, contribute to a number of planning resources by updating the risk information. Private sector businesses, such as hotels, request hazard information from time to time for their planning efforts. The Local Mitigation Plan provides valuable information for the Comprehensive Plans and Land Development Codes. Additional planning tools, such as future land use maps, conceptual development plans, and other proactive planning and development tools may also be affected by hazard locations.

Example plans include:

- Each jurisdictions Comprehensive Emergency Management Plan
- Supplemental Flood Action and Response Plans
- Risk Services plans
- Future Land Use Plans
- Hazard Response Plans
- Evacuation Plans
- School Plans

PLAN ADOPTION

The Bay County Board of County Commissioners will adopt the Local Mitigation Strategy Plan following approval by the Florida Division of Emergency Management (FDEM) and the Federal Emergency Management Agency (FEMA). The seven incorporated jurisdictions participating in the Plan will adopt the plan as well. Other participating agencies may adopt the plan as scheduling allows. The dates of adoption are summarized in the table below. A copy of each resolution may be found in Appendix H.

Table 10. Plan Adoption

<i>Jurisdiction</i>	<i>Date of Adoption</i>	<i>Resolution No.</i>
Callaway		
Lynn Haven		
Mexico Beach		
Panama City		
Panama City Beach		
Parker		
Springfield		

PLAN MONITORING, MAINTENANCE & UPDATES

Plan Maintenance, Maintenance and Updates is the process by which the Working Group continues to update and improve the mitigation planning process. It also includes the technical analysis needed for the process to propose more mitigation initiatives for incorporation into the plan. The LMSWG Chairman is in charge of tracking the LMS Plan maintenance to ensure the fluidity and accuracy annually in conjunction with the entire LMS Working Group. The group's activities will continue to monitor implementation of the plan, evaluate the effectiveness of implemented mitigation initiatives, and to strive continually to engage the community in the planning process. At each annual evaluation of the plan maintenance, the LMSWG will also advise the Executive Policy Group of Bay County to ensure that all effective decision makers are aware of new and potential grant funds available for future mitigation projects to enhance and rebuild the municipalities within Bay County.

Mitigation planning is a dynamic process and must be continually adjusted for changes in the community and to refine the information, judgments and proposals documented in the local mitigation plan. The process used by the Working Group to maintain the plan consists primarily of four functions:

- Continue to improve the mitigation plan by accomplishing additional technical analyses such as vulnerability assessments, evaluation of the policy framework of the participating jurisdictions, and post-event analysis of disasters, etc.

- Continue to expand participation in the planning process by soliciting the involvement of additional agencies from the participating jurisdictions, by reaching out to the public, and to expand participation by the private sector
- Routinely monitor implementation of the initiatives in the plan until each is completed and in place, and to assess their actual effectiveness following the next relevant disaster event
- Issue an updated plan document for use by the participating jurisdictions, to inform the community, and when appropriate for submittal to state and federal agencies for approval pursuant to the Disaster Mitigation Act of 2000

The technical analysis conducted by the participating jurisdictions is an ongoing effort to assess the hazards threatening the community, the vulnerabilities to those hazards, and the adequacy of the participating jurisdictions' policy and program framework to control vulnerabilities. When indicated, the technical analysis also includes formulating proposed mitigation initiatives to eliminate or minimize the identified vulnerabilities.

For the 2020 update, extensive new analysis for the THIRA was completed. During the next planning cycle, participants will continue their analyses, so potential mitigation-specific local ordinances are identified and documented indicating the relationship between the action-oriented mitigation strategy and other current planning documents.

The Emergency Management Division and the Working Group through the Local Mitigation Strategy will continue to expand participation in the mitigation planning process. Gaining additional participation in the planning process is also part of the public information and community outreach component of development.

The third category of plan maintenance activities that is undertaken by the Working Group is to monitor the implementation of mitigation initiatives by the participating jurisdictions and their agencies. The current status of initiative implementation is detailed in Appendix B of this plan, and the Emergency Management Division will update this section of the plan annually and include it in the next publication of the Bay County Local Mitigation Strategy. As Hazard Mitigation Grant Funds become available and each municipality administers projects under the HMGP Grant program, the LMS Plan will continue to be monitored and implemented on a continual basis. Each municipality will play an active role on the Local Mitigation Strategy Working Group with regards to planning, developing, researching, and incorporating all hazard mitigation activities into their policies, plans and ordinances for present and future projects. The 2020 LMS Strategy Plan is a working and living document that will be used in concert with all other mitigation initiatives throughout the County. Throughout the five-year planning cycle for the update, Public Meetings and Outreach sessions will be held to gather public input on projects that are needed in the community sector and initiatives and educational formats such as "Reducing a Community's Risk – One Grant at a Time" initiatives will be implemented to teach residents the importance of "hazard mitigation" measures and the need for implementing such measures on a day-to-day basis.

As a part of monitoring the implementation of mitigation initiatives following a disaster, the participants conduct a post-event mitigation assessment. This is intended to define, for the event,

the demonstrated effectiveness of completed mitigation initiatives, or any pre-existing mitigation initiatives, in reducing the human and economic impacts of the event. As time passes and disaster events occur, this will enable Bay County and the Working Group to accumulate a database of “mitigation success stories” regarding the value of the property losses avoided and the number of fatalities, injuries or illnesses prevented.

Monitoring the effectiveness of plan implementation and maintenance also involves assessing the effectiveness of the mitigation goals and objectives established for the planning process. As noted above, the Working Group established general goals and several specific objectives to guide the participants in the mitigation planning process. The attempts to address the established objectives, with the intent of achieving the associated mitigation goals for the community, are a key measure of the effectiveness of the continuing plan maintenance and plan implementation.

Appendix B includes the project listings, which documents the participants’ efforts to achieve the established goals and objectives through the implementation of associated proposed mitigation initiatives. As these initiatives are implemented and monitored for their effectiveness in future disasters, the Working Group will be able to determine the overall success of their mitigation planning effort. In future planning cycles, these goals will be reviewed and re-evaluated to ensure they are still as relevant to the unique needs of the community as they are now, and that they continue to address current and expected conditions.

The final activity in plan maintenance is to incorporate the results of all technical analyses, including the development of new mitigation initiatives, and publish an updated edition of the Local Mitigation Strategy. In addition to documenting further technical analysis, the program can also be used to document the efforts to continue to engage the public in the planning process in order to expand direct participation in the planning, and to increase representation.

Evaluation & Maintenance

The local hazard mitigation plan is evaluated on an annual basis by the Bay County Emergency Management Division Chief or designee. The Emergency Management Division was selected as the organization to evaluate the mitigation plan and to serve as support staff to the Working Group including representatives from all the participating jurisdictions and organizations. In this role, the Emergency Management Division has responsibility for maintaining the master copy of the LMS Plan, for scheduling and facilitating meetings, and collaborating with adjacent counties, the State of Florida and the Federal Emergency Management Agency regarding the mitigation plan. In addition, frequently, the Emergency Management Division is the contact point and coordinator for post-disaster funding opportunities for implementation of the proposed mitigation initiatives incorporated into the plan.

The following represents evaluation criteria:

- Assessing recent emergency events and their impact, as well as the resultant influence and/or adjustments that are needed in the mitigation planning process
- Evaluating the progress in addressing the established mitigation goals and objectives, primarily through the development and implementation of initiatives for each goal and objective to ensure progress is being made

- Assessing the extent to which the mitigation plan is effectively interacting with other jurisdictional plans and programs related to mitigation issues, such as being incorporated into a jurisdiction's comprehensive plan, emergency management plan, capital improvement plan, storm water management plan, etc.
- Evaluating the extent to which the vulnerabilities of assessed critical facilities, other facilities and systems, neighborhoods and repetitive loss properties are being addressed through the planning process, including the development and implementation of initiatives
- Assessing whether the Working Group continues to have or needs to expand its membership to promote community participation in the mitigation planning process.
- Evaluating continuing progress in the expansion and/or updating of the hazard identification and vulnerability assessment process, the development and implementation of mitigation initiatives, as well as assessing the effectiveness of implemented initiatives
- Assessing specific aspects of the mitigation policies and programs, based on policy data entered into the program, to evaluate specific mitigation issues of interest, especially on a multi-jurisdictional basis, such as variations in local mitigation-related codes

Updates

The planning period began September 2015 for this update of the Bay County Local Mitigation Strategy. The planned date for release of the next update of the Bay County Mitigation Strategy (LMS) is intended to be no later than September 2020 and this begins a new five-year cycle.

The Bay County Emergency Management Division, as supporting staff for the Working Group, is responsible for maintaining and updating the mitigation plan. The updating process is accomplished by convening an initial meeting of the group at the start of the planning cycle. This meeting will be used to establish participation in the update process, to brief participants on the current status of the planning efforts for each jurisdiction, to review the established mitigation goals and objectives, and to acquaint any new representatives with the technical steps in the planning process.

This meeting will also review any changes in the state or federal regulations and/or guidance applicable to the mitigation plan. Each jurisdiction will then be responsible for assessing the previous analysis completed for its community, and, as indicated, modifying or expanding the analysis. Through the coordination of the Bay County Emergency Management Division, each jurisdiction will then be responsible for updating its jurisdiction's portion of the strategy. Work products and/or planning milestones are to be produced on the schedule established for the update cycle. The Emergency Management Division will facilitate meetings with officials from individual jurisdictions to assist with the updating process.

Upon completion of each of the planning steps by a jurisdiction, the updated information for that step will be provided to the Bay County Emergency Management Division for review, coordination with information received from other jurisdictions, and data entry into the LMS.

Near the conclusion of the five-year planning cycle, a draft of the updated Plan will be prepared and available for public comment and input at the advertised meetings and via the <http://baycountyfl.gov> web page.

COMPLETED MITIGATION INITIATIVES

Once mitigation initiatives are completed, it is the duty of the Working Group to ensure proper close-out of the project as outlined in the Planning Process section of The Plan. A formal letter is sent to FDEM on an annual basis, in the month of January, with all updates to The Plan. The letter also includes a list of any mitigation initiatives that have been completed. Annual LMS Update letters are provided in Appendix F.

NFIP PARTICIPATION

INTRODUCTION

The National Flood Insurance Program (NFIP) was created by the Congress of the United States in 1968 through the National Flood Insurance Act of 1968 (P.L. 90-448). It enables property owners in participating communities to purchase insurance protection from the government against losses from flooding. Flood insurance is designed to provide an alternative to disaster assistance in meeting the escalating costs of repairing damage to buildings and their contents caused by floods.

Participation in the NFIP is based on an agreement between local communities and the federal government. The agreement states that if a community will adopt and enforce a floodplain management ordinance aimed at reducing future flood risks to new construction in a Special Flood Hazard Areas (SFHA), the federal government will support flood insurance availability within the community as a financial protection against flood losses.

BAY COUNTY FLOODPLAIN MANAGEMENT PLAN

The purpose of the Local Mitigation Plan is to develop a unified approach for dealing with identified hazards, including flooding. The Local Mitigation Plan serves as a tool to direct the County in its ongoing efforts to reduce vulnerability to the impacts produced by both natural and man-made hazards. The Plan also helps establish funding priorities for currently proposed mitigation projects. With these goals and purposes in mind, the LMS Plan also serves as the Bay County Floodplain Management Plan for purposes of the Community Rating System (CRS).

JURISDICTIONAL PARTICIPATION

Bay County, Florida

Bay County joined the NFIP in 1981, with its first NFIP map in January of that year and its first FIRM in July of 1981. The NFIP is locally administered by the Bay County Community Development Department. The latest report shows 14,402 policies with 497 claims of damage totaling \$26,512,144.91. The County has 204 repetitive loss properties, each of which is residential property. The current effective map for Bay County is dated June 2, 2009.

Chapter 24 of the County Land Development Code establishes minimum standards for the NFIP Flood Damage Prevention, and Storm Water Management (attached herein as Appendix J). Bay County is participating in the CRS rating program and is currently rated at a 5, with a 25% savings totaling \$2,411,508 community wide. The last CRS Cycle Evaluation occurred in 2016.

Bay County's efforts for continued NFIP compliance include:

- Informing repetitive loss property owners including, surrounding properties, of mitigation opportunities
- Extensive NFIP plan integration to the County Comprehensive Plan, Future Land Use Map, and Zoning Regulations
- Compensating Storage
- Provide flood information at both the Bay County Hurricane Expo and municipal partners hurricane expos.
- Maintaining a map of areas that flood frequently and prioritizing those areas for inspection immediately after the next flood or heavy rains.
- Obtaining FEMA's Substantial Damage Estimator and being prepared to use it when damage occurs.
- Maintaining supplies of FEMA/NFIP materials to help homeowners evaluate measures to reduce damage.
- Evaluating higher standards that are proven to reduce flood damage.
 - a. Anchoring of new development and manufactured homes
 - b. The use of flood resistant materials in new construction and substantial improvements
 - c. New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage
 - d. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and or located to prevent water from entering or accumulating within the components during conditions of flooding
 - e. Any new principal building shall be served by public water and sewer lines and no existing on-site systems shall be replaced except by public system connections.
 - 1. Regulation of residential, nonresidential, and elevated buildings to meet specific standards above the NFIP outlined in LDC Chapter 14
 - 2. The prohibition of new development within a designated floodway
 - 3. Maintaining supplies of FEMA/NFIP materials to help homeowners evaluate measures to reduce damage

Municipalities Participation in the National Flood Insurance Program

Every municipality in Bay County participates in the National Flood Insurance Program and intends to continue with all regulations of that program (including any higher standards set by the City) through the enforcement of its flood damage prevention ordinance, building department/floodplain manager review of permitted development practices, floodplain monitoring activities, education of local staff and participation of Community Rating System. The Cities will coordinate with the State of Florida Floodplain Management Office on issues requiring technical assistance and during Community Assistance visits or other compliance monitoring events.

The following is a list of the municipalities and the date of enlistment into the NFIP program:

- City of Callaway – July 1980
- City of Lynn Haven – June 1977
- City of Mexico Beach – July 1977
- City of Panama City – July 1977
- City of Panama City Beach – June 1977
- City of Parker – August 1980
- City of Springfield – August 1981

CRS Participation

Five of the seven municipalities participate in the Community Rating System. Mexico Beach and Springfield currently do not participate but are in looking into an application to become a part of the CRS program.

Bay County, Callaway, Lynn Haven, Panama City, Panama City Beach and Parker currently participate in the Community Rating System Program. They continue to actively engage the public through outreach programs such as:

- Social media through websites and Facebook pages
- Regular newsletters and newspaper articles
- Sending letters and documentation to property owners, lenders, insurance, and real estate offices
- Sending letters with flood risk and insurance information to citizens located in repetitive loss areas
- Meet with property owners and developers to discuss policies and regulations for floodplain protection
- Maintain elevation certificates and D-Firms for public review.

As of March 2019, the CRS Class Ratings of the following municipalities are as follows:

- Bay County – CRS Class Rating 5
- Callaway – CRS Class Rating 7
- Lynn Haven – CRS Class Rating 8
- Panama City – CRS Class Rating 6
- Panama City Beach – CRS Class Rating 8
- Parker – CRS Class Rating 8

Multi-Jurisdictional Program for Public Information

Bay County, and its seven municipalities have joined efforts to produce a unified Multi-Jurisdictional Program for Public Information (MJ-PPI), as a subcommittee to the Working Group. The MJ-PPI subcommittee was formed on March 12, 2019. The MJ-PPI is a collection of public/private participants whose primary goal is to identify targeted outreach activities/messages that follow major topics approved by the NFIP. These topics are targeted to increase awareness of the dangers of floods, as well as reducing the human and economic impact of flooding on communities participating in the NFIP's Community Rating System program. The MJ-PPI will develop a unified program for coordinating messages and projects for a cost effective and consistent method for flood hazard outreach across all jurisdictions.

REPETITIVE LOSS PROPERTIES

Repetitive loss properties are another means in identifying flood hazards. The FEMA NFIP defines repetitive loss properties as those with policies having two or more flood insurance claims of \$1,000 or more within a 10-year period. Current records show there are 204 such properties in Bay County. In each case of loss, the property is residential property. Repetitive loss properties are identified only if the owner has NFIP coverage.

Privacy laws prevent publishing repetitive loss properties addresses. The following map shows the general location of repetitive loss properties.

Jurisdiction	Residential	Commercial
Panama City	28	3
Panama City Beach	116	6
Lynn Haven	26	0
Unincorporated Bay County	25	0
Callaway	0	0
Mexico Beach	0	0
Parker	0	0
Springfield	0	0

MAP 7. REPETITIVE LOSS PROPERTY MAP

