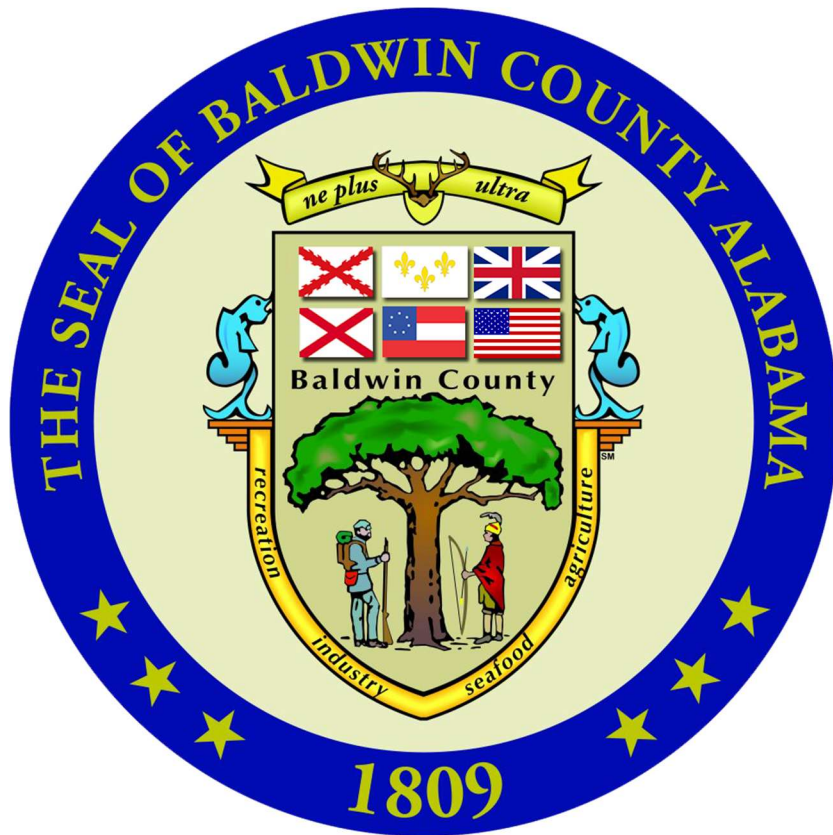


2026



Baldwin County, Alabama

2026 Multi-Hazard Mitigation Plan

Acknowledgements Page

The Hazard Mitigation Planning Committee (HMPC) Executive Committee members are listed below for their leadership and commitment to developing this plan. Their efforts, together with the collaboration of planning teams from each participating jurisdiction, were essential to the successful completion of the 2026 update.

Brandan Franklin	HMPC Chairperson City of Gulf Shores Building Official / EM Coordinator
Nicole Woerner	HMPC Vice-Chair Orange Beach Grants Coordinator / EM Coordinator
Anna-Marie O'Brien	HMPC Secretary Baldwin County Emergency Management Agency Planning & Grants Division Manager
Danon Smith	Baldwin County Emergency Management Agency Deputy Director
Janie Joiner	Baldwin County Building Department Hazard Mitigation Coordinator
Joshua Newman	Baldwin County Planning & Zoning Permit Engineer
Erik Cortinas	City of Fairhope Building Official

The following jurisdictions, as well as HMPC members, are recognized for their contributions to the 2026 Hazard Mitigation Plan:

City of Bay Minette	City of Loxley	City of Spanish Fort
City of Daphne	City of Orange Beach	Town of Summerdale
Town of Elberta	Town of Magnolia Springs	Ono Island
City of Fairhope	Town of Perdido Beach	Fort Morgan
City of Foley	City of Robertsedale	Lillian
City of Gulf Shores	Town of Silverhill	

Other participating HMPC members and stakeholders:

Baldwin County
Emergency Management
Agency Director, or
his/her designee

Baldwin County Building
Official or his/her
designee

Baldwin County Planning
& Zoning Director or
his/her designee

Baldwin County 911 or
his/her designee

Baldwin County Engineer
or his/her designee

Baldwin County Sheriff's
Department

Baldwin County Board of
Education

Baldwin County Local
Emergency Planning
Committee (LEPC)

Alabama Department of
Public Health

Baldwin County Electric
Membership Cooperative

North Baldwin Utilities

Alabama Power

White House Fork Water

Riveria Utilities

Belforest Water System

Ono Island Water, Sweer,
and Fire Protection
Authority

Orange Beach Water,
Sewer, and Fire
Protection Authority

Daphne Utilities

Fairhope Utilities

Loxley Utilities

Robertsdale Utilities

Summerdale Water and
Sewer Department

Baldwin County Sewer
Service, LLC

Chapter 1 – Introduction

I. Purpose

The Multi-Jurisdictional Hazard Mitigation Plan is intended to identify and detail the hazards that affect Baldwin County, Alabama, and all its jurisdictions. The jurisdictions within Baldwin County include the City of Bay Minette, City of Daphne, Town of Elberta, City of Fairhope, City of Foley, City of Gulf Shores, City of Loxley, Town of Magnolia Springs, City of Orange Beach, Town of Perdido Beach, City of Robertsedale, Town of Silverhill, City of Spanish Fort, and Town of Summerdale.

The purpose of the Baldwin County Multi-Hazard Mitigation Plan is to evaluate and identify hazards that may affect the county and identify mitigation strategies that address each of the identified hazards. This plan is only one of the steps that Baldwin County and its respective jurisdictions will take to achieve a safer, more hazard-resistant environment for its residents.

II. Authority

Hazard Mitigation Plans are required under Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. § 5165, as amended by the Disaster Mitigation Act of 2000 (DMA 2000), Public Law 106-390. This statute requires States, Tribes, and local governments to implement a risk-based mitigation planning process to reduce long-term risk to people and property from natural hazards.

In accordance with 44 CFR Part 201, States and local governments must maintain a FEMA-approved Hazard Mitigation Plan to remain eligible for non-emergency federal disaster assistance, including funding through the Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), and Flood Mitigation Assistance (FMA) programs. To be eligible for FEMA Hazard Mitigation Assistance, mitigation actions and projects must be identified in, or be consistent with, the jurisdiction's FEMA-approved Hazard Mitigation Plan. Projects that are not included in, or supported by, an approved plan are ineligible for FEMA hazard mitigation funding.

FEMA implements hazard mitigation planning requirements through regulations in 44 CFR Part 201, which allow jurisdictions to address natural and human-caused hazards. Consistent with current FEMA mitigation planning guidance, risk assessments should

consider changing hazard conditions, including climate-related impacts such as increased frequency and severity of hazard events, extreme heat, changing precipitation patterns, and sea level rise, where applicable. Pursuant to 44 CFR § 201.6(d)(3), local jurisdictions must review, revise, and resubmit their Hazard Mitigation Plan at least every five years to reflect changing conditions and remain eligible for mitigation grant funding.

III. History

The 2026 Baldwin County Multi-Hazard Mitigation Plan is a multi-jurisdictional guide for all communities that participated in its preparation through the Hazard Mitigation Planning Committee (HMPC). The political jurisdictions that participated in the development of this plan include the cities of Daphne, Fairhope, Bay Minette, Foley, Spanish Fort, Gulf Shores, Orange Beach, Robertsedale, Loxley, and the towns of Magnolia Springs, Perdido Beach, Summerdale, Silverhill, Elberta, and Baldwin County. This plan fulfills the requirements of the Federal Disaster Mitigation Act of 2000 (AEMA) and the Federal Emergency Management Agency (FEMA) Region IV.

Baldwin County initiated its hazard mitigation planning efforts in 2003 with the formation of the Hazard Mitigation Planning Committee (HMPC) through the Baldwin County Emergency Management Agency (BCEMA). The county's first Natural Hazards Mitigation Plan was adopted in 2004 and substantially revised in 2006 following Hurricane Ivan. These early plans addressed natural hazards affecting both incorporated and unincorporated areas of Baldwin County and established short- and long-term mitigation strategies, implementation responsibilities, and potential funding sources.

The HMPC reconvened in 2010 and 2015 to update the plan, expanding its scope to include man-made hazards and reinforcing a comprehensive, multi-jurisdictional planning approach. These updates were completed with support from Lehe Planning, LLC, and included participation from all incorporated and unincorporated jurisdictions, partner agencies, and stakeholders. Each update built upon prior risk assessments and mitigation strategies to maintain a unified, countywide framework for reducing hazard-related risks.

The most recent updates occurred in 2021 and 2025, continuing Baldwin County's commitment to a coordinated, multi-jurisdictional hazard mitigation planning process. The 2021 Multi-Jurisdictional Hazard Mitigation Plan included regional coordination through the South Alabama Regional Planning Commission and reinforced a unified approach among participating jurisdictions.

The 2026 update was developed in-house by the Hazard Mitigation Planning Committee with support and direction from the Baldwin County Emergency Management Agency's Planning & Grants Division Manager, who also serves as the HMPC Secretary. The update maintained a countywide, comprehensive planning and risk assessment framework and continues to guide local governments in reducing vulnerabilities, identifying mitigation priorities, and strengthening resilience to natural and human-caused hazards.

IV. Eligibility for FEMA Hazard Mitigation Assistance Grants

Adoption of this plan is a required step to maintain eligibility for FEMA Hazard Mitigation Assistance (HMA) funding for participating municipalities, consistent with 44 CFR Part 201 and the FEMA Hazard Mitigation Assistance Program and Policy Guide, Version 2.1 (effective January 20, 2025). FEMA Hazard Mitigation Assistance programs include the Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA), and other applicable mitigation funding programs administered by FEMA.

1. The Hazard Mitigation Grant Program (HMGP)

- The Hazard Mitigation Grant Program (HMGP) provides funding to eligible state, local, tribal, and territorial (SLTT) governments following a Presidential major disaster declaration. HMGP supports cost-effective, long-term mitigation actions that reduce the risk of future disaster losses and is authorized under Section 404 of the Stafford Act. Funding is calculated as a percentage of total eligible federal disaster assistance provided under the declaration.

2. The Pre-Disaster Mitigation Grant Program (PDM)

- Building Resilient Infrastructure and Communities (BRIC) is FEMA's competitive, annual pre-disaster hazard mitigation program that provides technical and financial assistance to eligible state, local, tribal, and territorial governments. BRIC is authorized under Section 203 of the Stafford Act and is funded through a set-aside of post-disaster federal assistance deposited into the National Public Infrastructure Pre-Disaster Mitigation Fund.

- **The Flood Mitigation Assistance Program (PDM)**

- Flood Mitigation Assistance (FMA) is a competitive annual grant program that funds activities to reduce flood risk to structures insured under the National Flood Insurance Program (NFIP). Eligible activities include mitigation planning, property acquisition,

structure elevation, and floodproofing. Sub-applicants must be active NFIP participants in good standing.

3. The Public Assistance Grant Program (Categories C – G) (PA)

- The Hazard Mitigation Grant Program (HMGP) provides funding to eligible state, local, tribal, and territorial (SLTT) governments following a Presidential major disaster declaration. HMGP supports cost-effective, long-term mitigation actions that reduce the risk of future disaster losses and is authorized under Section 404 of the Stafford Act. Funding is calculated as a percentage of total eligible federal disaster assistance provided under the declaration.

4. The Fire Management Assistance Grant Programs

- FMAG provides funding to SLTT governments by the authority of the Stafford Act §420 (FMAG) and §404 (HMGP Post Fire) to support the mitigation, management, and control of fires that could become major disasters. Following an FMAG declaration, FEMA may also authorize HMGP Post Fire, which provides funding for long-term hazard mitigation activities to reduce future wildfire risk in areas affected by the declared fire.

Chapter 2 – Prerequisites

I. Federal Prerequisites

This chapter addresses the federal prerequisite requirements of 44 CFR §§ 201.6(a)(1), 201.6(a)(4), and 201.6(c)(5), which establish eligibility for FEMA Hazard Mitigation Assistance (HMA) programs and outline plan approval and adoption standards.

44 CFR § 201.6(a) – Plan Requirements

- (1) “A local government must have a mitigation plan approved pursuant to this section to receive HMGP project grants. A local government must have a mitigation plan approved pursuant to this section to apply for and receive mitigation project grants under all other mitigation grant programs.”

- (4) “Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, if each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.”

44 CFR § 201.6(c) – Plan Content Requirements

- (5) Documentation of the planning process must describe how the plan was developed, who participated, and how the public was involved. The plan must include a risk assessment that describes the type, location, and extent of hazards affecting the jurisdiction, past occurrences, and the likelihood of future events, and evaluates community vulnerability. Vulnerability must address impacts to buildings, infrastructure, and critical facilities, include estimates of potential losses and the methodology used, consider land use and development trends, and address repetitively damaged NFIP-insured structures where applicable. For multi-jurisdictional plans, the risk assessment must identify jurisdiction-specific risks where they differ across the planning area, consistent with 44 CFR § 201.6(c)(1)– (2).

II. Plan Approval Required for Mitigation Grants Eligibility

FEMA approval of this plan is required for participating local governments and school districts to remain eligible for FEMA hazard mitigation grant assistance, including the Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA), Categories C–G of the Public Assistance (PA) Program, and the Fire Management Assistance Grant (FMAG) program, including HMGP Post Fire when applicable.

Following FEMA’s Approval Pending Adoption (APA) determination, each participating jurisdiction and school district must formally adopt the plan and submit its adoption resolution to FEMA through the Alabama Emergency Management Agency to receive Final FEMA Approval. This adoption process must be completed within fifteen (15) months of FEMA’s APA notification. Jurisdictions or school districts that do not obtain FEMA approval and formally adopt the plan will not be eligible to apply for or receive FEMA hazard mitigation project funding

III. Multi-Jurisdictional Participation

The Baldwin County Emergency Management Agency (BCEMA) serves as the lead coordinating agency for mitigation planning. It has been working in conjunction with the Hazard Mitigation Planning Committee (HMPC) and has maintained contact with and coordinated mitigation activities with all Baldwin County jurisdictions since the initial plan was approved in 2004. Baldwin County, the cities of Bay Minette, Daphne, Fairhope, Foley, Gulf Shores, Orange Beach, Robertsedale, Spanish Fort, as well as the towns of Elberta, Loxley, Magnolia Springs, Perdido Beach, Silverhill, and Summerdale have continued to participate in the 2026 plan update. In addition to the participating jurisdictions, other stakeholders affected by the plan contributed to the drafting of this update, including Federal, State, and regional agencies; the Baldwin County Board of Education; business interests; academia; non-profits; and the public.

(See Chapter 4 – “The Planning Process” for a detailed explanation of the HMPC and the participation of local jurisdictions and stakeholders in the planning process).

School districts are considered to be local governments under federal regulations at 44 CFR § 201.2 and are therefore required to be covered by a FEMA-approved local hazard mitigation plan to be eligible for FEMA hazard mitigation assistance project funding. A school district may participate as an independent local government with its own mitigation plan or may

demonstrate participation as a stakeholder within another local government's FEMA-approved mitigation plan.

For the 2026 Hazard Mitigation Plan update, the Baldwin County Board of Education elected to participate as a stakeholder within the countywide, multi-jurisdictional planning effort. The Board of Education actively participated in the planning process and demonstrated its commitment to hazard mitigation and resilience by formally adopting the 2026 Hazard Mitigation Plan.

The planning process provided multiple opportunities for multi-jurisdictional participation. Appendix I, "Multi-Jurisdictional Participation Activities," documents the type and extent of participation by Baldwin County jurisdictions. These multi-jurisdictional participation opportunities included the following activities:

- Attendance and participation in five HMPC committee meetings during the drafting phase of the plan.
- Providing key staff support to complete HMPC exercises and questionnaires regarding local capabilities for conducting mitigation activities, the implementation status of the 2026 mitigation actions, identifying and rating hazards, profiling hazards and hazard events, evaluating alternative mitigation measures, and updating plan goals and objectives.
- Reviewing and providing comments on draft plan sections.
- Compiling plans, studies, reports, regulations, ordinances, and codes relating to hazard mitigation and making these documents available to planners for review.
- Collaborating throughout the drafting phase of the plan.
- Attendance and participation in the Community Meeting held after the final HMPC committee meeting, at the end of the drafting phase of the plan update.
- Communicating with elected officials and other jurisdictional constituents on the scope and contents of the draft plan update.
- Conducting public hearings, which offered additional opportunities for public comments prior to formal adoption by the governing bodies.

Residents of each jurisdiction and other stakeholders were provided with opportunities to participate in the planning process.

IV. Multi-Jurisdictional Plan Adoption

All local jurisdictions in Baldwin County have actively participated in the planning process. Upon completion of the plan, each municipality and the Baldwin County Commission have passed a formal resolution accepting, approving, and adopting the 2026 Baldwin County Multi-Hazard Mitigation Plan. The Baldwin County Board of Education adopted this plan. By adopting this multi-jurisdictional hazard mitigation plan, the participating local governments and other eligible entities may apply for mitigation funds through FEMA's Hazard Mitigation Assistance programs.

Chapter 3 – Community Profiles

I. Federal Advisory Guidance for Community Profiles

Consistent with current FEMA guidance, this plan includes a community profile that describes key socioeconomic, historical, and geographic characteristics to provide context for understanding local hazard exposure, vulnerability, and mitigation priorities.

The planning team includes a current description of the jurisdiction within this section or the plan introduction. This description summarizes relevant socio-economic, historic, and geographic characteristics to provide context for understanding hazard exposure, vulnerability, and the mitigation actions identified to reduce risk.

II. Summary of Plan Updates

Table 3.1 – Summary of Plan Updates

Section		Change
3.3	Geographic Setting and History	Update descriptions, maps, and data
3.4	Government	Update descriptions and data
3.5	Physical Features	Update descriptions and data
3.6	Climate	Update descriptions and data
3.7	Demographics	Update descriptions, map, and data
3.8	Economy	Update descriptions, map, and data
3.9	Utilities	Update descriptions and data
3.10	Transportation	Update descriptions and data

Map 3.1 – Location of Baldwin County

III. Geographic Setting and History

Baldwin County, Alabama

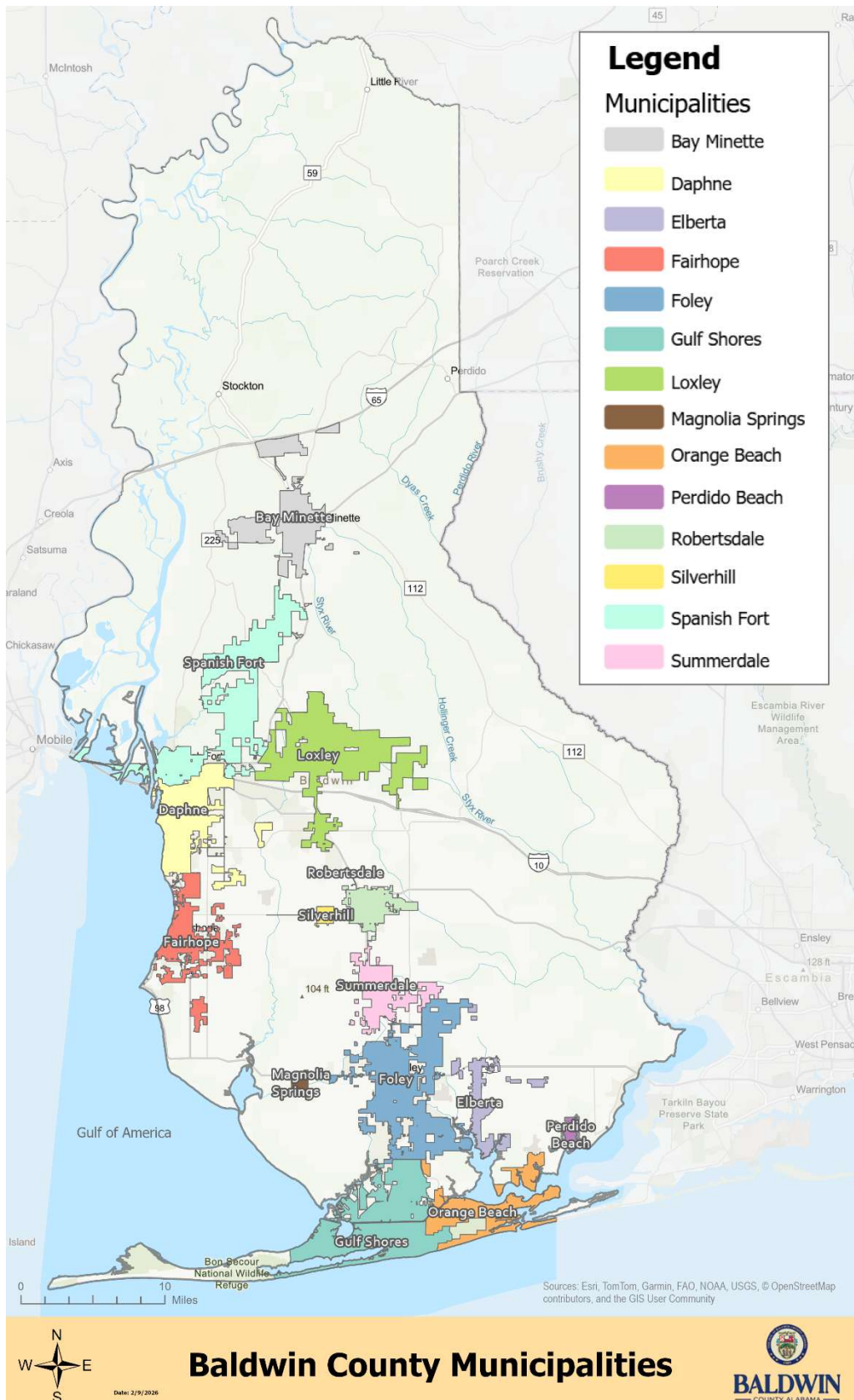
Baldwin County predates the State of Alabama, having been established by the Mississippi Territorial Legislature on December 21, 1809. As shown on Map 3.2, the county is located along the Gulf Coast in southwestern Alabama. It is bordered to the north by Clarke and Monroe Counties; to the east by Escambia County, Alabama, and Escambia County, Florida; and to the west by Mobile County and Mobile Bay. Encompassing approximately 1,590 square miles, Baldwin County is the largest county in Alabama by land area.

**** Insert Map 3.2 Baldwin County Detail**

Travel and tourism are the dominant industries in Baldwin County, which includes the communities of Gulf Shores and Orange Beach, as well as major attractions such as Gulf State Park and Fort Morgan. Table 3.2 presents approximate distances from Baldwin County to major metropolitan areas, and Map 3.3 illustrates the municipalities within the county.

Table 3.2 – Driving Distances to Nearby Cities

City	Mileage
Pensacola, Florida	34
Mobile, Alabama	38
New Orleans, Alabama	179
Birmingham, Alabama	264
Atlanta, Georgia	343
Nashville, Tennessee	449
Dallas, Texas	650

Map 3.3 – Baldwin County Municipalities

City of Bay Minette

The City of Bay Minette has served as the county seat of Baldwin County since 1900. The city is located in north-central Baldwin County and does not share boundaries with any other municipality. Bay Minette encompasses approximately 8.65 square miles and is landlocked. Despite its name, the city does not border Bay Minette Bay, which is located along Mobile Bay to the west.

City of Daphne

The City of Daphne is located in west-central Baldwin County and is the county's largest municipality by population. The city encompasses approximately 17.49 square miles, including about 0.6 square miles of water. Daphne is known as the "Jubilee City," a name derived from the natural biological phenomenon known as a "jubilee," during which large numbers of marine species, such as crab and shrimp, emerge along the shoreline. Daphne served as the county seat of Baldwin County until 1900 and was incorporated on July 8, 1927.

Town of Elberta

The Town of Elberta encompasses approximately 6.87 square miles and is among the smaller municipalities in Baldwin County by both land area and population. The town is named for the Elberta variety of peaches. Elberta was incorporated on December 9, 1952, and was originally founded by the Baldwin County Colonization Company to provide agricultural land for German immigrants who settled in the area.

City of Fairhope

The City of Fairhope is located in southwestern Baldwin County and borders the City of Daphne to the south. The city encompasses approximately 12.0 square miles and, according to the most recent population estimates, is the second-largest municipality in Baldwin County. Fairhope was founded in 1894 as a utopian community influenced by Henry George's economic philosophy, which advocated a single tax on the rental value of land as the primary source of government revenue. Today, approximately 4,000 acres within the city remain under the ownership of the Fairhope Single Tax Corporation, which provides long-term leases—typically up to 99 years—to residents while prohibiting the sale of the land.

City of Foley

The City of Foley is located in south-central Baldwin County and encompasses approximately 25.88 square miles. According to the most recent population estimates, Foley is the third-largest municipality in Baldwin County. The city is one of the principal communities within the Daphne–Fairhope–Foley Micropolitan Statistical Area, which includes all of Baldwin County. Foley was founded by Chicago businessman John Burton Foley, who persuaded Cornelius Vanderbilt to establish a railroad station at the site, contributing to the city’s early development and growth.

City of Gulf Shores

The City of Gulf Shores is a coastal resort city that borders the Gulf of America (formerly known as the Gulf of Mexico). The city encompasses approximately 27.9 square miles, of which about 23.2 square miles are of land, making it the largest municipality in Baldwin County by area. According to the most recent population estimates, Gulf Shores has sustained long-term population growth, reflecting its role as a major tourism destination and a growing residential community. The city forms the central portion of a continuous stretch of beachfront development extending from the unincorporated Fort Morgan area to the City of Orange Beach.

City of Loxley

The City of Loxley is located east of the City of Daphne in central Baldwin County. The town encompasses approximately 32.22 square miles and, according to the most recent population estimates, is among the smaller municipalities in Baldwin County. Loxley does not share boundaries with any other municipality and is known for hosting the annual Baldwin County Strawberry Festival.

Town of Magnolia Springs

The Town of Magnolia Springs was incorporated on June 29, 2006, becoming Baldwin County’s thirteenth municipality. Incorporation was motivated in part by a desire to protect local waterways and manage development pressures in the area. Located along the Magnolia River west of the City of Foley, the town encompasses approximately one square mile. According to the most recent population estimates, Magnolia Springs remains one of the smaller municipalities in Baldwin County.

City of Orange Beach

The City of Orange Beach is a coastal resort city located east of the City of Gulf Shores. The city encompasses approximately 15.95 square miles, of which about 14.7 square miles are land. According to the most recent population estimates, Orange Beach has experienced significant long-term population growth, reflecting its role as a major tourism destination and coastal residential community.

Town of Perdido Beach

The Town of Perdido Beach is the most recently incorporated municipality in Baldwin County, having been incorporated on June 10, 2009. The town is located along the northern shore of Perdido Bay and encompasses approximately 1.24 square miles. According to the most recent population estimates, Perdido Beach remains one of the smallest municipalities in Baldwin County.

City of Robertsedale

The City of Robertsedale is located in south-central Baldwin County, north of the City of Foley and east of the City of Fairhope. The city encompasses approximately 5.5 square miles and, according to the most recent population estimates, is among the mid-sized municipalities in Baldwin County. Robertsedale was incorporated in 1921 by the Southern Plantation Corporation of Chicago.

Town of Silverhill

The Town of Silverhill encompasses approximately 1.2 square miles and, according to the most recent population estimates, is the smallest municipality in Baldwin County by population. Silverhill was incorporated in 1926 and, like several other municipalities in southern Baldwin County, was founded as part of a colonization effort by a Chicago-based real estate company.

City of Spanish Fort

The City of Spanish Fort is located along Mobile Bay, north of the City of Daphne and Interstate 10. The city encompasses approximately 33.4 square miles, of which about 28.7 square miles are land. According to the most recent population estimates, Spanish Fort is among the larger municipalities in Baldwin County by land area and has experienced steady residential growth in recent decades, reflecting its proximity to regional transportation corridors and coastal amenities.

Town of Summerdale

The Town of Summerdale is located in south-central Baldwin County and encompasses approximately 9.73 square miles. According to the most recent population estimates, Summerdale is among the smaller municipalities in Baldwin County.

IV. Government

Baldwin County is governed by a four-member County Commission, with each commissioner elected to a four-year term and required to reside in the district they represent. The City of Bay Minette serves as the county seat. The county's municipalities operate under a mayor-council form of government, providing local legislative and executive authority within their respective jurisdictions.

V. Physical Features

Baldwin County is located within the Lower Coastal Plain of the Gulf Coastal Plain physiographic province and is characterized by five distinct geologic formations. The northwestern portion of the county includes extensive wetlands adjacent to Mobile Bay and is dominated by silt and clay sediments deposited by the Alabama and Tombigbee Rivers. Elevations in this area range from sea level to approximately 200 feet above sea level.

The southern portion of the county features nearly level to gently sloping terrain with elevations generally ranging from 10 to 100 feet above sea level and soil composed primarily of marine materials. The southernmost tip of the county features sandy coastal beaches along the Gulf of America (previously Mexico), with inland elevations rising from sea level to approximately 20 feet above sea level.

Eastern Baldwin County features hilly terrain, with elevations ranging from approximately 50 to 300 feet above sea level. The central portion of the county, which contains the majority of the population, consists of level to gently sloping topography with elevations generally ranging from 100 to 300 feet above sea level.

VI. Climate

Baldwin County experiences a humid subtropical maritime climate that is strongly influenced by weather systems originating in the Gulf of America. Summers are typically hot and humid, with conditions moderated by prevailing southerly breezes. The county is vulnerable to high winds and heavy rainfall from hurricanes and other tropical systems during the summer and fall.

During the summer season, abundant Gulf moisture contributes to frequent high humidity and periodic afternoon thunderstorms, which may produce strong winds, dangerous lightning, hail, or tornadoes. Winters are generally mild, and snowfall is rare. Additional climate information is provided in Table 3-3.

Table 3.3 – Climate Information

Category	Typical Conditions
Average Annual Temperature	Temperate to warm, consistent with a humid subtropical maritime climate
Average January Temperature	Mild winter conditions
Average July Temperature	Hot and humid summer conditions
Average Annual Precipitation (inches)	High annual rainfall is influenced by Gulf of America weather systems
Average Annual Snowfall	Minimal; snowfall is rare.
Growing Season	Long growing season typical of coastal southern Alabama
Prevailing Wind Direction	Predominantly southerly, influenced by Gulf weather patterns

Sources: Climate conditions summarized above reflect long-term climatological normals and observed trends for Baldwin County and southern coastal Alabama, as documented by the National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service (NWS).

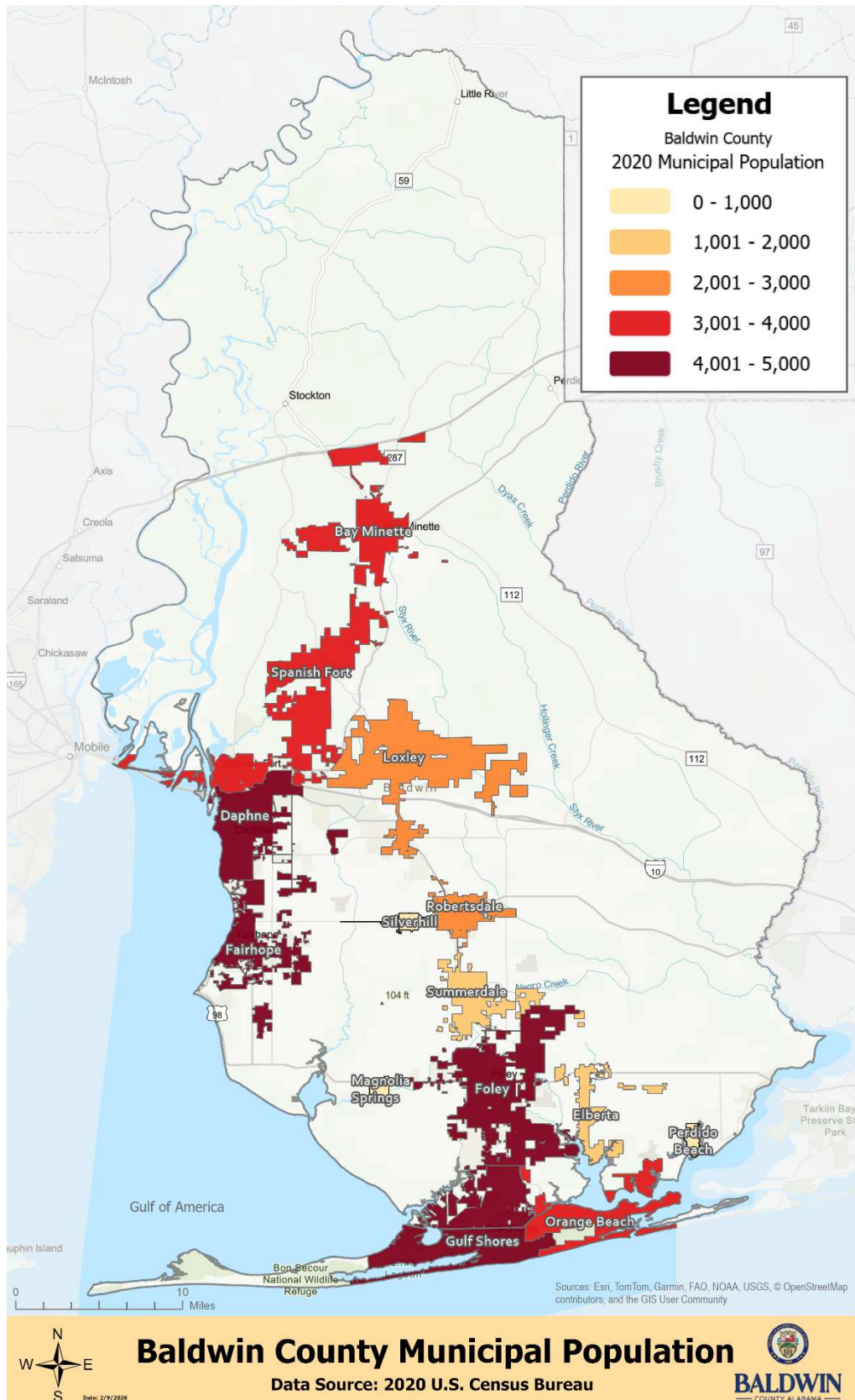
VII. Demographics

2026 Population

The latest U.S. Census estimates provide the 2020 population counts for Baldwin County and its municipalities. As shown on Chart 3.1 – 2020 Population by Municipality, Foley, Daphne, and Fairhope are the only cities in Baldwin County

** insert chart 3.1 – 2020 Population by Municipality.

Source: U.S. Census Bureau American Fact Finder, 202- Population Estimates

Map 3.4 – 2020 Baldwin County Municipal Population

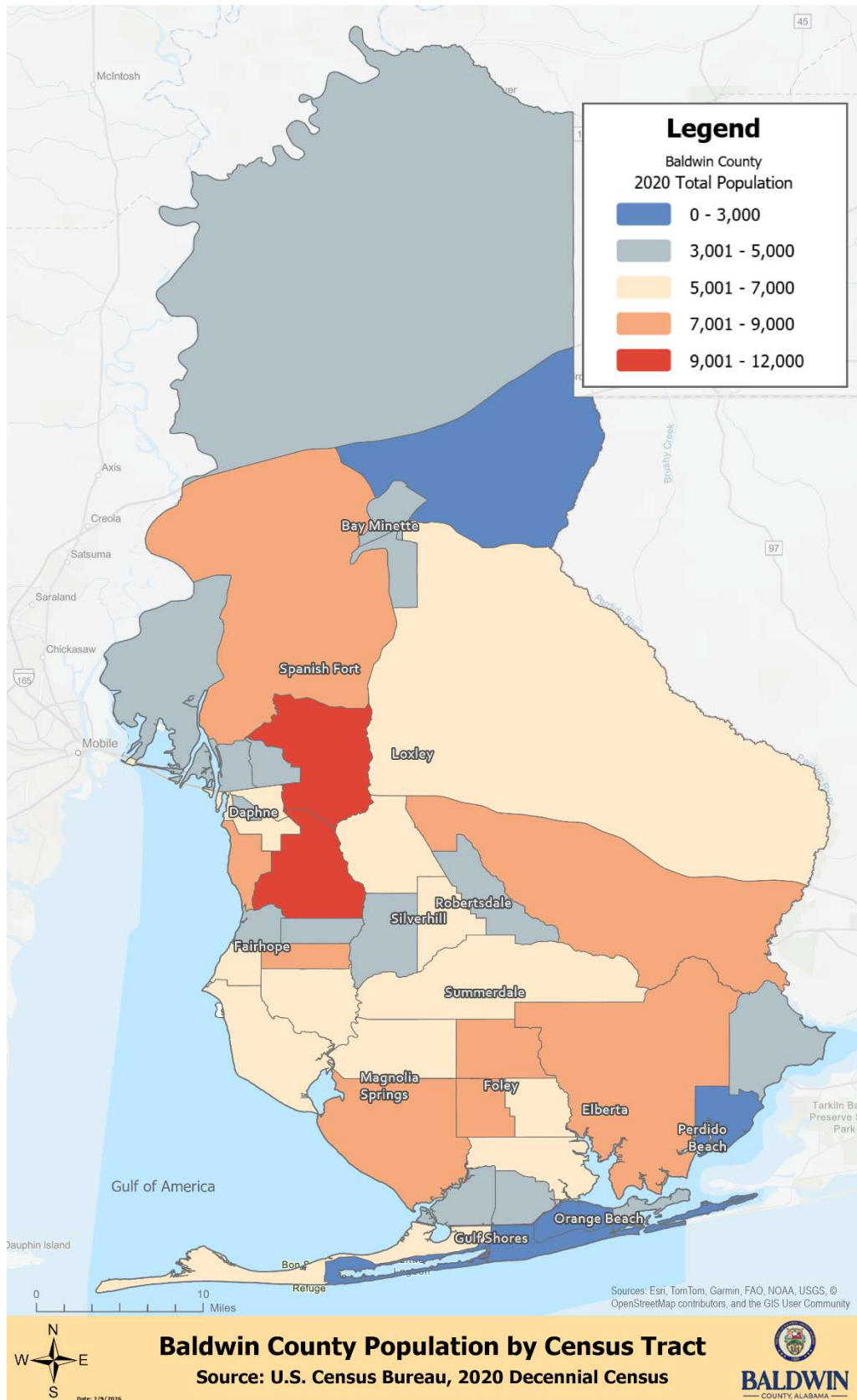
Map 3.5 – Population Density, Baldwin County

Chart 3.2 – 202- Population Distribution by Age, Baldwin County**Chart 3.3 – Racial Composition of Baldwin County**

Source: U.S. Census Bureau, 202- - 202- American Community Survey

Social Characteristics

The following chart illuminates Baldwin County's demography in 2020 and compares the county with the State of Alabama and the United States, when possible. As displayed in Chart 3.3, a significantly smaller share of Baldwin County's population is African American than is the case for the State of Alabama.

Chart 3.4 – Educational Attainment of Baldwin County

Source: U.S. Census Bureau, 202- American Community Survey

VIII. Economy

Baldwin County’s economy is heavily oriented toward service-sector employment, with retail trade, education, healthcare, and social services representing major sources of jobs. Public education remains a significant employment sector, led by the Baldwin County Board of Education. Tourism-related retail and commercial activity also play a major role in the local economy, with destinations such as Tanger Outlets and Walmart supporting both residents and visitors. Manufacturing contributes to economic diversification within the county, with notable employers including Collins Aerospace and Ace Hardware Support Center. Chart 3-5 illustrates Baldwin County employment by industry sector, and Map 3-5 depicts the locations of major employment centers throughout the county.

Chapter 4 – The Planning Process

I. Federal Requirements for the Planning Process

This chapter addresses the Planning Process requirements of 44 CFR Section 201.6 (b) and (c)(1) and the processes for the plan review and update requirements of Section 201.6 (d)(3), as follows:

44 CFR § 201.6 (b) – Planning Process

(b) “*Planning process.* An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process must include:

1. An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
2. An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and nonprofit interests to be involved in the planning process; and
3. Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.”

(c) “*Plan Content.* The plan must include the following:

1. Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.”

(d) “*Plan Review.*

1. A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.”

II. Summary of Plan Updates

Table 4.1 summarizes changes made to the 2026 plan update:

Table 4.1 – Summary of Plan Updates

	Section	Change
4.3	Opportunities for Public Comment on the Plan	Adds opportunities through Facebook and Twitter, and an updated community survey
4.4	Opportunities for Involvement in the Planning Process	Expanded opportunities
4.5	Review and Incorporation of Plans and Documents	Incorporated new plans and documents; examination of local tools
4.6	How the Plan was Prepared	Increased number and scope of HMPC meetings; more direct involvement and oversight by HMPC
4.7	Who was Involved in the Planning Process	Solidified HMPC membership, added new members, and expanded meeting invitations to other partners
4.8	How the Public was Involved in the Planning Process	Increased involvement through social media
4.9	The Plan Review and Update Process	This is the fourth 5-year review and update of the plan

III. Opportunities for Public Comment on the Plan

Placeholder for picture of Hazard Mitigation Website

The Hazard Mitigation Planning Committee (HMPC) actively solicited public input throughout the mitigation plan development process using multiple, accessible engagement methods.

Primary outreach occurred through the Baldwin County website (baldwincountyal.gov) and the Hazard Mitigation website (title), which served as the central hub for public participation. The websites provided advance notice of HMPC meetings and included meeting agendas, presentations, exercises, and supporting materials available for public download.

The draft of the mitigation plan was posted on the Hazard Mitigation website and remained available for public review and comment throughout the planning process. Members of the public could submit comments directly to the planning team via an online comment form and a dedicated project email address (hazard mitigation email).

Additional opportunities for engagement included participation through jurisdictional representatives serving on the HMPC, attendance at committee meetings, and direct coordination with Baldwin County Emergency Management Agency staff by telephone or by appointment.

During later drafting phases, the Baldwin County EMA hosted a community meeting to solicit public comments. The meeting was held on February 11, 2026, between 4 PM and 6 PM at the Baldwin County Annex, *22251 Palmer St D, Robertsdale, AL 36567*. It was conducted in an open house format.

The community meeting featured multiple exhibits, including maps, tables, and educational handouts designed to support public understanding of local hazard risks and mitigation strategies. Members of the Hazard Mitigation Planning Committee (HMPC) and the planning team were present to engage with attendees and respond to questions. Copies of both the draft mitigation plan and the previously approved Regional 2021 Hazard Mitigation Plan were made available on-site for public review and comparison. In addition, a community survey questionnaire was distributed at the meeting and made available for download on the

project website, giving residents the opportunity to submit written comments and concerns. Further details and documentation of community involvement activities, including the survey instrument, media release, and supporting materials, are provided in Appendix H, “Community Involvement Documentation.”

For the 2026 plan update, the Hazard Mitigation Planning Committee (HMPC) expanded public outreach efforts through social media to ensure the public had an opportunity to participate during the plan drafting stage, consistent with 44 CFR §201.6(b)(1). Community meeting announcements and plan update notifications were disseminated via social media platforms operated by Baldwin County Emergency Management Agency, including Facebook and Twitter. Each announcement included a direct link to the mitigation plan website, where draft plan materials were posted, and members of the public were encouraged to submit comments, concerns, and mitigation recommendations throughout the planning process.

Insert screenshots from social media posts



Public hearings to receive final comments were held by all jurisdictions prior to the adoption of this Plan by resolution, as required by State Law.

IV. Opportunities for Public Comment on the Plan

The planning team used resources, social media, and a formal notice of the draft mitigation plan, along with a survey requesting input from decision-makers across Baldwin County, neighboring jurisdictions, and other interested agencies and stakeholders. This outreach was conducted to provide an opportunity for participation during the plan drafting stage and to involve agencies with an interest in hazard mitigation and/or authority to regulate development, as well as representatives of businesses, academia, and other private and nonprofit organizations, in accordance with 44 CFR §201.6(b)(1) and (b)(2). Recipients were invited to review the draft plan and submit written comments and recommendations, or via an online survey. Copies of the notice and survey instrument are included in Appendix H, “Community Involvement Documentation.” A list of recipients is provided below.

Federal Agencies

- National Weather Service – Mobile Office
- U.S.D.A. Natural Resources Conservation Service – Alabama District
- U.S. Army Corps of Engineers – Mobile District
- Federal Emergency Management Agency (FEMA)

State Agencies

- Alabama Emergency Management Agency (AEMA)
- Alabama Department of Economic and Community Affairs (ADECA)
- Alabama Department of Environmental Management (ADEM)
- Alabama Department of Transportation (ALDOT)
- Alabama Forestry Commission
- Geological Survey of Alabama
- Alabama Historical Commission

Local and Regional Agencies

- South Alabama Regional Planning Commission
- Baldwin County Economic Development Alliance

Neighboring Counties (represented by County EMA directors)

- Mobile County, Alabama
- Washington County, Alabama
- Clarke County, Alabama
- Monroe County, Alabama
- Escambia County, Alabama
- Escambia County, Florida

Business Interests

- Mobile Area Chamber of Commerce
- Alabama Gulf Coast Area Chamber of Commerce
- Central Baldwin Chamber of Commerce
- South Baldwin Chamber of Commerce
- North Baldwin Chamber of Commerce
- Eastern Shore Chamber of Commerce

Academia

- Baldwin County Public Schools – Board of Education
- South Baldwin Regional Medical Center
- Thomas Hospital
- Mercy Medical
- North Baldwin Infirmary

V. Review and Incorporation of Applicable Plans and Documents

The planning team reviewed existing community plans and ordinances relevant to hazard mitigation and determined that most were adopted before the original local mitigation plans were developed. Several of these regulatory mechanisms address specific natural-hazard concerns, including floodplain management, stormwater detention, erosion and sedimentation control, tree protection, and land conservation and open-space preservation. These existing policies and ordinances were evaluated and incorporated into the mitigation planning process to ensure consistency and alignment with current hazard mitigation goals and strategies.

The planning team conducted a comprehensive review of community plans and regulatory tools as part of the 2021 mitigation plan update. During that update, participating jurisdictions submitted copies of relevant plans, studies, reports, ordinances, regulations, and technical information related to hazard mitigation for the planning team's evaluation.

Since that time, no substantial changes have been made to these documents, except for the plan updates described below. The reviewed materials were evaluated to identify hazard mitigation measures currently in place and to assess opportunities to incorporate additional mitigation actions into future revisions of existing documents.

The review generally included local comprehensive plans, zoning ordinances, subdivision regulations, building and technical codes, floodplain management ordinances, and erosion and sedimentation control ordinances. Selected plans and ordinances addressing specialized hazard concerns—such as stormwater management and drainage, tree preservation, open burning, and wildfire mitigation—were also examined. In addition, the planning team utilized multiple data sources to support plan development, including U.S. Census Bureau data, National Oceanic and Atmospheric Administration weather data, FEMA disaster declarations and reports, and the 2023 Alabama State Hazard Mitigation Plan. To complete the 2026 assessment of planning and regulatory capabilities, the planning team reviewed the most significant plans and ordinances adopted after 2021, most of which were available online at the time.

In 2023, the Baldwin County Commission adopted the updated Baldwin County Master Plan: Our Vision – A Citizen’s Guide to Growth in the Zoned Areas of Baldwin County, which provides long-range guidance for growth and development within the county’s zoned, unincorporated areas. The Master Plan emphasizes coordinated land-use planning, infrastructure investment, and the protection of natural and environmental resources to support sustainable growth. Future land-use policies in the plan promote the preservation of environmentally sensitive areas, the strategic use of open space, and development patterns that reduce exposure to flood hazards and other natural risks. In addition, the plan encourages context-sensitive recreational and green infrastructure investments that are compatible with natural landscapes, including rivers, forests, wetlands, and coastal resources. These policies directly support the mitigation goals and actions identified throughout this plan, particularly those related to natural resource protection, flood risk reduction, resilient land-use planning, and the conservation of open space as long-term hazard mitigation measures.

Mitigation strategies identified through this mitigation plan update are intended to be incorporated, as appropriate, into future revisions of existing comprehensive plans and other relevant planning and policy documents. Specific actions and procedures for integrating hazard mitigation considerations into local planning, regulatory, and decision-making processes are documented in the Community Mitigation Action Programs for each participating jurisdiction, as presented in Chapter 6, “Mitigation Strategy.”

VI. How the Plan was Prepared

Throughout 2024 and 2025, the Baldwin County Hazard Mitigation Planning Committee (HMPC) held regular meetings to support participation by committee members and partner agencies in the mitigation plan drafting process. Official meeting minutes are maintained on file at the Baldwin County Emergency Management Agency. Copies of meeting agendas and sign-in sheets are provided in Appendix G, “Committee Meeting Documentation.” All meeting agendas, presentations, and exercises were posted on the Baldwin County website (baldwincountyal.gov) to ensure transparency and accessibility. Committee members who were unable to attend in person could download meeting materials, review the content, and submit comments and feedback to the planning team, ensuring continued participation throughout the planning process.

The initial hazard mitigation planning meeting for the 2026 plan update was held on November 8, 2024. During this meeting, committee members discussed administrative items, including verification of contact information, roles and responsibilities, and the importance of the hazard mitigation plan in guiding risk reduction and maintaining eligibility for FEMA Hazard Mitigation Assistance programs. The full Hazard Mitigation Planning Committee (HMPC) convened again on January 16, 2025, at which time the structure and purpose of the Jurisdictional Assessment Teams (JATs) were discussed, including identification of team members within each participating jurisdiction to support localized data collection, risk assessment, and mitigation action development.

An additional full meeting of the Hazard Mitigation Planning Committee (HMPC) was held on October 16, 2025. During this meeting, a new HMPC Secretary was appointed, and the planning schedule was reviewed and updated to set revised deadlines for completing plan components. Each participating jurisdiction was provided with a copy of its previously approved Community Action Programs to support review and development of updated actions for inclusion in the 2026 plan. The HMPC Executive Committee subsequently met on December 9, 2025, to review submitted Community Mitigation Action Programs, discuss jurisdictional feedback, and conduct a detailed review of the draft mitigation plan.

On January 8, 2026, the full Hazard Mitigation Planning Committee (HMPC) convened at the Baldwin County Emergency Operations Center. During this meeting, committee members emphasized the importance of regular meetings to support completion of the draft mitigation plan. The full body approved the scheduling of additional meetings to ensure continued coordination and timely progress. The Planning Team subsequently met on January 30, 2026, to conduct a detailed review of the draft mitigation plan and the Community Mitigation Action Programs, incorporating feedback and preparing the plan for finalization.

The final meeting of the Hazard Mitigation Planning Committee (HMPC) was held on February 26, 2026, preceding the public comment period at the Baldwin County Emergency

Operations Center. During this meeting, the HMPC reviewed the draft mitigation plan, which had been distributed to committee members several weeks in advance, along with Volume II, *Community Mitigation Action Programs*. The planning team emphasized the importance of jurisdiction-specific action programs and reaffirmed HMPC members' ongoing responsibility to oversee implementation and monitor mitigation progress in their respective jurisdictions.

Chapter 4, Planning Process, was also reviewed, including a summary of the planning activities conducted during the update period and an overview of expectations for FEMA review and approval and local plan adoption. The mitigation plan approval process was outlined, beginning with a recommendation from the Alabama Emergency Management Agency and culminating in final approval by the Federal Emergency Management Agency. Committee members were advised that each participating jurisdiction must formally adopt the plan in order to maintain eligibility for future hazard mitigation funding. Finally, the planning team reiterated the requirement for the HMPC to meet at least annually to review plan implementation and progress, consistent with the plan maintenance procedures described in Chapter 7, *Plan Maintenance Process*.

The planning team assembled the final draft of the mitigation plan and submitted it to the Alabama Emergency Management Agency for review and recommendation to the Federal Emergency Management Agency. FEMA subsequently issued an *Approvable Pending Adoption* determination. Following FEMA's conditional approval, the mitigation plan was formally adopted by resolution at publicly noticed hearings of the governing bodies of all participating jurisdictions. As an active participant in the mitigation planning process and as a local government entity with facilities and services located throughout the planning area, the Baldwin County Board of Education also formally adopted the plan to maintain eligibility for hazard mitigation assistance programs.

VII. Who was Involved in the Planning Process

4.7.1 The Hazard Mitigation Planning Committee

The Baldwin County Hazard Mitigation Planning Committee (HMPC), comprised of representatives from participating jurisdictions and organizations with responsibilities related to hazard mitigation, guided the development of this mitigation plan. The HMPC provided oversight, coordination, and input throughout the planning process to ensure that local risks, capabilities, and priorities were appropriately addressed. The membership of the HMPC, along with the political jurisdictions and stakeholder organizations represented, is listed as follows:

Table 4.2 – HMPC Membership

[illegible]

Note: The Baldwin County EMA serves as the lead local agency supporting the drafting, adoption, and ongoing implementation of the plan. The EMA supports committee activities and represents the interests of all Baldwin County jurisdictions and agencies, including school boards and utilities.

4.7.2 The Mission of the Hazard Mitigation Planning Committee

The HMPC chose to retain the mission statement from previous plan updates:

The mission of the Baldwin County Hazard Mitigation Planning Committee is to oversee and establish a comprehensive hazard mitigation planning process that:

- *Engages public participation and support;*
- *Facilitates Federal, State, Regional, and Local Agencies' coordination;*
- *Constantly monitors and evaluates the potential risks of hazards to life and property;*
- *Actively mobilizes all available community resources and measures to mitigate the threats of hazards; and,*
- *Concludes in programmed actions with specific results.*

The 2026 mitigation plan update was prepared under the direction of the Hazard Mitigation Planning Committee (HMPC), with technical coordination and administrative support provided by the Baldwin County Emergency Management Agency Planning and Grants Division Manager, Anna-Marie O'Brien. Unlike previous plan updates that relied on consultant support, the 2026 plan was developed in-house through the collaborative efforts of the HMPC and participating jurisdictions, ensuring direct local involvement and ownership throughout the planning process.

VIII. How the Public was Involved in the Planning Process

As documented throughout this chapter, the public was provided multiple opportunities to participate in the 2026 mitigation plan update. Public involvement methods included: (1) participation in Hazard Mitigation Planning Committee (HMPC) meetings; (2) submission of comments through the plan website, dedicated email account, and social media platforms; (3) attendance at the public community meeting; (4) completion of the community survey; (5) submission of written comments via postal mail or email; and (6) direct consultation with the planning team by telephone or through in-person meetings. These outreach methods were implemented to ensure meaningful public engagement throughout the plan development process.

All Hazard Mitigation Planning Committee (HMPC) meetings were publicly noticed and open to the public. Meeting dates were posted on the Baldwin County website (baldwincountyal.gov) in advance of each meeting. Meeting agendas, slide presentations, committee exercises, handouts, and draft sections of the mitigation plan were also made publicly available, providing transparency and ensuring full public access to the mitigation planning process.

The Hazard Mitigation Planning Committee (HMPC) sponsored a special public community meeting on February 11, 2026, during the plan drafting phase. At this meeting, the draft mitigation plan was formally presented, and hazards and alternative mitigation measures were discussed with attendees. Maps and educational handouts, including publications from the Federal Emergency Management Agency, were made available to support public understanding of hazard risks and mitigation options. Members of the public were also encouraged to complete a community survey to identify perceived risks, hazard concerns, and potential mitigation strategies. Survey results were compiled and posted on the plan website and distributed to HMPC members for consideration during plan development.

At the conclusion of the planning process, the public was given a final opportunity to review and comment on the 2026 mitigation plan update before adoption. Each participating jurisdiction held a public hearing before formally adopting the plan, allowing individuals to provide additional input and testimony. Detailed documentation and discussion of public involvement activities conducted during the planning and adoption process are included in Appendix H, “Community Involvement Documentation”.

IX. The Plan Review and Update Process

The plan review and update process resulted in a comprehensive update of the entire 2015 and 2021 plan elements, which was achieved through a process that involved the following tasks, among others:

- Updated Community Profiles to reflect current demographics, housing characteristics, economic conditions, infrastructure investments, and recent growth and development trends through 2025;
- Updated assessment of local administrative, technical, regulatory, and financial capabilities to implement hazard mitigation measures, including staffing, data resources, and interagency coordination;
- Evaluation of the status and effectiveness of Community Mitigation Action Programs adopted in the 2015 and 2021 plans, with findings incorporated into revised 2026 jurisdiction-specific Action Programs;

- Comprehensive reassessment of risk using updated hazard data, historical event analysis, and probability estimates, including continued consideration of technological and human-caused hazards where applicable;
- Updated hazard mapping and analytical products, including revised floodplain data, storm surge and hurricane exposure, and other available modeling tools used in place of or in coordination with HAZUS-MH where appropriate;
- Reexamination of development patterns, land use changes, and exposure of people, property, critical facilities, and vulnerable populations to identified hazards;
- Review and reaffirmation of the community vision for disaster resilience, mitigation goals, and alignment with current state and federal mitigation priorities;
- Identification and evaluation of a comprehensive range of mitigation alternatives across FEMA mitigation categories, including prevention, property protection, natural resources protection, public education and outreach, and structural projects;
- Reprioritization of mitigation actions and projects using updated risk information, capability assessments, and feasibility considerations;
- Revision of Community Mitigation Action Programs for each participating jurisdiction to reflect updated risks, priorities, and implementation capacity; and
- Update of plan maintenance procedures to strengthen continuous monitoring, annual review by the Hazard Mitigation Planning Committee, streamlined amendment processes, and long-term implementation tracking.

During the period between approval of the 2021 plan and the drafting of the 2026 plan, the HMPC held six full-body planning meetings and several planning team meetings to review plan implementation measures and projects, in accordance with Chapter 7 “Plan Maintenance”. Documentation of those meetings can be found in Appendix G, “Committee Meeting Documentation.”

Chapter 5 – Risk Assessment

I. Federal Requirements for Risk Assessments

This chapter of the Plan addresses the Risk Assessment requirements of 44 CFR Section 201.6 (c)(2), as follows:

(c) **Plan Content.** The plan must include the following:

(2) *“A Risk Assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment must include:*

- (i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan must include information on previous occurrences of hazard events and on the probability of future hazard events.
- (ii) A description of the jurisdiction's vulnerability to the hazards described in [paragraph \(c\)\(2\)\(i\)](#) of this section. This description must include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008, must also address NFIP insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:
 - A. The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;
 - B. An estimate of the potential dollar losses to vulnerable structures identified in [paragraph \(c\)\(2\)\(ii\)\(A\)](#) of this section and a description of the methodology used to prepare the estimate;
 - C. Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.
- (iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

II. Summary of Plan Updates

Table 5.1 summarizes updates to the 2026 plan:

Table 5.1 – Plan Updates

	Section	Change
5.3	Identification of Hazards Affecting Each Jurisdiction	Provides an update on hazards.
5.4	Hazard Profiles	Refines existing profiles by improving descriptions, updating past event data, and enhancing mapping
5.5	Vulnerability of Structures within Each Jurisdiction	Incorporates HAZUS_MH inventory and population census data.
5.6	Estimate of Dollar Losses to Vulnerable Structures	Provides HAZUS-MH modeled loss estimates and supplements findings with historical loss data.
5.7	General Description	General land use and development trends address.
5.8	Repetitively Damaged NFIP-Insured Structures	Addresses Federal Requirement.
5.9	Summary of Hazards and Community Impacts	Previously mentioned hazard profiles and community-specific impact descriptions.
5.10	Risks that Vary Among the Jurisdictions	Improved explanation of how risks varied.

III. Identification of Hazards Affecting Each Jurisdiction

5.3.1 Types of Hazards

Hazards affecting each participating jurisdiction are identified in Table 5-2, “Identified Baldwin County Hazards.” This table illustrates the range of natural hazards impacting the planning area and highlights relationships among hazards where applicable. In addition to the hazards identified in previous plan updates, the 2026 Baldwin County Multi-Hazard Mitigation Plan includes tsunamis as an identified hazard to ensure a comprehensive assessment of coastal risks. Detailed hazard descriptions, ratings, and supporting information are provided in Appendix D, “Hazard Identification, Ratings and Descriptions.”

Table 5.2 – Identified Baldwin County Hazards

Hazards	Associated Hazards	Jurisdictions Affected
Hurricanes	Tropical Storms Tropical Depressions Severe Storms High Winds Floods Storm Surge Tornadoes	All jurisdictions
Flooding		All jurisdictions
Severe Storms	Thunderstorm Hail Lightening High Winds/Straight-Line Winds Tornado Floods Landslides Wildfires	All jurisdictions
Tornadoes	High Winds Severe Storms	All jurisdictions
Wildfires		All jurisdictions
Drought/Heat Waves	Extreme Heat Wildfires Sinkholes	All jurisdictions
Winter Storms/Freezes	Snowstorms Ice Storms Extreme Cold	All jurisdictions
Earthquakes	Landslides	All jurisdictions
Landslides		All jurisdictions
Dam/Levee Failure	Flooding	All jurisdictions
Sinkholes (Land Subsidence)		All jurisdictions
Tsunamis		All jurisdictions
Manmade/Technological		All jurisdictions

**Jurisdictions included in “All Jurisdictions” are Baldwin County, Bay Minette, Daphne, Elberta, Fairhope, Foley, Gulf Shores, Loxley, Magnolia Springs, Orange Beach, Perdido Beach, Robertsedale, Silverhill, Spanish Fort, and Summerdale, unless otherwise noted.*

5.3.2 Sources for Identifying Baldwin County Hazards

The planning team used the following sources to identify hazards for the 2026 Baldwin County Multi-Hazard Mitigation Plan:

1. HMPC Hazard Identification and Ratings Exercise. The Hazard Mitigation Planning Committee initiated the 2026 hazard identification process by completing a structured exercise to review and evaluate the hazards identified in the previous plan update. This exercise assessed the continued relevance of previously identified hazards, considered emerging or changing hazard conditions, and incorporated committee input based on recent events and local experience. The results of this exercise are documented in Appendix D, “HMPC Hazard Identification and Ratings.”
2. Alabama State Hazard Mitigation Plan. The most recent update to the Alabama State Hazard Mitigation Plan was used as an additional reference to identify hazards affecting Baldwin County. The planning team compared state-level and local hazard data to ensure consistency and completeness. Differences between the state and local hazard lists are summarized in Table 5-3.

Table 5.3 – Comparison of Identified Baldwin County Hazards to Alabama Hazard Mitigation Plan

Hazards Identified in the 2023 Alabama State Plan	Equivalent 2026 Baldwin County Identified Hazards	Differences
High Winds (hurricanes, tornadoes, and windstorms)	Hurricanes – High Winds Tornadoes – High Winds Severe Storms – High Winds	High winds are treated as a hazard component within hurricanes, tornadoes, and severe storms in the Baldwin County plan, rather than as a standalone hazard.
Floods (storm surge, riverine, flash floods, etc.)	Flooding Hurricanes – Storm Surge	Baldwin County's plan differentiates flooding by mechanism and associates' storm-surge impacts primarily with hurricanes and coastal hazards.
Hail	Severe Storms – Hail	Included as a component of severe storms in the Baldwin County Plan.
Lightening	Severe Storms – Lightning	Including it as a component of severe storms in the Baldwin County plan.

Hazards Identified in the 2023 Alabama State Plan	Equivalent 2026 Baldwin County Identified Hazards	Differences
Wildfires	Wildfires	Baldwin County plan notes strong relationships among wildfires, drought, and extreme heat.
Droughts	Droughts/Heat Waves	The Baldwin County plan combines drought and heat-related hazards and identifies secondary impacts such as sinkholes and wildfire risk.
Extreme Temperatures	Droughts/Heat Waves – Extreme Heat Winter Storms/Freezes – Extreme Cold	Extreme temperatures are addressed through both heat-related and cold-weather hazard categorizations in the Baldwin County plan.
Winter/Ice Storms	Winter Storms/Freezes	The Baldwin County plan emphasizes extreme cold and freezing conditions and their associated impacts.
Earthquakes	Earthquakes	Baldwin County plan identifies landslides and sinkholes as potential secondary hazards associated with seismic activity.
Landslides	Landslides	Baldwin County plan includes mudslides as an associated hazard where applicable.
Dam/Levee Failures	Dam/Levee Failures	The Baldwin County plan emphasizes flooding as the primary consequence of flood/levee failure scenarios.
Sinkholes & Land Subsidence	Sinkholes (Land Subsidence)	No substantive difference.
Tsunamis	Tsunamis	Baldwin County explicitly includes tsunamis due to coastal exposure and potential Gulf-related impacts.
Sea Level Rise	Tsunamis – Sea Level Rise	The Baldwin County plan treats sea-level rise as a contributing factor to tsunami and coastal-hazard impacts, rather than a standalone hazard.

3. List of Federally Declared Disasters. Federal disaster declarations were used as an additional source for hazard identification for the 2026 Baldwin County Multi-Hazard Mitigation Plan. Baldwin County has been included in numerous federal disaster declarations since 1973. It should be noted that not all declared events resulted in direct impacts within Baldwin County, as FEMA frequently includes adjacent or “buffer” counties in disaster declarations to account for the potential for broader or evolving impacts. All federal disaster declarations applicable to Baldwin County through the most recent data available for this plan update are summarized in Table 5-4.

Table 5.4 – 1973-2026 Federal Disaster Declarations Affecting Baldwin County

Disaster No.	Description	Date of Declaration	Declaration Type
369	Tornado	5/3/1973	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
388	Severe Storms, Flooding	5/29/1973	HM
422	Tornadoes	4/4/1974	HM
458	Severe Storms, Flooding	3/14/1975	HM
464	Severe Storms, Flooding	4/23/1975	HM
488	Severe Storms, Tornadoes, Flooding	10/2/1975	HM
532	Severe Storms, Flooding	4/9/1977	HM
3045	Drought	7/20/1977	PA-AB
563	Severe Storms, Flooding	8/9/1978	PA-ABCDEFGF, HM
3074	Flooding	3/17/1979	PA-AB
578	Storms, Wind, Flooding	4/18/1979	HM
598	Hurricane Frederic	9/13/1979	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
619	Severe Storms	4/20/1980	HM
638	Severe Storms, Tornadoes, Flooding	4/10/1981	HM

Disaster No.	Description	Date of Declaration	Declaration Type
639	Flood	5/14/1981	HM
695	Severe Storms, Flooding, Tornadoes	12/13/1983	HM
742	Hurricane Elena	9/7/1985	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
848	Severe Storms, Tornadoes	11/17/1989	HM
856	Flooding, Severe Storm, Tornado	2/17/1990	HM
861	Severe Storms	3/23/1990	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
890	Flooding, Severe Storm	1/4/1991	HM
3096	Severe Snowfall, Winter Storm	3/15/1993	PA-AB
1013	Winter Storm, Severe Storm, Freezing, Flooding	3/3/1994	HM
1019	Severe Storm, Flooding, Tornado	3/30/1994	HM
1034	Severe Storm, Flooding, Tropical Storm Alberto	7/8/1994	HM
1047	Severe Storms, Tornadoes, Flooding	4/21/1995	HM
1070	Hurricane Opal	10/10/1995	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
1104	Storms, Flooding	2/23/1996	HM
1108	Storms, Tornadoes, Floods	3/20/1996	HM
1185	Severe Storms	7/25/1997	IA, PA-ABCDEFGF, DH, DUA, IFG, HM
1208	Severe Storms, Flooding	3/9/1998	HM
1214	Tornadoes, Severe Storms	4/9/1998	HM
3133	Hurricane Georges	9/28/1998	PA-AB, HM

Disaster No.	Description	Date of Declaration	Declaration Type
1250	Hurricane Georges	10/6/1998	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
1261	Freezing Rain, Ice Storm	1/15/1999	HM
1317	Winter Storm	2/18/2000	HM
1322	Severe Storms, Flooding	3/17/2000	HM
1352	Tornadoes	12/18/2000	HM
1362	Severe Storms, Flooding	3/5/2001	HM
1399	Severe Storms, Tornadoes	12/7/2001	HM
1438	Tropical Storm Isidore	10/9/2002	PA-ABCDEFGH, HM
1442	Severe Storms, Tornadoes	11/9/2002	HM
1466	Severe Storms, Tornadoes, and Flooding	5/12/2003	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
1549	Hurricane Ivan	9/15/2004	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
1593	Hurricane Dennis	7/10/2005	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
1605	Hurricane Katrina	8/29/2005	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
3237	Hurricane Katrina Evacuation	9/10/2005	PA-B
1687	Severe Storms, Tornadoes	3/3/2007	HM
3214	Hurricane Katrina	8/28/2005	PA-AB
3292	Hurricane Gustav	8/30/2008	PA-B
1789	Hurricane Gustav	9/10/2008	IA, PA-ABCDEFGH, DH, DUA, IFG, HM
1797	Hurricane Ike: Severe Storms, Flooding	9/26/2008	PA-AB, HM

Disaster No.	Description	Date of Declaration	Declaration Type
1835	Severe Storms, Flooding, Tornadoes	4/28/2009	PA-ABCDEFGH, HM
1836	Severe Storms, Flooding, Tornadoes, Straight-line Winds	5/8/2009	HM
1842	Severe Storms, Tornadoes, Flooding, Straight-line Winds	6/3/2009	HM
1866	Tropical Storm Ida	12/22/2009	PA-AB, HM
1870	Severe Storms, Flooding	12/31/2009	HM
1908	Severe Storms, Tornadoes, Straight-line Winds, Flooding	5/3/2010	HM
1971	Severe Storms, Tornadoes, Straight-line Winds, Flooding	4/28/2011	HM
4052	Severe Storms, Tornadoes, Straight-line Winds, Flooding	2/1/2012	HM
4082	Hurricane Isaac	9/21/2012	PA-ABCDEFGH, HM
4176	Severe Storms, Tornadoes, Straight-line Winds, Flooding	5/2/2014	IA, PA-ABCDEFGH, HM
4563	Hurricane Sally	9/20/2020	IA, PA
4596	Severe Storms, Straight-Line Winds, and Tornadoes	4/26/2021	
4710	Severe Storms, Straight-Line Winds, and Tornadoes	5/5/2023	
3618	Hurricane Helene	9/26/2024	PA-B
* Declaration Type / Description Key:			
IA – Individual assistance		PA-A – Debris removal	
PA – Public assistance		PA-B – Protective measures	

Disaster No.	Description	Date of Declaration	Declaration Type
DH – Disaster housing		PA-C – Roads and bridges	
CC – Crisis counseling		PA-D – Water control facilities	
DFA – Direct federal assistance		PA-E – Public buildings	
DUA – Disaster unemployment assistance		PA-F – Public utilities	
HM – Hazard mitigation		PA-G – Recreation	
IFG – Individual and family grant		SA – Stafford Act	
SBA – Small Business Administration		403C – Department of Defense	

4. Other Hazard Identification Sources:

- Local expertise provided by Baldwin County Emergency Management Agency staff and local government professionals
- Discussions with residents serving on the Hazard Mitigation Planning Committee and participants in community meetings, outreach events, and public surveys
- National Weather Service
- NOAA Storm Events Database
- Southeast Regional Climate Center
- U.S. Geological Survey
- Southern Wildfire Risk Assessment Portal
- Alabama Forestry Commission
- U.S. Department of Transportation Hazardous Materials Intelligence Portal
- Extensive review of publicly available technical reports, datasets, and other internet-based resources

IV. Hurricanes Profile

5.4.1 Hurricanes Profile

Hurricanes typically form in late summer and early fall, when prolonged warm weather has raised sea-surface temperatures across the Atlantic Ocean and the Gulf of America. Evaporation from these warm waters provides the energy that fuels tropical disturbances, some of which intensify into tropical storms and, under favorable conditions, hurricanes. Baldwin County's location along the central Gulf Coast places the county at elevated risk for direct hurricane landfalls as well as indirect impacts such as high winds, heavy rainfall, storm surge, and coastal flooding. The Alabama Emergency Management Agency has identified Baldwin County as part of the Primary Hurricane Risk Area due to its coastal exposure and historical hurricane impacts.

Hurricane Isaac prompted a State of Emergency declaration on September 21, 2012, and made landfall in Louisiana as a Category 1 hurricane on August 28, 2012. Although the most significant damage occurred outside Alabama, Baldwin County experienced heavy rainfall, resulting in minor roadway flooding in low-lying areas and scattered power outages. Coastal conditions deteriorated as swells increased, producing hazardous surf conditions along the shoreline. One image shows waves overtopping a roadway in Orange Beach (credit: CNN).

Figure 5.1 – Swells on Public Roadway, Gulf Shores, AL



Photo credit: Alabama State Parks (Gulf State Park)

Location for Potential Hurricanes

Although all areas of Baldwin County are vulnerable to hurricane impacts, certain locations are more susceptible to specific hurricane-related hazards. Coastal communities, including Gulf Shores, Orange Beach, Perdido Beach, and nearby unincorporated coastal areas, face the greatest risk from high winds and storm surge.

Hurricane intensity is measured by sustained wind speed, which is typically strongest at or near the point of landfall. Storm surge occurs when hurricane-force winds push ocean water above normal sea level, creating an abnormal rise in water along the coast. As a hurricane moves onshore, the elevated water can inundate low-lying coastal areas, causing flooding, erosion, and damage to structures and infrastructure.

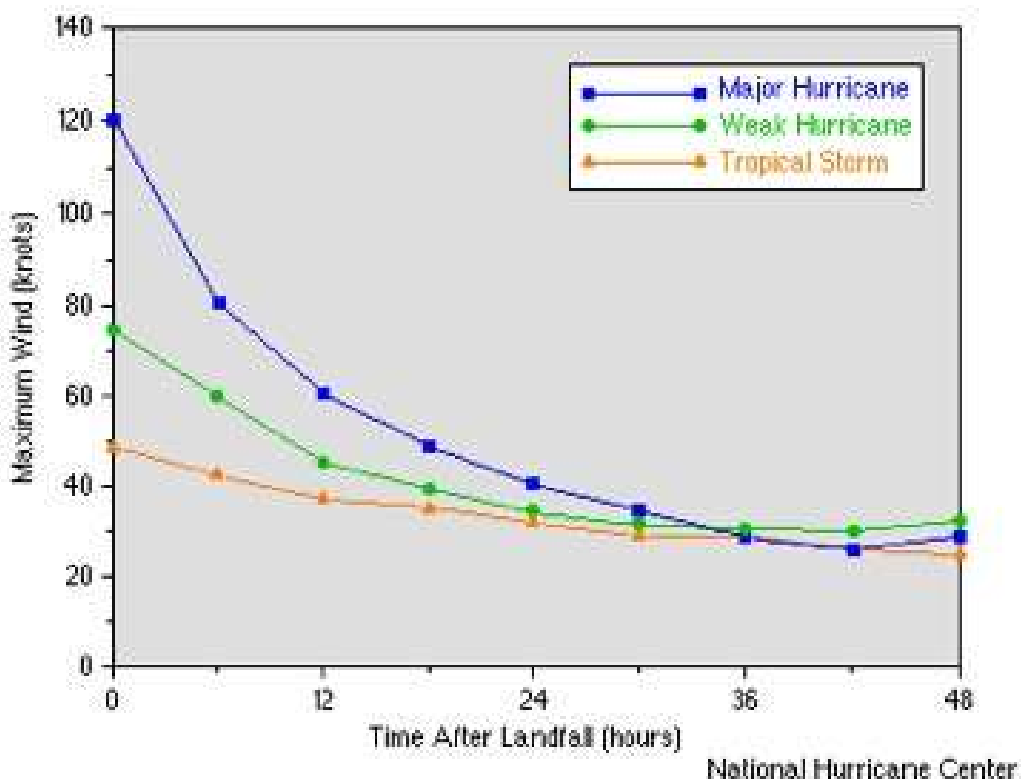
Extent and Intensity of Hurricanes

For Baldwin County, storm surge is the most dangerous hazard associated with hurricanes. The extent and severity of storm surge depend on several factors, including hurricane wind speed, proximity to the coastline, storm track, and local underwater geography. Map 5-1 delineates areas within Baldwin County that are subject to storm surge impacts. Communities along the Gulf of America shoreline and within the inner reaches of Mobile Bay are particularly vulnerable to storm surge associated with higher-category hurricanes due to their low elevation and exposure to wind-driven coastal flooding.

Map 5.1 – Storm Surge, Baldwin County

The second most dangerous hazard associated with hurricanes is high winds. Chart 5-1 illustrates how a hurricane's wind speed typically decreases by approximately half within 24 hours after landfall. However, all communities within Baldwin County are located within the distance a hurricane can travel within several hours of landfall. As a result, most areas of the county should expect wind speeds that remain close to the storm's initial landfall intensity, particularly during the early stages of impact.

Chart 5.1 – Wind Speed Decay



Source: National Hurricane Center

Hurricanes often produce torrential rainfall that may persist for several days. Flooding from heavy rainfall ahead of landfall can be further intensified when combined with a tidal surge, increasing impacts in low-lying and poorly drained areas. Slow-moving hurricanes, such as Hurricanes Danny and Georges, pose the greatest flood risk and have the potential to produce rainfall totals exceeding 25 inches.

Tornadoes are a third significant hazard associated with hurricanes and are among the most dangerous and deadly phenomena in these storms. Approximately ten percent of hurricane-related damage is attributable to tornadoes, and historical records indicate that nearly half of all hurricanes produce at least one tornado capable of causing property damage.

Hurricane-related tornadoes typically develop within 12 hours of landfall, a timeframe that allows tornado impacts to occur anywhere within Baldwin County.

Past Occurrences of Hurricanes

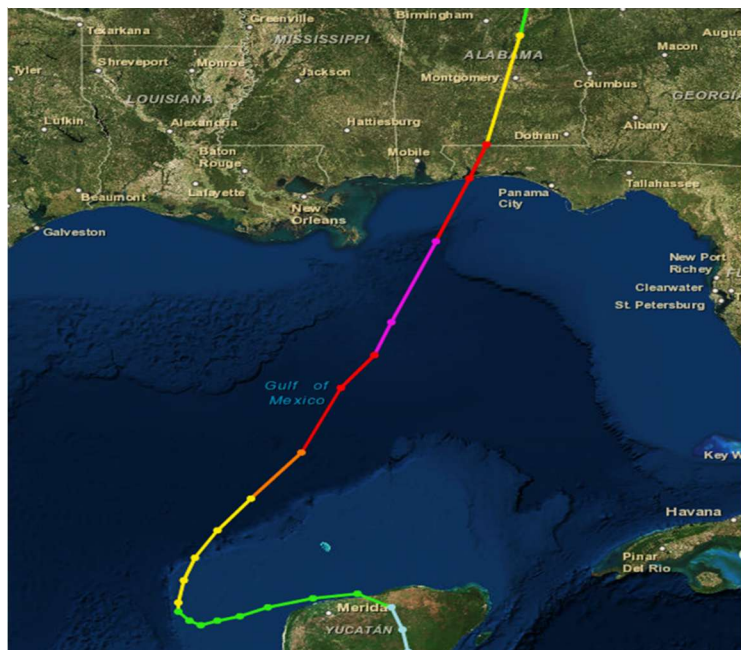
Since 1900, Alabama has experienced numerous powerful hurricanes, underscoring the risk Baldwin County faces. Descriptions of notable historical storms provide important context for understanding this threat.

Hurricane Elena was a Category 3 hurricane with sustained winds of approximately 124 miles per hour. The storm made landfall on September 2, 1985, near Biloxi, Mississippi, and caused extensive damage along the Florida, Mississippi, and Alabama coasts. The eye of the storm passed roughly 30 miles south of Mobile, significantly impacting Gulf Shores in Baldwin County and Dauphin Island in Mobile County. Baldwin and Mobile Counties were declared disaster areas on September 7, 1985. Damage from Hurricane Elena was primarily the result of high winds, with additional impacts from storm surge and wave action. Shoreline properties in both counties were affected, with the most severe damage concentrated on the western end of Dauphin Island.

Three hurricanes affected Alabama during the 1995 season. Hurricane Allison caused concern for residents of Alabama and Florida in June 1995; however, impacts in Alabama were minimal and largely limited to evacuation-related effects from the Florida coast. Hurricane Erin made landfall in August 1995 and resulted in extensive crop damage in Escambia County, along with reported damage in Baldwin, Washington, Clarke, and other counties in southwestern Alabama.

Hurricane Opal was the most destructive hurricane to affect Alabama during the 1995 season. Opal made landfall on October 4, 1995, as a Category 4 hurricane with sustained winds of approximately 125 miles per hour and moved northeast across the

Figure 5.2 Hurricane Opal Track



Source: NOAA, Office for Coastal Management

state. In coastal communities within Baldwin and Mobile Counties, storm surge caused severe beach erosion, damaged piers, docks, boats, and roadways, and flooded low-lying areas. Heavy rainfall, strong winds, and tornadoes associated with Opal contributed to inland flooding, blocked roads, and widespread power outages. The storm caused significant sand displacement, destruction of primary dune systems, and overall narrowing of beaches along much of the coast.

More than half of Alabama's counties were included in the federal disaster declaration for Hurricane Opal. The affected area extended across much of the eastern half of the state and along the southern border westward to the Mississippi state line. This area encompassed a population of approximately 2,982,088 people and included the state's three largest cities: Birmingham, Mobile, and Montgomery.

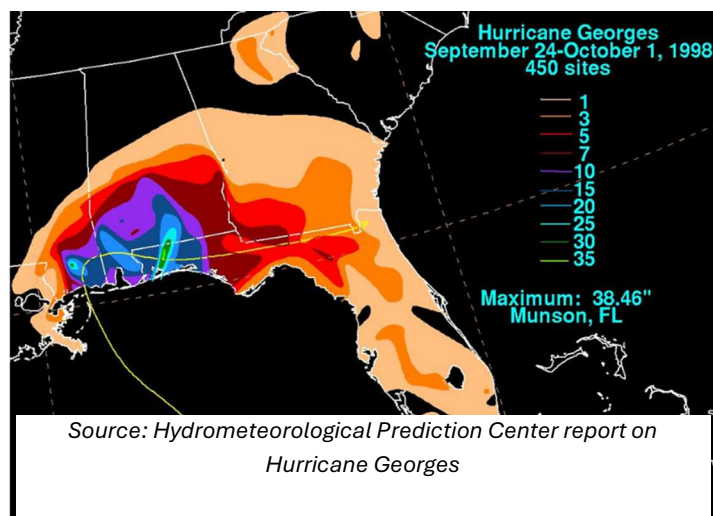
Hurricane Danny made landfall in Mobile Bay on July 19, 1997. The storm is notable for stalling over the Mobile Bay area for approximately two days, during which time more than 25 inches of rain fell across portions of Baldwin County. Areas surrounding the Fish River in central Baldwin County experienced extensive flooding, resulting in damage to homes, roadways, and other infrastructure. The prolonged heavy rainfall also caused significant agricultural losses, destroying crops in rural areas throughout the county.

Hurricane Georges, a Category 2 hurricane, made landfall on September 28, 1998, near Biloxi, Mississippi. Like Hurricane Danny, Hurricane Georges was slow-moving, and much of the damage in Baldwin County resulted from prolonged heavy rainfall that caused extensive flooding. The City of Bay Minette recorded approximately 29.66 inches of rainfall during the event. Along the coast, Fort Morgan reported a storm surge of 11.9 feet.

Damage estimates associated with Hurricane Georges include approximately \$18.2 million in losses to unincorporated areas of Baldwin County and \$28.7 million in damages to the City of Orange Beach. These estimates are documented in materials prepared by the U.S. Geological Survey.

Hurricane Ivan made landfall near Gulf Shores on September 16, 2004, as a Category 5 hurricane with maximum sustained winds of approximately 130 miles per hour. Hurricane Ivan generated a storm surge of roughly 12 feet, produced

Figure 5.3 – Hurricane Georges Rainfall



heavy rainfall, and spawned more than 100 tornadoes. Damage was concentrated primarily in Baldwin and Escambia Counties, with total losses estimated at approximately \$14 billion. The storm resulted in 57 fatalities and is widely regarded as one of the most powerful and deadly hurricanes affecting the Gulf Coast region.

The 2005 Atlantic hurricane season

produced a record number of named storms, with 27 tropical systems forming across the Atlantic and Gulf Coast regions. Several of these storms threatened or impacted the Gulf Coast. The most significant impacts on Alabama were Tropical Storms Arlene and Cindy and Hurricanes Dennis and Katrina.

Hurricane Dennis, a Category 3 hurricane, made landfall in the western Florida Panhandle on July 10, 2005. The storm caused storm surge and wind damage along the Florida and Alabama coastlines, as well as scattered wind and flooding impacts across portions of Georgia, Mississippi, and Tennessee. Hurricane Dennis resulted in more than \$2 billion in damages nationwide and caused 12 fatalities in the United States.

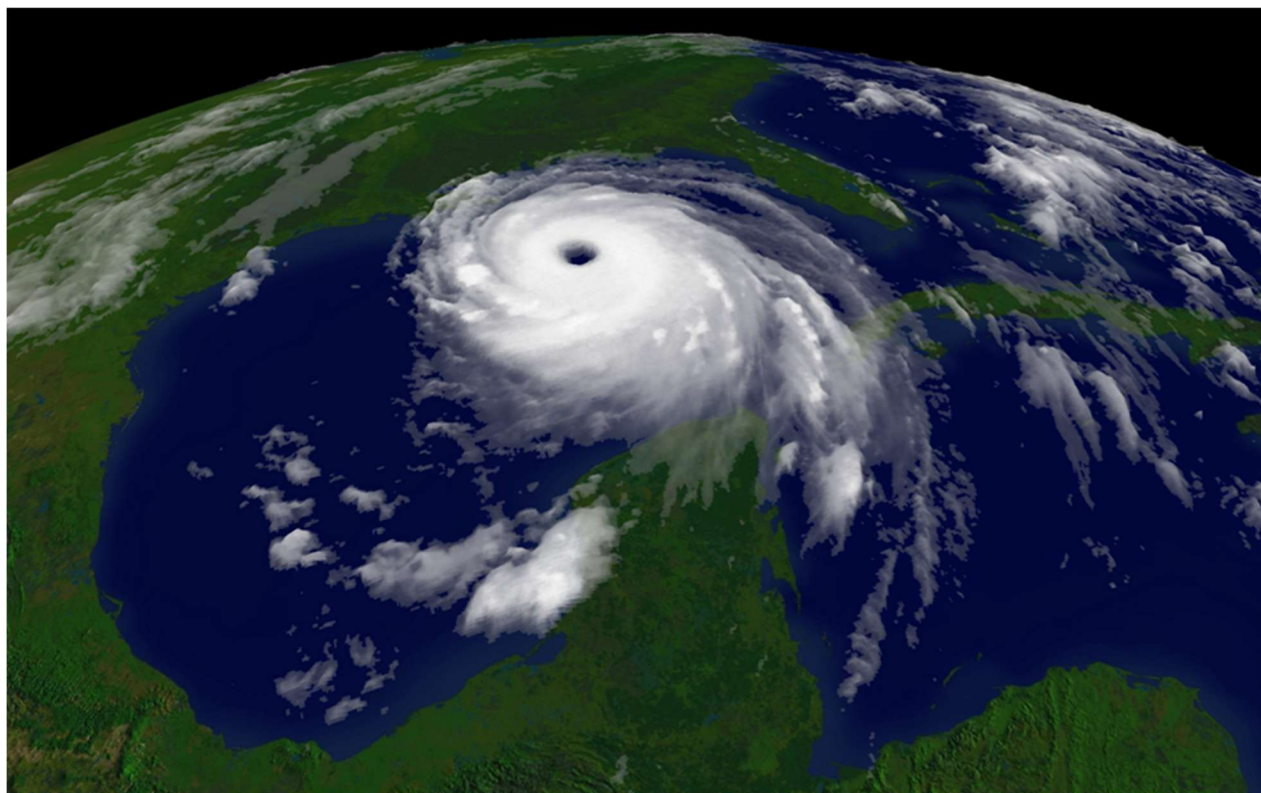
Hurricane Katrina made landfall in southeastern Louisiana on August 29, 2005, as a Category 3 hurricane. Although the center of the storm did not make landfall in Alabama, its immense size generated a storm surge estimated between 12 and 16 feet within Mobile Bay, resulting in significant coastal impacts along Alabama's Gulf Coast. The storm surge and wave action caused extensive coastal flooding and damage, including the collapse of offshore oil rigs, several of which were washed ashore along the Alabama coastline.

Hurricane Katrina is remembered for its unprecedented scale and severity, with an estimated death toll of approximately 1,300 people and total damages exceeding \$100 billion, making it the costliest natural disaster in United States history.

Figure 5.4 – Hurricane Ivan Damage, Gulf Shores, AL



Source: Original Oyster Housel; Hurricane Ivan

Figure 5.5 – Hurricane Katrina Approaching the Gulf Coast

Source: National Oceanic and Atmospheric Administration

Hurricane Ike, a Category 2 hurricane at landfall, made landfall near Galveston, Texas, on September 13, 2008. Although the storm's center made landfall well west of Alabama, Hurricane Ike's exceptionally large size generated significant storm surge and coastal impacts along the northern Gulf Coast. Elevated water levels and wave action affected Baldwin County, resulting in minor coastal flooding, beach erosion, and hazardous marine conditions. Baldwin County was included in FEMA Major Disaster Declaration DR-1791-AL, which provided Public Assistance for eligible response and recovery activities. While damage in Baldwin County was limited compared to areas closer to landfall, Ike demonstrated the potential for distant hurricanes to produce surge and coastal impacts along Alabama's shoreline.

Hurricane Isaac made landfall near the mouth of the Mississippi River in southeastern Louisiana on August 28, 2012, as a Category 1 hurricane. The storm was notable for its slow forward motion, which resulted in prolonged rainfall and extended coastal impacts across the northern Gulf Coast. Although the most significant damage occurred west of Alabama, Baldwin County experienced heavy rainfall that caused minor flooding in low-lying areas, roadway inundation, and scattered power outages. Coastal conditions deteriorated due to increased wave action and elevated tides. Baldwin County was included in federal disaster

declarations associated with Hurricane Isaac, reflecting regional impacts from flooding and prolonged storm effects.

Hurricane Irma made landfall in southwestern Florida on September 10, 2017, as a Category 4 hurricane. Although the storm's center remained east of Alabama, its large wind field affected Baldwin County with gusty winds, elevated tides, and minor coastal flooding. While Baldwin County was not included in a separate federal disaster declaration for Irma, impacts included beach erosion, minor flooding in vulnerable coastal areas, and wind-related damage consistent with tropical cyclone effects (National Weather Service, 2017).

Hurricane Nate made landfall near the mouth of the Mississippi River on October 7, 2017, as a Category 1 hurricane and moved rapidly inland across the southeastern United States. Although landfall occurred west of Baldwin County, Nate's expansive wind field produced tropical storm conditions and elevated water levels along the Alabama coast. FEMA issued Major Disaster Declaration DR-4332-AL, which included Baldwin County for Public Assistance. Impacts within Baldwin County included moderate coastal flooding, storm surge in low-lying areas, and wind damage to structures, vegetation, and infrastructure. Damage to Baldwin County was incorporated into regional recovery totals, resulting in millions of dollars in public repair and response costs (Federal Emergency Management Agency, 2017; National Weather Service, 2017).

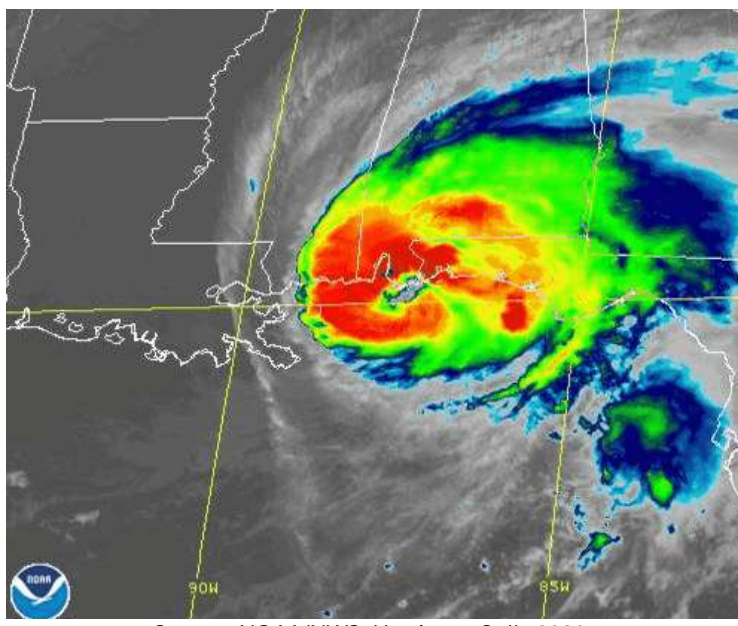
Tropical Storm Gordon affected the central Gulf Coast in early September 2018, bringing tropical storm-force winds, heavy rainfall, and elevated tides to coastal Alabama, including Baldwin County. Although Gordon did not make landfall in Baldwin County and was not associated with a county-specific federal disaster declaration, the storm caused minor coastal flooding and wind-related impacts. Gordon demonstrated the potential for tropical systems to affect Baldwin County even in the absence of direct hurricane landfall (National Weather Service, 2018).

Hurricane Michael made landfall near Mexico Beach, Florida, on October 10, 2018, as a Category 5 hurricane with maximum sustained winds of approximately 160 miles per hour. Although the storm's center made landfall well east of Alabama, Hurricane Michael's large wind field and rapid movement produced tropical storm-force winds, heavy rainfall, and isolated tornadoes across southern Alabama, including Baldwin County. Impacts in Baldwin County included downed trees, scattered power outages, minor structural damage, and localized flooding from heavy rainfall. Baldwin County was included in FEMA Major Disaster Declaration DR-4399-AL, which provided Public Assistance for eligible response and recovery activities. While damage in Baldwin County was significantly less severe than in

areas closer to landfall, Michael demonstrated the potential for intense hurricanes making landfall outside Alabama to still produce meaningful wind and rainfall impacts within the county.

Hurricane Sally made landfall near Gulf Shores, Alabama, on September 16, 2020, as a Category 2 hurricane with maximum sustained winds of approximately 95–105 miles per hour. Sally moved slowly inland, producing prolonged high winds, storm surge, and heavy rainfall across Baldwin County. Rainfall totals exceeded 15–20 inches in many areas, resulting in widespread flooding of homes, businesses, and roadways. Storm surge inundated

Figure 5.6 – Hurricane Sally Making Landfall in Gulf Shores, AL



Source: NOAA/NWS, Hurricane Sally 2020

coastal areas, and wind damage caused extensive power outages and structural impacts. FEMA issued Major Disaster Declaration DR-4563-AL for Hurricane Sally, which included Baldwin County for Public Assistance. Estimated damages within Baldwin County reached hundreds of millions of dollars, reflecting extensive impacts to residential and commercial properties, public infrastructure, and economic activity (Federal Emergency Management Agency, 2020; National Weather Service, 2020).

Hurricane Zeta made landfall near Cocodrie, Louisiana, on October 28, 2020, as a Category 2 hurricane with maximum sustained winds of approximately 110 miles per hour. As the storm moved rapidly northeast, it produced strong winds and heavy rainfall across coastal Alabama, including Baldwin County. Impacts within Baldwin County included widespread power outages, downed trees, minor structural damage, and localized flooding. Baldwin County was included in FEMA Major Disaster Declaration DR-4573-AL, which provided Public Assistance for eligible response and recovery activities. Although Zeta's impacts were brief due to its fast-forward speed, the storm caused measurable damage to utilities, transportation infrastructure, and public facilities across the county.

Hurricane Ida made landfall near Port Fourchon, Louisiana, on August 29, 2021, as a Category 4 hurricane with maximum sustained winds of approximately 150 miles per hour. As the storm moved inland and weakened, its remnants produced heavy rainfall, gusty

winds, and localized flooding across portions of Alabama, including Baldwin County. FEMA issued Major Disaster Declaration DR-4611-AL for Hurricane Ida, which included Baldwin County for Public Assistance. Impacts within Baldwin County included localized flooding, downed trees, power outages, and minor infrastructure damage. Although damages were significantly less severe than those experienced in Louisiana, Baldwin County incurred measurable response and recovery costs associated with wind and rain impacts from the storm.

Hurricane Helene affected coastal Alabama in late September 2024 as the storm tracked through the Gulf of America and inland across the southeastern United States. However, Hurricane Helene did not make direct landfall in Baldwin County, its expansive wind field and associated rainfall produced tropical storm-force winds, periods of heavy rain, and elevated coastal water levels along the Alabama Gulf Coast. Baldwin County experienced scattered power outages, downed trees, minor flooding in low-lying areas, and coastal impacts associated with elevated tides. An Emergency Declaration, EM-3618-AL, was issued to Alabama in advance of Hurricane Helene to support preparedness and response activities. While damages in Baldwin County were limited compared to areas closer to the storm's track, Helene demonstrated the county's ongoing vulnerability to indirect hurricane impacts, including wind, rainfall, and coastal flooding.

Map 5.2 – Gulf Coast Historic Hurricanes 1950-2026

Table 5.5 provides a historical look of hurricanes impacting Baldwin County since 1893.

Table 5.5 – Baldwin County Area Hurricane History

DATE	CATEGORY	NAME	NOTES
10/3/1893	unknown		Mobile deluged. Water Driven in from the Bay Far Up in the City. Winds of 75 miles per hour.
9/27/1906	unknown		Moved inland in Pensacola, strongest to hit Pensacola since 1736.
7/5/1916	3		The pressure measured at Fort Morgan was 28.38 inches, or 961 Mb. The Hurricane made landfall just west of Mobile.
10/18/1916	3		Winds reached 114 mph at landfall. It moved inland over Pensacola.
9/20/1926	3		The pressure at Perdido Beach measured 28.20 inches, or 955 Mb. Significant flooding occurred in South Mobile and Baldwin Counties.
8/17/1969	5	Camille	The strongest known land-falling hurricane in recorded history. Winds were estimated to be 190 mph at landfall. Hurricane Camille was extremely small, and moved inland near Bay St. Louis, MS. Great damage occurred throughout coastal Mississippi, with a recorded pressure of 26.84 inches, or 909 Mb. The storm surge was estimated at 22-25 feet. The devastation of Camille inspired the Saffir-Simpson Hurricane Scale.
9/12/1979	3	Frederic	Frederic strengthened from a category one to a category four storm in 30 hours while in the Gulf of America (formerly Mexico) but weakened before landfall. The sustained winds reached 100 mph at landfall with gusts near 145 mph. Frederic moved inland near Mobile Bay and the Dauphin Island Bridge. The wind resulted in incredible damage to Mobile. Frederic was the first major hurricane to affect Mobile since 1926.

DATE	CATEGORY	NAME	NOTES
9/2/1985	3	Elena	Hurricane Elena, with sustained winds of 124 mph, made landfall on September 2, 1985, near Biloxi, causing extensive damage along the Florida, Mississippi and Alabama coasts. The eye passed 30 miles south of Mobile, battering Gulf Shores and Dauphin Island. Wind gusts were estimated at up to 132 miles per hour on Dauphin Island. Storm surge reached 6 to 8 feet in an area from Dauphin Island west to Gulfport. The rainfall amounts were light, averaging about 2.5 inches in the Mobile area.
8/3/1995	2	Erin	Hurricane Erin had winds of 100 mph at landfall, and it moved inland near Pensacola, FL. Hurricane Erin was the first of two local Hurricanes in 1995.
10/4/1995	3	Opal	Hurricane winds were estimated near 115 mph at landfall, and Opal moved inland near Santa Rosa Island, FL. Opal reached category four strength, rapidly intensifying from a category one hurricane in only 18 hours. Hurricane Opal attained category four status 200 miles south of Pensacola. Before landfall, Opal weakened to category three but still caused major damage in Pensacola. The storm surge reached 12-20 feet. The highest rain reached 15.45 inches.
7/19/1997	1	Danny	Hurricane Danny had wind gusts reaching 80 mph at landfall as it crossed Mullet Point south of Point Clear in Baldwin County. Hurricane Danny then stalled over Mobile Bay and brought record flooding to south Alabama. Rain totals at the Dauphin Island Sea Lab reached 36.71 inches with 25.98 inches of that in seven hours.
9/28/1998	2	Georges	Hurricane Georges delivered sustained winds of 103 mph at landfall, and then it moved inland near Biloxi MS. Georges produced 16.7 inches of rain in Pascagoula. The storm surge reached 12 feet near Fort Morgan, and Georges produced 25 foot waves in the Gulf of Mexico. Georges slowed in forward speed once it approached Alabama. This led to huge amounts of rain. In Bay Minette, a rain total of nearly 30 inches was recorded.

DATE	CATEGORY	NAME	NOTES
9/16/2004	3	Ivan	Hurricane Ivan had winds around 120 mph at landfall, and it moved inland near Gulf Shores. Ivan was the strongest Hurricane from Baldwin to Santa Rosa Counties in more than 100 years. 160 miles inland, near Demopolis, AL, a wind gust near 90 mph was recorded. Rain totals reached 15.75 inches in Pensacola, with a storm surge in Escambia Bay of 12 feet.
7/10/2005	3	Dennis	Hurricane Dennis carried winds of 121 mph at landfall, as it moved inland near Navarre Beach. Dennis had an extremely small eye and was only significant in a localized area. Dennis prompted a large scale evacuation as it reached category four status in the Gulf of America (formerly Mexico) before it weakened near the central Gulf coast.
8/29/2005	3	Katrina	Hurricane Katrina had winds at landfall estimated at 120 mph. It moved inland near Waveland MS. Katrina was the costliest and one of the deadliest U.S. disasters. Hurricane Katrina produced a 27 ft. storm surge in Hancock County, MS, and breached levees in New Orleans. The highest storm surge along Mobile Bay reached 12 feet at the USS Alabama along I-10. The death toll was over 1,800.
9/01/2008	2	Gustav	Gustav erratically through the Greater Antilles into the moved Gulf of America (formerly Mexico), eventually making landfall on the coast of Louisiana. It briefly became a category 4 hurricane on the Saffir-Simpson Hurricane Scale and caused many deaths and considerable damage in Haiti, Cuba, and Louisiana. In the United States, the Insurances Services Office reports that the hurricane caused an estimated \$2.15 billion in damages to insured property, of which \$2.045 billion occurred in Louisiana. Gustav is known to have produced 41 tornadoes – 21 in Mississippi, 11 in Louisiana, 6 in Florida, 2 in Arkansas, and 1 in Alabama.
9/13/2008	2	Ike	Ike, with its associated storm surge, caused extensive damage across parts of the northwestern Gulf Coast when it made landfall on September 13, 2008, along the north end of Galveston Island on the Texas coast at the upper end of Category 2 intensity.

DATE	CATEGORY	NAME	NOTES
11/10/2009	2	Ida	Ida was a late season hurricane that had a large impact on the east coast of Nicaragua and the adjacent islands. It was the first November hurricane in the Gulf of America (formerly Mexico) since Kate of 1985. It made landfall as a tropical storm near Dauphin Island, AL, and quickly dissipated over the Florida Panhandle by the next day.
8/28/2012	1	Isaac	Isaac spared Alabama the worst, damaging a few buildings and minor road flooding in low-lying areas of Baldwin County. Scattered blackouts occurred with the greatest impact to Dauphin Island (Mobile County) where about 2,400 residences were without electricity. Isaac made landfall in Louisiana as a Category 1.
9/10/2017	4	Irma	Hurricane Irma affected Baldwin County in September 2017 through its expansive wind field despite making landfall in southwestern Florida. The county experienced gusty winds, elevated tides, minor coastal flooding, beach erosion, and scattered power outages. Impacts were limited but demonstrated Baldwin County's exposure to peripheral effects from major hurricanes tracking east of Alabama.
10/7/2017	1	Nate	Hurricane Nate impacted Baldwin County in October 2017 after making landfall near the mouth of the Mississippi River. The storm produced tropical storm-force winds, elevated water levels, and coastal flooding in low-lying areas. Baldwin County was included in FEMA Major Disaster Declaration DR-4332-AL for Public Assistance, with impacts including downed trees, roadway debris, and minor infrastructure damage.
10/10/2018	5	Michael	Hurricane Michael impacted Baldwin County in October 2018 after making landfall near Mexico Beach, Florida. The county experienced strong winds, heavy rainfall, and isolated tornado activity. Impacts included downed trees, scattered power outages, minor structural damage, and localized flooding. Baldwin County was included in FEMA Major Disaster Declaration DR-4399-AL for Public Assistance.

DATE	CATEGORY	NAME	NOTES
9/16/2020	2	Sally	Hurricane Sally made landfall near Gulf Shores on September 16, 2020, directly impacting Baldwin County with prolonged high winds, storm surge, and extreme rainfall. Flooding was widespread, with many homes, businesses, and roadways inundated. Coastal areas experienced storm surge, beach erosion, and structural damage, while prolonged power outages affected large portions of the county. Baldwin County was included in FEMA Major Disaster Declaration DR-4563-AL, with damages estimated in hundreds of millions of dollars.
10/28/2020	3	Zeta	Hurricane Zeta affected Baldwin County on October 28, 2020, following landfall in southeastern Louisiana. The fast-moving storm produced strong winds that resulted in widespread power outages, downed trees, and minor damage to buildings and infrastructure. Baldwin County was included in FEMA Major Disaster Declaration DR-4573-AL for Public Assistance.
8/29/2021	4	Ida	Hurricane Ida impacted Baldwin County in late August and early September 2021 as the storm weakened after landfall in southeastern Louisiana. The county experienced heavy rainfall, gusty winds, localized flooding, downed trees, and power outages. Baldwin County was included in FEMA Major Disaster Declaration DR-4611-AL for Public Assistance, with damages primarily associated with wind and rain impacts.
9/26/2024	4	Helene	Hurricane Helene affected Baldwin County in September 2024 as the storm tracked through the Gulf of America and inland across the southeastern United States. The county experienced tropical storm-force winds, periods of heavy rainfall, minor flooding in low-lying areas, coastal impacts from elevated tides, and scattered power outages. Alabama was covered under Emergency Declaration EM-3618-AL, with Baldwin County experiencing limited but measurable storm impacts.

Source: National Hurricane Center

Table 5.6 – Baldwin County Hurricane/Tropical Storm Events (2000-2026)

Year	Event Type	Deaths	Injuries	Total Damages
2000	Tropical Storm	0	0	\$0
2001	Tropical Storm (3)	1	0	\$41,000
2002	Tropical Storm (2)	0	0	\$2,040,000
2002	Hurricane	0	0	\$75,000
2003	-	-	-	-
2004	Tropical Storm (2)	0	0	\$0
2004	Hurricane Ivan	0	0	\$0
2005	Tropical Storm (2)	0	0	\$1,500,000
2005	Hurricane Dennis (3)	0	0	\$0
2006-2007	-	-	-	-
2008	Tropical Depression	0	0	\$0
2008	Tropical Storm Gustav & Ike (2)	0	0	\$1,000,000
2009	Tropical Storm Ida	0	0	\$8,000,000
2010	Tropical Storm	0	0	\$1,000
2012	Tropical Storm Isaac	0	0	\$0
2014	-	-	-	-
2015				
2016				
2017				
2018	Tropical Storm Alberto			
2018	Hurricane Michael			
2019				
2020	Hurricane Sally			
2020	Hurricane Zeta			
2021	Tropical Storm Claudette			
2021	Hurricane Ida			
2022				
2023				
2024	Hurricane Helene			
2025-2026				
TOTAL	25	2	0	
Annual Average	1.3	0.1	0	

Source: National Climatic Data Center

*Data for Hurricane Opal not available

Probability of Future Hurricane Events

Baldwin County remains highly vulnerable to hurricanes and tropical storms due to its location along the northern Gulf of Mexico. Since the adoption of the previous Hazard Mitigation Plan, Baldwin County has experienced impacts from multiple tropical systems, including Hurricane Sally in 2020, Hurricane Zeta in 2020, and Hurricane Ida in 2021, as well as repeated tropical storm events that produced heavy rainfall, storm surge, tornadoes, and prolonged power outages. These events caused widespread wind damage, flooding, coastal erosion, and infrastructure impacts across both coastal and inland portions of the County.

Historical data and recent storm activity confirm that Baldwin County can expect recurring impacts from tropical systems on a regular basis, including both direct landfalls and indirect impacts from nearby storms. The Hazard Mitigation Planning Committee (HMPC) continues to rank hurricanes as the most likely and most damaging natural hazard affecting Baldwin County (see Appendix D for hazard ranking results).

Recent climate data and observed trends indicate increased extreme rainfall rates and storm intensification associated with tropical systems affecting the northern Gulf Coast. Warmer Gulf water temperatures and higher atmospheric moisture levels contribute to heavier rainfall and increased storm surge potential. Even storms that do not make direct landfall can produce significant flooding and wind impacts within Baldwin County. The primary hazards associated with hurricanes in Baldwin County continue to include storm surge, coastal flooding, inland flooding, high winds, tornadoes, erosion, and extended power and utility outages.

5.4.2 Floods Profile

Flooding remains one of the most frequent and costly hazards affecting Baldwin County. Since the last plan update, Baldwin County has experienced repeated flood events associated with tropical systems and intense rainfall, including widespread flooding from Hurricane Sally in 2020, Hurricane Ida in 2021, and multiple severe weather systems that produced flash and riverine flooding throughout the County. These events resulted in roadway closures, damage to homes and businesses, streambank erosion, failures of culverts and drainage structures, and impacts on critical facilities and evacuation routes.

The April 28 to 29, 2014 flood event remains one of the most severe rainfall events on record; however, recent storms have demonstrated that Baldwin County continues to experience rainfall intensities capable of overwhelming drainage systems and producing flooding beyond mapped floodplain boundaries. Flooding remains a recurring hazard across the County and continues to pose risks to life safety, private property, and public infrastructure.

The HMPC continues to identify flooding as a major concern for Baldwin County communities, particularly in low-lying, coastal, and river basin areas.

Location of Potential Flooding

Historical data and recent storm activity confirm that Baldwin County can expect recurring impacts from tropical systems on a regular basis, including both direct landfalls and indirect impacts from nearby storms. The Hazard Mitigation Planning Committee (HMPC) continues to rank hurricanes as the most likely and most damaging natural hazard affecting Baldwin County (see Appendix D for hazard ranking results).

Baldwin County is vulnerable to both riverine and coastal flooding. Flood-prone areas were identified through review of Flood Insurance Rate Maps, federal disaster declarations, recent storm impact reports, National Weather Service Storm Events Database records, and Planning Committee input.

Riverine flooding most frequently affects the Fish River basin in southwestern Baldwin County and the Styx River basin in east central Baldwin County. Additional flood-prone waterways include the Mobile River, Perdido River, Bay Minette Creek, Hollinger Creek, and their tributaries. Flooding also occurs in developed areas with limited drainage capacity, particularly in low-lying neighborhoods and areas experiencing rapid growth and increased impervious surface coverage.

Coastal flooding and storm surge continue to pose a significant risk to communities along the Gulf of Mexico, including Gulf Shores, Orange Beach, Perdido Beach, and the Fort Morgan Peninsula. These areas remain highly vulnerable to hurricane-related storm surge, wave action, and coastal erosion. Backwater flooding also affects Fairhope and unincorporated Point Clear along Mobile Bay and the Fish River basin. Current Flood Insurance Rate Maps show extensive portions of Baldwin County located within Special Flood Hazard Areas, reflecting the widespread nature of flood risk across both coastal and inland areas.

Extent and Intensity of Potential Flooding

Historical data and recent storm activity confirm that Baldwin County can expect recurring impacts from tropical systems on a regular basis, including both direct landfalls and indirect impacts from nearby storms. The Hazard Mitigation Planning Committee (HMPC) continues to rank hurricanes as the most likely and most damaging natural hazard affecting Baldwin County (see Appendix D for hazard ranking results).

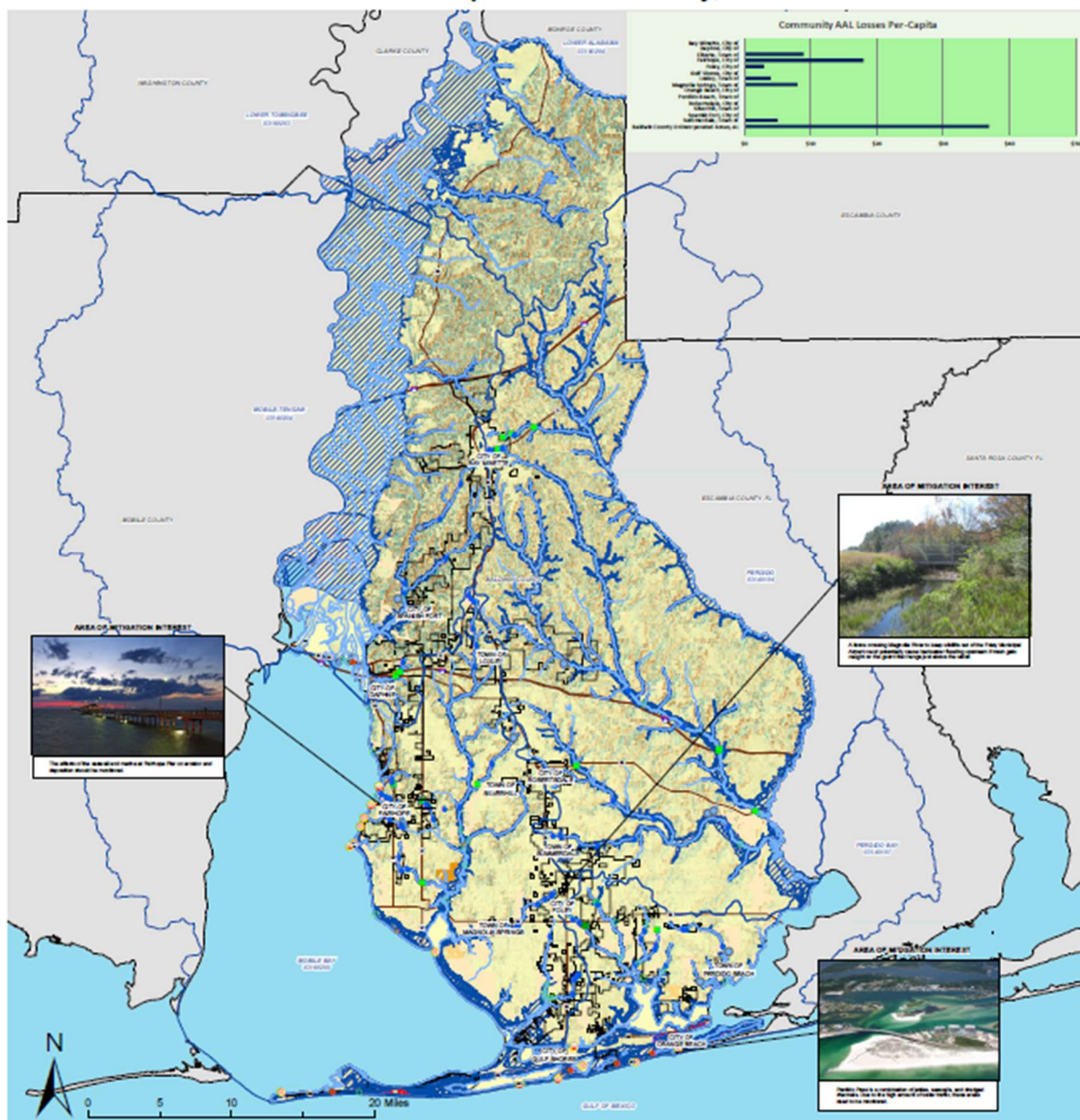
The extent and severity of flooding in Baldwin County are influenced by rainfall intensity, storm duration, soil saturation, watershed characteristics, land use, and the capacity of natural channels and engineered drainage systems. Intense rainfall over short periods produces flash flooding, while prolonged rainfall from slow-moving tropical systems results in widespread riverine flooding. Urban development and increased impervious surfaces exacerbate runoff and extend flood duration and depth.

Recent flood events associated with hurricanes and tropical storms have produced rainfall exceeding drainage design standards at multiple locations across the County. Flooding has occurred beyond the mapped 100-year and 500-year floodplains, impacting structures, transportation routes, and critical infrastructure. Baldwin County's low-lying topography and proximity to tidal influences further increase flood depth and prolong flood conditions in coastal and bayfront areas.

Continued development in flood-prone areas increases exposure to flood hazards. Ongoing floodplain management, higher regulatory standards, drainage system maintenance, and hazard mitigation measures, including property acquisitions, structure elevations, retrofits, improved warning systems, and resilient construction practices, are critical to reducing future flood losses.

5.3

Flood Risk Map: Baldwin County, Alabama



MAP SYMBOLLOGY

Base Data

- County Boundary
- Corporate Limits
- Watershed Boundary
- Major Roads
- Leaves

Flood Data

- Rivers and Streams
- New SFHA

Flood Risk

- Annualized Flood Risk

- Very Low
- Low
- Medium
- High
- Very High

*Based on 2010 Level 1 HAZUS Study from FEMA and 2014 Level 2 HAZUS Study Risk Cost

Areas of Mitigation Interest

- Coastal Structure
- Dams
- Stream Flow Constrictions
- Past Claims Hot Spot
- Significant Land Use Change
- At-Risk Essential Facilities
- Key Emergency Routes
- Overtopped During Frequent Flooding Events
- Other Flood Risk Areas
- Areas of Mitigation Success
- Other

PROJECT LOCATOR



Risk Mapping, Assessment, and Planning (Risk MAP)

FRM FLOOD RISK MAP



FEMA
VERSION NUMBER

1.1.1.5

RELEASE DATE
3/21/2019

For more information on the data used for this map, please consult the Baldwin County, Alabama Flood Risk Database and Flood Risk Report.

Previous Occurrences of Floods

The National Climatic Data Center (NCDC) indicates frequent flooding since 1995. There have been 78 floods reported for Baldwin County—3.9 per year—as summarized in Table 5-7. According to NCDC estimates, the average annual damage has been \$1.5 million, with \$380,000 per event.

Table 5.7 - Baldwin County Flood Events, 2010-2025

Year	Floods	Deaths	Injuries	Total Damages
2010	1	0	0	\$0
2011	0	0	0	\$0
2012	2	0	0	\$0
2013	8	0	0	\$75,000
2014	14	2	1	\$27,140,000
2015	0	0	0	\$0
2016	6	0	0	\$10,000
2017	11	0	0	\$680,000
2018	5	0	0	0
2019	0	0	0	\$0
2020	2	0	0	0
2021	13	0	0	\$250,000
2022	5	0	0	\$250,000
2023	9	0	0	0
2024	2	0	0	\$0
2025	8	0	0	\$0
TOTAL	86	2	1	\$28,405,000
Annual Average	3.9	0	0	\$1,472,100

Source: NCEI Storm Events Database (flood and flash flood events for Baldwin County, 2010–2025)

Probability of Future Flood Events

Flooding and flash flooding are recurring hazards in Baldwin County and are expected to continue. Historical event patterns indicate that damaging flood events occur regularly across the County due to intense rainfall, stalled weather systems, and seasonal storm activity. These conditions contribute to both flash flooding and longer-duration riverine flooding.

Flood risk is influenced by local conditions, including development within flood-prone areas, increased impervious surfaces, drainage system capacity, settlement patterns, and the effectiveness of flood forecasting and warning systems. Recent trends in high-intensity rainfall increase the potential for flooding in areas both within and outside mapped floodplains. Based on recent history and local vulnerability, the Hazard Mitigation Planning Committee ranked flooding among the most likely natural hazards affecting Baldwin County (see Appendix D).

5.4.3 Severe Storms Profile

Severe storms pose a recurring threat to Baldwin County, primarily through thunderstorms producing high winds, lightning, and hail. Unlike hurricanes, which are seasonal and tracked in advance, severe storms can occur in any season and often develop with limited warning, increasing the risk of localized damage and service disruptions.

According to the Hazard Mitigation Planning Committee (see Appendix D) and community input, severe storms are ranked as the second most significant natural hazard affecting Baldwin County. Event history documented in the NOAA National Centers for Environmental Information Storm Events Database supports this ranking, reflecting frequent severe thunderstorms and high-wind activity across the County.

Location of Potential Severe Storms

All areas of Baldwin County are susceptible to severe storm impacts. Thunderstorms do not follow fixed geographic corridors and can affect multiple communities within a single event. As a result, severe storm risk is considered county-wide.

Extent and Intensity of Potential Severe Storms

The extent and severity of severe storm impacts depend on wind speed, storm duration, hail size, lightning activity, and localized conditions. High winds commonly result in fallen trees, roof and side damage, blocked roadways, and power outages. Lightning poses risks to life safety and can damage electrical and communications systems and, in some cases, contribute to wildfire ignition in undeveloped areas. Hail events, while less frequent, can cause localized damage to vehicles, roofing materials, windows, and exterior building components. While individual impacts are often localized, repeated severe storm activity contributes to cumulative damage to public and private assets across the County.

Previous Occurrences of Severe Storms

According to the NOAA National Centers for Environmental Information Storm Events Database, Baldwin County experienced recurring severe storm events from 2010 through 2025. Table 5 8 summarizes documented thunderstorm wind, hail, and lightning events during this period, including reported fatalities, injuries, and estimated damages. While individual events often produce localized impacts, the historical record indicates that severe storms pose a persistent hazard to Baldwin County.

Table 5.8 - Baldwin County Severe Storm Events, 2010-2025

Year	Type	Number	Deaths	Injuries	Total Damages
2010	Hail	0	0	0	\$0
	Lightning	2	1	2	\$0
	Thunderstorm/High Wind	2	0	0	\$22,000
2011	Hail	4	0	0	\$0
	Lightning	1	0	1	\$0
	Thunderstorm/High Wind	5	0	10	\$23,000
2012	Hail	2	0	0	\$0
	Lightning	1	0	1	\$0
	Thunderstorm/High Wind	8	0	0	\$51,000
2013	Hail	1	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	5	0	0	\$25,500
2014	Hail	0	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	4	0	0	\$8,000
2015	Hail	1	0	0	\$0
	Lightning	2	1	7	\$5,000
	Thunderstorm/High Wind	9	0	1	\$300,000
2016	Hail	3	0	0	\$0

Year	Type	Number	Deaths	Injuries	Total Damages
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	7	0	0	\$52,000
2017	Hail	5	0	0	\$0
	Lightning	1	1	5	\$0
	Thunderstorm/High Wind	7	0	1	\$997,000
2018	Hail	0	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	3	0	0	\$15,000
2019	Hail	0	0	0	\$0
	Lightning	1	1	0	\$0
	Thunderstorm/High Wind	12	0	0	\$17,000
2020	Hail	1	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	14	0	0	\$0
2021	Hail	9	0	0	\$0
	Thunderstorm/High Wind	5	0	0	\$0
2022	Hail	5	0	0	\$0
	Lightning	6	0	0	\$70,000
	Thunderstorm/High Wind	16	0	0	\$0

Year	Type	Number	Deaths	Injuries	Total Damages
2023	Hail	5	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	20	0	2	\$0
2024	Hail	6	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	16	0	0	\$0
2025	Hail	1	0	0	\$0
	Lightning	0	0	0	\$0
	Thunderstorm/High Wind	11	0	0	\$0
TOTAL		201	4	30	\$1,585,500

Source: National Climatic Data Center

Probability of Future Severe Storms

Severe thunderstorms producing high winds, lightning, and hail are expected to continue to affect Baldwin County on a recurring basis. Event history indicates that these storm types occur regularly across the County and can affect any jurisdiction, with little warning. While many severe storm events result in localized and short-term impacts, high-wind and hail events can cause property damage, utility disruptions, roadway obstructions, and safety risks.

Storm intensity, local development patterns, vegetation and tree canopy conditions, and the resilience of utility and transportation systems influence the likelihood and severity of severe storm impacts. Given recent event history and local vulnerability, severe storms remain among the most likely natural hazards to affect Baldwin County.

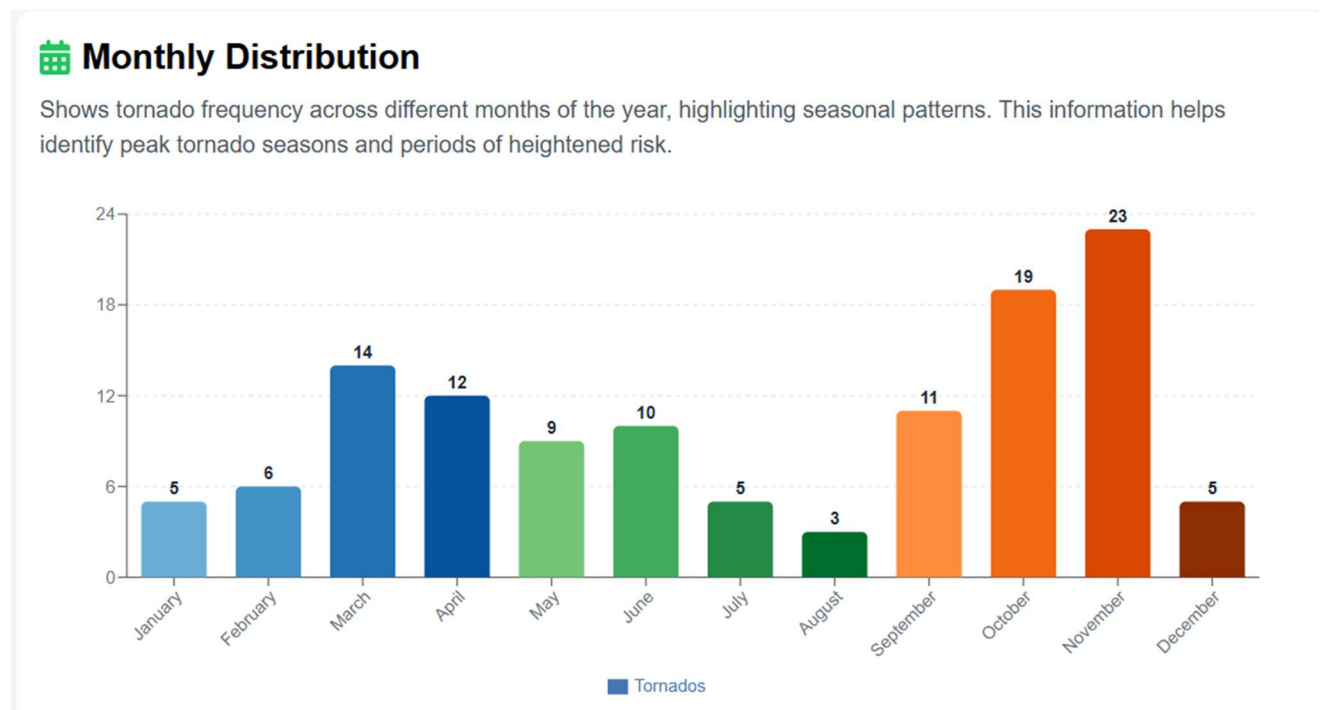
5.4.4 Tornadoes Profile

Tornadoes are violently rotating columns of air that extend from severe thunderstorms to the ground and can cause intense, highly localized damage. In Baldwin County, tornadoes most often develop from severe thunderstorms associated with strong frontal systems, squall lines, and organized convective systems. Tornadoes may also occur with landfalling tropical systems, although these events are typically shorter-lived and more localized in extent.

Tornadoes are capable of producing extreme wind speeds that result in structural damage, destruction of manufactured housing, downed trees and power lines, roadway obstructions, and life safety impacts. While tornadoes generally affect narrow paths and occur over short durations, impacts within affected areas can be severe.

Tornado activity in Baldwin County exhibits a clear seasonal pattern. Higher frequencies occur during the spring months, with elevated activity in March and April, and a secondary peak in the fall, particularly in October and November. Chart 5.2 illustrates the monthly distribution of documented tornado occurrences affecting Baldwin County.

Chart 5.2 - Seasonal Pattern of Tornado Occurrences in Baldwin County



Source: <https://www.tornadopath.com/alabama/baldwin>

Location of Potential Tornado Impacts

Tornadoes are not confined to specific locations or corridors within Baldwin County. Historical tornado occurrence data indicate that tornado touchdowns and paths have occurred across both coastal and inland areas of the County. Figure 5 X illustrates documented tornado touchdown locations and paths affecting Baldwin County. While individual tornado tracks vary widely in location and direction from event to event, the historical record demonstrates that tornado impacts can occur anywhere within the County. As a result, tornado risk is considered county-wide, with all jurisdictions and communities subject to potential tornado impacts.

****5.4 - TORNADO MAP GOES HERE****

Extent and Intensity of Potential Tornado Impacts

According to the Hazard Mitigation Planning Committee (see Appendix D), tornadoes pose a significant hazard in Baldwin County, with exposure, potential severity of impacts, and probability of occurrence ranking among the higher risk natural hazards affecting the County. Tornado impacts are typically highly localized but can be severe within affected areas.

Tornado intensity varies by event, with impacts ranging from minor structural damage to significant destruction of buildings, manufactured housing, and infrastructure. Stronger tornadoes can result in downed trees and power lines, damage to critical facilities, roadway obstructions, and life safety impacts. While most tornadoes affect relatively narrow paths and occur over short durations, concentrated damage within impacted areas can be severe.

Tornado intensity classifications referenced in this plan are based on the Enhanced Fujita Scale used by the National Weather Service. The scale categorizes tornadoes from EF0 to EF5 based on observed damage to structures and vegetation.

Figure 5.7 - Enhanced Fujita Scale (EF Scale) Wind

EF Rating	Wind Speeds	Expected Damage	
EF-0	65-85 mph	'Minor' damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.	
EF-1	86-110 mph	'Moderate' damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.	
EF-2	111-135 mph	'Considerable' damage: roofs torn off well constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.	
EF-3	136-165 mph	'Severe' damage: entire stories of well constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.	
EF-4	166-200 mph	'Extreme' damage: Well constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.	
EF-5	> 200 mph	'Massive/incredible' damage: Well constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.	

Source: https://www.weather.gov/hun/efscale_explanation

Previous Occurrences of Tornadoes

According to the NOAA National Weather Service tornado database, Baldwin County experienced multiple tornado events between 2010 and 2025. Table 5 10 summarizes documented tornado occurrences during this period, including reported fatalities, injuries, and estimated damages. While tornadoes are less frequent than other severe weather hazards, their impacts within affected areas can be severe, resulting in structural damage, debris hazards, roadway obstructions, and localized service disruptions. The historical record confirms that tornadoes remain a recurring, though episodic, hazard affecting communities across Baldwin County.

Table 5.9 - Baldwin County Tornado Events, 2010-2025

Year	Number	Deaths	Injuries	Total Damages
2010	1	0	1	\$45,000
2011	2	0	0	\$200,000
2012	0	0	0	\$0
2013	0	0	0	\$0
2014	0	0	0	\$0
2015	0	0	0	\$0
2016	0	0	0	\$0
2017	3	0	0	\$5,000
2018	3	0	3	\$150,000
2019	0	0	0	\$0
2020	1	0	0	\$0
2021	0	0	0	\$0
2022	10	0	0	\$0
2023	3	0	0	\$0
2024	4	0	0	\$0
2025	1	0	0	\$0
TOTAL	28	0	4	\$400,000

Source: National Climatic Data Center

Probability of Future Tornadoes

The exact timing, location, and frequency of tornado events cannot be predicted with precision, as tornado occurrence varies widely from year to year. Historical patterns indicate that tornadoes will continue to occur episodically in Baldwin County, with impacts that are highly localized but potentially severe within affected areas. Tornado risk is considered countywide, with all jurisdictions potentially affected.

Tornado occurrence in Baldwin County is influenced by severe regional weather patterns, including strong frontal systems and organized convective storms. While individual tornado events are relatively infrequent compared to other severe weather hazards, the potential for

concentrated damage, injuries, and disruptions to critical services warrants continued preparedness and mitigation planning.

Current scientific understanding does not support definitive conclusions regarding long term changes in tornado frequency or intensity at the local level. However, conditions favorable for severe thunderstorms, which can produce tornadoes, are expected to persist seasonally in the region. As a result, Baldwin County should anticipate ongoing tornado risk and continue to prioritize public awareness, warning systems, and resilient construction and sheltering practices.

5.4.5 Wildfires Profile

There are two types of wildfires experienced in Baldwin County: *Wildland* wildfires and *interface* wildfires. *Wildland* fires burn only on vegetation and therefore occur in strictly rural areas. *Interface* wildfires burn on a mix of vegetation and human structures and therefore occur at the interface of human development and rural landscapes. Like wildland fires, interface fires can start due to lightning strikes. More commonly, though, interface wildfires are started by human activities, such as debris burning. Non-permitted burns are a major cause of interface wildfires.

There are potential measures for reducing the risk of wildfires. Limiting underbrush vegetation through prescribed burns and herbicides reduces the fuel supply of potential wildfires. Public campaigns to disseminate fire safety strategies can reduce dangerous behaviors, such as leaving campfires unattended or burning trash in forests.

Fire Behavior Overview

Fire behavior is the manner in which a fire reacts to the following environmental influences:

1. Fuels
2. Weather
3. Topography

Fire behavior characteristics are attributes of wildland fire that pertain to its spread, intensity, and growth. Fire behavior characteristics utilized in the Southern Wildfire Risk Assessment (SWRA) include fire type, rate of spread, flame length, and fire intensity scale. These metrics are used to determine the potential fire behavior under different weather scenarios. Areas exhibiting moderate to high fire behavior potential can be identified for mitigation treatments, particularly when they are near homes, businesses, or other assets.

Location of Potential Wildfires

Unincorporated, rural areas of Baldwin County are most susceptible to wildfires, but due to sparse development, the risks to life and property are lower in these areas. The risks are greatest in areas of sprawl where human development coexists with conditions that are amenable to wildfires. The high-risk areas are located predominantly north of I-10 and I-65, and around the coastal areas of Mobile Bay.

Extent and Intensity of Potential Wildfires

Baldwin County’s extensive forest coverage creates an abundant and widespread fuel source for wildfires. Further, the County’s weather conditions, drought, and lightning from severe storms can increase risks. The wildland-urban interface, where urban development and human activities interact with forested wildlands, compounds wildfire risk in Baldwin County. Unpermitted burns can contribute to the many causes of wildfires, with out-of-control burns that can rage, leading to extensive damage. Effective forest management practices include prescribed burns, thinning, mowing, and herbicidal applications to reduce hazardous concentrations of underbrush. Additionally, prescribed burns can help develop valuable wildlife habitats.

Burn Probability

According to the Wildfire Risk Assessment Portal (Southern Group of State Foresters), Burn probability is the likelihood of wildfire burning a specific location within a set time frame - commonly represented as the chance of burning during one calendar year or wildfire season.

Burn Probability can be expressed as a percentage (e.g., 5%) or as odds (1-in-20) and provides a long-term estimate of the probability that a large wildfire (over 21 acres) will burn an area in a given year. In the legend below, Class 9/10 or “Very High,” means there is a 2% to 5% chance of wildfire per year — or about one fire every 20 to 50 years, based on past wildfire patterns.

Probability results are based on fire modeling over thousands of simulations of possible fire seasons. In each simulation, factors that influence the probability of fire occurrence, including weather and ignition likelihood, are varied according to patterns derived from observations in recent decades. Burn Probability is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn Probability does not say anything about the intensity of fire if it occurs.

Wildfire Exposure Score

According to the Wildfire Risk Assessment Portal (Southern Group of State Foresters), Wildfire Exposure Score (also called “Structure Exposure Score”) combines two important wildfire factors related to structure exposure: the chance of wildfire (Burn Probability – defined as the likelihood of wildfire burning a specific location within a calendar year or wildfire season) and the potential damage to homes from wildfire

(*Damage Potential* – defined as an estimate of damage that a wildfire could cause to homes considering both fire intensity and embers from nearby fuel).

Exposure scores are provided for all areas regardless of whether a structure currently exists at that location. Each Wildfire Exposure Score category accounts for a 1.5 times (or 50 percent) difference in exposure. For example, a structure located within Class 3/10 is 1.5 times more exposed than one in Class 2/10, and so on.

Damage Potential

According to the Wildfire Risk Assessment Portal (Southern Group of State Foresters), Damage Potential provides an index of potential damage to homes from wildfire. It considers factors like flame length and embers lofted from nearby fuel.

Damage Potential is a relative index (from low to high) that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. This index does not incorporate a measure of wildfire likelihood.

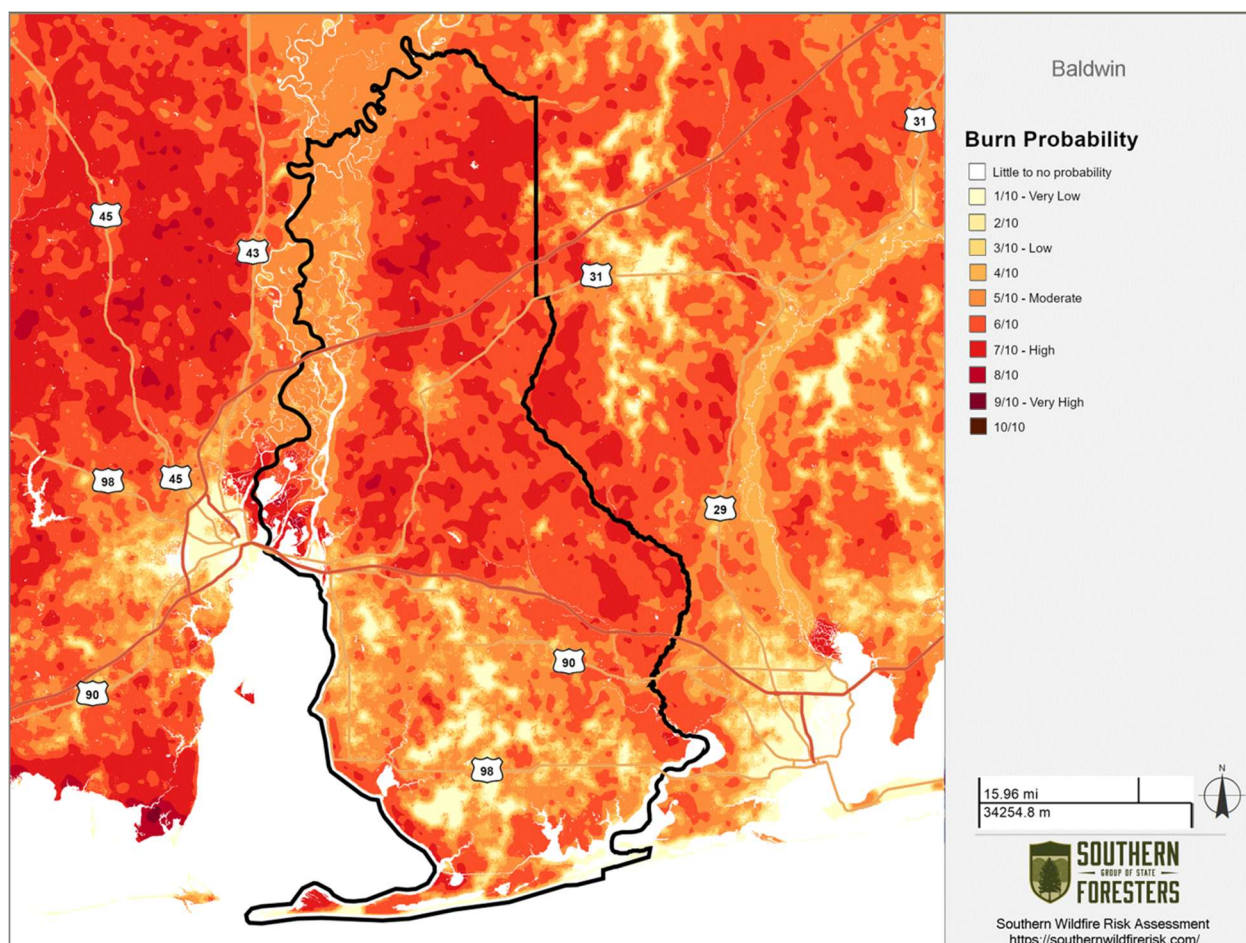
Damage Potential is a fire-effects measure and includes flame-length estimates that reflect all spread directions (heading, backing, and flanking). Intensities from non-heading spread directions are considerably lower than those at the head of the fire.

Wildfire Hazard Potential

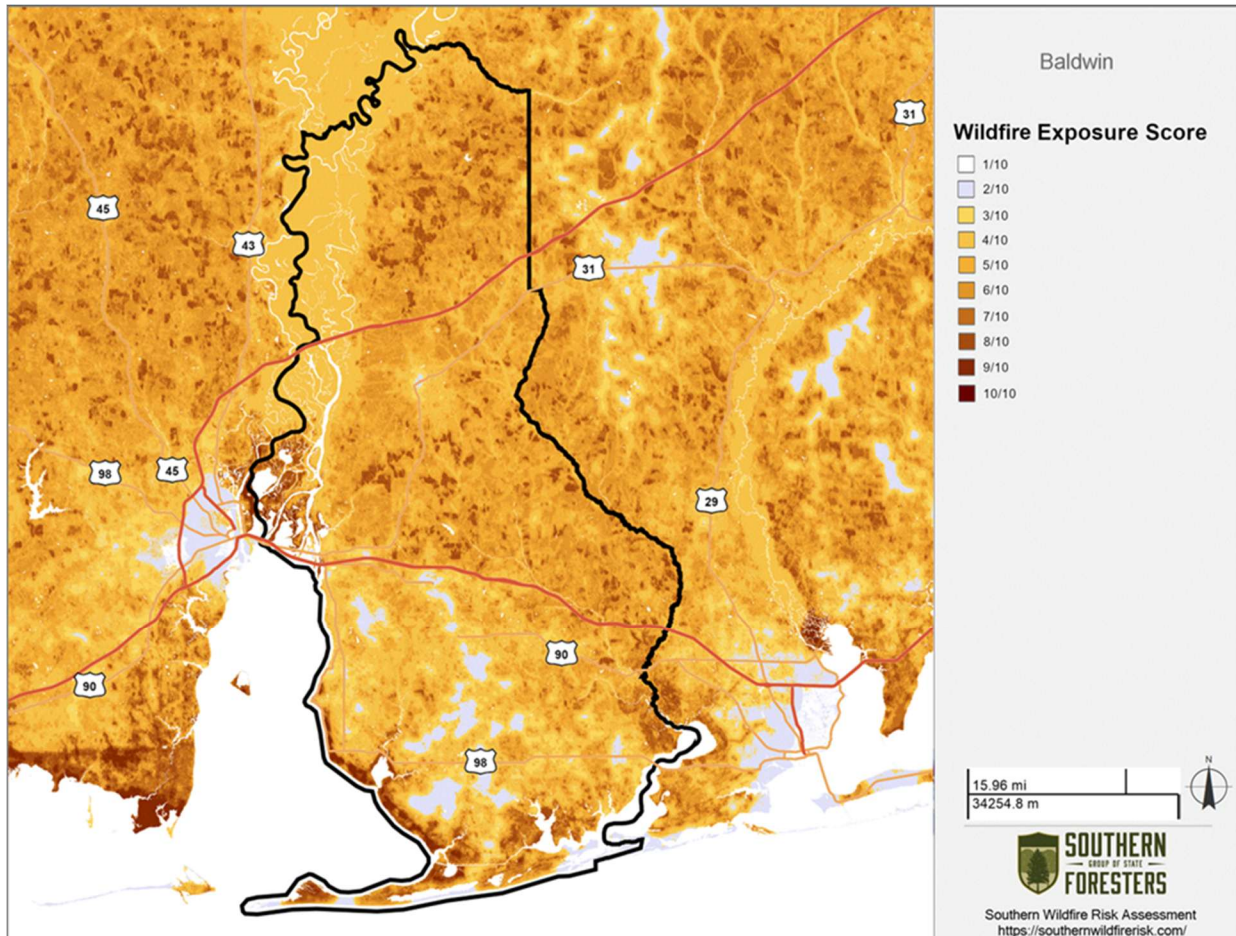
Wildfire Hazard Potential represents the difficulty of controlling wildfires and includes information such as Burn Probability, small-fire ignition density, fire-intensity measures, and fuel/vegetation type.

Wildfire Hazard Potential is mapped with eight classes, ranging from low (blue) to high (red) hazard levels. The highest classes indicate areas with fuels that are more prone to extreme fire behavior under severe fire-weather conditions. Although Wildfire Hazard Potential is useful for long-term planning purposes, it does not incorporate current or forecasted weather conditions and should not be relied upon as a seasonal outlook.

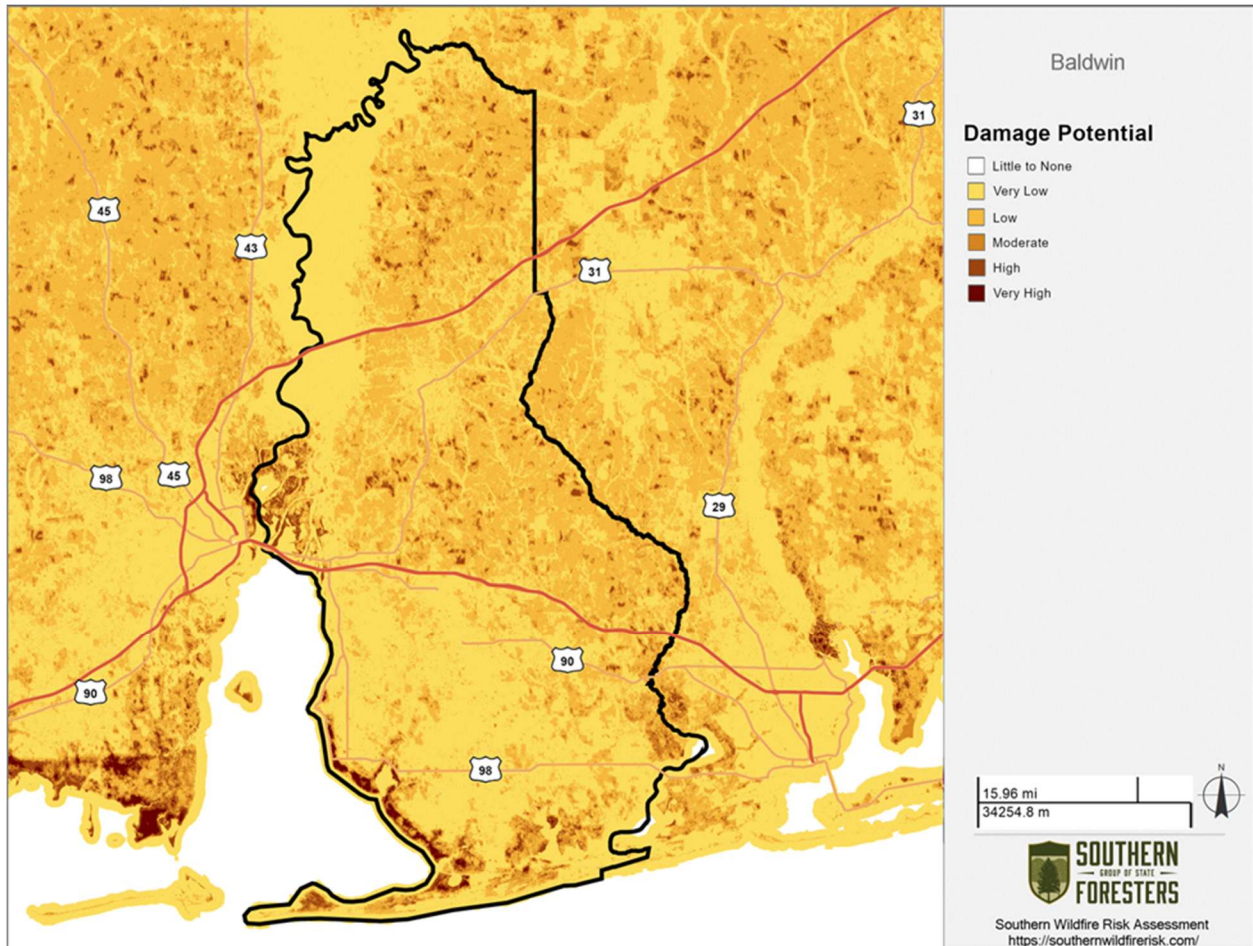
Data Source: Alabama Forestry Commission, Southern Group of State Foresters (accessed February 2026)

Map 5.5 – Baldwin County Burn Probability

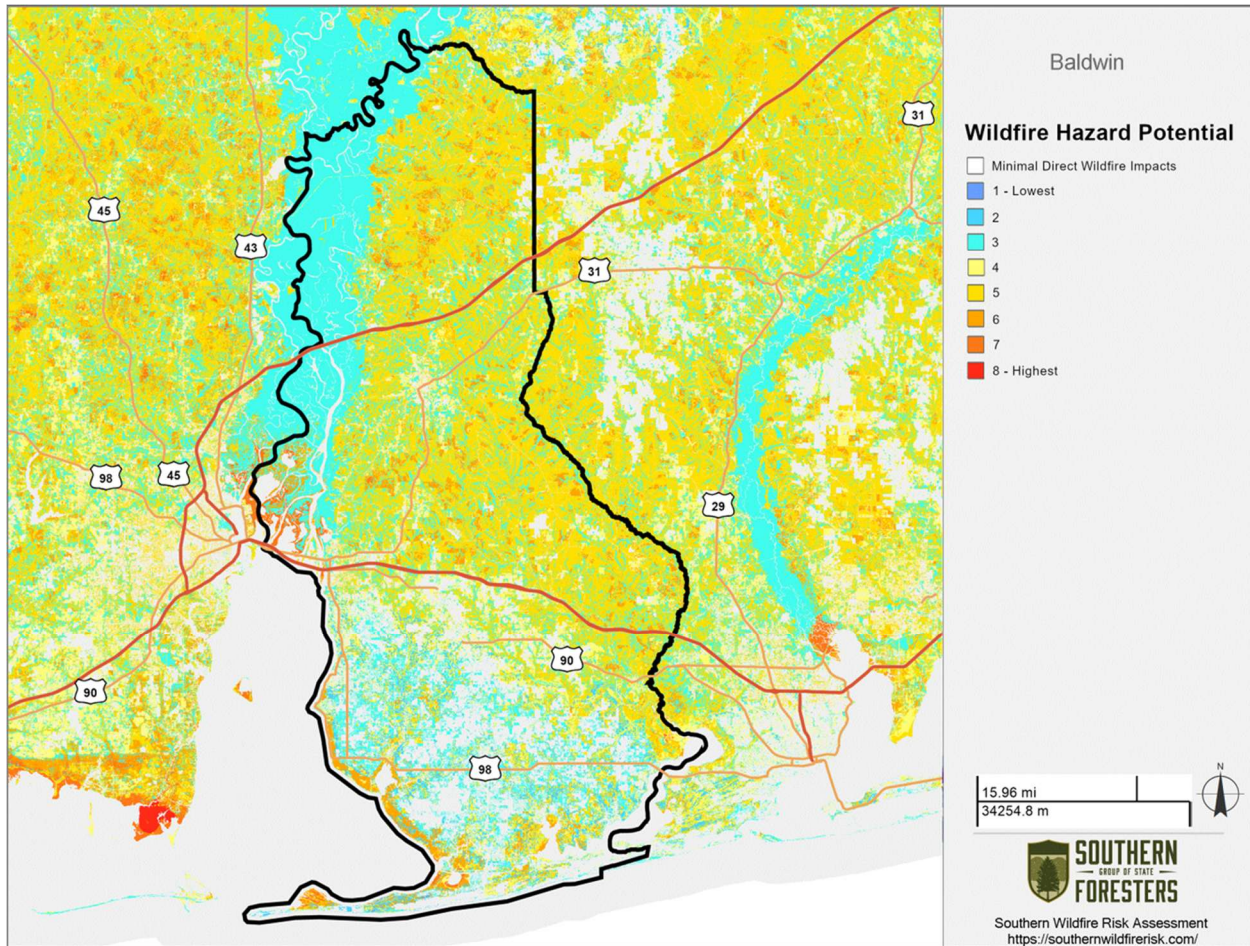
	Burn Probability Category	Burn Probability - Percent	Burn Probability - Odds	Acres	Percent
	Little to no probability	0	0	81,310	7 %
	1/10 – Very Low	< 0.01 %	> 0 to 1-in-10,000	24,356	2 %
	2/10	< 0.1 %	< 1-in-1,000	19,177	2 %
	3/10 – Low			37,991	3 %
	4/10			90,378	8 %
	5/10 – Moderate	< 1.0 %	< 1-in-100	264,383	24 %
	6/10			381,270	35 %
	7/10 – High			194,035	18 %
	8/10	~ 1-2 %	~ 1-in-100 to 1-in-50	6,789	1 %
	9/10 – Very High	~ 2-5 %	~ 1-in-50 to 1-in-20	0	0 %
	10/10	~ 5-10 %	~ 1-in-20 to 1-in-10	0	0 %
	Total			1,099,689	100 %

Map 5.6 – Baldwin County Wildfire Exposure

	Wildfire Exposure Score Category	Acres	Percent
	1/10	81,310	7 %
	2/10	35,873	3 %
	3/10	55,987	5 %
	4/10	287,564	26 %
	5/10	289,770	26 %
	6/10	234,040	21 %
	7/10	69,465	6 %
	8/10	40,864	4 %
	9/10	4,817	0 %
	10/10	0	0 %
	Total	1,099,689	100 %

Map 5.7 – Baldwin County Damage Potential

	Damage Potential Category	Acres	Percent
	Little to None	1,697	0 %
	Very Low	596,728	54 %
	Low	407,937	37 %
	Moderate	67,884	6 %
	High	21,006	2 %
	Very High	4,436	0 %
	Total	1,099,689	100 %

Map 5.8 – Baldwin County Wildfire Hazard Potential

	Wildfire Hazard Potential Category	Acres	Percent
	Minimal Direct Wildfire Impacts	259,587	24 %
	1 - Lowest	433	0 %
	2	39,528	4 %
	3	265,989	24 %
	4	92,645	8 %
	5	375,384	34 %
	6	59,426	5 %
	7	6,697	1 %
	8 - Highest	0	0 %
	Total	1,099,689	100 %

Previous Occurrences of Wildfires

Wildfire numbers and acreage in Alabama overall fluctuate annually with weather conditions, drought, and human activity. AFC wildfires statewide often number in the hundreds to thousands per year, with varying total acres burned, and Baldwin County tends to be one of the more active counties in southwest Alabama, in annual ranking year-to-year.

Wildfire History and Trends (2017-2025)

Between 2017 and 2025, Baldwin County experienced a total of 495 wildfires, burning approximately 15,205 acres, as summarized in Table 5-1. Annual wildfire activity varied considerably, ranging from a low of 42 fires in 2021 to a high of 105 fires in 2017. Acres burned also fluctuated significantly year to year, reflecting the influence of weather conditions, fuel availability, and ignition sources.

Several years during this period experienced notably high acreage losses, including 2020 (2,055 acres), 2022 (3,880 acres), and 2024 (3,314 acres), indicating larger or more severe wildfire events despite relatively moderate numbers of individual fires. Overall, the nine-year period averaged approximately 55 wildfires per year and 1,690 acres burned annually.

Wildfires continue to occur throughout Baldwin County; however, they remain more concentrated in rural and unincorporated areas, where forested land, agricultural uses, and expanding wildland–urban interface development increase exposure and ignition potential.

Table 5.10 – Baldwin Total Acres Burned (2017-2025)

YEAR	# WILDFIRES	ACRES BURNED
2017	105	1,002
2018	54	1,055
2019	47	1,546
2020	49	2,055
2021	42	474
2022	57	3,880
2023	51	802
2024	44	3,314
2025	46	1,077

Data Source: Alabama Forestry Commission, Southern Group of State Foresters (accessed February 2026)

Probability of Future Wildfire Events

Based on the most recent five-year period (2021–2025), Baldwin County averaged approximately 48 wildfires per year, with an average of 1,909 acres burned annually. Across the full 2017–2025 dataset, the county averaged approximately 30.7 acres burned per wildfire, indicating that while many fires are relatively small, periodic large events substantially increase total annual acreage losses.

Factors that may influence future wildfire probability and severity include continued residential and commercial development in western and southern Baldwin County, prolonged dry periods, and seasonal weather patterns that promote rapid fire spread. Expansion of development into previously undeveloped or forested areas also increases the likelihood of human-caused ignitions.

Historically, wildfire activity in Baldwin County has increased following tropical storms and hurricanes, which generate large amounts of downed timber and vegetative debris that serve as additional fuel. When post-storm debris coincides with extended dry conditions, wildfire risk increases until fuels naturally decompose or are removed. This pattern remains a relevant consideration for future wildfire risk in the county.

5.4.6 Droughts/Heat Waves Profile

Drought occurs when precipitation levels fall below normal over an extended period of time. Climatic factors such as high temperatures, persistent winds, and low relative humidity can intensify drought conditions by increasing evaporation rates and reducing soil moisture. Two primary types of droughts are generally recognized: meteorological drought and hydrological drought. These conditions may lead to secondary impacts, including agricultural and socioeconomic droughts.

Meteorological drought is defined by the degree of dryness relative to normal precipitation patterns for a specific region and time period. This type of drought varies geographically because atmospheric conditions and precipitation patterns differ across regions.

Hydrological drought is associated with prolonged precipitation deficits that affect surface water and groundwater resources, including streams, reservoirs, and aquifers. Hydrological droughts typically develop more slowly than meteorological or agricultural droughts because it takes time for reduced precipitation to be reflected in streamflow, groundwater levels, and reservoir storage. While impacts to crops may occur relatively quickly, reservoir and groundwater impacts may not be evident for several months. Climate conditions,

changes in land use, land degradation, and the construction and operation of dams can further influence hydrologic systems, particularly during extended dry periods.

Agricultural drought occurs when available soil moisture is insufficient to meet crop water demands, resulting in crop stress and reduced yields. Socioeconomic drought develops when water shortages begin to affect people, economic activity, and quality of life, including impacts to public water supplies, agriculture, and industry.

The National Weather Service continues to use multiple indices to monitor and classify drought conditions. The Crop Moisture Index is commonly used to evaluate short-term moisture conditions affecting agriculture. In contrast, the Palmer Index is used to assess longer-term drought trends and remains a widely accepted indicator of prolonged moisture deficits.

Baldwin County may periodically experience short-duration droughts and periods of extreme summer heat. While drought conditions affecting large portions of Alabama have occurred in recent decades, including multi-year droughts in the mid-2000s, impacts within Baldwin County have generally been less severe than in other regions of the state due to localized precipitation patterns and coastal influences.

Location of Potential Droughts/Heat Waves

Droughts and heat waves affect all areas of Baldwin County relatively uniformly. However, wildfires that develop or intensify under drought conditions pose the greatest risk to residents living in areas along the rural–urban interface, where development is adjacent to forested or undeveloped lands and access for suppression activities may be limited.

Extent and Intensity of Potential Droughts/Heat Waves

Farmers and other residents who depend on rainfall for economic activity may experience material losses during periods of drought. Heat waves also pose significant health risks, particularly for older adults and other vulnerable populations, including individuals living in homes without adequate air conditioning or cooling.

Previous Occurrences of Droughts/Heat Waves

According to records maintained by the National Centers for Environmental Information, Baldwin County has experienced relatively few documented drought events compared to other regions of Alabama. Historical climate data indicate that no droughts were formally recorded for Baldwin County between 1995 and 2014. The national climate database, however, documents three instances of extreme heat affecting the county during that period.

Two extreme heat events were recorded in 2000, including a late June heat wave that resulted in one fatality. A third instance of extreme heat occurred in August 2007, when much of Alabama and large portions of the United States experienced prolonged drought. During that period, Baldwin County reached “Drought Watch” status, one level below a declared full drought. It should be noted that while drought conditions were recognized at the state and regional levels in 2007, this drought did not appear as a formally recorded drought event for Baldwin County within the national climate database.

More recent climate monitoring indicates that Baldwin County continues to experience episodic extreme heat events and short-duration dry periods, particularly during the summer months. While long-term drought conditions remain relatively infrequent locally, increasing temperatures, changing precipitation patterns, and extended periods of heat underscore the importance of continued monitoring of drought and heat as part of the 2026 hazard assessment.

Table 5.11 – Baldwin County Drought/Extreme Heat Events 2000-2026

Year	Type	Number	Deaths	Injuries	Total Damages
2000	Extreme Heat	2	1	0	0
2001-2006					
2007					
2008-2026					
Total					
Annual Average					

Source: National Climatic Data Center

Probability of Future Droughts/Heat Waves

Although Baldwin County has not experienced recent droughts that meet federal reporting thresholds, the county is located within a region that may periodically experience infrequent, short-duration drought conditions. Periods of extreme summer heat are increasingly likely and remain a recurring concern, particularly during prolonged dry or stagnant weather patterns.

According to the National Centers for Environmental Information, atmospheric moisture plays an important role in the development and severity of heat waves. Heat waves are more frequent under dry, low-humidity conditions; however, heat events accompanied by high humidity can be especially dangerous and may have significant impacts on public health, livestock, and wildlife. These conditions increase the potential for heat-related illness and stress, particularly among vulnerable populations, even in the absence of prolonged drought.

5.4.7 Winter Storms/Freezes Profile

Winter storms in Baldwin County typically develop when Arctic cold fronts interact with warmer, moisture-laden weather systems originating from the Gulf of America. Although such events are infrequent, winter storms and freezes can pose risks, including frostbite and hypothermia, crop damage or failure, power outages, and hazardous travel conditions caused by ice or freezing precipitation on roadways.

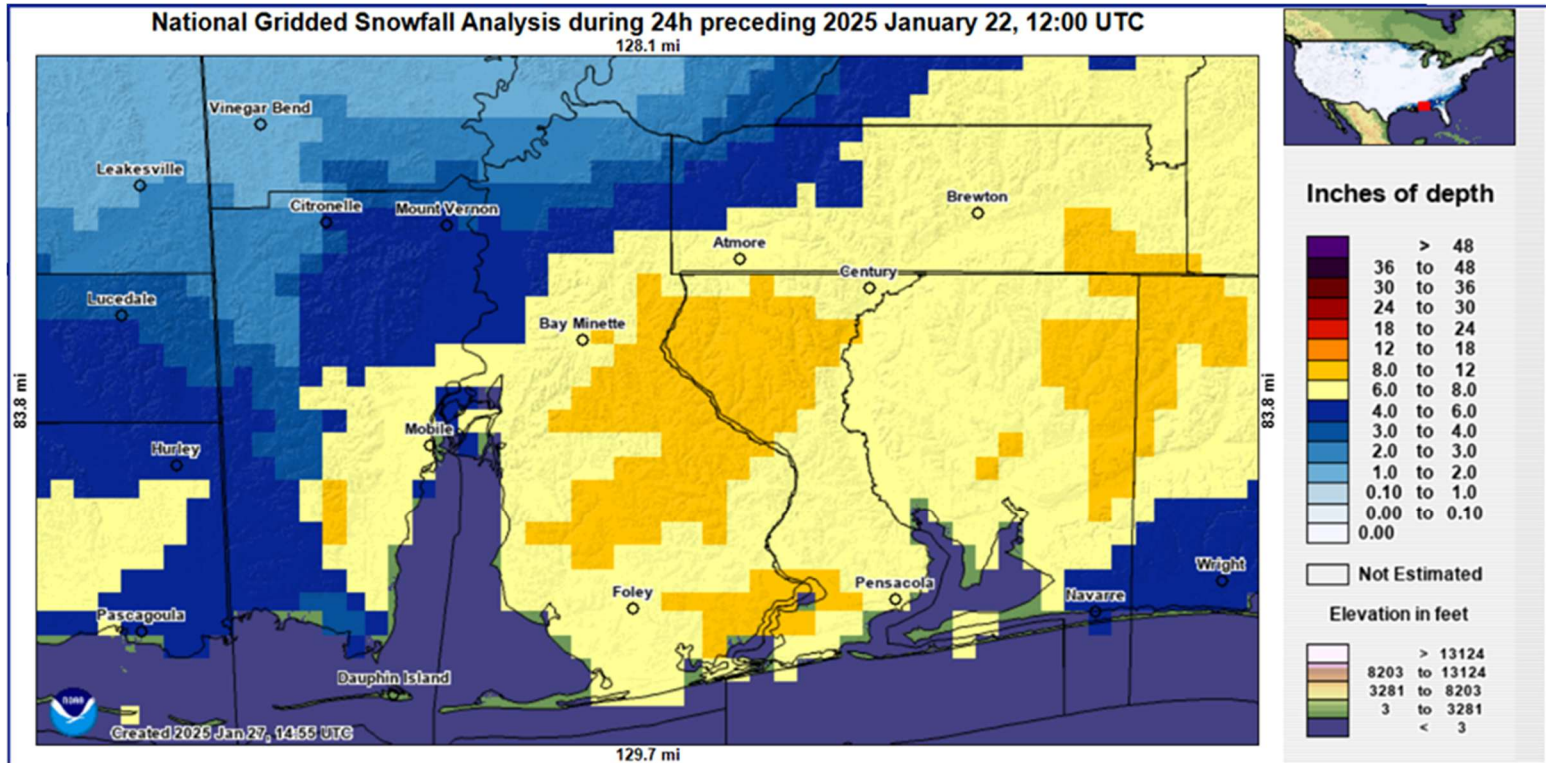
Winter weather observations summarized in Table 5-12 are based on data compiled by the Southeast Regional Climate Center using records for the City of Robertsedale. These data indicate that snowfall accumulation in Baldwin County is minimal and that winter temperatures are generally mild, thereby limiting the frequency and duration of winter-storm impacts.

Table 5.12 – Winter Weather Observations, Baldwin County

Category	Observation
Average Winter Temperature	52.4°F
Average Winter Minimum Temperature	40.9°F
Lowest Temperature (1957)	3°F
Average Season Snowfall	0.1 in
Largest Snowfall (1973)	3.0 in

Source: SE Regional Climate Center, 2025

In January 2025, Baldwin County experienced a rare winter weather event that included light snowfall across portions of the county. Snow accumulations were generally limited to trace amounts to approximately one inch, depending on location. While the event caused localized travel concerns and public interest due to its infrequency, reported snowfall totals did not exceed historical records for Baldwin County. This event is best characterized as an unusual winter weather occurrence rather than a new climatological extreme. Data and observations were documented by the National Weather Service and local reporting sources. Map 3.13 depicts a rare winter weather event, showing snowfall amounts across the county, with Robertsdale as the location of the observational data.

Map 5.13 – 2025 Baldwin County Winter Weather Event

Source, NOAA, <https://www.noahsc.noaa.gov/interactive/html/map.html>

Location of Potential Winter Storms/Freezes

Baldwin County and its participating jurisdictions are generally unlikely to experience winter storms. Areas farther inland are somewhat more susceptible to freezing temperatures than coastal locations due to reduced maritime influence; however, the overall risk of winter storms and prolonged freezes across the county remains low.

Extent and Intensity of Potential Winter Storms/Freezes

Typically, winter storms in the southeastern United States include ice storms, crop-killing freezes, and occasional snowfall. In Baldwin County, winter storms are infrequent and generally mild due to the county's southern latitude and low elevation. Freezing temperatures occur more frequently than winter storms; however, the county's subtropical climate and coastal influences substantially reduce the severity of these events relative to other areas of Alabama. A review of records maintained by the National Centers for Environmental Information indicates that no deaths or injuries related to winter weather have been reported in Baldwin County during the past 20 years, and documented monetary damages have remained minimal through the 2026 planning period.

Average winter temperatures in Baldwin County are approximately 52.4 degrees Fahrenheit, with an average winter minimum temperature of 40.9 degrees Fahrenheit. Nevertheless, when winter storms or freezes do occur, risks can be proportionally greater because residents, infrastructure, and response agencies are not routinely equipped to manage icy or snow-covered conditions. The largest recorded snowfall in Baldwin County occurred in 1973, when approximately 3.0 inches of snow were reported. While a light snowfall occurred in January 2025, reported accumulations did not exceed historical records.

Winter storms are often accompanied by strong winds, which can reduce visibility, create hazardous wind chill conditions, and exacerbate travel risks. Because Baldwin County has limited experience with icy roadways, motorists may become stranded, emergency services may be disrupted, and traffic conditions may be hazardous. The most recent significant ice storm, which occurred on January 28, 2014, resulted in widespread road closures, traffic disruptions, and multiple vehicle accidents.

Additional effects of extreme cold include increased risks of hypothermia and frostbite, particularly among vulnerable populations. Prolonged freezing conditions can also cause water pipes to freeze and burst, and may damage crops, landscaping, and natural vegetation.

Previous Occurrences of Winter Storms/Freezes

Baldwin County occasionally experiences winter storms and periods of extreme cold. According to records maintained by the National Centers for Environmental Information, a total of eight winter storm events and two ice storm events have been documented for Baldwin County. These events have generally been infrequent and of limited severity, but when they occur, they have resulted in transportation disruptions, hazardous travel conditions, and localized impacts. Table 5-13 summarizes recorded winter storm and extreme cold events affecting Baldwin County, along with associated damages, based on a review of available data through the 2026 planning period.

Table 5.12 – Baldwin County Winter Storm Damages, 2000-2026

Year	Type	Number	Deaths	Injuries	Total Damages
2000-2001	-	-	-	-	-
2002	Winter Weather	1	0	0	\$10,000
2003-2009	-	-	-	-	-
2010	Winter Storm	1	0	0	\$0
2011-2013	-	-	-	-	-
2014	Winter Storm	2	0	0	\$0
2014	Ice Storm	2			
Total					
Annual Average					

Source: National Climatic Data Center

Probability of Future Winter Storms/Freezes

As indicated by the Hazard Mitigation Planning Committee's hazard identification exercise, Baldwin County is not at significant risk for winter storms. Map 5-14 illustrates that Baldwin County has experienced fewer winter storms than most counties in Alabama, averaging approximately 2.5 events per 10-year period. Based on this assessment, the HMPC ranked winter storms and freezes as having some likelihood of occurring, with the potential for moderate impacts when they do occur, as documented in Appendix D.

***Map 5.14 – Alabama Winter Storm Interval, xxxx-xxxx**

5.4.8 Earthquakes Profile

An earthquake is the sudden movement or slip along a fault that releases stored energy, resulting in ground shaking and the propagation of seismic waves. Earthquake-related hazards encompass a range of secondary effects that can threaten life and property, including surface faulting, ground shaking, landslides, liquefaction, tectonic deformation, tsunamis, and seiches. Earthquake risk is defined as the probability of damage and loss that would occur if an earthquake were to take place along a particular fault.

The severity of earthquake losses depends on multiple factors, including building construction type, population density, local topography and soil conditions, and distance from the earthquake epicenter. An earthquake's magnitude alone is not always a reliable indicator of potential damage, as it does not account for the duration of ground shaking, which can significantly influence the level of destruction. Large-magnitude earthquakes are more likely to cause structural collapse; however, such events are relatively rare. In most earthquakes, widespread damage is typically associated with building contents and nonstructural components rather than complete structural failure.

Structures constructed with flexible materials, such as steel framing, generally perform better during seismic events by absorbing and dissipating energy. Wood-frame construction, which represents a large proportion of residential structures in the United States, also tends to flex rather than crack or collapse. However, it may present an increased fire risk following an earthquake.

Building codes have long been used to establish construction standards intended to reduce damage from earthquakes and other hazards. However, vulnerabilities persist due to older structures built prior to modern codes, inconsistent compliance, and an evolving understanding of seismic risk. To further reduce potential losses of life and property, continued emphasis on improved construction practices and retrofitting is needed, particularly for critical facilities such as hospitals, schools, dams, and essential utilities, including power, water, and wastewater systems.

Location of Potential Earthquakes

When earthquakes occur, it is not possible to predict with certainty which specific locations within a county will experience the greatest impacts. Maps 5-15, 5-16, and 5-17 illustrate earthquake-related conditions in Baldwin County using GIS data originally provided by the Geological Survey of Alabama and reviewed for the 2026 planning cycle. These maps depict historical earthquake locations, variations in expected ground shaking, and areas susceptible to soil liquefaction.

Map 5-15 shows recorded earthquake locations from 1886 through 2014, along with mapped geologic faults in and near Baldwin County. Based on this historical record, only two earthquakes have been documented within or immediately adjacent to the county. While seismic activity is infrequent, the presence of regional faults and past events indicates that earthquakes remain a potential, though low-probability, hazard.

Baldwin County exhibits low to moderate overall susceptibility to seismic liquefaction; however, impacts can vary significantly with earthquake magnitude, depth, and epicenter location. As shown on Map 5-16, areas along the Gulf Coast and the shoreline of Mobile Bay demonstrate higher liquefaction susceptibility due to local soil and groundwater conditions. In these areas, saturated soils increase the likelihood of ground failure during strong shaking, thereby amplifying damage to buildings, roads, and buried infrastructure.

In addition to liquefaction, soil type and site amplification influence the intensity of ground shaking by affecting the transmission of shear waves through soil and rock. According to classifications developed by the National Earthquake Hazards Reduction Program, Baldwin County contains two soil types: Soil Type D and Soil Type E, as shown on Map 5-17. Soil Type D, present primarily in unincorporated areas along Mobile Bay, consists of dense soils such as sands, silts, gravels, and some quaternary muds, where significant amplification of shaking is expected. Soil Type E, which characterizes much of the remainder of Baldwin County, consists of softer, water-saturated soils and artificial fill and is associated with the highest potential amplification of ground shaking. As noted by the U.S. Geological Survey, these soil conditions can substantially increase localized damage during an earthquake, even when regional seismic activity is relatively low.

Map 5.15 – Baldwin County Earthquakes & Geologic Faults

***Map 5.16 – Baldwin County Earthquake Liquefaction Potential**

***Map 5.17 – Baldwin County Soil Amplification Seismic Shaking Potential**

Extent and Intensity of Potential Earthquakes

According to the Geological Survey of Alabama, recent seismograph records indicate that earthquakes occur relatively frequently throughout the state; however, most events are small in magnitude and not strong enough to be felt at the ground surface. While earthquakes can occur anywhere in Alabama, they are generally low-magnitude and unlikely to cause damage to structures or infrastructure.

As discussed in the Earthquake Description included in Appendix D, the intensity of ground shaking from an earthquake is measured using the Modified Mercalli Intensity Scale. This scale classifies earthquake effects based on observed impacts to people, structures, and the natural environment, using values ranging from I to XII. Lower values represent shaking that is not felt or causes minimal effects, while higher values correspond to increasingly severe and damaging ground motion. Figure 5.8 illustrates the Modified Mercalli Intensity Scale and its associated observed effects.

The U.S. Geological Survey publishes national seismic hazard maps that depict the probability of exceeding specific levels of earthquake ground shaking over defined time periods. Ground shaking intensity is commonly measured as

Figure 5.8 – Modified Mercalli Intensity Scale

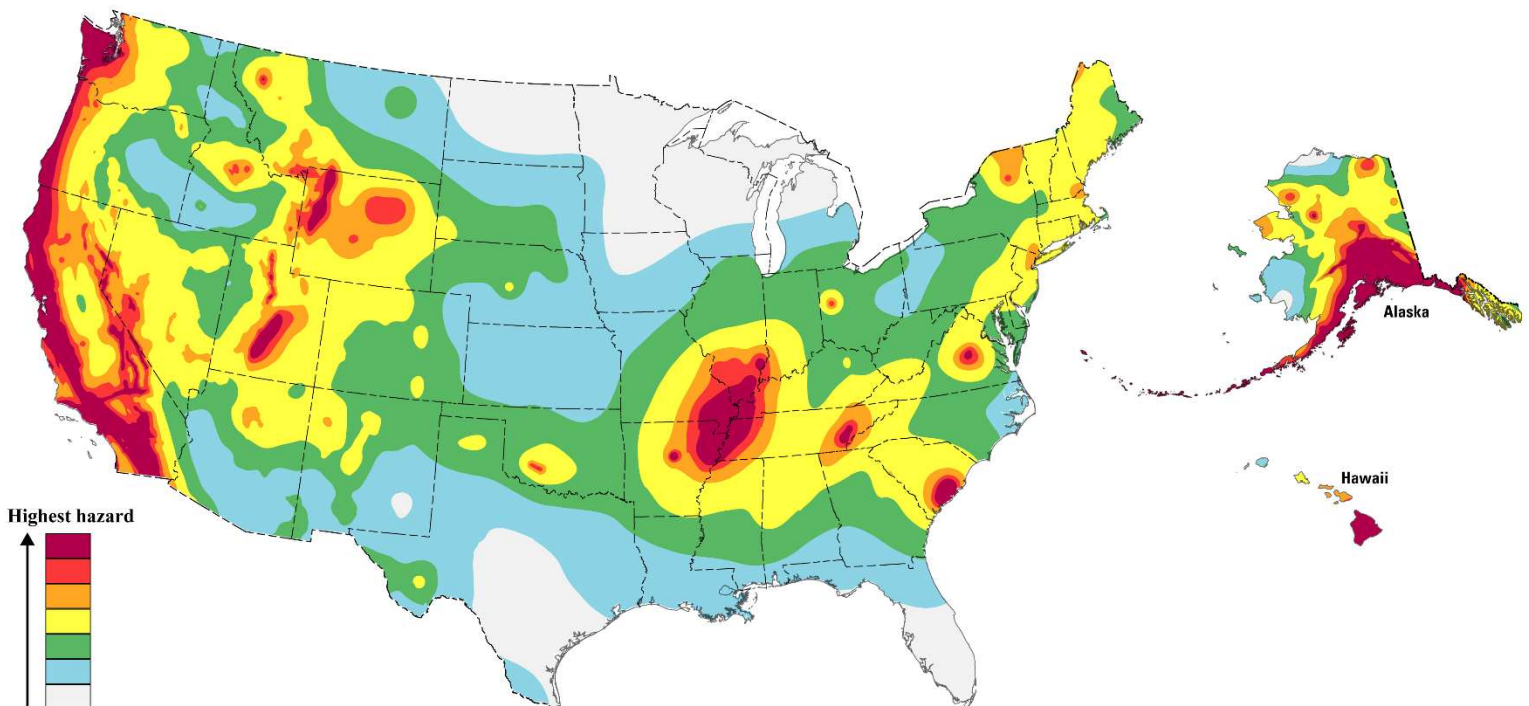
I. Not felt	Not felt except by very few under especially favorable conditions.
II. Weak	Felt only by a few people at rest, especially on upper floors of buildings.
III. Weak	Felt quite noticeably by people indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV. Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V. Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI. Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII. Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII. Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX. Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations. Liquefaction.
X. Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI. Extreme	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII. Extreme	Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

Source: Geological Survey of Alabama

peak ground acceleration (PGA), which represents the peak ground acceleration during an earthquake and is expressed as a percentage of gravity (%g), where gravity is 9.8 m s^{-2} .

Based on map data from the USGS Earthquake Hazards Program seismic hazard maps, Baldwin County has a relatively low seismic risk. The most recent data used for this plan update indicates that Baldwin County has an estimated 4-6% probability of experiencing ground shaking exceeding 16% of gravity (%g) over a 50-year period, as shown on Map 5-18. This low probability reflects the generally low level of seismic activity affecting the county compared to other regions of the United States.

Map 5.18 – State of Alabama Seismic Hazards Map, 2024



Source: United States Geological Survey, Earthquakes Hazards Program, 2024

Previous Occurrences of Earthquakes

Map 5-19, “Alabama Earthquake Locations,” illustrates the location and magnitude of recorded earthquakes in Alabama based on available historical records. The dataset used for this plan update covers earthquake activity recorded from 1886 through the most recent available data for the 2026 planning cycle. According to this information, Baldwin County has experienced only one recorded earthquake. Statewide records indicate that only a

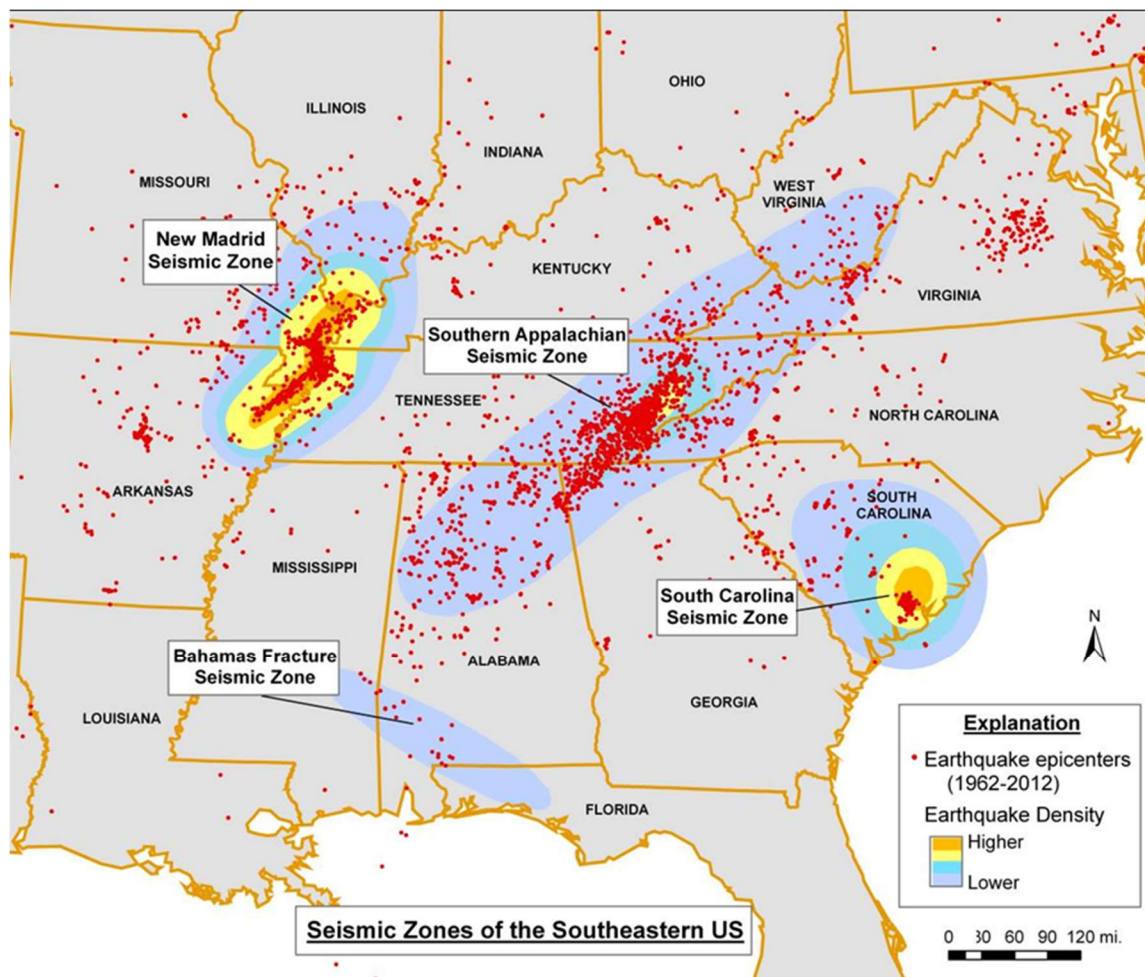
limited number of earthquakes with magnitudes greater than 4.0 have occurred in Alabama, indicating that although seismic activity is present, damaging earthquakes are relatively infrequent. This historical pattern is consistent with Baldwin County's overall low seismic risk as identified in national and state seismic assessments.

Map 5.19 – Alabama Earthquake Locations

Probability of Future Earthquakes

Records and analyses from the Geological Survey of Alabama indicate that the likelihood of a damaging earthquake occurring in Alabama is extremely low. Map 5-20, “Seismic Zones in the Southeastern United States,” shows that Alabama lies within two recognized seismic zones: the Southern Appalachian Seismic Zone and the Bahamas Fracture Seismic Zone. Historically, the majority of earthquakes recorded in Alabama have been associated with the Southern Appalachian Seismic Zone. Baldwin County is located along the margin of the less active Bahamas Fracture Seismic Zone, which further contributes to the county’s relatively low seismic risk compared to other areas of the state.

Map 5.20 – Seismic Zones in the Southeastern United States



Source: Geological Survey of Alabama, Mapping and Hazards Program

The seismic zone information depicted on Map 5-20 is based on the best available regional geologic data at the time of its development. While the map reflects an earlier dataset, the underlying tectonic features and seismic zones shown are long-standing geologic structures that do not change appreciably over time. More recent seismic monitoring and analysis conducted by the Geological Survey of Alabama and the U.S. Geological Survey continue to support the conclusion that Alabama, and Baldwin County in particular, remains in a low seismic hazard region. As a result, the map remains appropriate for illustrating regional seismic context in the 2026 Hazard Mitigation Plan, despite the age of the original dataset.

5.4.9 Landslides

A landslide is defined by the United States Geological Survey as the movement of rock, debris, or earth downslope under the influence of gravity. Landslides may be triggered by a variety of natural and human-induced factors. Natural triggers include weakened or unstable geologic formations, heavy or prolonged rainfall, changes in groundwater levels, and seismic activity. In contrast, human activities such as excavation, grading, and land development can also contribute to slope instability. Local geology and topography are key factors in determining an area's susceptibility to landslides.

Due to its predominantly flat and low-relief terrain, Baldwin County has a very low susceptibility to landslides. Steep slopes and unstable geologic conditions that typically contribute to landslide activity are largely absent across the county. As a result, landslides are considered an unlikely hazard in Baldwin County, with minimal potential for widespread impacts.

The Geological Survey of Alabama has evaluated landslide potential across the state of Alabama. Geographic Information Systems data provided by the GSA and reviewed for this plan update classify landslide incidence and susceptibility within Baldwin County. These data are presented on Map 5-21, "Baldwin County Landslide Susceptibility," which identifies areas of varying landslide potential based on local geology, topography, and historical observations, as described below.

1. *Landslide susceptibility.* Susceptibility represents the likelihood that an area will respond to landslide-triggering conditions, such as excavation or grading, loading of slopes, or unusually heavy rainfall. Changes in groundwater levels or existing site conditions can also contribute to slope instability. Areas where rocks and soils have experienced landslides in the past are more likely to experience future movement under similar conditions. Landslide susceptibility is classified into the following categories:

High susceptibility – greater than 15 percent of a given area is susceptible to landsliding.

- Medium susceptibility – 1.5 percent to 15 percent of a given area is susceptible to landsliding.
- Low susceptibility – less than 1.5 percent of a given area is susceptible to landsliding.
- No susceptibility indicated – susceptibility is equal to or lower than the level of landslide incidence.

2. *Landslide incidence.* Landslide incidence refers to the number of landslide events that have occurred within an area and is measured by the percentage of land that has previously experienced landsliding. Incidence is classified into the following categories:

- High incidence – greater than 15 percent of a given area has previously experienced landsliding.
- Medium incidence – 1.5 percent to 15 percent of a given area has previously experienced landsliding.
- Low incidence – less than 1.5 percent of a given area has previously experienced landsliding.

Location of Potential Landslides

As shown on Map 5-21, Baldwin County exhibits at least a low degree of landslide susceptibility throughout the county. Areas with relatively greater susceptibility are primarily located in the northern and western portions of Baldwin County, where rolling or hilly terrain is present. In contrast, the central and southern portions of the county are generally flat and exhibit lower susceptibility to landslides due to minimal relief and more stable soil conditions.

Extent and Intensity of Potential Landslides

According to data provided by the Geological Survey of Alabama, the majority of Baldwin County exhibits a low degree of landslide susceptibility. Areas with higher susceptibility are limited and are primarily located in unincorporated areas near Mobile Bay, as shown on Map 5-21. Landslides in Baldwin County are generally mild in nature because the county's predominantly flat topography limits the mass and velocity that typically contribute to more severe landslide events. As a result, the severity of landslides in Baldwin County largely depends on localized human activities, such as excavation or development, or on weather-related factors, such as prolonged or intense rainfall.

Previous Occurrences of Landslides

Heavy rainfall associated with Hurricane Danny triggered a landslide in the City of Spanish Fort in 1997. In addition, bluffs along the eastern shoreline of Mobile Bay continue to be susceptible to erosion and potential future landslides, posing a risk to residential structures located along the bluff edges. These conditions remain largely unchanged due to the area's geologic characteristics and ongoing shoreline processes.

To address these risks and reduce the potential for future property damage, the State of Alabama and the City of Spanish Fort have pursued funding to support stabilization and mitigation efforts along the bluff areas. A review of records maintained by the Geological Survey of Alabama through the 2026 planning cycle indicates that a total of six landslides have been documented in Baldwin County, confirming that landslide activity remains localized and limited in scope.

Probability of Future Landslides

Although mapping prepared by the Geological Survey of Alabama identifies general degrees of landslide risk within Baldwin County, the actual probability of a landslide occurring varies by site-specific conditions. Factors influencing landslide potential include local rock and soil characteristics, slope and topography, excavation or grading activities, hillside development, vegetation removal, heavy or prolonged rainfall, and seismic activity. As a result, landslides may occur even in areas mapped as having a low incidence of past landslide activity.

Overall, the qualitative probability of landslides in Baldwin County is considered low when compared to other natural hazards affecting the county.

Map 5.21 – Baldwin County Landslide Susceptibility

5.4.10 Dam/Levee Failures Profile

In Baldwin County, dams and levees have primarily been constructed to support water supply, stormwater management, and recreational uses rather than hydroelectric power generation. As a result, these structures generally impound smaller volumes of water and pose a comparatively lower risk than large hydroelectric dams. According to the National Inventory of Dams, there are 23 inventoried dams located within Baldwin County as of the most recent review for the 2026 planning cycle.

Although the overall risk is low, dam and levee failures can cause catastrophic flooding with little or no warning. Failures are most often associated with factors such as inadequate maintenance, design or construction deficiencies, structural deterioration, or damage resulting from natural hazards, including extreme rainfall, flooding, or seismic activity. While severe dam and levee failures are rare in the United States, when they do occur, they can result in significant downstream impacts, including loss of life, substantial property damage, disruption of critical infrastructure, and long-term alteration of natural landscapes.

Location of Potential Dam/Levee Failures

According to the U.S. Corps of Engineers National Inventory of Dams, there are 23 dams in Baldwin County. See Table 5-14 and Map 5-22 for location information.

Table 5.14 – Baldwin County Dams

Dam Name	River	Year Completed	NID Height (Ft.)	Max Discharge	Max Storage
Baroco Lake Dam No. One	TR-Soldier Creek	1970	12	500	53
Bob Pace	TR-Blackwater River	1973	17	184	323
Branchland Lake Dam	Cowpen Creek - Offstream	1958	18	700	72
Calvin Childers Lake Dam No. One	TR-Polecat Creek	1968	16	500	70

Calvin Childers Lake Dam No. Two	TR-Polecat Creek	1958	22	370	100
Childress Dam	TR-Blackwater River	1981	15	330	142
Cook Lake Dam	TR-Blackwater River	1955	12	500	100
Cooper Number One	Mill Creek	1968	14	271	233
Corte Dam	Fly Creek	1981	21	580	73
Crosby Lumber Co.	TR- McCurtin Creek	1972	17	1,200	200
Deep South Girl Scouts Lake	Aikin Creek	1983	30	-	583
John Q. Kendrick	TR-Styx River	1968	21	105	180
JP Bertolli	TR-Styx River	1955	15	80	93
Lake Bobo	TR-Joes Creek	1974	15	99	160
Lake Muriel	Owens Creek	1967	16	210	512
Laupero Use	TR-Bay Minette Creek	1957	19	127	132
Miles Neuman	TR-Spring Branch	1979	18	384	232
Patterson	Seven Mile Creek	1958	34	800	2,640
Paul Childress Lake Dam	TR-Blackwater River	1951	10	-	80
Raynag UA	Perone Branch	1969	17	550	404

Stacey Lake Dam	TR-Whitehouse Creek	1968	15	700	65
Tennessee Coal & Iron	Roans Creek	1953	24	13,000	2,000
Wynn Brothers Lake Dam	TR-Polecat Creek	1969	35	500	140

Source: Army Corps of Engineers, xxxx

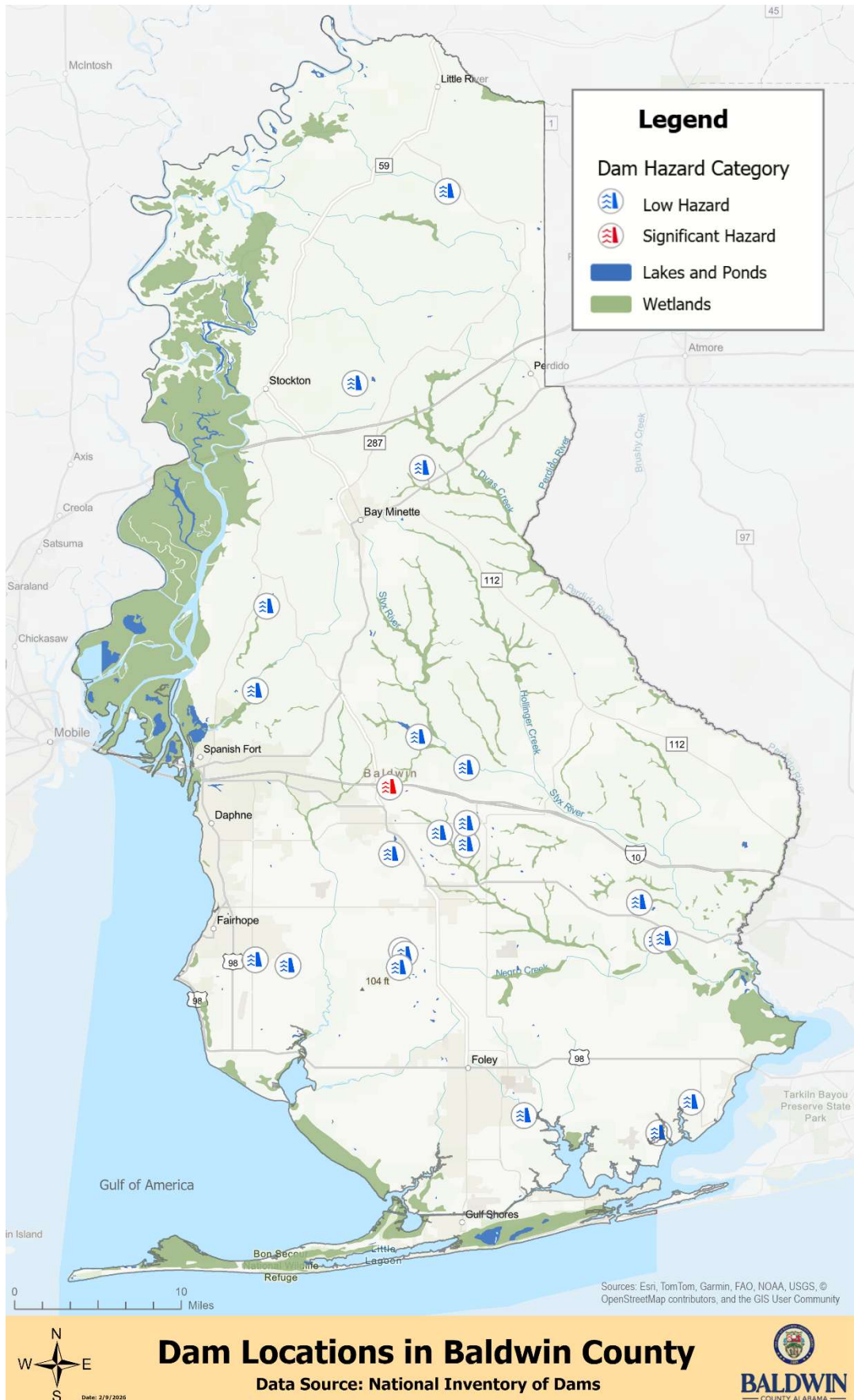
Extent and Intensity of Potential Dam/Levee Failures

According to the U.S. Army Corps of Engineers, Baldwin County has no dams classified in the high hazard category, one dam classified as a significant hazard, and twenty-two dams classified as low hazard, as summarized in Table 5-15. A significant hazard classification indicates that failure or faulty operation of the dam would not be expected to result in loss of life but could cause economic losses, environmental damage, and disruption of critical or lifeline facilities. A low hazard classification indicates that dam failure or faulty operation would not result in loss of life and would be expected to cause only minimal economic or environmental damage.

Table 5.15 – Baldwin County Dams Risk

Hazard Categories	Number of Dams
High	0
Significant	1
Low	22
Undetermined	0
Total	23

Source: Army Corps of Engineers

Map 5.22 – Baldwin County Dams

Previous Occurrences of Dam/Levee Failures

No known dam or levee failures have occurred in Baldwin County.

Probability of Future Dam/Levee Failures

The probability of a catastrophic dam failure in Baldwin County is considered very low. While detailed, site-specific engineering data are not available for all dams to fully evaluate structural conditions, none of the inventoried dams are expected to cause severe damage to developed areas in the event of failure, given their size, storage capacity, and downstream conditions. Based on the Hazard Identification and Ratings Exercise, the Hazard Mitigation Planning Committee identified dam and levee failure as the least likely hazard to occur within Baldwin County.

5.4.11 Sinkholes (Land Subsidence) Profile

Sinkholes are a naturally occurring geologic feature that form in areas where limestone, salt, or other soluble rocks beneath the ground surface are gradually dissolved by circulating groundwater. As this dissolution occurs, underground voids and caverns develop. The land surface may remain stable until these voids become too large to support the overlying material, at which point a sudden collapse can occur, forming a sinkhole. Sinkholes vary widely in size, ranging from small depressions to large collapses capable of damaging or consuming vehicles, structures, or roadways.

Certain natural and human-related activities can increase the likelihood of sinkhole formation in susceptible areas. These include prolonged drought conditions that lower groundwater levels, periods of excessive rainfall that rapidly recharge and destabilize subsurface cavities, heavy groundwater withdrawal from wells, and construction activities that alter surface drainage or impose additional loads on the ground.

Location of Potential Sinkholes

Sinkholes are a geologic phenomenon characterized by the sudden collapse of the ground surface, which occurs when groundwater dissolves soluble rock, such as limestone, creating subsurface voids. Map 5-23 illustrates karst geology across the state and indicates that Baldwin County contains geologic units with minor carbonate content. Map 5-24

presents sinkhole distribution data compiled by the U.S. Geological Survey and shows that Baldwin County has a relatively higher density of documented sinkholes compared to other areas of the state.

Despite the presence of karst features and documented sinkholes, sinkhole impacts in Baldwin County have generally been localized and limited in severity. Based on available research, mapped data, and local experience, the Hazard Mitigation Planning Committee assigned sinkholes a low threat and risk level for the county. This ranking reflects both the typically small scale of sinkhole occurrences and the absence of widespread or catastrophic sinkhole-related damages within Baldwin County.

Location of Potential Sinkholes

Sinkholes are a geologic phenomenon characterized by the sudden collapse of the ground surface, which occurs when groundwater dissolves limestone or other soluble rock in the subsurface, creating voids that can no longer support the overlying soil. Map 5-23 illustrates karst geology across the state and indicates that Baldwin County contains geologic units with minor carbonate content. Map 5-24 presents sinkhole distribution data compiled by the U.S. Geological Survey and shows that Baldwin County has a relatively higher density of documented sinkholes compared to other areas of Alabama.

Despite the presence of karst features and mapped sinkholes, sinkhole occurrences in Baldwin County have generally been localized and limited in severity. Based on available research, mapped data, and local knowledge, the Hazard Mitigation Planning Committee assigned sinkholes a low threat and risk level for Baldwin County, reflecting both the typically small scale of sinkhole events and the absence of widespread or catastrophic impacts.

Extent and Intensity of Potential Sinkholes

Any sinkhole in Baldwin County is likely to be small-scale.

Previous Occurrences of Potential Sinkholes

Data from the Geological Survey of Alabama document more than 6,400 sinkhole events statewide and indicate that sinkholes have occurred at various locations throughout Baldwin County. As shown on Map 5-25, sinkhole occurrences are predominantly concentrated in the southern half of the county, reflecting underlying geologic conditions

and the presence of carbonate-bearing formations that increase susceptibility to sinkhole development.

Probability of Future Sinkholes

Map 5-25, “Baldwin County Sinkhole Susceptibility,” shows that the county contains relatively limited areas of dolostone and limestone rock types, indicating that the overall probability of future sinkhole formation is low. However, continued data collection and analysis by the Geological Survey of Alabama may identify previously undocumented subsurface conditions that could increase sinkhole susceptibility in certain localized areas of Baldwin County.

Map 5.23 – Karst Geography, Alabama

Map 5.24 – Alabama Sinkhole Density

Map 5.25 – Baldwin County Sinkhole Susceptibility

5.4.12 Tsunamis

Tsunamis are large ocean waves generated by the sudden displacement of water caused by events such as earthquakes, volcanic eruptions, and landslides occurring either on land or beneath the ocean surface. For the Gulf Coast region, the potential tsunami threat to Baldwin County is primarily associated with submarine landslides rather than seismic activity.

There are no documented historical records of tsunamis affecting the Gulf Coast. However, the Regional Assessment of Tsunami Potential in the Gulf of America, prepared by the U.S. Geological Survey, indicates that a limited tsunami risk does exist. This risk is attributed to submarine landslides, which involve the movement of sediment along the seafloor across the continental shelf and into deeper waters of the Gulf of America. Although the probability of such an event is considered low, the assessment notes that coastal vulnerability would be relatively high along the Gulf Coast due to the concentration of population, industrial facilities, and critical infrastructure should a significant submarine landslide generate a tsunami.

Tsunamis generated by earthquakes are considered unlikely within the Gulf of America due to the region's low tectonic activity and the absence of major offshore seismic sources capable of producing substantial vertical displacement of the seafloor.

Map 5.26 – Submarine Landslide Zones

Extent and Intensity of Potential Tsunamis

Communities in Baldwin County located at low elevations are particularly vulnerable to potential tsunami impacts due to the concentration of population, industrial activity, and critical infrastructure in these coastal and near-coastal areas.

Previous Occurrences of Future Tsunamis

There have been no previous occurrences of tsunamis affecting Baldwin County.

Probability of Future Tsunamis

Given the lack of historical evidence of tsunami activity, the probability of future occurrences is low.

5.4.13 Man-Made/Technological Hazards Profile

Man-made hazards continue to play an increasingly important role in hazard mitigation planning for the 2026 planning cycle. These hazards include hazardous materials incidents, chemical releases, radiological events, and acts of terrorism. Among these, hazardous materials accidents are among the most common and consequential man-made hazards.

Hazardous materials incidents can occur at any point in a material's lifecycle, including extraction, manufacturing, processing, storage, transportation, and final delivery or use. Such incidents may result from transportation accidents, equipment failure, human error, or intentional acts, and can pose risks to public health, the environment, and critical infrastructure. As development, transportation networks, and industrial activities continue to expand within Baldwin County, consideration of man-made hazards remains an essential component of the 2026 Hazard Mitigation Plan.

Location of Potential Man-Made/Technological Hazards

Baldwin County contains facilities where hazardous chemicals are manufactured, used, or stored. According to the U.S. Environmental Protection Agency Toxic Release Inventory, there are approximately 20 regulated facilities located within the county. The locations of these fixed hazardous materials facilities are shown on Map 5-26.

In addition to fixed facilities, hazardous materials are routinely transported through Baldwin County by rail and highway. Trains and tractor-trailers carrying hazardous materials regularly travel through the county, particularly along major transportation corridors such as Interstate 10. Transportation-related hazardous materials incidents present an ongoing risk due to the potential for spills or releases resulting from traffic accidents, derailments, or mechanical failures. They are an important consideration in the 2026 Hazard Mitigation Plan.

Extent and Intensity of Potential Man-Made/Technological Hazards

The impacts of technological hazards and terrorist attacks can be severe and far-reaching, with the potential to cause widespread damage to property and critical infrastructure and to result in significant loss of life and injuries within any jurisdiction. The scale and consequences of such incidents may extend beyond local boundaries, affecting public health, environmental conditions, economic stability, and emergency response capabilities. As a result, consideration of technological and intentional hazards remains an important component of hazard mitigation planning for the 2026 planning cycle.

Previous Occurrences of Man-Made/Technological Hazards

The most recent large-scale hazardous materials incident affecting Baldwin County occurred on April 20, 2010, when the Deepwater Horizon oil rig, operated by BP, exploded and subsequently collapsed. This event resulted in the largest oil spill in United States history, releasing an estimated 4.9 million barrels of oil into the Gulf of America between April 20 and July 15, 2010. Baldwin County's coastline was significantly impacted, with tar balls deposited along miles of beaches and a persistent oil sheen observed on coastal waters. These conditions caused substantial environmental damage and prolonged economic impacts, particularly on the county's tourism industry.

In addition to large-scale offshore incidents, Baldwin County has experienced smaller-scale man-made hazard events involving hazardous materials accidents. These incidents have occurred at manufacturing and storage facilities as well as during the transportation of hazardous materials by highway and rail. According to records maintained by the U.S. Department of Transportation HAZMAT Intelligence Portal, 23 transportation-related hazardous materials incidents were reported in Baldwin County between 1995 and 2014, resulting in total documented damages of approximately \$667,804. These incidents, summarized in Table E-9 in Appendix E, involved releases measured primarily in liquid gallons unless otherwise noted. Continued transportation activity and industrial

development underscore the ongoing need to address risks posed by hazardous materials within the 2026 Hazard Mitigation Plan.

Map 5.26 – Hazardous Materials Storage in Baldwin County

Chapter 6 – Risk Assessment

I. Federal Requirements for the Mitigation Strategy

This chapter of the Plan addresses the Mitigation Strategy requirements of 44 CFR Section 201.6 (c) (3), as follows:

45 CFR § 201.6 (c) (3) – Plan Content

- (3) “A *mitigation strategy* that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section must include:
- i. A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
 - ii. A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction’s participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
 - iii. An action plan describing how the actions identified in paragraph (c) (3) (ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization will include a special emphasis on the extent to which benefits are maximized according to a cost-benefit review of the proposed projects and their associated costs.
 - iv. For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.”

II. Summary of Plan Updates

Table 6.1 summarizes changes made to the plan as a result of the 2026 plan update:

Table 6.1 – Summary of Plan Updates

Section	Change
6.3 Goals for Hazard Mitigation	Goals and objectives from previous plans were reviewed and revised in light of current conditions.
6.4 Participation and Compliance with the National Flood Insurance Program (NFIP)	Described the participation and ongoing commitments of NFIP participants to enhance floodplain management program activities.
6.5 Implementation of Mitigation Actions	Describes new selection criteria for mitigation actions and projects.
6.6 Multi-Jurisdictional Mitigation Action Program	Creates new five-year action programs for each participating community.

III. Goals for Hazard Mitigation

6.3.1 Description of How the Goals were Developed

The Hazard Mitigation Planning Committee (HMPC) reviewed the goals from the 2015 and 2021 Hazard Mitigation Plans and determined that the goal statements remain valid and effective and should be retained in the 2026 plan update. This determination is based on current conditions, updated risk assessment data, progress toward implementation of mitigation actions, and consistency with FEMA Hazard Mitigation Assistance requirements and state mitigation priorities.

The HMPC also considered ongoing hazard exposure, development trends, and stakeholder input, and found that the existing goals continue to support cost-effective, feasible mitigation actions that reduce long-term risk to life, property, and critical infrastructure. The goals remain:

- The completion of mitigation measures over the five-year plan implementation cycle.
- The 2026 update to the risk assessment in Chapter 5.
- The update to the risk assessment in the Alabama State Hazard Mitigation Plan (2023).
- The update of State goals and mitigation priorities is reflected in the State Plan.

The previously approved plan included objectives associated with each goal, many of which are carried forward in this update. Some objectives have been revised, and new objectives have been added to identify better, evaluate, and prioritize mitigation measures that address current risk conditions and planning considerations. The 2021 implementation status report documents the objectives that have been completed or advanced for Baldwin County.

Among the considerations reviewed by the planning team during the process of updating this goals section of the mitigation strategy were the following concerns:

- Whether the 2021 goals and objectives reflected the updates to the local risk assessment and the update to the State risk assessment.
- Whether the 2021 goals and objectives effectively directed mitigation actions and projects that helped reduce vulnerability to property and infrastructure.
- Whether the 2021 goals and objectives support the changed 2026 mitigation priorities established by the HMPC.
- Whether the 2021 goals reflect the adopted goals in the Alabama State Hazard Mitigation Plan.

The updated goals are presented in Section 6.3.3, “Community Goals,” and are also incorporated into Table 6.3. A strategic planning approach has been applied to identify and analyze mitigation actions and projects. FEMA’s program categories for managing a successful mitigation program were used as guidelines for identifying and sorting the alternative mitigation measures:

- **Prevention:** Adoption, administration, and enforcement of ordinances, regulations, plans, and programs that guide land use and development to reduce exposure and minimize losses from natural hazards.
- **Property Protection:** Actions that reduce damage to existing buildings and protect occupants by retrofitting, elevating, floodproofing, relocating, or acquiring structures; this category also includes demolition and conversion of vulnerable developed properties to permanent open space.
- **Public Education and Outreach:** Activities that educate, inform, and engage the public and stakeholders about natural hazard risks and available mitigation actions to reduce threats to life, property, and critical services.
- **Natural Resources Protection:** Preservation, conservation, and restoration of natural systems that mitigate hazard impacts and support long-term community resilience by balancing environmental functions with social and economic needs.
- **Structural Projects:** Engineered and constructed modifications to natural systems or public infrastructure designed to control, reduce, or redirect hazard forces and lessen the severity of hazard impacts on the community.

The comprehensive list of alternative mitigation measures for each of the above mitigation program areas was developed by the planning team (see Appendix F). The process by which the Hazard Mitigation Planning Committee (HMPC) and local jurisdictions selected the STAPLEE method. STAPLEE examines local, technical, administrative, political, legal, environmental, and economic considerations.

HMPC representatives from each jurisdiction participated in the evaluation and selection of the mitigation measures. Not all the mitigation measures initially considered were included in the final Community Mitigation Action Programs (See Volume II “Community Action Programs”). The STAPLEE evaluation eliminated many of the measures. Additionally, some communities lacked the capacity to implement a particular measure under consideration or had other concerns identified by the STAPLEE method.

A capability assessment was conducted by the Hazard Mitigation Planning Committee (HMPC) and planning team to evaluate each participating jurisdiction’s capability to implement its selected mitigation actions, consistent with 44 CFR §201.6(c)(3). The results of this assessment are documented in Appendix B, Community Mitigation Capabilities. The assessment examined key areas of planning and implementation capacity, including existing local plans, ordinances, studies, regulatory mechanisms, administrative and technical resources, financial capacity, and education and outreach tools. Where gaps or opportunities were identified, mitigation actions were considered and, where appropriate, incorporated into the mitigation strategy to strengthen local capabilities and better integrate hazard mitigation objectives into ongoing planning, land use, and capital investment processes.

In addition to the STAPLEE evaluation and community capability assessment, participating jurisdictions applied additional evaluation criteria when selecting and prioritizing mitigation actions, consistent with FEMA mitigation planning requirements and guidance that emphasize risk-informed, implementable mitigation strategies. These criteria included consistency with the plan’s vision, goals, and objectives; cost effectiveness and anticipated risk reduction benefits; alignment with current FEMA and State Hazard Mitigation Assistance (HMA) funding priorities; and each jurisdiction’s fiscal, administrative, and staffing capacity to carry out the proposed actions. This approach is supported by 44 CFR §201.6, which requires mitigation actions to be prioritized based on their ability to maximize benefits relative to costs and to reflect the jurisdiction’s existing authorities, policies, programs, and resources. FEMA’s Local Mitigation Planning Policy Guide and Local Mitigation Planning Handbook further reinforce that local mitigation plans serve as investment strategies and should prioritize actions that are feasible, sustainable, and implementable using available mitigation funding sources. This multi-criteria approach supports risk-informed decision-making and helps ensure that selected mitigation actions are achievable, sustainable, and eligible for potential FEMA mitigation funding.

The 2026 Baldwin County Multi-Jurisdictional Mitigation Action Program, presented in Table 6-3 in Section 6.6, summarizes the mitigation goals, objectives, and actions selected by

each participating jurisdiction as part of this plan update. The Community Action Programs (CAPs) provided in Volume II supplement Table 6-3 by organizing the mitigation actions by jurisdiction and identifying implementation priority, estimated timeframe, and the agency or department responsible for implementation. Together, these components satisfy the mitigation strategy requirements of 44 CFR §201.6(c)(3) by clearly documenting how mitigation actions were identified, evaluated, prioritized, and assigned for implementation.

6.3.2 The Vision for Disaster-Resistant Baldwin County Communities

This shared vision among all Baldwin County local governments will be achieved through a short-term hazard mitigation strategy that addresses the hazards identified through this plan's risk assessment, including the following:

- Hurricanes
- Flooding
- Severe Storms
- Tornadoes
- Wildfires
- Drought and Heat Waves
- Winter Storms and Freezes
- Earthquakes
- Landslides
- Dam and Levee Failures
- Sinkholes
- Tsunamis, and
- Manmade Hazards
- Technological Hazard

Achieving this vision requires the effective implementation of a comprehensive range of mitigation measures guided by the following principles and purposes:

- To reduce or eliminate long-term risks from natural hazards.
- To reduce the vulnerability of existing, new, and future development, including buildings and infrastructure.
- To minimize the exposure and vulnerability of people, buildings, critical facilities, and infrastructure to identify hazards.
- To increase public awareness, understanding, and support for hazard mitigation.
- To promote interagency cooperation in the planning and implementation of mitigation activities.
- To strengthen communication and coordination among public, private, and non-profit partners.
- To integrate local hazard mitigation planning with State hazard mitigation planning.
- To protect life and property by reducing losses and damage to buildings and infrastructure.

6.3.3 Community Goals

The goals guiding the Mitigation Strategy and supporting the long-range vision shared among Baldwin County communities are as follows:

1. **Prevention Goal.** Manage the development of land and buildings to reduce exposure to and minimize losses from natural and man-made hazards.
2. **Property Protection Goal.** Protect existing and future structures, their occupants, and contents from the damaging efforts of natural and man-made hazards.
3. **Public Education and Awareness Goal.** Educate and inform the public about hazard risks and available mitigation actions to reduce threats to life, property, and community resilience.
4. **Natural Resources Protection Goal.** Preserve and restore the beneficial functions of natural systems to support sustainable community development while balancing environmental constraints with social and economic needs.
5. **Structural Projects Goal.** Implement engineered structural modifications to natural systems and public infrastructure to reduce hazard impacts where such measures are technically feasible, cost-effective, and environmentally appropriate.

6.3.4 Compatibility with 2023 Alabama State Plan Goal

The Baldwin County mitigation vision, goals, and objectives are consistent with and supportive of the goals established in the Alabama State Hazard Mitigation Plan, most recently revised in 2023, and administered by the Alabama Emergency Management Agency (AEMA). The State plan establishes the following statewide hazard mitigation goals:

1. Establish and maintain a comprehensive statewide hazard mitigation system.
2. Reduce the State of Alabama's vulnerability to natural hazards.
3. Reduce vulnerability associated with new and future development.
4. Foster public understanding, support, and acceptance of hazard mitigation.
5. Strengthen and expand interagency coordination and cooperation for hazard mitigation activities.

Alabama local governments, including the communities of Baldwin County, serve as the foundational components of the statewide hazard mitigation system. The goals and guiding principles of the Baldwin County Mitigation Strategy complement and advance the State's goals by emphasizing risk reduction for natural and man-made hazards; reducing vulnerability of existing, new, and future development; minimizing exposure of people, buildings, critical facilities, and infrastructure; increasing public awareness and support for mitigation; and promoting coordinated intergovernmental and interagency mitigation efforts.

IV. Participation & Compliance with the National Flood Insurance Program (NFIP)

As part of the 2026 plan update, Baldwin County and all participating jurisdictions remain in good standing with the National Flood Insurance Program (NFIP). All communities continue to demonstrate adequate administrative, technical, and regulatory capacity to effectively implement and enforce floodplain management ordinances in accordance with NFIP requirements and applicable Flood Insurance Rate Maps (FIRMs).

Local floodplain administrators provide technical assistance to applicants and property owners and maintain familiarity with current floodplain management standards through regular coordination with the State NFIP Coordinator. These activities demonstrate established local capacity to administer floodplain regulations and to adopt programmatic, regulatory, and mapping updates over time.

In addition, participating jurisdictions have implemented five-year action programs to strengthen floodplain management practices as part of the Mitigation Strategy under Goal 1 (Prevention). These actions support continued NFIP compliance and reinforce local capacity to reduce flood risk and vulnerability.

Demonstrations of community commitment to effective implementation of the NFIP include, but are not limited to, the following actions:

- Documented, consistent enforcement of local floodplain management ordinance requirements and permitting procedures.
- Ongoing training and continued education for local floodplain administrators to maintain proficiency with current NFIP requirements, FEMA guidance, and mapping updates.
- Public-facing outreach and technical assistance to inform builders, developers, and property owners of floodplain development standards, permitting requirements, and compliance responsibilities.
- Periodic updates to local floodplain management ordinances, as needed, to remain consistent with current NFIP minimum standards and applicable FIRM products.
- Maintenance and use of current flood hazard and FIRM data within the County GIS environment to support permitting, mitigation planning, and risk-informed decision making across jurisdictions.
- Routine coordination and communication between participating jurisdictions and the State NFIP Coordinator regarding program requirements, mapping changes, and floodplain management best practices.

- Monitoring and documentation of flood events and flood-related impacts in coordination with the Baldwin County Emergency Management Agency (BCEMA) to support situational awareness, loss tracking, and mitigation action refinement.
- Encouragement of Community Rating System (CRS) participation and/or CRS-aligned practices where feasible and appropriate, supported through the Hazard Mitigation Planning Committee (HMPC) and the local mitigation planning process.
- Maintenance and distribution of current NFIP reference materials and public information resources by BCEMA to support local floodplain administrators and provide consistent public education messaging.

Table 6.2 – NFIP Community Status, Baldwin County Jurisdictions

Community ID	Jurisdiction	Current Effective Map Date	Status
015000	Baldwin County	4/19/19	Participating
010004	Bay Minette	4/19/19	Participating
010005	Daphne	4/19/19	Participating
010212	Elberta	4/19/19	Participating
010006	Fairhope	4/19/19	Participating
010007	Foley	4/19/19	Participating
015005	Gulf Shores	4/19/19	Participating
010009	Loxley	4/19/19	Participating
010524	Magnolia Springs	4/19/19	Participating
015011	Orange Beach	4/19/19	Participating
010523	Perdido Beach	4/19/19	Participating
010222	Robertsdale	4/19/19	Participating
010010	Silverhill	4/19/19	Participating
010429	Spanish Fort	4/19/19	Participating
010328	Summerdale	4/19/19	Participating

V. Implementation of Mitigation Areas

The mitigation goals identified in Section 6.3, *Goals for Hazard Mitigation*, provided the framework for selecting actions and projects for the five-year Community Mitigation Action Programs of each participating jurisdiction. The Hazard Mitigation Planning Committee (HMPC), in coordination with the planning team and local jurisdictions, evaluated and selected mitigation measures based on local conditions, capabilities, and identified risks.

For each selected mitigation measure, participating jurisdictions assigned an implementation priority, identified an estimated cost where feasible, and identified potential funding sources. Funding considerations included potential eligibility for FEMA Hazard Mitigation Assistance (HMA) Programs, as well as other local, state, and federal resources.

Mitigation measures were evaluated and prioritized using the STAPLEE methodology, which considers social, technical, administrative, political, legal, environmental, and economic factors. This approach supported risk-informed, feasible, and cost-effective selection of mitigation actions appropriate for implementation by participating jurisdictions.

Key STAPLEE addressed the following areas of concern and responded to many of the questions here:

1. Social Considerations

- *Environmental Justice*. Does the proposed measure equitably benefit the community, including disadvantaged or special needs populations (e.g., elderly, individuals with disabilities)?
- *Neighboring Support*. Will the measure disrupt existing neighborhoods or community character, or will it improve quality of life for affected areas?
- *Community Support*. Is the measure consistent with community values, and is public or stakeholder support anticipated?
- *Impact on Social and Cultural Resources*. Will the measure adversely affect, or help preserve and enhance, valued social, cultural, or historic resources?
- Will the measure adversely affect, or help preserve and enhance, valued social, cultural, or historic resources?

2. Technical Considerations

- *Technical Feasibility.* Is the proposed measure technically feasible using available methods, technology, and expertise? Will the measure effectively reduce the identified hazard risk without creating unintended or secondary impacts? Have technical professionals or subject matter experts been consulted where appropriate?

3. Technical Considerations

- *Staffing.* Does the jurisdiction have sufficient staff capacity and technical expertise to implement the measure? Will additional staffing, training, consultant support, or interagency coordination be required?
- *Maintenance.* Does the jurisdiction have the capability to operate and maintain the measure over its useful life?
- *Timing.* Can the measure be implemented within a reasonable and achievable timeframe?

4. Political Considerations

- *Political Support.* Is the proposed measure supported by the local governing body, key stakeholders, and the public? Are there partner organizations that can support the implementation of the measure?

5. Legal Considerations

- *Legal Authority.* Does the jurisdiction have the legal authority to implement the proposed measure? Are there legal implications associated with implementing the measure, pursuing an alternative action, or taking no action? Would new ordinances, resolutions, agreements, or legislative actions be required?

6. Environmental Considerations

- *National Environmental Policy Act (NEPA).* Is the proposed measure consistent with the National Environmental Policy Act (NEPA) and other applicable federal environmental requirements?
- *State and Local Environmental Regulations.* Will the measure comply with state and local environmental regulations, including floodplain management, wetlands protection, and water quality standards? Will the measure avoid, minimize, or mitigate potential adverse environmental impacts?
- *Environmental Conservation Goals.* Does the measure support broader environmental conservation, sustainability, or resilience objectives?

7. Economic Considerations

- *Availability of Funds.* Are funding resources reasonably available to implement the measure, including local funds and potential grant funding?
- *Benefits and Costs.* Are anticipated benefits, such as reduced damages and losses, reasonable in relation to estimated costs?
- *Economic Feasibility.* Have alternate actions, including the no-action alternative, been considered and compared?
- *Impact on Local Economy.* Will the measure support local economic stability or development, or adversely affect the tax base?
- *Economic Development Goals.* Is the measure economically feasible over the short and long term?

The STAPLEE evaluation informed the prioritization of mitigation measures, with higher priority assigned to actions deemed financially feasible, implementable, and effective in reducing risk. General economic considerations were incorporated by weighing anticipated benefits against estimated costs to support selection among competing measures.

For mitigation actions proposed for FEMA Hazard Mitigation Assistance funding, a detailed Benefit-Cost Analysis (BCA) will be completed at the time of project application in accordance with FEMA requirements.

Application of these evaluation and prioritization methods resulted in the final mitigation goals, objectives, and actions presented in Section VI and further detailed in Volume II, *Community Action Programs*, which document jurisdiction-specific priorities, timeframes, and implementation responsibilities.

VI. Implementation of Mitigation Areas

The 2026 mitigation strategy identifies goals, objectives, and mitigation measures for each participating jurisdiction. Jurisdiction-specific Community Mitigation Action Programs are documented in Volume II, *Community Action Programs*. All mitigation measures are within the legal authority of the implementing jurisdiction or represent coordinated actions among multiple jurisdictions participating in this plan.

Each jurisdiction participated in the development of its action program through representation of the Hazard Mitigation Planning Committee (HMPC). Through this process, jurisdictions identified and evaluated a comprehensive range of mitigation actions and projects addressing the hazards documented in the risk assessment. All actions included in the plan are considered achievable and within the administrative, technical, and regulatory

capabilities of the participating jurisdictions. A capability assessment supporting this determination is documented in Appendix B, *Community Mitigation Capabilities*.

This plan update builds upon previously approved mitigation plans. The status of mitigation actions from the prior plan is documented in Appendix C, *Plan Implementation Status*, which identifies actions as completed, ongoing, deferred, or removed, along with the general reasons for deferral or removal. New mitigation measures were identified through the 2026 plan update process, including input from participating jurisdictions, the HMPC, and relevant state and local planning guidance. Ongoing and deferred actions that remain applicable were carried forward into the current plan.

The mitigation strategy identifies the hazards addressed by each action, distinguishes between actions affecting existing and future development, and categorizes measures as projects or policy-based actions. Potential funding sources are identified where feasible. Mitigation actions that may seek FEMA Hazard Mitigation Assistance (HMA) funding remain subject to eligibility requirements, including completion of a benefit-cost analysis and the availability of funds at the time of application.

Chapter 7 – Plan Maintenance Process

I. Federal Requirements for the Plan Maintenance Plan

This chapter of the plan addresses the Plan Maintenance Process requirements of 44 CFR Section 201.6 (c) (4), as follows:

46 CFR § 201.6 (c) (4) – Plan Content

(4) “A plan maintenance process includes:

- (i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
- (ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.
- (iii) Discussion on how the community will continue public participation in the plan maintenance process.”

II. Summary of Plan Updates

This chapter continues active monitoring and a streamlined plan-maintenance framework, including ongoing monitoring, guidance for the annual evaluation of plan status, a streamlined amendment process, continued integration with local planning mechanisms, and sustained opportunities for public and stakeholder participation.

III. Monitoring, Evaluating, and Updating the Mitigation Plan

7.3.1 Ongoing Monitoring of the Plan

In preparation for the 2026 update, the Hazard Mitigation Planning Committee (HMPC) reconvened frequently until planning meetings began on July 18, 2024. After the Committee held elections in October 2024, planning began on November 8, 2024. From 2024 to 2026, the Committee held Quarterly Full Body Meetings, with several Executive Committee meetings to discuss planning and maintenance, and to establish a revision timeline.

The HMPC reviewed and refined its membership, meeting structure, and planning focus, and met throughout the planning cycle to address mitigation priorities, risk assessment updates, THIRA alignment, and the plan update process. The HMPC is committed to maintaining the plan through regular monitoring, evaluation, and updates, as outlined in this 2026 plan.

- Documentation of actions undertaken to implement scheduled mitigation measures, including securing funding, obtaining permits and approvals, completing design or engineering activities, and acquiring other resources necessary to initiate implementation.
- Identification of mitigation measures that have been completed, including associated public involvement and public outreach activities.
- Documentation of revisions to a mitigation measure's priority, timeline, responsible agency, or funding source, including the rationale for such changes and any additional information or analysis that informed the revision.
- Identification of mitigation measures that a jurisdiction no longer intends to implement, with justification provided to ensure the mitigation strategy remains realistic, achievable, and aligned with current capabilities and risk conditions.

The ongoing review process may require adjustments to the selection of mitigation measures, priorities, timelines, lead responsibilities, and funding sources identified in the Community Action Programs. When modifications to the plan are warranted because of the annual review or changing conditions, the Hazard Mitigation Planning Committee (HMPC) will oversee and approve all amendments by a majority vote of a quorum of HMPC members. Conditions that may warrant amendments include, but are not limited to, special funding opportunities or the occurrence of a natural disaster that alters community risk or mitigation priorities. Approved plan amendments will be distributed by the Baldwin County Emergency Management Agency to all participating jurisdictions in a timely manner and filed with the Alabama Emergency Management Agency.

7.3.2 Evaluating the Plan

Within sixty days following a significant disaster or emergency event that substantially impacts all or a portion of Baldwin County or any of its jurisdictions, the Hazard Mitigation Planning Committee (HMPC) will conduct or oversee an analysis of the event to evaluate the effectiveness of the Mitigation Strategy and its implications for the Risk Assessment. This assessment will examine the location, type, and extent of damage, as well as direct and indirect losses, including response and recovery costs and broader economic impacts. The findings will inform the identification of potential mitigation initiatives to reduce or prevent similar losses from future hazard events. Assessment results will be provided to affected jurisdictions for review. They will inform consideration of plan amendments and the development of mitigation initiatives during the next five-year plan update cycle. This post-event analysis will be documented and maintained as part of the plan's official record and used to support FEMA grant applications, Community Rating System (CRS) activities, and future mitigation planning efforts.

The Hazard Mitigation Planning Committee (HMPC) will oversee an annual evaluation of progress toward implementation of the Mitigation Strategy, with all discussions and findings documented. These evaluation results will be used to clearly justify and explain any revisions when the plan is next updated. As part of the annual review, the HMPC will examine specific topics to assess the effectiveness of implementation actions and determine whether revisions to the Mitigation Strategy are necessary.

- Are there any new potential hazards that have developed and were not addressed in the plan?
- Have any disasters occurred that are not included in the plan?
- Are there additional mitigation ideas that need to be incorporated into the plan?
- What projects or other measures have been initiated, completed, deferred, or deleted?
- Are there any changes in local capabilities to carry out mitigation measures?
- Have funding levels to support mitigation actions either increased or decreased?

The HMPC may create subcommittees to oversee and evaluate the plan implementation. This will be done at the Committee's discretion.

7.3.3 Plan Update Process

Any of the following situations may require a review and update of the plan:

- Requirement for a five-year plan update.
- Change in Federal requirements for review and update of the plan.
- Significant natural hazard event(s) before the expiration of the five-year plan update.

As stated above in Section 7.3.2, the HMPC will convene within 60 days of a significant disaster to discuss the potential need for any amendments to the plan. If no significant disasters trigger an update, the current Federal guidelines require a five-year update.

The Baldwin County Emergency Management Agency will publish a public notice announcing the initiation of a hazard mitigation plan update. It will provide information on meeting schedules, how and where to access plan materials, methods for submitting comments, and opportunities for additional public involvement. Following the public notice, the EMA will convene the Hazard Mitigation Planning Committee (HMPC) and, with the assistance of EMA staff and/or a consultant if deemed necessary, will carry out the required steps to complete the plan update.

Initial steps for the five-year update of this plan will begin approximately nine to twelve months prior to the current FEMA approval expiration date, allowing sufficient time for the Alabama Emergency Management Agency and FEMA to complete their review processes, which may take up to 90 days. Additional time for planning grants may require extending the start date up to 1 year. Once the Hazard Mitigation Planning Committee (HMPC) is organized to oversee the update, the following steps will be undertaken to facilitate completion of the plan update process:

- Step 1.** Review the most current FEMA local mitigation planning requirements, regulations, and guidance.
- Step 2.** Evaluate the existing planning process and identify recommendations for improvements to enhance coordination, documentation, and effectiveness.
- Step 3.** Examine and update the Risk Assessment, including hazard identification, hazard profiles, vulnerability analyses, and impacts related to development trends, to ensure information is accurate and current.
- Step 4.** Update mitigation goals, strategies, and action items, informed by the annual plan implementation evaluations and changing community conditions.
- Step 5.** Evaluate existing plan maintenance procedures and identify opportunities for improvement to ensure ongoing monitoring, reporting, and updates.
- Step 6.** Ensure compliance with all applicable federal regulations, requirements, and directives.

Ninety days prior to the anniversary date, a final draft of the revised plan will be submitted to the Alabama Emergency Management Agency for review and comments and then to FEMA for conditional approval. Once FEMA Region IV has issued conditional approval, the updated plan will be adopted by all participating jurisdictions.

IV. Incorporation of the Mitigation Plan into Other Planning Mechanisms

This plan supplements the most current edition of the Baldwin County Emergency Operations Plan and is administered through the Baldwin County Emergency Management Agency. Each participating jurisdiction is responsible for implementing its respective Community Mitigation Action Program in accordance with locally established priorities, available funding, technical and administrative capabilities, and other considerations outlined in Chapter 6, “Mitigation Strategy.” Within a multi-jurisdictional mitigation plan, implementation mechanisms for mitigation actions may vary across participating jurisdictions, depending on existing programs, authorities, and resources. Each jurisdiction’s unique risks, needs, and capacities for implementation are reflected in its individual mitigation action program.

The Hazard Mitigation Planning Committee recognizes the importance of fully integrating hazard mitigation planning and implementation into existing local plans, regulatory tools, and related programs. This plan is intended to inform and guide each jurisdiction’s decisions related to land use, development, public facilities, and infrastructure. Updates, revisions, or amendments to the Baldwin County Emergency Operations Plan, local comprehensive plans, capital improvement budgets or plans, zoning ordinances and maps, subdivision regulations, building and technical codes, and other development controls should be consistent with the goals, objectives, and mitigation measures adopted in this plan. Each jurisdiction’s commitment to maintaining this consistency is reflected in its respective mitigation action program. As part of future five-year plan updates, local planning mechanisms will be reviewed for effectiveness, and opportunities for enhanced integration will be identified and considered. This type of update was implemented in the 2026 update and should be included in the next update cycle.

Multi-hazard mitigation planning should be integrated not only with local planning and regulatory tools, but also with existing public information efforts and household emergency preparedness activities. Ongoing public education programs should emphasize the importance of identifying, managing, and reducing hazard risks. Where appropriate, public information materials and emergency preparedness handouts should highlight practical hazard-mitigation actions that individuals and households can take to reduce vulnerability and enhance community resilience.

Of particular importance to integrating hazard mitigation planning with other planning programs is the Baldwin County Emergency Management Agency’s commitment to fully incorporate multi-hazard mitigation planning into its comprehensive emergency operations planning program and related public emergency management activities to the greatest extent practicable.

V. Continuing Public Participation in the Plan Maintenance Process

A critical component of maintaining an effective and relevant multi-hazard mitigation plan is ongoing public review and comment. Accordingly, the Hazard Mitigation Planning Committee is committed to engaging the public and encouraging citizen participation in providing feedback on the plan throughout the five-year implementation cycle and during interim reviews.

Copies of the 2026 Baldwin County Multi-Jurisdictional Hazard Mitigation Plan will be maintained at the offices of the Baldwin County Emergency Management Agency and at the principal offices of each participating jurisdiction. Following plan adoption, a public information notice will be issued to inform residents that the plan is available for public review at these locations and online. An electronic version of the plan will be available on the Baldwin County EMA webpage within the Baldwin County Commission website. Public comments may be submitted to the Baldwin County Emergency Management Agency by telephone, mail, or email.

Public meetings will be conducted when significant modifications to the plan are required or when otherwise deemed necessary by the Hazard Mitigation Planning Committee. These meetings will provide opportunities for the public to share concerns, ideas, and feedback related to hazard mitigation priorities and strategies. At a minimum, public hearings will be held during the annual review process and as part of the five-year plan update, including presentation of the draft plan and any amendments prior to adoption. In addition, public opinion surveys may be conducted during community meetings and other public involvement activities. They may be periodically administered by the Baldwin County Emergency Management Agency to support the five-year update process.

Public involvement activities initiated through previous planning efforts are documented in Appendix H, "Community Involvement Documentation." Many of these activities will continue throughout the five-year implementation cycle and will be evaluated for effectiveness at least annually by the Hazard Mitigation Planning Committee. In addition, the public outreach goal of this plan, along with its associated objectives and mitigation measures, commits each participating jurisdiction to implementing a range of public education and awareness activities. Ongoing monitoring of these programmed mitigation actions ensures continued public participation throughout the plan's maintenance and implementation.

Appendix'

Appendix A

Federal Requirements for Local Mitigation Plans

Appendix A – Federal Requirements for Local Mitigation Plans

I. Purpose

The 2026 Baldwin County Multi-Hazard Mitigation Plan addresses the Local Mitigation requirements of 44 CFR § 201.6, as follows,

II. 44 CFR § 201.6 (2024)

Section 201.6 Local Mitigation Plans. “The local mitigation plan is the representation of the jurisdictions 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.

(a) *Plan Requirements.*

- (1) A local government must have a mitigation plan approved pursuant to this section in order to receive HMGP project grants. A local government must have a mitigation plan approved pursuant to this section in order to apply for and receive mitigation project grants under all other mitigation grant programs.
- (2) Plans prepared for the FMA program, described at [part 77 of this chapter](#), need only address these requirements as they relate to flood hazards in order to be eligible for FMA project grants. However, these plans must be clearly identified as being flood mitigation plans, and they will not meet the eligibility criteria for other mitigation grant programs, unless flooding is the only natural hazard the jurisdiction faces.
- (3) Regional Administrators may grant an exception to the plan requirement in extraordinary circumstances, such as in a small and impoverished community, when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after notice of grant's termination will not be reimbursed by FEMA.

- (4) Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.
- (b) *Planning Process.* An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process must include:
- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
 - (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and nonprofit interests to be involved in the planning process; and
 - (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
- (c) *Plan Content.* The plan must include the following:
- (1) Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.
 - (2) A *risk assessment* that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment must include:
 - (i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan must include information on previous occurrences of hazard events and on the probability of future hazard events.
 - (ii) A description of the jurisdiction's vulnerability to the hazards described in [paragraph \(c\)\(2\)\(i\)](#) of this section. This description must include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP insured

structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:

- A. The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;
- B. An estimate of the potential dollar losses to vulnerable structures identified in [paragraph \(c\)\(2\)\(ii\)\(A\)](#) of this section and a description of the methodology used to prepare the estimate;
- C. Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

(iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

(3) A *mitigation strategy* that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section must include:

- (i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
- (ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
- (iii) An action plan describing how the actions identified in [paragraph \(c\)\(3\)\(ii\)](#) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization will include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
- (iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

- (4) *A plan maintenance process* that includes:
 - (i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
 - (ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.
 - (iii) Discussion on how the community will continue public participation in the plan maintenance process.
- (5) *Documentation* that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

(d) *Plan review.*

- (1) Plans must be submitted to the State Hazard Mitigation Officer (SHMO) for initial review and coordination. The State will then send the plan to the appropriate FEMA Regional Office for formal review and approval. Where the State point of contact for the FMA program is different from the SHMO, the SHMO will be responsible for coordinating the local plan reviews between the FMA point of contact and FEMA.
- (2) The Regional review will be completed within 45 days after receipt from the State, whenever possible.
- (3) A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.
- (4) Managing States that have been approved under the criteria established by FEMA pursuant to [42 U.S.C. 5170c\(c\)](#) will be delegated approval authority for local mitigation plans, and the review will be based on the criteria in this part. Managing States will review the plans within 45 days of receipt of the plans, whenever possible, and provide a copy of the approved plans to the Regional Office.

[67 FR 8848preview citation details, Feb. 26, 2002, as amended at 67 FR 61515, Oct. 1, 2002; 68 FR 61370, Oct. 28, 2003; 69 FR 55096, Sept. 13, 2004; 72 FR 61748, Oct. 31, 2007 ; 74 FR 47482, Sept. 16, 2009; 86 FR 50674, Sept. 10, 2021]

Appendix B

Community Mitigation Capabilities

Appendix B – Community Mitigation Capabilities

I. Scope and Methodology

This assessment evaluates community mechanisms that affect participating jurisdictions' capacity to implement hazard mitigation activities. The assessment provides an overview of the administrative, technical, regulatory, and financial capabilities of Baldwin County jurisdictions to implement mitigation strategies. It identifies any gaps or limitations that could affect the implementation of the mitigation actions proposed in this plan. The findings of this assessment informed the development and prioritization of mitigation actions and the determination of the types of mitigation activities that jurisdictions can reasonably undertake within the five-year action program framework presented in Chapter 6, *Mitigation Strategy*.

The following table identifies each participating jurisdiction in Baldwin County and summarizes the results of a comprehensive capabilities questionnaire distributed by the planning team. The questionnaire was used to evaluate whether key indicators of a jurisdiction's capacity to implement hazard mitigation actions are currently in place. These indicators assess the presence and effectiveness of planning and regulatory tools, prior experience with mitigation projects, and the availability of staffing and administrative resources. The results of this assessment support the identification of strengths and limitations that informed the development and prioritization of the mitigation actions included in this plan.

Appendix C

2021 Plan Implementation Status

Appendix C – 2021 Plan Implementation Status

I. Scope and Methodology

As part of the 2026 plan update, each jurisdiction that participated in the 2021 Baldwin County Multi-Hazard Mitigation Plan reviewed its original five-year mitigation action program in accordance with FEMA mitigation planning requirements. This review assessed the status of each mitigation action or project and identified actions as completed, ongoing, deferred, or removed. For actions that remained unchanged, jurisdictions documented the rationale for maintaining the original scope. Participating jurisdictions also identified challenges that hindered implementation, including technical, financial, administrative, legal, political, and interagency coordination constraints, and described approaches to address these barriers in future updates. This evaluation supports continuous improvement of the mitigation strategy and ensures ongoing compliance with federal requirements for updating mitigation plans.

This appendix includes the Community Mitigation Action Programs adopted by Baldwin County and its participating jurisdictions. In accordance with FEMA mitigation planning requirements, mitigation actions identified in the previously approved plan were reviewed to determine their current implementation status. Each jurisdiction or agency responsible for an action was asked to classify the action as completed, ongoing, deferred, or removed and to provide updates on progress, milestones achieved, or barriers to implementation. Jurisdictions also identified challenges that affected implementation, including technical, financial, administrative, legal, political, or interagency coordination constraints. This evaluation informs future mitigation priorities, supports continuous improvement of the mitigation strategy, and documents compliance with federal requirements for updating mitigation plans.

To complete the mitigation action status assessment, a questionnaire based on the mitigation action program from the previously approved plan was distributed to all members of the Hazard Mitigation Planning Committee (HMPC) and to the lead agencies or individuals responsible for implementing mitigation actions for participating jurisdictions. The questionnaire provided jurisdictions with a consistent method for reporting the current implementation status of each mitigation action and for submitting supporting comments on progress, outcomes, or challenges encountered during implementation. This approach ensured systematic documentation of mitigation progress and supported compliance with FEMA mitigation plan update requirements.

Results from the mitigation action status survey are summarized in the table included in this appendix. For mitigation measures identified as deferred or recommended for removal, participating jurisdictions were required to document the reason for the action status. Reasons for deletion were categorized using standardized codes to ensure consistency across jurisdictions, as defined below:

DE - Economic	Implementation was impeded by funding limitations or budget constraints
DA - Administrative	Insufficient staff capacity or administrative resources to implement or maintain the mitigation measure
DP - Political	The mitigation measure lacked sufficient local political support to advance implementation.
DT - Technical	The mitigation measure was determined to be technically infeasible
DL - Legal	The jurisdiction lacked the legal authority necessary to implement the mitigation measure
DN - Not Needed	The mitigation measure was determined to be no longer necessary due to changes in circumstances.

II. Summary of Results

- ✓ The 2021 Multi-Hazard Mitigation Plan, only referencing Baldwin County, contained approximately xx mitigation measures. Most mitigation measures were completed or were ongoing at the time of review.
- ✓ The most common reasons cited by individual jurisdictions for removing mitigation measures were economic infeasibility and a lack of technical capacity to implement the measures.

The Key for Table C-1 is as follows:

C	=	Completed
O	=	Completed, but Ongoing
DF	=	Not Completed, defer for the 2026 Plan Update
DA	=	Delete for Administrative Reasons
DE	=	Delete for Economic Reasons
DL	=	Delete for Legal Reasons
DP	=	Delete for Political Reasons
DT	=	Delete for Technical Reasons
DN	=	Delete, Not Needed
NR	=	No Response
NA	=	Not Applicable

Appendix D

HMPC Hazard Identification and Ratings

Appendix D – HMPC Hazard Identification and Ratings

I. Scope and Methodology

1.0 The HMPC Hazard Identification Exercises

The tables in this appendix summarize the results of hazard identification and ranking exercises completed by the Hazard Mitigation Planning Committee (HMPC) during its quarterly meetings. These results reflect the collective professional judgment and local knowledge of HMPC members, while also considering existing plans, studies, reports, and technical information regarding the location, probability, and potential severity of natural and human-caused hazards affecting jurisdictions throughout Baldwin County. While the outcomes of these exercises are not intended to serve as the sole analytical basis for hazard characterization and may not align with all quantitative data and analyses presented in Chapter 5, Risk Assessment, they provide important qualitative context that complements other data sources.

The HMPC ratings illustrate how perceived hazard impacts and likelihood may vary across jurisdictions and help identify relative differences in vulnerability based on geographic, developmental, and operational considerations. Average scores are used to compare perceived hazard exposure and potential community impacts across participating jurisdictions. Similar hazard identification exercises were conducted during the development of the 2026 mitigation plan update, and the results of those efforts are referenced for comparative purposes to illustrate changes in local conditions, experience, and risk perception over time.

These planning exercises are consistent with FEMA mitigation planning guidance and support a risk-informed, whole-community approach by incorporating practitioner experience alongside technical analyses. As such, the results serve as a supporting resource to inform hazard prioritization and the development of mitigation strategies, rather than a replacement for the data-driven risk assessment methods required under 44 CFR §201.6.

The following is a key to the tables that describe the hazard ratings:

Table D.1 – Natural Hazard Ratings

LOCATION: Whether the jurisdiction is affected by the hazard	PROBABILITY: The likelihood that the hazard would occur in this jurisdiction	EXTENT: The severity or magnitude of the hazard, should it occur in this jurisdiction
1 = YES	5 – VERY HIGH	5 – VERY HIGH
0 = NO	4 – HIGH	4 – HIGH
	3 – MEDIUM	3 – MEDIUM
	2 – LOW	2 – LOW
	1 – MINIMUM	1 – MINIMUM

2.0 Summary of Results

Location of Natural Hazards

- ✓ In 2021, the HMPC identified hazards that could occur in all jurisdictions, including hurricanes, tornadoes, severe storms, winter storms/freezes, and droughts/heat waves. The 2026 update continues to recognize these hazards as countywide concerns, with varying degrees of impact by location (e.g., coastal surge exposure, riverine floodplains, and areas with higher wind vulnerability).
- ✓ Flooding can occur in all jurisdictions, and flood studies confirm that all jurisdictions are subject to flooding. Flood maps included in Chapter 5 – “Risk Assessment” show precise flood zones.
- ✓ All jurisdictions recognize hurricane impacts; however, coastal communities and areas adjacent to Mobile Bay face higher exposure to storm surge. Inland areas remain vulnerable to hurricane-related winds, rain, inland flooding, and tornadoes.
- ✓ Some communities did not identify landslides, sinkholes, dam/levee failures, earthquakes, or tsunamis as significant localized threats; however, the plan continues to document these hazards to the extent they are applicable to the planning area and to support a comprehensive multi-hazard risk assessment. See locational maps in Chapter 5 – “Risk Assessment.”
- ✓ Tsunamis were added historically as a possible hazard risk based on external scientific discussion (2009 USGS Study). In this study, a slight potential for submarine landslides beneath Gulf waters was noted, which could cause tsunamis. The 2026 update retains tsunami as a low-probability hazard and documents it consistently with the plan’s broader hazard identification methodology and risk assessment framework.

Possibility of Natural Hazards

- ✓ According to HMPC input, hurricanes and severe storms remain among the most likely recurring hazards. Flooding and tornadoes also present a high likelihood of occurrence across the planning area, with variability by jurisdiction. The 2026 update uses HMPC perceptions as a supplement to occurrence histories and technical data summarized in Chapter 5.
- ✓ Hazards with moderate likelihood include wildfires, droughts/heat waves, and winter storms/freezes, recognizing that impacts may be episodic but can affect infrastructure, public health, and essential services.
- ✓ Hazards generally perceived as least likely include sinkholes, earthquakes, landslides, and dam/levee failures; however, these hazards can have disproportionate consequences in specific locations and remain documented for completeness and planning awareness.

Extents of Natural Hazards

- ✓ The most potentially severe hazards are hurricanes and severe storms due to wind, rainfall, tornadoes, and storm surge impacts (specifically for coastal/bayfront areas).
- ✓ Tornadoes, flooding, and wildfires can also have severe impacts, particularly when vulnerable structures, critical facilities, repetitive loss areas, or development trends increase exposures.
- ✓ Droughts/Heat Waves and Winter Storms/Freezes are generally moderate in severity but can cause meaningful impacts to public health, agriculture, water supply, and utilities.
- ✓ Earthquakes, landslides, sinkholes, tsunamis, and dam/levee failures are generally lower probability hazards in the planning area. The plan documents them to support comprehensive planning and risk communication.

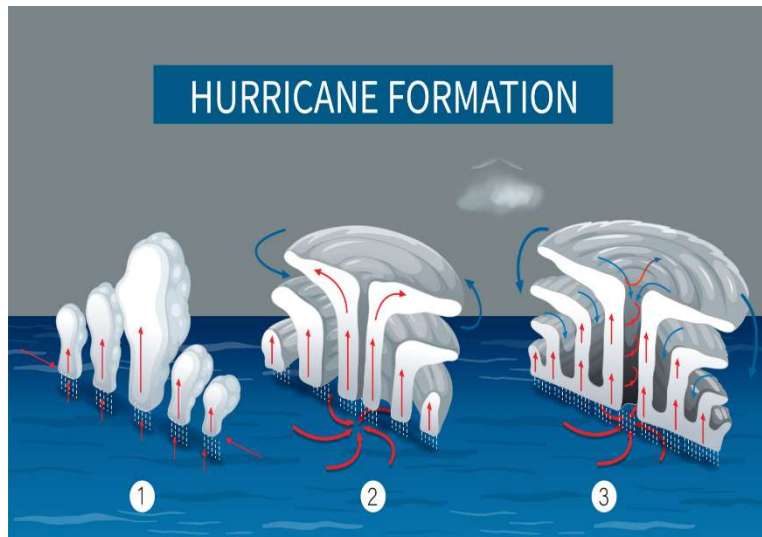
Consistent with the 2015 and 2021 Hazard Mitigation Plans, the 2026 planning committee re-administered the same rating scale and retained all hazards, with no additions. These ratings inform the prioritization of mitigation actions, consistent with the plan's strategy and cost-benefit analysis.

Table D.1 – Baldwin County HMPC Identification and Rating of Natural Hazards

II. Hazard Descriptions

1.0 Hurricanes Description

In this plan, the term *hurricane* refers collectively to tropical cyclones, including tropical depressions, tropical storms, and hurricanes. A tropical cyclone is a rotating, organized weather system that forms over warm tropical or subtropical waters and derives its energy from ocean heat.



Graphic D.1 – Source: National Hurricane Center (NHC)

A tropical depression is characterized by an organized system of clouds and thunderstorms with a closed surface circulation and maximum sustained winds of 38 miles per hour (mph) or less. When sustained winds increase to 39–73 mph, the system is classified as a tropical storm. A hurricane is defined as a tropical cyclone with a well-defined circulation and sustained winds of 74 mph or greater.

Tropical cyclones typically originate from atmospheric disturbances such as easterly waves, remnants of frontal boundaries, or other areas of disturbed weather. For a tropical disturbance to develop into a hurricane, three primary conditions must be present:

1. Warm ocean waters, generally at least 80°F, provide the energy necessary for storm development;
2. Adequate atmospheric moisture, which supports thunderstorm growth and intensification; and
3. Developing low-level wind circulation, allowing the system to organize and strengthen.

Warm ocean water is the most critical of these factors, as it serves as the primary fuel source that enables a disturbance to intensify into a tropical storm or hurricane.

Although hurricanes primarily affect coastal areas, their impacts are not limited to the immediate shoreline. Inland areas, including jurisdictions throughout Baldwin County, may experience damaging winds, heavy rainfall, flooding, and tornadoes associated with tropical storms and hurricanes. These hazards can result in widespread impacts to infrastructure, critical facilities, transportation systems, and public safety well beyond the coast.

The Atlantic hurricane season officially begins on June 1 and continues through November 30. The Atlantic basin, which includes the Atlantic Ocean, Caribbean Sea, and Gulf of America, produces an average of approximately 14 named tropical storms each year, about 7 of which become hurricanes, based on long-term climatological data. Of these hurricanes, approximately 3 reach major hurricane strength (Category 3 or higher).

On average, the United States coastline is impacted by multiple tropical cyclones over a multi-year period, with landfalls varying by location, track, and storm intensity. While major hurricanes pose the greatest threat to life and property due to extreme winds, storm surge, and widespread flooding, tropical depressions and tropical storms can also cause significant damage and loss of life, primarily through heavy rainfall, inland flooding, and tornadoes.

Hurricanes are classified using the Saffir–Simpson Hurricane Wind Scale, which categorizes storms from Category 1 through Category 5 based on maximum sustained wind speed. The scale was developed in the early 1970s by Herbert Saffir, a consulting engineer, and Dr. Robert Simpson, then Director of the National Hurricane Center. Category 3, 4, and 5 hurricanes are considered major hurricanes due to their potential for severe damage.

The Saffir–Simpson scale is based primarily on wind speed; however, it also provides general descriptions of the potential impacts, including structural damage. While storm surge and barometric pressure are commonly associated with stronger hurricanes, it should be noted that storm surge and rainfall impacts vary widely depending on storm size, forward speed, angle of approach, coastal bathymetry, and local topography, and are not solely determined by wind category. While wind speed is the basis for hurricane classification, flooding, particularly rainfall-induced and storm-surge flooding, historically accounts for the majority of hurricane-related fatalities.

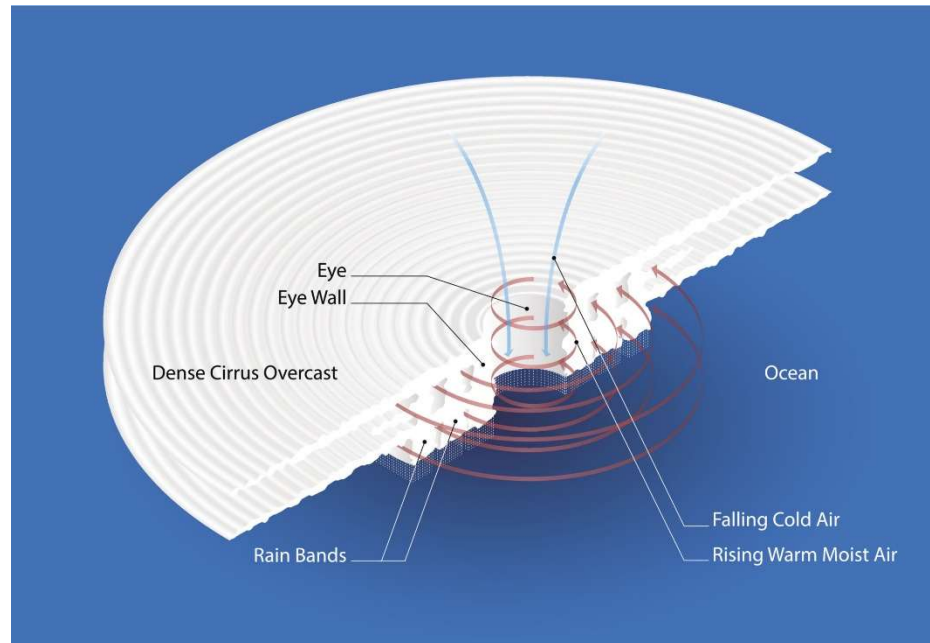
Table D.2 – Saffir-Simpson Scale

<i>Category</i>	<i>Sustained Wind Speed (mph)</i>	<i>Sustained Wind Speed (km/h)</i>	<i>Damage Description</i>
<i>Tropical Storm</i>	39 – 73	63 – 118	Minimal damage
<i>Category 1</i>	74 – 95	119 – 153	Very dangerous winds
<i>Category 2</i>	96 – 110	154 – 177	Extremely dangerous winds
<i>Category 3</i>	111 – 129	178 – 208	Devastating damage
<i>Category 4</i>	130 – 156	209 – 251	Catastrophic damage
<i>Category 5</i>	≥ 157	≥ 252	Catastrophic damage

Source: NOAA / National Hurricane Center (NHC)

A hurricane is composed of three primary structural features: the eye, the eyewall, and rainbands.

The eye is the center of the hurricane and is typically the calmest region of the storm. Eyes typically range from 20 to 40 mm in diameter, although size may vary. Within the eye, winds are generally light—often less than 15 mph—and skies may be partly cloudy or clear due to subsiding air that suppresses cloud formation. A distinct eye usually forms once a tropical cyclone reaches hurricane strength, with maximum sustained winds of 74 mph or greater.



Graphic D.2 – Source: National Hurricane Center (NHC)

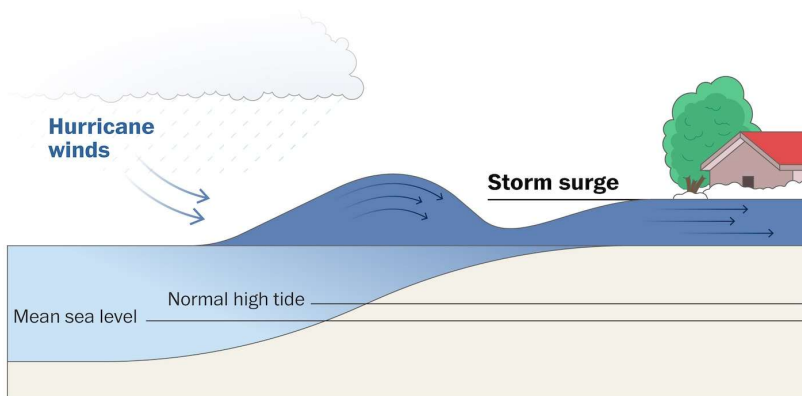
Surrounding the eye is the eyewall, a dense ring of intense thunderstorms where the strongest winds, heaviest rainfall, and most severe damage occur. Air spirals inward at low levels toward the center of the storm and rises rapidly within the eyewall, producing powerful convection. At upper levels, air spreads outward, helping maintain the storm's circulation. The strongest pressure gradients and wind speeds are concentrated in this region.

Extending outward from the eyewall are spiral rainbands, which consist of bands of showers and thunderstorms that rotate around the storm center. These rainbands can extend hundreds of miles from the center and are capable of producing heavy rainfall, gusty winds, flash flooding, and tornadoes, often well in advance of the storm's landfall.

The passage of the eye over a location is often marked by a temporary period of calm or reduced winds, which can create the false impression that the storm has ended. This lull can be highly dangerous, as the eyewall will recur shortly thereafter, bringing intense winds and rainfall from the opposite quadrant as the storm continues to move forward.

Hurricanes produce a range of direct and indirect hazards that can affect both coastal and inland areas. In addition to high winds, secondary hazards include storm surge, wind gusts, squalls, inland flooding, and tornadoes. Storm surge is the abnormal rise of water above normally predicted tide levels caused by a storm's winds pushing water toward the shore. When storm surge combines with normal tides, it creates a storm tide, which is further intensified by wind-driven waves, increasing the potential for severe coastal flooding.

The magnitude and extent of storm surge flooding depend on several factors, including storm intensity, size, forward speed, and coastal characteristics. One of the most significant geographic influences is the slope of the continental shelf; a broad, shallow shelf allows storm surge to build higher and penetrate farther inland, increasing inundation risk. Hurricanes can also produce prolonged heavy rainfall and tornadoes, resulting in significant inland flooding and damage well beyond the immediate coastline.



Graphic D.3 - Graphic Source: National Hurricane Center (NHC)

In addition to storm surge, hurricanes produce damaging winds, which are classified based on maximum sustained wind speed. This classification does not account for wind gusts or squalls, which can cause additional damage. Wind gusts are brief, rapid increases in wind speed caused by turbulence and the downward mixing of faster winds aloft to the surface, particularly over land. Squalls are longer periods of increased wind

speeds; most commonly occurring within the outer rainbands of a hurricane and can produce damaging winds well away from the storm's center.

Hurricanes, tropical storms, and tropical depressions often produce torrential rainfall and flooding that may persist for several days after a storm has passed. The intensity of the storm does not always correlate with flood severity; slow-moving or weaker tropical systems can cause greater flooding and damage than faster-moving, more intense hurricanes due to prolonged rainfall over the same areas.

Tornadoes may occur within a tropical cyclone and are most likely to develop in the right-front quadrant of the storm, although they can also form within rainbands well away from the storm's center. Some hurricanes produce no tornadoes, while others generate numerous tornadoes. NOAA studies indicate that approximately half of all landfalling hurricanes

produce at least one tornado. When combined with hurricane-force winds, tornadoes can result in substantial localized wind damage. Tornadoes may develop at any point during landfall, but most commonly occur within the first 12 hours after landfall, often during daylight hours. Due to this elevated risk, tornado watches are typically issued along the anticipated path of a hurricane prior to landfall.

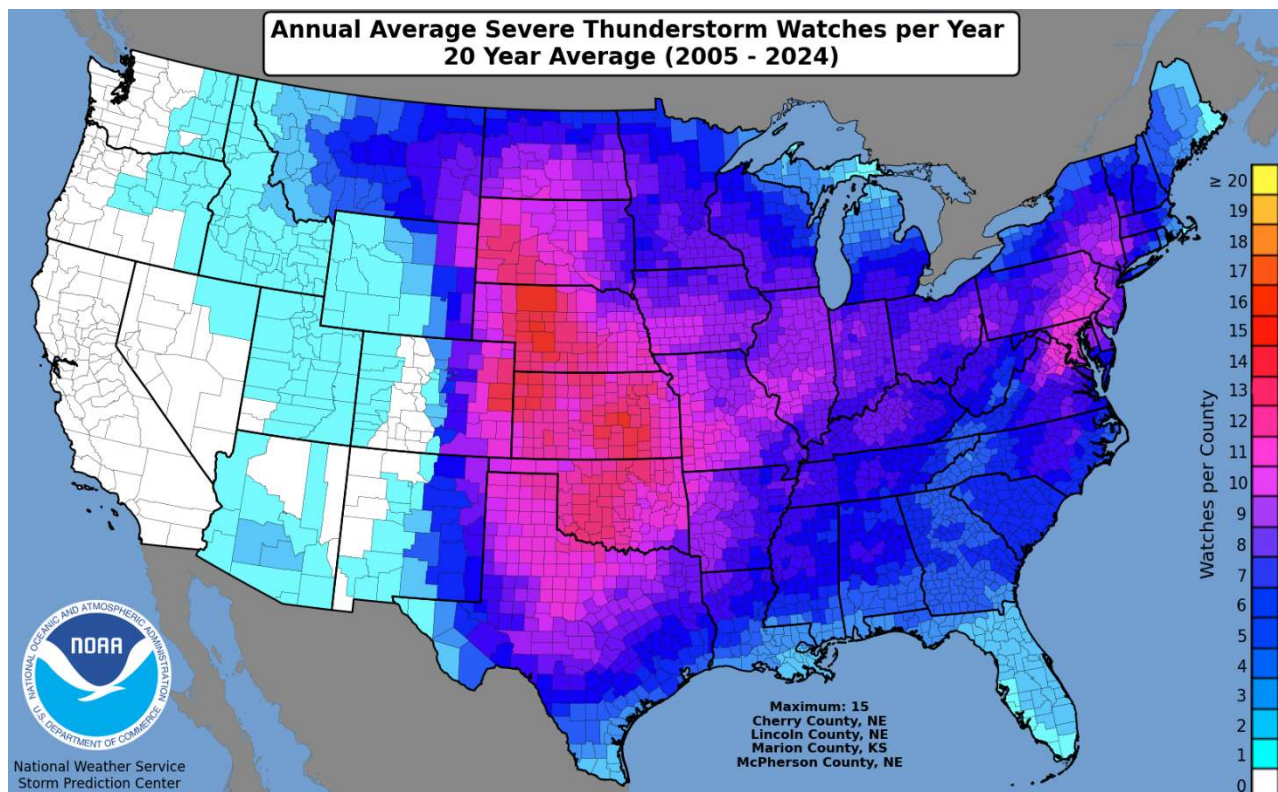
This description of hurricanes is based upon information extracted from the National Hurricane Center (NHC) and National Oceanic and Atmospheric Administration (NOAA) websites. Source: National Oceanic and Atmospheric Administration (NOAA), Hurricanes: Unleashing Nature's Fury – A Preparedness Guide.

2.0 Severe Storms Description

Severe storms, as referred to in this plan, include severe thunderstorms capable of producing damaging lightning, hail, and straight-line winds. Severe storms may also be associated with tornadoes, hurricanes, and flooding, which are addressed separately in this plan.

Thunderstorms generally affect relatively small geographic areas when compared to hazards such as hurricanes or winter storms. A typical thunderstorm is approximately 15 miles in

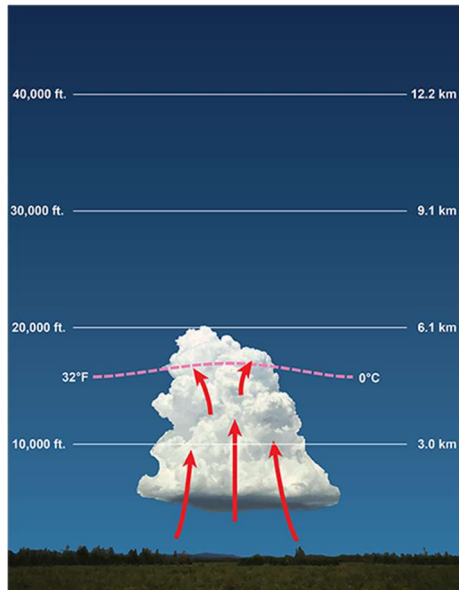
Map D.1 – Annual Average Severe Thunderstorm Watches per Year



diameter and lasts an average of 30 minutes. Despite their limited size and duration, thunderstorms can pose significant risks to life and property.

Based on long-term National Weather Service climatological estimates, approximately 100,000 thunderstorms occur annually in the United States, with about 10 percent classified as severe. A thunderstorm is considered severe if it produces hail measuring at least three-quarters of an inch in diameter, wind gusts of 58 miles per hour or greater, or a tornado.

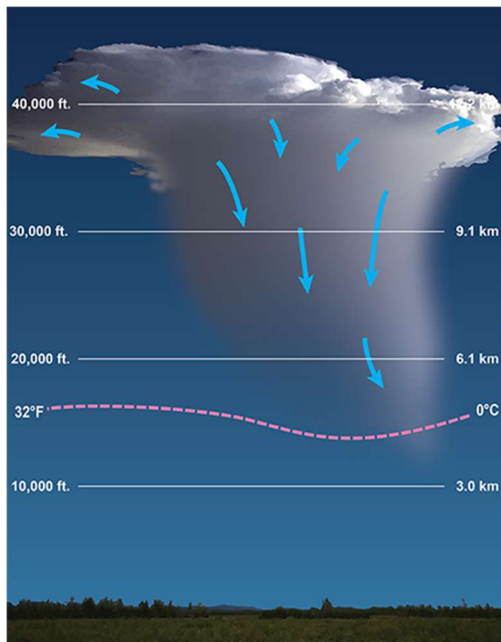
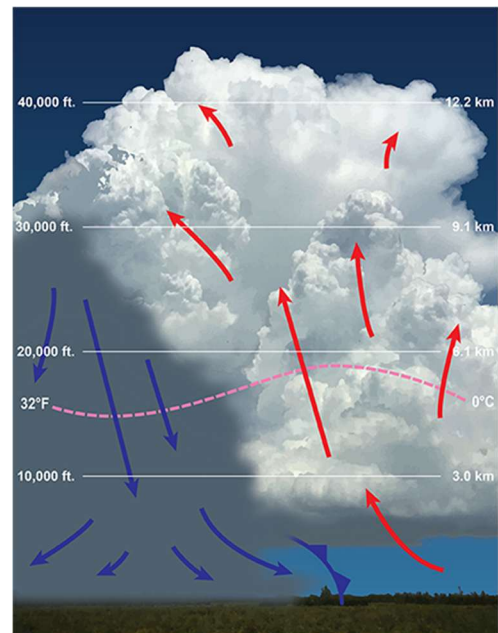
Globally, the National Weather Service estimates that more than 40,000 thunderstorms occur each day, or nearly 16 million thunderstorms annually. In the United States, thunderstorm activity averages roughly 100,000 events per year. The southeastern United States experiences the highest frequency of thunderstorms, with Florida recording approximately 80 to more than 100 thunderstorm days per year. Alabama also experiences a high incidence of thunderstorm days, averaging 50 to 80 per year. This elevated frequency is largely due to the availability of warm, moist air from the Gulf of America and the Atlantic Ocean, which provides favorable conditions for thunderstorm development.

Graphic D.5 – Life Cycle of a Thunderstorm**Stage 1: Cumulus Stage (Developing)**

- Warm, moist air rises in an unstable atmosphere.
- Updrafts dominate; clouds grow vertically.
- Little to no precipitation reaches the ground.
- Occasional lightning.

Stage 2: Mature Stage

- The storm reaches maximum intensity.
- Strong updrafts and downdrafts exist.
- Most likely time for hail, heavy rain, frequent lightning, strong winds, and tornadoes.
- This is the most hazardous stage of the storm life cycle.

**Stage 3: Dissipating Stage**

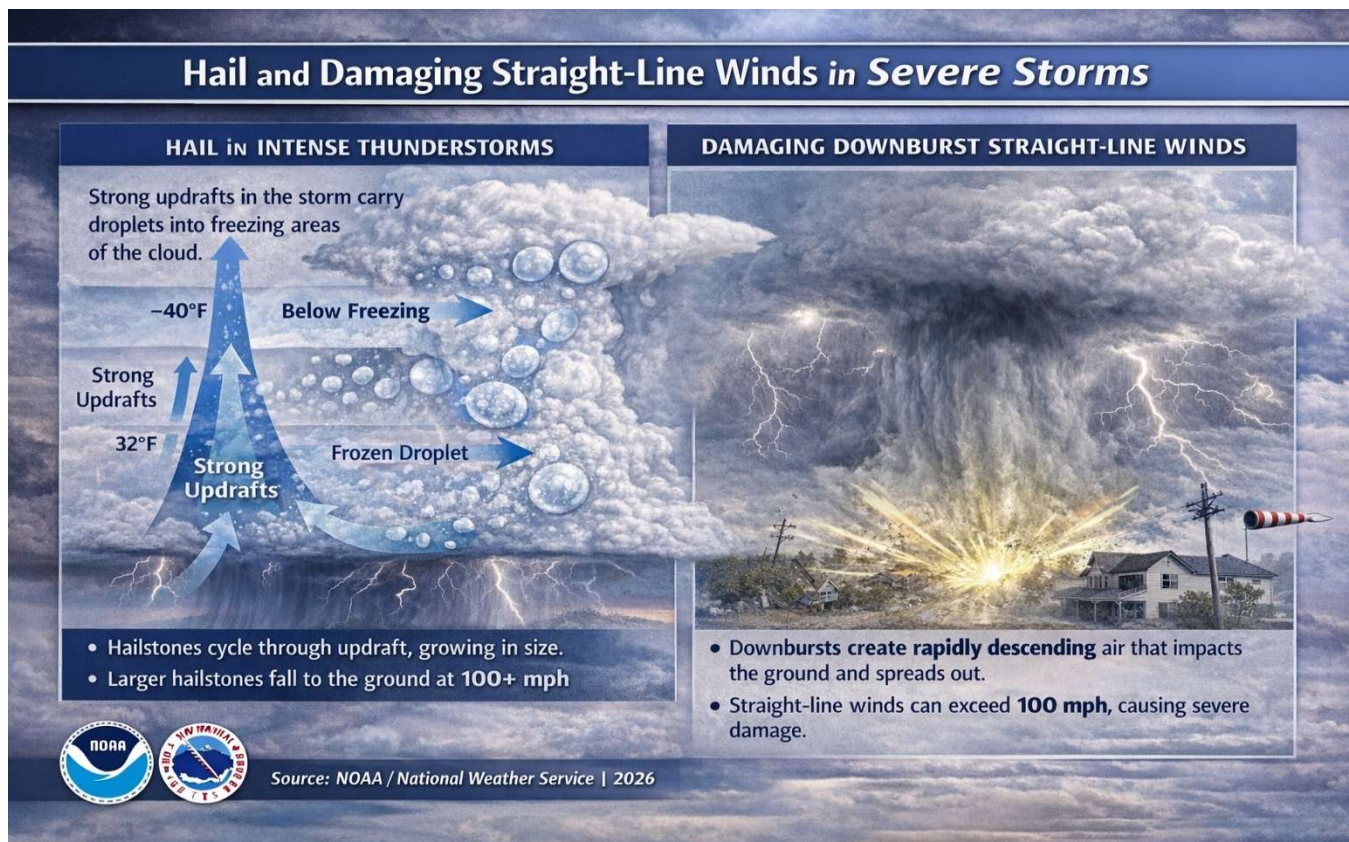
- Downdrafts dominate and cut off the warm air.
- Rainfall gradually weakens.
- The storm loses intensity and dissipates.

Lightning results from the buildup and discharge of electrical energy between positively and negatively charged regions within a thunderstorm. Rising and descending air currents separate these electrical charges, while interactions between water droplets, ice crystals, and graupel further influence charge distribution. A cloud-to-ground lightning strike begins when a channel of electrically charged air, known as a stepped leader, moves downward from the cloud toward the ground. As this channel approaches the surface, an upward-moving surge of electricity rises from the ground to meet it, producing the visible lightning flash.

According to the National Weather Service, lightning poses a significant hazard across the United States, with the following key facts:

- Lightning causes an average of 20 - 25 fatalities and several hundred injuries each year in the United States.
- Lightning occurs in all thunderstorms, regardless of intensity.
- Lightning strikes the Earth approximately 25 million times per year. The energy from a single lightning flash is sufficient to power a 100-watt light bulb for several months.
- Most lightning-related fatalities and injuries occur when individuals are outdoors during summer months, particularly in the afternoon and evening, when thunderstorm activity peaks. However, lightning can strike at any time of year.
- Lightning can occur within a cloud, between clouds, from cloud to ground, or from cloud to air.
- Lightning is a major cause of wildfires, particularly in the western United States and Alaska.
- The air surrounding a lightning channel is heated to temperatures approaching 50,000 degrees Fahrenheit, hotter than the surface of the sun.
- The rapid heating and expansion of air along the lightning channel, followed by rapid cooling, creates a shock wave that is heard as thunder.

Another damaging effect of severe storms is hail. Hailstones are balls or irregular lumps of ice produced by strong thunderstorms with intense updrafts. These updrafts carry raindrops upward into extremely cold areas of the storm cloud, where the droplets freeze and grow as they collide with supercooled water droplets. Hailstones may cycle repeatedly through the updraft, increasing in size until they become too heavy for the rising air to support and fall to the ground. Large hailstones can reach diameters of several inches and may fall at speeds exceeding 100 miles per hour. Each year, hail causes significant damage to buildings, vehicles, crops, and other property across the United States.



Graphic D.6 – Hail and Damaging Stright-Line Winds Graphic adapted from National Weather Service educational materials.

Most thunderstorm wind damage is caused by straight-line winds rather than tornadoes. Straight-line winds can exceed 100 miles per hour in severe storms. One particularly dangerous form of straight-line wind is a downburst, which occurs when a concentrated column of rapidly descending air impacts the ground and spreads outward in all directions. Downbursts can produce damage patterns similar to those of tornadoes, including extensive damage to trees, power lines, and structures, but without rotational signatures.

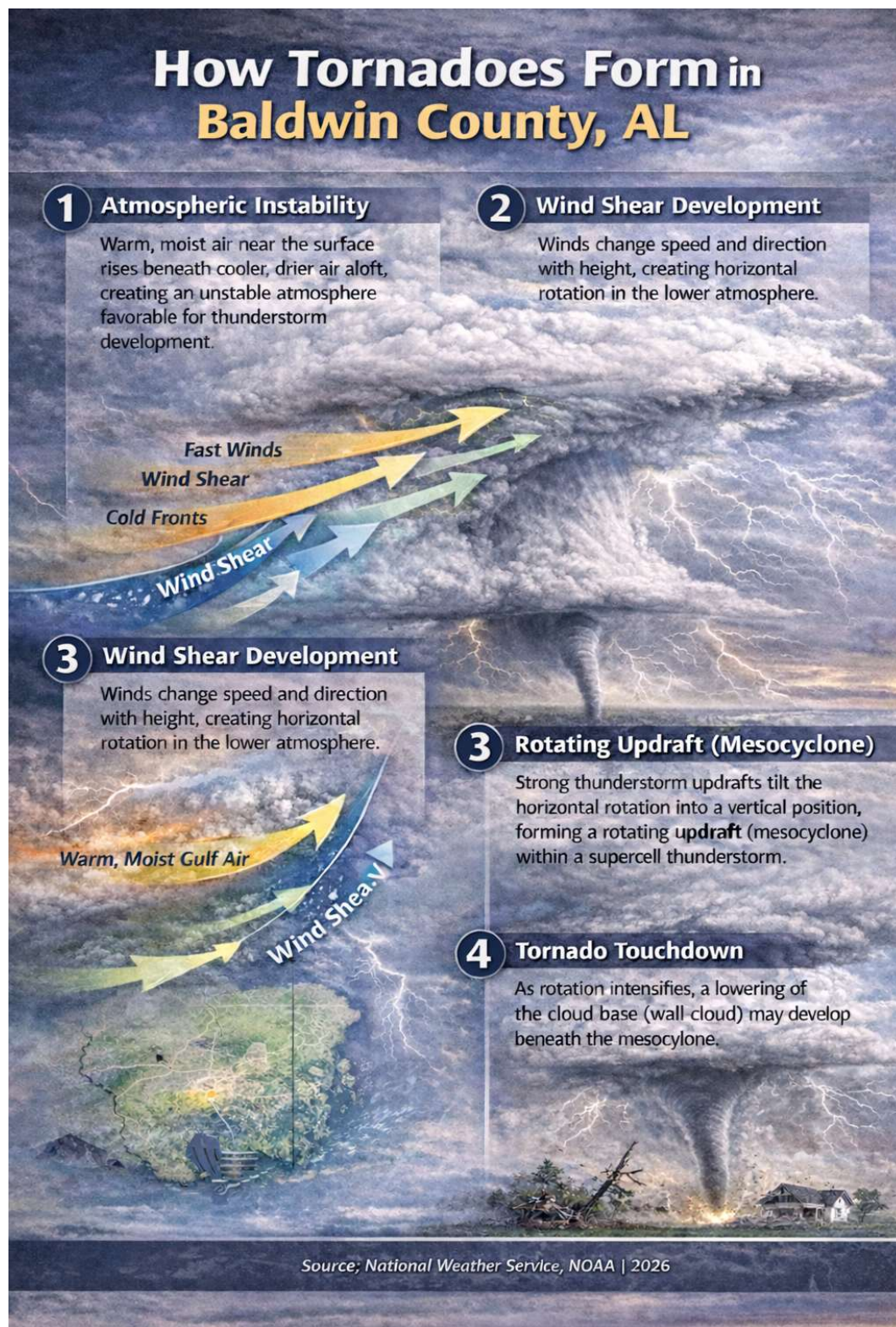
3.0 Tornadoes Description

Tornadoes are among nature's most violent storms and are characterized by a rapidly rotating column of air extending from the base of a thunderstorm to the ground. In an average year, approximately 1,200 tornadoes are reported across the United States. These events result in dozens of fatalities and hundreds of injuries annually, making tornadoes one of the leading causes of weather-related deaths from wind hazards. The most violent tornadoes can produce wind speeds exceeding 200 miles per hour and are capable of causing catastrophic damage. Tornado damage paths may exceed one mile in width and extend for dozens of miles. Tornadoes can occur in a wide range of environments and vary greatly in size, intensity, and duration.

In Alabama, peak tornado season typically occurs from March through May, with a secondary season in late fall. However, tornadoes can occur at any time of year when atmospheric conditions are favorable. During the spring peak season, tornadoes are often associated with strong frontal systems that develop in the central United States and move eastward across the Southeast. These weather patterns can result in large-scale tornado outbreaks affecting multiple states simultaneously.

Tornadoes commonly develop from severe thunderstorms forming within warm, moist air masses ahead of advancing cold fronts. These thunderstorms may also produce large hail, damaging straight-line winds, and intense rainfall. Tornado formation occurs when cold air aloft overrides warm surface air, causing rapid upward motion and storm rotation. Tornadoes may also occur in association with tropical storms and hurricanes after landfall, particularly in the right-front quadrant of the storm relative to its direction of movement. In rare cases, intense wildfire-related circulations and fire-induced vortices have also been observed to produce tornado-like phenomena.

Graphic D.7 – How a Tornado Forms



Graphic D.7 – How a Tornado Forms relevant to Baldwin County, Alabama. Graphic adapted from National Weather Service educational materials.

Meteorologists rely on weather radar to monitor and assess developing storm systems. The National Weather Service strategically locates Doppler radar sites across the country to detect precipitation intensity and air movement toward or away from the radar. This technology allows forecasters to identify increasing rotation aloft within thunderstorms, providing critical lead time to issue life-saving warnings before a tornado forms. When atmospheric conditions are favorable for severe weather, the National Weather Service issues a severe thunderstorm or tornado watch, indicating that hazardous weather is possible. When severe weather is imminent or occurring, Warnings are issued for specific locations. Weather Service personnel use Doppler radar data, trained storm spotter reports, and other observational tools to issue these warnings. Severe thunderstorm and tornado warnings are disseminated through local radio and television stations and NOAA Weather Radio, and relayed to local emergency management and public safety officials. These officials may then activate local warning systems to alert affected communities.

In 1971, Dr. T. Theodore Fujita of the University of Chicago developed the original Fujita (F) Scale to classify tornado intensity based on observed wind damage. On February 1, 2007, the original F-Scale was replaced by the Enhanced Fujita (EF) Scale. The EF Scale provides a more accurate and consistent method for assessing tornado damage by incorporating engineering and meteorological research and evaluating damage across 28 standardized damage indicators. This approach accounts for variations in construction type and quality when estimating wind speeds. As with the original scale, tornadoes are rated based on the most intense damage observed along the damage path. Tornadoes that occurred prior to February 1, 2007, are not retroactively reclassified using the Enhanced Fujita Scale.

Table D.3 – Enhanced F-Scale for Tornado Damage

Rating	Estimated Wind Speeds	Typical Damage
EF0	65 – 85 mph	Minor damage (branches broken, shallow-rooted trees pushed)
EF1	86 – 110 mph	Moderate damage (roofs damaged, mobile homes overturned)
EF2	111 – 135 mph	Considerable damage (roofs torn off, frame homes damaged)
EF3	136 – 165 mph	Severe damage (entire stories destroyed)
EF4	166 – 200 mph	Devastating damage (well-built homes destroyed)
EF5	>200 mph	Incredible damage (strong frame homes swept away)

Source: National Weather Service (NWS)

4.0 Floods Description

Flooding is a natural and recurring process affecting rivers, streams, coastal systems, and drainage basins. Floods occur when excess water from rainfall, storm surge, or snowmelt exceeds the capacity of natural or constructed drainage systems, resulting in overflow onto adjacent land. Floodplains are low-lying areas adjacent to rivers, lakes, and coastal waters that are subject to periodic inundation.

Flooding is one of the most common hazards in the United States, affecting all 50 states and U.S. territories and causing an average of approximately 150 fatalities annually. Floods can occur at any time of year, in any region, and at any time of day or night. Most flood-related deaths and injuries occur when individuals are swept away by moving water, while most property damage results from prolonged inundation by sediment-laden floodwaters.

Flood severity is influenced by rainfall intensity and duration, storm surge, soil saturation, land use, topography, and ground cover. Heavy rainfall over a short period can produce flash flooding, whereas moderate rainfall can also cause flooding when soil is saturated or when runoff is concentrated in areas with extensive impervious surfaces, such as roadways, parking lots, and developed urban areas. Steeper slopes and limited vegetation increase runoff potential and flood impacts.

Flood frequency varies based on climate, watershed characteristics, and channel slope. In regions with seasonal precipitation or snowmelt-driven hydrology, floodplains may be inundated regularly. In areas without prolonged freezing temperatures, flooding most often occurs during periods of highest rainfall.

Most flood hazard areas in the United States have been mapped by the Federal Emergency Management Agency, which administers the National Flood Insurance Program (NFIP). Flood risk data are documented in Flood Insurance Studies (FIS) and depicted on Flood Insurance Rate Maps (FIRMs), which delineate Special Flood Hazard Areas (SFHAs), assign flood risk zones, and establish Base Flood Elevations (BFEs) based on the base flood, defined as the flood with a 1-percent annual chance of occurrence. Paper FIRMs have largely been replaced by Digital Flood Insurance Rate Maps (DFIRMs).

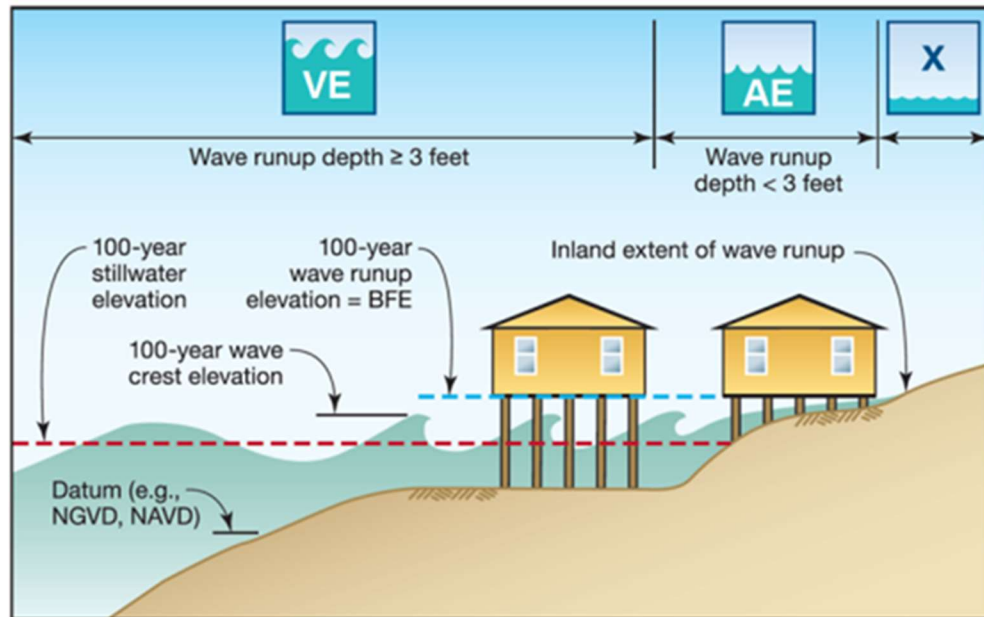
The term 100-year flood refers to a flood with a 1-percent chance of occurring in any given year and does not imply a once-in-a-century event; multiple base floods may occur within a short timeframe. The base flood is the national standard used for floodplain management under the NFIP and provides a consistent benchmark for mitigation, permitting, and insurance purposes.

Base Flood Elevation (BFE) is the computed elevation of floodwater during the base flood and is shown on FIRMs and in FIS reports. BFEs are referenced to an established vertical datum, such as the National Geodetic Vertical Datum of 1929 (NGVD 29), the North American Vertical Datum of 1988 (NAVD 88), or another datum specified in the applicable FIS.

Special Flood Hazard Areas (SFHAs) include A-Zones and V-Zones shown on FIRMs and represent areas subject to inundation by the base flood. Shaded X-Zones represent the 500-year floodplain, which has a 0.2-percent annual chance of flooding. These floodplain designations are used for floodplain management, permitting, mitigation planning, and flood insurance rating.

100-Year Floodplain Areas of High Risk					
Flood Zone	Annual Chance of Flooding	Description	BFEs Shown	NFIP Insurance Required	Typical Use in Mitigation & Permitting
A	1% (Base Flood / 100-Year)	Areas subject to inundation by the base flood. Determined by detailed or approximate analyses. Includes Zones A, AE, AH, AO, AR	AE, AH, AO = YES A = NO	YES	Floodplain management, development permitting, elevation standards, mitigation prioritization
V	1% (Base Flood)	Coastal high-hazard areas are subject to storm surge, wave action, and velocity-driven flooding. Includes Zones VE and V.	VE = YES V = NO	YES	Coastal construction standards, wave action analysis, and structural mitigation
X (shaded)	0.2% (500-Year)	Moderate flood hazard areas between the limits of the 100-Year and 500-Year floodplains.	NO	NO (recommended)	Risk awareness, future development planning, and resilience considerations
X (unshaded)	Minimal	Areas of minimal flood hazard outside the 500-Year floodplain.	NO	NO	General planning reference

***NFIP flood insurance is required for structures in A and V Zones when federally backed mortgages are involved. Coastal high-hazard areas (V-Zones, including VE) are subject to wave action and storm surge; new construction and substantial improvements must meet NFIP standards, including elevation on open foundations (pilings or columns) at or above the Base Flood Elevation, use of breakaway walls for enclosures below the elevated structure, prohibition of fill for structural support, and elevation or protection of utilities and service equipment. FEMA provided information on the above table.**

Graphic D.8 – Flood Plain Cross Section

Source: FEMA, Coastal Special Flood Hazard Areas (2024)

Flooding can occur across a range of magnitudes beyond the 100-year flood. Structures located in proximity to streams, rivers, or shorelines may experience flooding more frequently due to smaller, more common flood events.

5.0 Wildfires Description

Wildfires are a serious and persistent hazard across much of the United States, posing significant risks to life, property, and natural resources, particularly where wildland areas interface with developed communities. Each year, millions of acres burn nationwide, resulting in substantial property damage and economic loss. More than 100,000 wildfires occur annually in the United States, with approximately 90 percent caused by human activity; the remainder are primarily ignited by lightning and other rare natural causes.

A wildfire is an uncontrolled fire that spreads through vegetative fuels and may threaten or consume structures. Wildfires often begin unnoticed, spread rapidly, and are frequently identified by dense smoke that can impact areas many miles from the fire origin. Weather conditions are among the most critical factors influencing wildfire behavior, with wind speed, temperature, and relative humidity directly affecting fire intensity and rate of spread. Long-term climatic conditions, such as drought, further increase wildfire frequency and severity by drying fuels and extending fire seasons.

Wildfires generally fall into two categories: wildland fires and wildland–urban interface (WUI) fires. Wildland fires occur in areas with little development beyond basic infrastructure, such as roads, rail lines, power corridors, and utility facilities. Wildland–urban interface fires occur where residential or commercial development is located adjacent to or intermixed with wildland vegetation. Areas containing large amounts of wooded land, brush, or grasses are at elevated risk for wildfire occurrence and spread.

Human activity is the primary cause of wildfire ignition, whether intentional or accidental. Intentional ignitions may include prescribed burns or arson, while accidental ignitions often result from outdoor recreation, equipment use, or other careless actions. Wildfire severity and duration are influenced by available fuel, topography, and prevailing weather conditions.

Wildfire prevention, detection, and response efforts in Alabama are coordinated by the Alabama Forestry Commission, which conducts aerial patrols in high-risk areas, maintains firefighting resources, and provides a toll-free public reporting system for wildfires. Fire suppression efforts are supported by Forestry Commission personnel and a statewide network of local and volunteer fire departments.

6.0 Droughts/Heat Waves Description

Drought can occur in nearly any geographic location, with characteristics and impacts varying based on climate, land use, and water management practices. According to the National Drought Mitigation Center (NDMC), drought is commonly categorized into four types based on its progression and impacts.

Meteorological drought is defined as a deficiency in precipitation over a specific period and is typically region-specific, reflecting local climatology. It is often the earliest indicator of drought conditions. Agricultural drought occurs when soil moisture is insufficient to meet the needs of crops or vegetation at a particular time and generally follows meteorological drought but precedes hydrological drought. Hydrological drought is characterized by reduced surface and subsurface water supplies and is measured by declines in streamflow, lake and reservoir levels, and groundwater levels. Due to the time lag between precipitation deficits and impacts on water supply, hydrological drought may persist even after rainfall returns to normal levels.

The final drought classification identified by the NDMC is socioeconomic drought, which occurs when water shortages begin to affect people, communities, and economic activities, including public water supply, agriculture, industry, and ecosystems. In addition to impacts on water supply, prolonged drought and declining groundwater levels can contribute to land subsidence and sinkhole formation in susceptible areas.

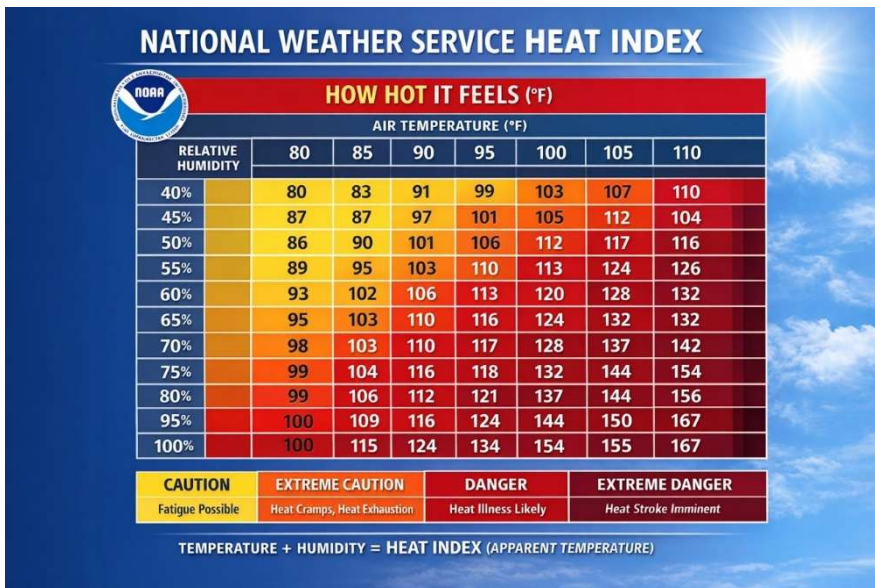
In recent years, drought conditions in Alabama have stressed water resources and adversely affected many residents, industries, and ecosystems. Drought is a naturally occurring phenomenon that develops gradually and can persist for extended and unpredictable periods because rainfall patterns vary widely in amount, duration, and location. The significant environmental, social, and economic impacts experienced during past droughts have not been fully mitigated due in part to historically slow and fragmented responses at all levels of government, with limited emphasis on preparedness and mitigation. To address these challenges proactively, the Office of Water Resources collaborated with numerous local, state, and federal agencies, water resources professionals, and stakeholders to develop and implement a coordinated statewide approach to drought planning and management as reflected in the current Alabama Drought Management Plan (2024).

The State Drought Management Plan establishes four phases of drought conditions—drought watch, advisory, warning, and emergency—based on a compilation of drought indices, including the Crop Moisture Index, Palmer Drought Severity Index, streamflow, reservoir elevation levels, and groundwater conditions. Each drought phase corresponds to increasing levels of management, coordination, and response actions.

The U.S. Drought Monitor, produced by the National Drought Mitigation Center (NDMC), employs a standardized four-tier classification system to assess drought intensity nationwide, using multiple drought indicators updated continuously. The classifications range from D0, which represents abnormally dry conditions that may precede or follow a drought, to D4, which indicates exceptional drought conditions. D1 represents moderate drought and marks the initial stage of drought-related impacts.

The primary physical impacts of drought are commonly classified as agricultural impacts, designated as “A,” which affect crops, pastures, and grasslands, and hydrologic impacts, designated as “H,” which affect water resources such as rivers, reservoirs, and groundwater supplies.

Graphic D.9 – Heat Index



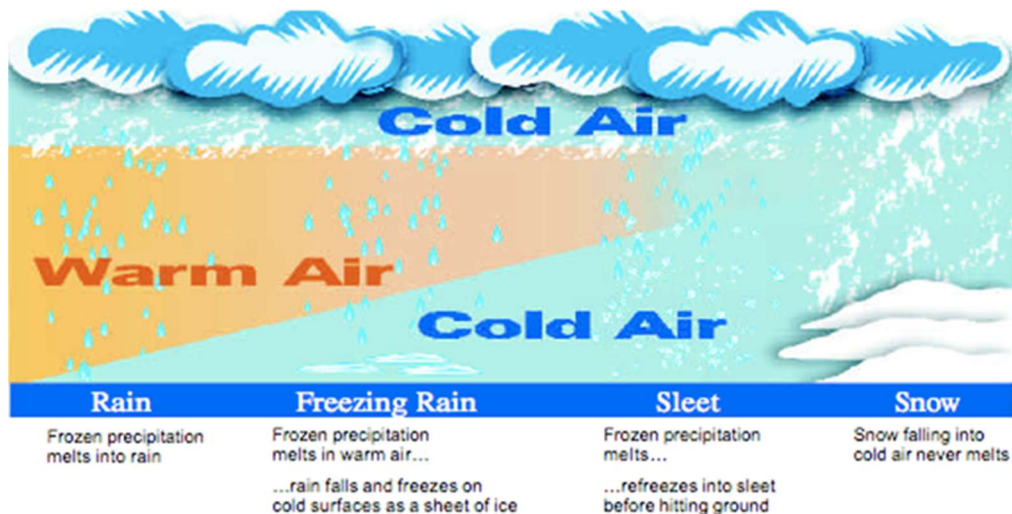
According to NOAA, extreme heat is the leading cause of weather-related fatalities in the United States, resulting in an average of approximately 1,500 deaths annually. Extreme heat events occur when high temperatures combine with elevated humidity, significantly increasing the risk of heat-related illness and mortality, particularly among vulnerable populations.

The National Weather Service issues: Heat Advisories, Excessive Heat Watches, and Excessive Heat Warnings when conditions are expected to produce dangerous heat index values over one or more days. The heat index, expressed in degrees Fahrenheit, represents how hot conditions feel to the human body when relative humidity is combined with the actual air temperature. Prolonged periods of elevated heat index values increase the risk of heat exhaustion, heat stroke, and other heat-related effects, particularly when nighttime temperatures remain high and provide little relief.

7.0 Winter Storms/Freezes Description

Winter storms and blizzards originate from mid-latitude cyclonic weather systems that often follow shifts in the jet stream and can produce freezing temperatures, snow, sleet, ice, and strong winds. While blizzards are more common in northern regions, winter storms in the southeastern United States typically result from the interaction of cold Arctic or Canadian air masses moving southward with moisture-rich systems from the Gulf of America. Common winter weather impacts in the Southeast include ice storms, freezing rain, crop-damaging freezes, and occasional snowfall. Even modest winter storms can cause significant disruptions to transportation networks, utilities, agriculture, and public safety due to limited regional preparedness for cold-weather events. The 2023 National Preparedness Report highlights that climate-driven weather extremes, including cold waves and severe winter weather, are increasing the strain on emergency management systems and critical services nationwide. Freeze events can damage water distribution systems, residential structures, and critical infrastructure, leading to cascading impacts that extend beyond the immediate event. These conditions reinforce the importance of risk-based hazard mitigation planning that evaluates exposure and vulnerability, prioritizes protection of essential services and infrastructure, and identifies long-term mitigation actions to reduce future losses associated with winter storms and freeze events.

Graphic D.10 – Winter Weather Formation



Source: National Weather Service

8.0 Earthquake Description

An earthquake is the shaking and vibration of the Earth's surface caused by the sudden release of energy resulting from movement along a fault plane within the Earth's crust. Earthquakes most commonly occur when built-up stress within rocks is released as opposing sides of a fault slip past one another, though seismic activity may also result from magma movement in volcanic regions. Earthquakes typically occur without warning and are often followed by aftershocks, which can continue for days, weeks, or longer following the initial event.

Earthquakes can affect large geographic areas and cause extensive damage to buildings, infrastructure, and critical facilities, resulting in significant economic losses, injuries, and loss of life. Even moderate earthquake events can disrupt transportation networks, utilities, communications systems, and emergency response operations. The social and economic functioning of affected communities may be significantly impacted, particularly when damage to housing, lifelines, or essential services occurs.

Earthquakes originate from sudden rupture or movement along geologic faults where stress has accumulated over time. These faults are most commonly located along tectonic plate boundaries, which generally align with continental margins, though faults may also exist within the interior of tectonic plates. Tectonic plates are approximately 50 to 60 miles thick and move slowly and continuously over the Earth's mantle. As plates interact, they may slide past one another, collide, or become locked, allowing stress to build until it exceeds the elastic strength of the surrounding rock, resulting in an earthquake. Larger earthquakes generally have greater potential to produce surface fault rupture and secondary hazards, including landslides, ground failure, liquefaction, and sinkholes, which can significantly increase overall damage and risk to life and property.

Appendix E

Hazard Profile Data

Appendix E – Hazard Profile Data

I. Records of Previous Occurrences of Hazard Events

This section contains the detailed records of previous occurrences of hazard events reported in Section 5.4 “*Hazard Profiles*”, for events reported by the National Weather Service, the National Climatic Data Center, and the Geological Survey of Alabama.

Past Occurrences of Hurricanes

Table E.1 – Baldwin County Hurricanes and Tropical Storms, 1995-2025

51 HURRICANE & TROPICAL STORM event(s) were reported in **Baldwin County, Alabama** between **01/01/1995** and **12/31/2025**.

Mag: Magnitude
Dth: Deaths
Inj: Injuries
PrD: Property Damage
CrD: Crop Damage

Location	Date	Time	T.Z.	Type	Dth	Inj	PrD	CrD
Totals:					1	0		
UPPER BALDWIN (ZONE)	7/18/97	12:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	7/18/97	12:00	CST	Hurricane (typhoon)	1	0	60.500M	2.500M
UPPER BALDWIN (ZONE)	9/1/98	15:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/1/98	15:00	CST	Hurricane (typhoon)	0	0	5.00K	0.00K
UPPER BALDWIN (ZONE)	9/25/98	9:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/25/98	9:00	CST	Hurricane (typhoon)	0	0	82.000M	0.00K
UPPER BALDWIN (ZONE)	9/21/00	9:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/21/00	9:00	CST	Tropical Storm	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	8/4/01	9:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	8/4/01	9:00	CST	Tropical Storm	0	0	40.00K	0.00K

Location	Date	Time	T.Z.	Type	Dth	Inj	PrD	CrD
UPPER BALDWIN (ZONE)	9/12/02	9:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/12/02	9:00	CST	Tropical Storm	0	0	40.00K	0.00K
UPPER BALDWIN (ZONE)	9/24/02	9:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/24/02	9:00	CST	Tropical Storm	0	0	2.000M	0.00K
UPPER BALDWIN (ZONE)	10/2/02	9:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	10/2/02	9:00	CST	Hurricane (typhoon)	0	0	75.00K	0.00K
UPPER BALDWIN (ZONE)	9/13/04	21:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/13/04	21:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	10/9/04	15:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	10/9/04	15:00	CST	Tropical Storm	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	6/10/05	3:00	CST	Tropical Storm	0	0	1.500M	0.00K
LOWER BALDWIN (ZONE)	6/10/05	3:00	CST	Tropical Storm	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	7/5/05	3:00	CST	Tropical Storm	0	0	0.00K	0.00K

Location	Date	Time	T.Z.	Type	Dth	Inj	PrD	CrD
LOWER BALDWIN (ZONE)	7/5/05	3:00	CST	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	7/9/05	3:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	7/9/05	3:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	7/10/05	16:45	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	8/27/05	15:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	8/27/05	15:00	CST	Hurricane (typhoon)	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	8/23/08	23:00	CST-6	Tropical Depression	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	8/23/08	23:00	CST-6	Tropical Depression	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	8/31/08	21:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	8/31/08	21:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	9/1/08	0:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
UPPER BALDWIN (ZONE)	9/1/08	0:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
LOWER BALDWIN (ZONE)	8/28/12	6:00	CST-6	Tropical Storm	0	0	0.00K	0.00K

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
<u>BALDWIN CENTRAL (ZONE)</u>	10/7/17	17:00	CST-6	Tropical Storm	0	0	115.00K	0.00K
<u>BALDWIN INLAND (ZONE)</u>	10/17/17	17:00	CST-6	Tropical Storm	0	0	25.00K	0.00K
<u>BALDWIN COASTAL (ZONE)</u>	10/7/17	17:00	CST-6	Tropical Storm	0	0	660.00K	0.00K
<u>BALDWIN CENTRAL (ZONE)</u>	9/4/18	17:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN CENTRAL (ZONE)</u>	10/10/18	17:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN COASTAL (ZONE)</u>	10/10/18	12:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN COASTAL (ZONE)</u>	6/7/20	12:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN CENTRAL (ZONE)</u>	6/19/20	9:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN COASTAL (ZONE)</u>	9/15/20	4:00	CST-6	Hurricane (typhoon)	0	0	234.480M	1.600K
<u>BALDWIN CENTRAL (ZONE)</u>	9/15/20	4:00	CST-6	Hurricane (typhoon)	0	0	0.00K	0.00K
<u>BALDWIN INLAND (ZONE)</u>	9/15/20	4:00	CST-6	Hurricane (typhoon)	0	0	0.00K	0.00K
<u>BALDWIN CENTRAL (ZONE)</u>	6/19/21	3:00	CST-6	Tropical Storm	0	0	0.00K	0.00K
<u>BALDWIN COASTAL (ZONE)</u>	6/19/21	3:00	CST-6	Tropical Storm	0	0	0.00K	0.00K

Location	Date	Time	T.Z.	Type	Dth	Inj	PrD	CrD
BALDWIN COASTAL (ZONE)	8/29/21	5:00	CST-6	Tropical Storm	0	0	0.00K	0.00K

Source: National Climatic Data Center

Table E.2 – Hurricanes Affecting Alabama Gulf Coast, 1995-Present (NWS)

YEAR	DATE	CATEGORY	NAME	NOTES
1995	8/3	2	Erin	Hurricane Erin had winds of 100 mph at landfall, and it moved inland near Pensacola, FL. Hurricane Erin was the first of two local Hurricanes in 1995.
1995	10/4	3	Opal	Hurricane winds were estimated near 115 mph at landfall, and Opal moved inland near Santa Rosa Island, FL. Opal reached category four strength, rapidly intensifying from a category one hurricane in only 18 hours. Hurricane Opal attained category four status 200 miles south of Pensacola. Before landfall, Opal weakened to category three but still caused major damage in Pensacola. The storm surge reached 12-20 feet. The highest rain total near Pensacola in the Ellyson community reached 15.45 inches.
1997	7/19	1	Danny	Hurricane Danny had wind gusts reaching 80 mph at landfall as it crossed Mullet Point south of Point Clear in Baldwin County. Hurricane Danny then stalled over Mobile Bay and brought record flooding to south Alabama. Rain totals at the Dauphin Island Sea Lab reached 36.71 inches with 25.98 inches of that in seven hours.
1998	9/28	2	Georges	Hurricane Georges delivered sustained winds of 103 mph at landfall, and then it moved inland near Biloxi MS. Georges produced 16.7 inches of rain in Pascagoula. The storm surge reached 12 feet near Fort Morgan, and Georges produced 25-foot waves in the Gulf of Mexico. Georges slowed in forward speed once it approached Alabama. This led to huge amounts of rain. In Bay Minette, a rain total of nearly 30 inches was recorded.
2004	9/16	3	Ivan	Hurricane Ivan had winds around 120 mph at landfall, and it moved inland near Gulf Shores. Ivan was the strongest Hurricane from Baldwin to Santa Rosa Counties in more than 100 years. 160 miles inland, near Demopolis, AL, a wind gust near 90 mph was recorded. Rain totals reached 15.75 inches in Pensacola, with a storm surge in Escambia Bay of 12 feet.
2005	7/10	3	Dennis	Hurricane Dennis carried winds of 121 mph at landfall, as it moved inland near Navarre Beach. Dennis had an extremely small eye and was only significant in a localized area. Dennis prompted a large-scale evacuation as it reached category four status in the Gulf of Mexico before it weakened near the central Gulf coast.
2005	8/29	3	Katrina	Hurricane Katrina had winds at landfall estimated at 120 mph. It moved inland near Waveland MS. Katrina was the costliest and one of the deadliest U.S. disasters. Hurricane Katrina produced a 27 ft. storm surge in Hancock County, MS, and breached levees in New Orleans. The highest storm surge along Mobile Bay reached 12 feet at the USS Alabama along I-10. The death toll was over 1,800.
2005	9/21	3	Rita	Rita was a destructive and deadly hurricane that devastated portions of southeastern Texas and southwestern Louisiana and significantly impacted the Florida Keys. After entering the Gulf of Mexico, Rita intensified from Category 2 to Category 5 in about 24 hours. The maximum sustained winds reached 165 mph late on September 21, and the hurricane reached a peak intensity of 180 mph early on September 22. Weakening began later that day and continued until landfall around 0740 UTC 24 September just east of the Texas/Louisiana border between Sabine Pass and Johnson's Bayou. At that time, maximum sustained winds were 115 mph (Category 3). Weakening continued after landfall, but Rita remained a tropical storm until reaching northwestern Louisiana late on 24 September. The cyclone then turned northeastward and merged with a frontal system two days later. Rita brought hurricane conditions to southwestern Louisiana and southeastern Texas.

YEAR	DATE	CATEGORY	NAME	NOTES
2008	9/13	3	Ike	Ike developed a large wind field as it moved northwestward across the Gulf of Mexico with tropical-storm-force winds extending up to 275 miles from the center and hurricane-force winds extending up to 115 miles from the center. The hurricane gradually intensified as it moved across the Gulf toward the Texas coast. Ike made landfall over the north end of Galveston Island in the early morning hours of September 13 as a Category 2 hurricane with maximum sustained winds of 110 mph. The hurricane weakened as it moved inland across eastern Texas and Arkansas and became extratropical over the middle Mississippi Valley on September 14. It then moved rapidly through the Ohio valley and into Canada, producing wind gusts to hurricane force along the way.
2018	10/10	5	Michael	Although Hurricane Michael made landfall near Mexico Beach, Florida, its expansive wind field produced tropical storm-force winds across Baldwin County . Impacts included downed trees and power lines, scattered roof and siding damage, minor coastal flooding, and hazardous marine conditions. Localized power outages occurred, particularly in coastal and near-coastal communities.
2020	9/16	2	Sally	Extremely slow-moving storms that produced historic rainfall totals, leading to severe freshwater flooding. Roads, neighborhoods, and critical facilities experienced prolonged inundations; wind damage and storm surge affected coastal communities. Sally caused significant wind damage and historic rainfall-induced flooding across Baldwin County. Sustained hurricane-force winds damaged roofs, structures, and utility systems. Rainfall was approximately 20-30 inches, resulting in widespread flooding, residential inundation. Prolonged power outages and long-term recovery challenges were reported.
2020	10/29	2	Zeta	Zeta was a fast-moving hurricane that delivered widespread wind damage across coastal Alabama. Impacts included downed trees, damaged roofs, structural impacts to manufactured housing, and extensive power outages affecting hundreds of thousands of customers. Coastal erosion and minor storm surge impacts were observed, though rainfall flooding was limited due to the storm's rapid forward speed.
2024	9/26	4	Helene	While Helene's center remained east of Alabama, its large circulation produced tropical storm-force winds, heavy rainfall, coastal flooding, and elevated storm surge along the Alabama Gulf Coast. Impacts included minor structural damage, localized flooding in low-lying coastal areas, hazardous marine conditions, and scattered power outages. Impacts were more pronounced along bays, inlets, and exposed coastal zones.

Source: National Hurricane Center

Past Occurrences of Severe Storms

Table E.3 – Past Occurrences of Severe Storm Events, 2005-2025

271 THUNDERSTORM & HIGH WIND event(s) were reported in **Baldwin County, Alabama** between **01/01/2005** and **01/01/2025**.

Mag: Magnitude

Dth: Deaths

Inj: Injuries

PrD: Property Damage

CrD: Crop Damage

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:						7	26	2.557M	0.00K
ORANGE BEACH	01/29/2005	09:25	CST	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
PERDIDO	03/26/2005	15:05	CST	Hail	1.00 in.	0	0	0.00K	0.00K
LOXLEY	03/27/2005	02:35	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
LOXLEY	03/27/2005	02:35	CST	Hail	0.75 in.	0	0	0.00K	0.00K
VAUGHN	03/27/2005	02:50	CST	Hail	1.00 in.	0	0	0.00K	0.00K
LOXLEY	04/01/2005	05:05	CST	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
FOLEY	04/06/2005	14:05	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BAY MINETTE	04/22/2005	20:26	CST	Hail	1.00 in.	0	0	0.00K	0.00K
BAY MINETTE	04/22/2005	21:23	CST	Hail	0.75 in.	0	0	0.00K	0.00K
WHITEHOUSE FORKS	04/26/2005	14:38	CST	Hail	1.75 in.	0	0	4.00K	0.00K
ELBERTA	04/30/2005	09:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
LOTTIE	05/24/2005	20:05	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
GULF SHRS	07/23/2005	11:13	CST	Lightning		2	0	0.00K	0.00K
DAPHNE	08/24/2005	14:00	CST	Lightning		0	0	0.00K	0.00K
PERDIDO BEACH	01/13/2006	09:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BAY MINETTE	01/17/2006	09:20	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
FAIRHOPE	04/21/2006	17:55	CST	Hail	0.75 in.	0	0	0.00K	0.00K
SEMINOLE	04/25/2006	17:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
WHITEHOUSE FORKS	05/08/2006	21:25	CST	Hail	0.88 in.	0	0	0.00K	0.00K
SEMINOLE	05/08/2006	22:05	CST	Thunderstorm Wind	55 kts. EG	0	0	10.00K	0.00K
SPANISH FT	05/09/2006	09:45	CST	Hail	0.88 in.	0	0	0.00K	0.00K
MALBIS	05/09/2006	10:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CROSSROADS	05/09/2006	12:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
WHITEHOUSE FORKS	05/09/2006	12:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
BAY MINETTE	05/23/2006	15:45	CST	Hail	0.88 in.	0	0	0.00K	0.00K
SILVERHILL	05/29/2006	14:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DAPHNE	05/29/2006	14:45	CST	Lightning		0	1	15.00K	0.00K
FOLEY	06/23/2006	12:45	CST	Hail	1.75 in.	0	0	0.00K	0.00K
GULF SHRS	06/23/2006	12:50	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
GULF SHRS	06/23/2006	13:25	CST	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
GULF SHRS	07/06/2006	10:09	CST	Lightning		0	1	0.00K	0.00K

ELBERTA	07/16/2006	08:30	CST	Lightning		1	0	0.00K	0.00K
FOLEY	07/20/2006	13:20	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
LOXLEY	08/08/2006	14:55	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ELBERTA	08/09/2006	12:30	CST	Hail	1.75 in.	0	0	0.00K	0.00K
SPANISH FT	08/15/2006	21:40	CST	Lightning		0	0	100.00K	0.00K
BAY MINETTE	08/30/2006	16:15	CST	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
BAY MINETTE	08/30/2006	16:45	CST	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
DAPHNE	10/17/2006	07:00	CST-6	Lightning		0	0	30.00K	0.00K
MIFLIN	11/15/2006	10:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
PERDIDO	05/11/2007	13:10	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
BELFOREST	05/13/2007	13:00	CST-6	Lightning		0	0	60.00K	0.00K
BELFOREST	05/13/2007	13:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
ROBERTSDALE	06/09/2007	15:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SUMMERDALE	06/09/2007	15:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
LOXLEY	06/09/2007	16:15	CST-6	Hail	1.75 in.	0	0	8.00K	0.00K
MALBIS	06/27/2007	14:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	07/11/2007	19:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
FAIRHOPE	07/11/2007	19:35	CST-6	Lightning		0	0	250.00K	0.00K
SPANISH FT	07/14/2007	14:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
BELFOREST	07/14/2007	14:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
MARLOW	08/09/2007	14:30	CST-6	Lightning		0	1	0.00K	0.00K
SPANISH FT	08/24/2007	14:22	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
LOXLEY	02/12/2008	17:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	55.00K	0.00K
DAPHNE	02/12/2008	17:30	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
GULF SHRS	03/01/2008	03:51	CST-6	Thunderstorm Wind	50 kts. EG	0	0	18.00K	0.00K
FAIRHOPE	05/15/2008	10:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
SUMMERDALE	05/15/2008	10:25	CST-6	Thunderstorm Wind	54 kts. EG	0	0	30.00K	0.00K
FOLEY	05/25/2008	14:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	06/29/2008	07:45	CST-6	Thunderstorm Wind	55 kts. EG	0	0	25.00K	0.00K
BAY MINETTE	12/24/2008	17:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ROBERTSDALE	03/27/2009	03:12	CST-6	Thunderstorm Wind	75 kts. MG	0	0	0.00K	0.00K
ROBERTSDALE	03/27/2009	03:15	CST-6	Thunderstorm Wind	104 kts. EG	0	0	125.00K	0.00K
ELSANOR	03/27/2009	21:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LOXLEY	04/13/2009	06:30	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DAPHNE	07/31/2009	03:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
SEMINOLE	08/04/2009	16:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
PHILLIPSVILLE	08/05/2009	14:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
PHILLIPSVILLE	08/05/2009	15:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
GULF SHRS	12/24/2009	17:38	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ELBERTA	06/18/2010	15:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	12.00K	0.00K
GULF SHRS	08/03/2010	10:30	CST-6	Lightning		0	2	0.00K	0.00K
HURRICANE	08/07/2010	17:50	CST-6	Lightning		1	0	0.00K	0.00K
DAPHNE	12/11/2010	23:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
GULF SHRS	01/18/2011	20:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K

FOLEY	02/01/2011	17:20	CST-6	Thunderstorm Wind	52 kts. EG	0	5	10.00K	0.00K
SEMINOLE	02/01/2011	17:51	CST-6	Thunderstorm Wind	52 kts. EG	0	5	0.00K	0.00K
FOLEY	06/06/2011	13:10	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SUMMERDALE	06/06/2011	13:20	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
SUMMERDALE	06/06/2011	13:32	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LOXLEY	07/02/2011	13:05	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
LOXLEY	07/02/2011	13:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ELBERTA	08/04/2011	22:40	CST-6	Lightning		0	1	0.00K	0.00K
FOLEY	08/24/2011	12:59	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SEMINOLE	02/18/2012	17:20	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
LILLIAN	02/18/2012	17:40	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
FOLEY	05/21/2012	18:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ELSANOR	05/30/2012	14:18	CST-6	Thunderstorm Wind	52 kts. EG	0	0	8.00K	0.00K
LOXLEY	06/05/2012	16:20	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
GULF SHRS	06/10/2012	09:00	CST-6	Lightning		0	1	0.00K	0.00K
SILVERHILL	07/03/2012	15:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	7.00K	0.00K
SUMMERDALE	07/04/2012	12:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
WHITEHOUSE FORKS	07/17/2012	17:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
DAPHNE	07/17/2012	18:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
FOLEY	07/30/2012	14:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	7.00K	0.00K
GULF SHRS	04/14/2013	09:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
FAIRHOPE	04/14/2013	10:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
DAPHNE	05/01/2013	12:53	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	07/22/2013	15:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	4.50K	0.00K
ROSINTON	07/22/2013	15:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	4.50K	0.00K
SEMINOLE	07/22/2013	16:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	4.50K	0.00K
BAY MINETTE	02/21/2014	02:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
ROBERTSDALE	04/14/2014	06:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
ELSANOR	05/28/2014	17:40	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
ELBERTA	12/23/2014	20:30	CST-6	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
FAIRHOPE	04/25/2015	14:20	CST-6	Thunderstorm Wind	50 kts. MG	0	0	90.00K	0.00K
POINT CLEAR	04/25/2015	14:24	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
SILVERHILL	04/25/2015	14:29	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
ROBERTSDALE	04/25/2015	14:30	CST-6	Thunderstorm Wind	61 kts. EG	0	0	120.00K	0.00K
FOLEY	04/25/2015	14:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
ROSINTON	04/25/2015	14:37	CST-6	Thunderstorm Wind	52 kts. EG	0	0	30.00K	0.00K
FOLEY	06/09/2015	09:55	CST-6	Lightning		0	0	5.00K	0.00K
FOLEY	06/23/2015	13:07	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FT MORGAN	07/05/2015	12:30	CST-6	Lightning		1	0	0.00K	0.00K
BRIDGEHEAD	07/17/2015	15:10	CST-6	Thunderstorm Wind	61 kts. EG	0	0	5.00K	0.00K
GULF SHRS	07/19/2015	12:55	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
SPANISH FT	08/09/2015	17:10	CST-6	Thunderstorm Wind	52 kts. EG	0	1	30.00K	0.00K
DYAS	01/21/2016	23:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
CROSSROADS	03/17/2016	19:28	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

SPANISH FT	03/17/2016	19:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CROSSROADS	03/17/2016	19:46	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	03/17/2016	19:54	CST-6	Thunderstorm Wind	61 kts. EG	0	0	30.00K	0.00K
MALBIS	03/17/2016	20:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K
FT MORGAN	05/20/2016	00:30	CST-6	Thunderstorm Wind	60 kts. MG	0	0	0.00K	0.00K
STOCKTON	05/20/2016	00:44	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K
BAY MINETTE	05/20/2016	00:44	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K
RABUN	06/17/2016	17:40	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
GULF SHRS	01/02/2017	14:47	CST-6	Thunderstorm Wind	70 kts. EG	0	1	950.00K	0.00K
FOLEY	01/21/2017	19:09	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ELBERTA	01/21/2017	19:18	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
FOLEY	01/22/2017	09:04	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
FOLEY	01/22/2017	09:51	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BAY MINETTE	02/07/2017	13:50	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
ELBERTA	02/07/2017	14:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
GULF SHRS	02/07/2017	15:55	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
BAY MINETTE	05/12/2017	12:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	20.00K	0.00K
PHILLIPSVILLE	05/12/2017	12:46	CST-6	Thunderstorm Wind	61 kts. ES	0	0	15.00K	0.00K
MIFLIN	07/26/2017	16:55	CST-6	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
GULF SHRS	07/26/2017	17:12	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
GULF SHRS	08/26/2017	14:45	CST-6	Lightning		1	5	0.00K	0.00K
BAY MINETTE	06/28/2018	18:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
STOCKTON	11/01/2018	06:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
BAY MINETTE	11/01/2018	06:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
STOCKTON	04/18/2019	18:36	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
DOUGLASVILLE	04/18/2019	18:59	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
SEMINOLE	04/18/2019	19:33	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
ROBERTSDALE	05/12/2019	07:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FOLEY MUNI ARPT	05/12/2019	07:19	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
GULF SHRS	05/12/2019	07:20	CST-6	Thunderstorm Wind	70 kts. MG	0	0	0.00K	0.00K
GULF SHRS	05/12/2019	07:24	CST-6	Thunderstorm Wind	63 kts. MG	0	0	0.00K	0.00K
SPANISH FT	06/07/2019	12:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	06/25/2019	15:06	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	06/27/2019	18:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DAPHNE	06/27/2019	18:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GULF SHRS	06/27/2019	18:36	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OAK	08/15/2019	14:00	CST-6	Lightning		1	0	0.00K	0.00K
TAYLORS CAMP	03/31/2020	10:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FT MORGAN	04/10/2020	00:18	CST-6	Thunderstorm Wind	58 kts. MG	0	0	0.00K	0.00K
MALBIS	04/19/2020	22:21	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
JACKSON OAK	04/19/2020	22:26	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LOXLEY	04/19/2020	22:33	CST-6	Thunderstorm Wind	64 kts. MG	0	0	0.00K	0.00K
BATTLES WHARF	04/19/2020	22:38	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	05/27/2020	10:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

BAY MINETTE	05/27/2020	10:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	05/27/2020	10:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
POINT CLEAR	06/23/2020	10:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DAPHNE	07/01/2020	15:31	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MONTROSE	07/01/2020	15:38	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	07/12/2020	19:04	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
PARK CITY	07/12/2020	19:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	07/12/2020	19:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
GULF SHRS	04/10/2021	02:10	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
GULF SHRS	04/10/2021	02:17	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ORANGE BEACH	04/10/2021	02:20	CST-6	Hail	4.00 in.	0	0	0.00K	0.00K
ROMAR BEACH	04/10/2021	02:25	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
ORANGE BEACH	04/10/2021	02:25	CST-6	Hail	3.00 in.	0	0	0.00K	0.00K
ORANGE BEACH	04/10/2021	02:25	CST-6	Hail	2.75 in.	0	0	0.00K	0.00K
JOSEPHINE	04/10/2021	02:30	CST-6	Hail	2.50 in.	0	0	0.00K	0.00K
LILLIAN	04/10/2021	02:40	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
SUMMERDALE	04/10/2021	05:45	CST-6	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
GULF SHRS	04/10/2021	05:54	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
MIFLIN	04/10/2021	05:57	CST-6	Thunderstorm Wind	60 kts. MG	0	0	0.00K	0.00K
FOLEY MUNI ARPT	04/15/2021	06:56	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STOCKTON	04/24/2021	04:12	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE MUNI ARP	04/24/2021	04:18	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	03/18/2022	09:37	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
FT MORGAN	03/22/2022	20:35	CST-6	Thunderstorm Wind	55 kts. MG	0	0	0.00K	0.00K
BAY MINETTE	04/17/2022	21:18	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MONTROSE	04/17/2022	21:22	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
FAIRHOPE	04/17/2022	21:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	04/17/2022	21:26	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROBERTSDALE	04/17/2022	21:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROBERTSDALE	04/17/2022	21:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TAYLORS CAMP	04/17/2022	21:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROBERTSDALE	04/17/2022	21:38	CST-6	Thunderstorm Wind	78 kts. EG	0	0	0.00K	0.00K
ROBERTSDALE	05/06/2022	02:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	05/06/2022	03:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	05/06/2022	03:00	CST-6	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
LOXLEY	05/14/2022	16:16	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
SUMMERDALE	05/15/2022	15:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ROBERTSDALE	05/15/2022	15:50	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
ROBERTSDALE	05/15/2022	15:51	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	05/15/2022	18:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRHOPE	06/10/2022	15:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MALBIS	06/25/2022	13:53	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FOLEY	06/30/2022	08:18	CST-6	Lightning		0	0	10.00K	0.00K
BON SECOUR	06/30/2022	08:30	CST-6	Lightning		0	0	10.00K	0.00K

FOLEY	06/30/2022	08:30	CST-6	Lightning		0	0	10.00K	0.00K
SUMMERDALE	06/30/2022	08:45	CST-6	Lightning		0	0	10.00K	0.00K
SPANISH FT	06/30/2022	09:12	CST-6	Lightning		0	0	10.00K	0.00K
WHITEHOUSE FORKS	07/11/2022	16:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
POINT CLEAR	08/08/2022	11:49	CST-6	Lightning		0	0	20.00K	0.00K
MONTROSE	01/25/2023	01:33	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	01/25/2023	01:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	01/25/2023	02:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PERDIDO	03/28/2023	00:30	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
PERDIDO	03/28/2023	00:40	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
ROMAR BEACH	04/13/2023	04:34	CST-6	Thunderstorm Wind	61 kts. EG	0	2	0.00K	0.00K
DAPHNE	04/15/2023	14:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SPANISH FT	04/15/2023	14:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MALBIS	04/15/2023	14:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	04/15/2023	14:15	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
ORANGE BEACH	04/15/2023	14:23	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FOLEY	04/27/2023	10:47	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BAY MINETTE	06/14/2023	19:41	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SILVERHILL	06/16/2023	07:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
PERDIDO	06/16/2023	07:16	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	06/16/2023	07:17	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
STOCKTON	06/16/2023	21:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BATTLES WHARF	06/16/2023	23:55	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
MALBIS	06/18/2023	09:38	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	06/18/2023	09:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SPANISH FT	06/22/2023	16:04	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DAPHNE	06/22/2023	16:06	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
BATTLES WHARF	06/26/2023	02:15	CST-6	Thunderstorm Wind	64 kts. MG	0	0	0.00K	0.00K
MALBIS	07/22/2023	14:17	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LOXLEY	07/22/2023	14:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
(BFM)MOBILE BROOKLEY	01/09/2024	04:26	CST-6	Thunderstorm Wind	63 kts. MG	0	0	0.00K	0.00K
ROBERTSDALE	01/09/2024	04:47	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SUMMERDALE	01/09/2024	04:53	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FOLEY	03/09/2024	02:10	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ELBERTA	03/09/2024	02:12	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
LILLIAN	03/09/2024	02:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
GASQUE	04/10/2024	10:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FT MORGAN	04/10/2024	10:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
MAGNOLIA SPGS	04/10/2024	10:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BAY MINETTE MUNI ARP	05/10/2024	02:15	CST-6	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
BAY MINETTE	05/10/2024	02:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	05/10/2024	02:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FOLEY	05/10/2024	02:41	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

FOLEY	05/10/2024	02:50	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
CARPENTER	05/13/2024	08:04	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DOUGLASVILLE	05/13/2024	08:15	CST-6	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
SPANISH FT	05/13/2024	08:22	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
TAYLORS CAMP	05/13/2024	08:40	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
FOLEY	05/13/2024	09:16	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROMAR BEACH	05/13/2024	09:58	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MIFLIN	05/17/2024	01:35	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
FAIRHOPE	05/17/2024	15:51	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BAY MINETTE MUNI ARP	02/16/2025	02:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MONTROSE	05/29/2025	08:36	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MONTROSE	05/29/2025	08:36	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FAIRHOPE	05/29/2025	08:39	CST-6	Thunderstorm Wind	58 kts. MG	0	0	0.00K	0.00K
BELFOREST	05/29/2025	08:43	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BELFOREST	05/29/2025	08:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BELFOREST	05/29/2025	08:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LOXLEY	05/29/2025	08:48	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BAY MINETTE	05/29/2025	09:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROMAR BEACH	05/29/2025	09:08	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
JOSEPHINE	05/29/2025	09:31	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
STEELWOOD	06/23/2025	16:35	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
Totals:						7	26	2.557M	0.00K

Source: National Climatic Data Center

Past Occurrences of Tornadoes

Table E.4 – Baldwin County Tornadoes, 2005-2025

32 TORNADO event(s) were reported in **Baldwin County, Alabama** between **01/01/2005** and **01/01/2025**.

Mag: Magnitude
Dth: Deaths
Inj: Injuries
PrD: Property Damage
CrD: Crop Damage

Location	Date	Time	LZ	Type	Mag	Dth	Inj	PrD	CrD
Totals:						0	3	574.00K	0.00K
FT MORGAN	08/28/2005	18:04	CST	Tornado	F0	0	0	4.00K	0.00K
RABUN	11/15/2006	08:48	CST-6	Tornado	F0	0	0	50.00K	0.00K
DYAS	11/15/2006	09:09	CST-6	Tornado	F1	0	0	100.00K	0.00K
ELBERTA	09/01/2008	12:05	CST-6	Tornado	EF0	0	0	20.00K	0.00K
ELSANOR	10/24/2010	20:10	CST-6	Tornado	EF1	0	0	45.00K	0.00K
SILVERHILL	03/09/2011	09:17	CST-6	Tornado	EF2	0	0	0.00K	0.00K
LILLIAN	09/04/2011	02:22	CST-6	Tornado	EF1	0	0	200.00K	0.00K
SUMMERDALE	06/21/2017	14:02	CST-6	Tornado	EF0	0	0	0.00K	0.00K
GULF SHRS	10/07/2017	12:58	CST-6	Tornado	EF0	0	0	0.00K	0.00K
ORANGE BEACH	10/07/2017	17:34	CST-6	Tornado	EF0	0	0	5.00K	0.00K
GASQUE	04/22/2018	14:05	CST-6	Tornado	EF0	0	0	25.00K	0.00K
OAK	04/22/2018	14:25	CST-6	Tornado	EF0	0	3	100.00K	0.00K
ELBERTA	04/22/2018	14:38	CST-6	Tornado	EF0	0	0	25.00K	0.00K
TAYLORS CAMP	04/19/2020	22:46	CST-6	Tornado	EF1	0	0	0.00K	0.00K
SUMMERDALE	03/22/2022	22:07	CST-6	Tornado	EF1	0	0	0.00K	0.00K
POINT CLEAR	03/30/2022	22:22	CST-6	Tornado	EF0	0	0	0.00K	0.00K

ROSINTON	03/30/2022	22:50	CST-6	Tornado	EF0	0	0	0.00K	0.00K
DAPHNE	05/06/2022	02:47	CST-6	Tornado	EF1	0	0	0.00K	0.00K
BON SECOUR	10/29/2022	16:10	CST-6	Tornado	EF0	0	0	0.00K	0.00K
MAGNOLIA SPGS	10/29/2022	16:16	CST-6	Tornado	EF1	0	0	0.00K	0.00K
GULF SHRS	10/29/2022	17:50	CST-6	Tornado	EF1	0	0	0.00K	0.00K
POINT CLEAR	10/29/2022	19:51	CST-6	Tornado	EF0	0	0	0.00K	0.00K
DAPHNE	10/29/2022	20:19	CST-6	Tornado	EF0	0	0	0.00K	0.00K
SPANISH FT	10/29/2022	20:29	CST-6	Tornado	EF1	0	0	0.00K	0.00K
LOXLEY	06/15/2023	23:21	CST-6	Tornado	EF0	0	0	0.00K	0.00K
TAYLORS CAMP	06/17/2023	15:30	CST-6	Tornado	EF0	0	0	0.00K	0.00K
WEEKS BAY	06/19/2023	12:00	CST-6	Tornado	EF1	0	0	0.00K	0.00K
STEELWOOD	01/09/2024	04:32	CST-6	Tornado	EF1	0	0	0.00K	0.00K
STEELWOOD	01/09/2024	04:35	CST-6	Tornado	EF1	0	0	0.00K	0.00K
BELFOREST	01/09/2024	04:38	CST-6	Tornado	EF0	0	0	0.00K	0.00K
SUMMERDALE	12/29/2024	00:47	CST-6	Tornado	EF1	0	0	0.00K	0.00K
ELBERTA	10/26/2025	21:52	CST-6	Tornado	EF1	0	0	0.00K	0.00K
Totals:						0	3	574.00K	0.00K

Source: National Climatic Data Center

Past Occurrences of Floods

Table E.6 – Baldwin County Floods, 2005-2025

133 FLOOD event(s) were reported in **Baldwin County, Alabama** between **01/01/2005** and **01/01/2025**.

Mag: Magnitude
Dth: Deaths
Inj: Injuries
PrD: Property Damage
CrD: Crop Damage

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:					2	1	28.792M	0.00K
CENTRAL PORTION	03/31/2005	19:00	CST	Flash Flood	0	0	10.00K	0.00K
SOUTH PORTION	04/01/2005	00:00	CST	Flash Flood	0	0	100.00K	0.00K
SOUTH PORTION	04/06/2005	17:30	CST	Flash Flood	0	0	150.00K	0.00K
CENTRAL PORTION	04/30/2005	08:15	CST	Flash Flood	0	0	0.00K	0.00K
WEST PORTION	07/06/2005	05:00	CST	Flash Flood	0	0	0.00K	0.00K
COUNTYWIDE	08/29/2005	12:00	CST	Flash Flood	0	0	0.00K	0.00K
CENTRAL PORTION	05/29/2006	15:30	CST	Flash Flood	0	0	0.00K	0.00K
EAST PORTION	06/16/2006	14:00	CST	Flash Flood	0	0	0.00K	0.00K
PERDIDO	11/15/2006	12:00	CST-6	Flash Flood	0	0	0.00K	0.00K
VAUGHN	04/01/2007	11:00	CST-6	Flash Flood	0	0	0.00K	0.00K
LILLIAN	05/30/2007	12:15	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	10/19/2007	07:30	CST-6	Flash Flood	0	0	100.00K	0.00K
LITTLE RIVER	10/23/2007	00:00	CST-6	Flash Flood	0	0	0.00K	0.00K
STOCKTON	01/31/2008	21:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	04/05/2008	02:00	CST-6	Flash Flood	0	0	10.00K	0.00K
MONTROSE	05/16/2008	08:30	CST-6	Flash Flood	0	0	10.00K	0.00K
SPANISH FT	08/25/2008	01:10	CST-6	Flash Flood	0	0	2.00K	0.00K
MONTROSE	09/01/2008	15:30	CST-6	Flash Flood	0	0	5.00K	0.00K
GULF SHRS	10/07/2008	04:45	CST-6	Flash Flood	0	0	0.00K	0.00K
ROBERTSDALE	12/10/2008	07:30	CST-6	Flash Flood	0	0	0.00K	0.00K
LOXLEY	03/28/2009	04:45	CST-6	Flash Flood	0	0	0.00K	0.00K
ORANGE BEACH	11/09/2009	23:30	CST-6	Flash Flood	0	0	0.00K	0.00K
BAY MINETTE	12/14/2009	17:42	CST-6	Flash Flood	0	0	0.00K	0.00K
BAY MINETTE	12/14/2009	19:55	CST-6	Flash Flood	0	0	0.00K	0.00K
CROSSROADS	12/14/2009	19:55	CST-6	Flash Flood	0	0	0.00K	0.00K
PERDIDO	12/15/2009	19:55	CST-6	Flash Flood	0	0	0.00K	0.00K
GASQUE	05/16/2010	08:00	CST-6	Flash Flood	0	0	0.00K	0.00K
GASQUE	05/16/2010	14:10	CST-6	Flash Flood	0	0	0.00K	0.00K
DAPHNE	05/02/2012	21:47	CST-6	Flash Flood	0	0	0.00K	0.00K
RIVER PARK	06/09/2012	13:33	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	07/04/2013	01:45	CST-6	Flash Flood	0	0	0.00K	0.00K
YUPON	07/11/2013	09:40	CST-6	Flash Flood	0	0	0.00K	0.00K

FAIRHOPE MUNI ARPT	07/11/2013	09:40	CST-6	Flash Flood	0	0	0.00K	0.00K
BARNWELL	07/11/2013	10:07	CST-6	Flash Flood	0	0	0.00K	0.00K
MONTROSE	07/11/2013	10:07	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	07/11/2013	10:10	CST-6	Flood	0	0	0.00K	0.00K
HOUSTONVILLE	07/11/2013	11:00	CST-6	Flash Flood	0	0	75.00K	0.00K
JOSEPHINE	07/28/2013	09:32	CST-6	Flash Flood	0	0	0.00K	0.00K
ROBERTSDALE	03/28/2014	09:02	CST-6	Flood	0	0	15.00K	0.00K
SUMMERDALE	03/28/2014	09:05	CST-6	Flood	0	0	0.00K	0.00K
POINT CLEAR	03/28/2014	09:05	CST-6	Flood	0	0	0.00K	0.00K
FOLEY	04/14/2014	19:30	CST-6	Flash Flood	0	0	0.00K	0.00K
TAYLORS CAMP	04/14/2014	19:30	CST-6	Flash Flood	0	0	100.00K	0.00K
TAYLORS CAMP	04/14/2014	19:30	CST-6	Flash Flood	0	0	25.00K	0.00K
FAIRHOPE	04/14/2014	19:30	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	04/14/2014	19:30	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	04/14/2014	19:30	CST-6	Flash Flood	0	0	0.00K	0.00K
MAGNOLIA SPGS	04/14/2014	21:00	CST-6	Flash Flood	0	0	0.00K	0.00K
SPANISH FT	04/29/2014	15:50	CST-6	Flash Flood	1	1	27.000M	0.00K
LILLIAN	05/02/2014	08:00	CST-6	Flood	1	0	0.00K	0.00K
FAIRHOPE	05/14/2014	13:30	CST-6	Flash Flood	0	0	0.00K	0.00K
MAGNOLIA SPGS	05/14/2014	13:30	CST-6	Flash Flood	0	0	0.00K	0.00K
ROMAR BEACH	02/23/2016	20:00	CST-6	Flash Flood	0	0	0.00K	0.00K
PERDIDO BEACH	02/23/2016	21:15	CST-6	Flood	0	0	0.00K	0.00K
SPANISH FT	05/02/2016	18:15	CST-6	Flash Flood	0	0	10.00K	0.00K
ROBERTSDALE	08/10/2016	13:15	CST-6	Flash Flood	0	0	0.00K	0.00K
BON SECOUR	08/12/2016	08:00	CST-6	Flood	0	0	0.00K	0.00K
ELBERTA	08/12/2016	10:15	CST-6	Flash Flood	0	0	0.00K	0.00K
BELFOREST	01/02/2017	19:00	CST-6	Flash Flood	0	0	600.00K	0.00K
ELSANOR	06/07/2017	00:00	CST-6	Flash Flood	0	0	0.00K	0.00K
GULF SHRS	06/20/2017	23:18	CST-6	Flash Flood	0	0	0.00K	0.00K
ORANGE BEACH	08/30/2017	07:30	CST-6	Flash Flood	0	0	0.00K	0.00K
MAGNOLIA SPGS	08/30/2017	07:40	CST-6	Flash Flood	0	0	0.00K	0.00K
LOXLEY	10/22/2017	16:40	CST-6	Flash Flood	0	0	30.00K	0.00K
SILVERHILL	10/22/2017	17:15	CST-6	Flash Flood	0	0	0.00K	0.00K
SILVERHILL	10/22/2017	17:15	CST-6	Flash Flood	0	0	0.00K	0.00K
MARLOW	10/22/2017	18:15	CST-6	Flash Flood	0	0	50.00K	0.00K
OAK	10/28/2017	00:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ELBERTA	10/28/2017	01:30	CST-6	Flash Flood	0	0	0.00K	0.00K
TURKEY BRANCH	09/05/2018	00:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ELSANOR	09/05/2018	00:00	CST-6	Flash Flood	0	0	0.00K	0.00K
MALBIS	09/05/2018	05:00	CST-6	Flash Flood	0	0	0.00K	0.00K
SEMINOLE	09/05/2018	15:00	CST-6	Flood	0	0	0.00K	0.00K
LILLIAN	12/01/2018	16:27	CST-6	Flash Flood	0	0	0.00K	0.00K
FT MORGAN	09/15/2020	19:07	CST-6	Flash Flood	0	0	0.00K	0.00K
BARNWELL	09/15/2020	22:00	CST-6	Flash Flood	0	0	0.00K	0.00K

MIFLIN	05/05/2021	05:00	CST-6	Flash Flood	0	0	0.00K	0.00K
SUMMERDALE	06/19/2021	06:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ORANGE BEACH	07/06/2021	07:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	07/07/2021	01:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	07/16/2021	11:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	07/16/2021	11:00	CST-6	Flash Flood	0	0	0.00K	0.00K
GULF SHRS	07/16/2021	13:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ORANGE BEACH	09/15/2021	13:05	CST-6	Flash Flood	0	0	0.00K	0.00K
JOSEPHINE	09/15/2021	13:05	CST-6	Flash Flood	0	0	0.00K	0.00K
PERDIDO BEACH	09/15/2021	13:45	CST-6	Flash Flood	0	0	250.00K	0.00K
FAIRHOPE	10/04/2021	07:05	CST-6	Flash Flood	0	0	0.00K	0.00K
MARLOW	10/04/2021	23:20	CST-6	Flash Flood	0	0	0.00K	0.00K
ROSINTON	12/10/2021	03:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FAIRHOPE	05/26/2022	08:45	CST-6	Flash Flood	0	0	250.00K	0.00K
DAPHNE	06/30/2022	09:38	CST-6	Flash Flood	0	0	0.00K	0.00K
PLATEAU	08/18/2022	09:30	CST-6	Flash Flood	0	0	0.00K	0.00K
BON SECOUR	08/24/2022	15:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	08/25/2022	07:00	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	04/27/2023	11:00	CST-6	Flash Flood	0	0	0.00K	0.00K
OAK	05/17/2023	15:04	CST-6	Flash Flood	0	0	0.00K	0.00K
LOXLEY	06/16/2023	03:00	CST-6	Flash Flood	0	0	0.00K	0.00K
MAGNOLIA SPGS	06/19/2023	12:07	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	06/19/2023	13:09	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	06/19/2023	13:59	CST-6	Flash Flood	0	0	0.00K	0.00K
OAK	06/19/2023	14:46	CST-6	Flash Flood	0	0	0.00K	0.00K
BARNWELL	06/19/2023	14:50	CST-6	Flash Flood	0	0	0.00K	0.00K
MAGNOLIA SPGS	06/19/2023	14:54	CST-6	Flash Flood	0	0	0.00K	0.00K
SUMMERDALE	05/13/2024	09:45	CST-6	Flash Flood	0	0	0.00K	0.00K
FOLEY	05/13/2024	09:45	CST-6	Flash Flood	0	0	0.00K	0.00K
SPANISH FT	04/06/2025	18:45	CST-6	Flash Flood	0	0	0.00K	0.00K
MALBIS	04/06/2025	19:00	CST-6	Flash Flood	0	0	0.00K	0.00K
PARK CITY	04/06/2025	19:33	CST-6	Flash Flood	0	0	0.00K	0.00K
PARK CITY	04/06/2025	20:05	CST-6	Flash Flood	0	0	0.00K	0.00K
MALBIS	04/06/2025	20:30	CST-6	Flash Flood	0	0	0.00K	0.00K
HOUSTONVILLE	08/13/2025	03:45	CST-6	Flash Flood	0	0	0.00K	0.00K
LILLIAN	10/26/2025	11:26	CST-6	Flash Flood	0	0	0.00K	0.00K
ORANGE BEACH	10/26/2025	12:20	CST-6	Flash Flood	0	0	0.00K	0.00K
Totals:					2	1	28.792M	0.00K

Source: National Climatic Data Center

Past Occurrences of Winter Storms/Freeze

Table E.7 – Baldwin County Extreme Cold and Winter Storm Events, 2005-2025

9 SNOW & ICE event(s) were reported in **Baldwin County, Alabama** between **01/01/2005** and **01/01/2025**.

Mag: Magnitude
Dth: Deaths
Inj: Injuries
PrD: Property Damage
CrD: Crop Damage

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:					0	0	0.00K	0.00K
BALDWIN INLAND (ZONE)	12/08/2017	21:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN CENTRAL (ZONE)	12/08/2017	21:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN CENTRAL (ZONE)	01/17/2018	23:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN COASTAL (ZONE)	01/17/2018	23:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN INLAND (ZONE)	01/17/2018	23:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN CENTRAL (ZONE)	01/16/2024	07:00	CST-6	Winter Weather	0	0	0.00K	0.00K
BALDWIN COASTAL (ZONE)	01/21/2025	07:30	CST-6	Heavy Snow	0	0	0.00K	0.00K
BALDWIN INLAND (ZONE)	01/21/2025	07:30	CST-6	Heavy Snow	0	0	0.00K	0.00K
BALDWIN CENTRAL (ZONE)	01/21/2025	07:30	CST-6	Heavy Snow	0	0	0.00K	0.00K
Totals:					0	0	0.00K	0.00K

Source: National Climatic Data Center

Appendix F

Identification and Analysis of Mitigation Measures

Appendix F – Identification and Analysis of Mitigation Measures

I. Alternative Mitigation Measures

This appendix documents the range of alternative mitigation measures considered by the Hazard Mitigation Planning Committee (HMPC) during development of the mitigation strategy and the selection of final action programs for each participating jurisdiction. This documentation demonstrates compliance with the federal requirement that mitigation plans identify and analyze “a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure” (44 CFR §201.6(c)(3)(ii)).

The following supporting materials are included in this appendix:

1. Types of Mitigation Measures: A comprehensive list of mitigation measures organized by program area, including Prevention, Property Protection, Public Education and Outreach, Natural Resources Protection, and Structural Projects. The HMPC used this framework as a reference in identifying and evaluating potential mitigation actions.
2. Table of Alternative Mitigation Measures: A summary table identifying each mitigation measure as an action or project, indicating whether it applies to new or existing buildings and infrastructure, and specifying the hazard impacts addressed by the measure.

The alternative mitigation measures described in this appendix are intended to address vulnerabilities within the built environment and to reduce potential loss of life and damage to buildings and infrastructure. Measures focused on disaster response, recovery, or preparedness were not included in this analysis. The hazard mitigation plan is not an emergency operations, response, or recovery plan; therefore, activities such as development of emergency response procedures, training or equipping emergency personnel, preparedness planning, or programs addressing mobile technological hazards or terrorism were excluded from the range of alternatives considered.

Consistent with the purpose of mitigation planning, the measures evaluated in this appendix emphasize long-term, sustained actions and projects designed to reduce hazard risk and lessen the need for future response and recovery efforts, rather than expanding operational response or recovery capabilities.

Consistent with current FEMA mitigation planning guidance, hazard mitigation is defined as any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. All mitigation measures presented in this appendix were evaluated for consistency with this definition and were determined to support long-term risk reduction objectives rather than short-term preparedness, response, or recovery activities.

II. Types of Mitigation Measures

Prevention Measures Prevention measures consist of adopting, administering, and enforcing ordinances, regulations, policies, programs, and plans that guide the location, design, and development of land and buildings to reduce exposure and vulnerability to natural hazards and, where applicable, human-caused hazards. These measures are intended to limit future development in high-risk areas and reduce potential losses before hazards occur.

- *Comprehensive Plans and Smart Growth.*

Comprehensive plans provide a long-range framework for land use, infrastructure, environmental protection, and community development. When informed by hazard mitigation planning, comprehensive plans can direct growth away from high-risk areas and promote safer, more sustainable development patterns. Incorporating Smart Growth principles—such as compact infill development, preservation of open space, protection of floodplains and coastal zones, and avoidance of hazardous location enhances a community’s ability to reduce future hazard losses. Integration of mitigation goals, objectives, and policies into the comprehensive plan ensures that hazard vulnerability informs decisions related to land use, infrastructure investment, and community facilities.

- *Capital Improvements Plans (CIP).*

Capital Improvements Plans support mitigation by prioritizing and scheduling public infrastructure investments over a multi-year timeframe, with identified funding sources. CIPs may include projects such as retrofitting or relocating vulnerable facilities, improving drainage systems, acquiring open space, and constructing emergency service facilities. Aligning CIP investments with the mitigation plan and comprehensive plan allows communities to direct growth, infrastructure timing, and public expenditures away from hazard-prone areas.

- *Zoning and Land Development Controls.*

Zoning ordinances and related land development regulations are primary tools for limiting development in hazardous areas. These controls may include density restrictions, use limitations, overlay districts, landscaping requirements, hillside development standards, and transfer-of-development-rights (TDR) programs. Such measures can discourage development in flood-prone, unstable, or environmentally sensitive areas while incentivizing growth in safer locations.

- *Subdivision Regulations.*

Subdivision regulations govern the division of land and can require identification of hazard areas on plats, establish minimum buildable lot sizes, and ensure adequate access, spacing, and fire protection. These regulations help reduce risks associated with flooding, landslides, sinkholes, and wildfire by incorporating hazard awareness into the earliest stages of development.

- *Building and Technical Codes.*

Modern building and technical codes establish construction standards that improve resistance to wind, flood, fire, seismic activity, and other hazards. Adoption and enforcement of current International Code Series standards, combined with site plan review during permitting, help ensure that new and substantially improved structures are designed and constructed to withstand hazard forces and reduce future damage.

- *Floodplain Management Programs.*

Participation in the National Flood Insurance Program (NFIP) requires communities to adopt and enforce floodplain management regulations based on Flood Insurance Rate Maps (FIRMs). Flood Insurance Studies and FIRMs provide the technical basis for regulating development in flood-prone areas. Communities may exceed minimum NFIP requirements by adopting higher regulatory standards, participating in the Community Rating System (CRS), and maintaining updated digital FIRMs. Enhanced flood plain management reduces flood risk while providing insurance cost savings and public awareness benefits.

- *Stormwater Management Regulations.*

Stormwater management controls address increased runoff caused by development outside floodplains. Regulations may require detention or retention basins, infiltration practices, erosion and sediment control measures, and low-impact development techniques, such as swales, permeable pavements, and vegetated buffers, to reduce flooding and protect drainage capacity.

- *Dam Safety Management.*

Dam safety programs focus on identifying inundation zones associated with dam failure, restricting development in these areas, and conducting regular inspections. Floodplain regulations may incorporate dam-failure scenarios to establish appropriate building elevations and land-use controls to reduce downstream risk.

- *Coastal Zone Management Regulations.*

Coastal zone management programs address erosion, sea-level rise, storm surge, and coastal land loss through coordinated land-use controls, sediment management, and development standards to protect coastal resources and reduce hazard exposure.

- *Open Space Requirements.*

The preservation of open space is an effective nonstructural mitigation strategy. Acquisition, easements, land dedication, and conservation agreements can protect floodplains, wetlands, and other hazard-prone areas while reducing runoff, preventing damage, and providing recreational and environmental benefits.

- *Additional Prevention Measures.*

Other prevention measures include open burning regulations to reduce wildfire risk; safe room and shelter requirements for vulnerable populations; public right-of-way maintenance regulations to protect drainage systems; critical facilities vulnerability assessments to identify retrofit needs; and use of Geographic Information Systems (GIS) and planning studies to support hazard analysis, mapping, and evaluation of mitigation alternatives. Advanced monitoring and modeling technologies may also be used to support long-term mitigation planning and risk reduction analysis.

- *Open Burning Regulations.*

Open burning regulations can be adopted and enforced to reduce wildfire risk, particularly during drought conditions when vegetation is highly susceptible to ignition. These measures limit ignition sources and reduce the likelihood of wildfire spreading in vulnerable areas.

- *Safe Room and Shelter Requirements.*

Some communities require safe rooms or shelters as part of new residential construction and mandate community shelters for manufactured home parks, apartment complexes, and other planned residential developments. These requirements reduce life-safety risks by providing hardened spaces designed to withstand high-wind and severe-weather hazards.

- *Public Right-of-Way Maintenance Regulations.*

Regulations governing public rights-of-way can support hazard mitigation by preventing dumping and debris accumulation in drainage ditches and stream channels, and requiring adjacent property owners to maintain these areas. Proper maintenance reduces drainage obstructions, minimizes localized flooding, and can also reduce wildfire risk by limiting combustible debris.

- *Critical Facilities Assessments.*

Critical facility assessments evaluate the vulnerability of essential facilities, including hospitals, schools, fire and police stations, emergency operations centers, and special-needs housing. These assessments identify structural and site-specific vulnerabilities and inform mitigation actions, including retrofits or relocations, to reduce damage and operational disruption during hazard events.

- *Geographic Information Systems (GIS).*

GIS technology supports hazard mitigation planning by integrating spatial data with mapping tools to analyze hazards, assets, and vulnerabilities. GIS datasets may include property information, socioeconomic data, critical facility inventories, and hazard locations. FEMA's HAZUS-MH model uses GIS-based methodologies to estimate potential losses from earthquakes, hurricane winds, and flooding and supports risk-informed mitigation decision-making.

- *Technology Programs.*

Advances in technology support mitigation planning through monitoring, modeling, and simulation capabilities. Systems such as the U.S. Geological Survey (USGS) and the National Weather Service (NWS) gauge networks provide data for flood forecasting and watershed analysis. Integrated monitoring systems—including rainfall, stream stage, wind, and remote camera data—can be used to model hazard scenarios, evaluate mitigation alternatives, and assess potential damage under simulated conditions, thereby supporting long-term risk-reduction strategies.

- *Planning Studies.*

Specialized planning studies may be conducted to evaluate mitigation alternatives for areas with unique hazard concerns. Examples include detailed flood hazard studies that update hydrologic and hydraulic models, generate revised flood profiles, and assess the economic feasibility of structural and nonstructural mitigation options; and geologic investigations to identify landslide-prone areas and recommend corrective measures.

Property Protection Measures

Property protection measures include actions that reduce damage to buildings, infrastructure, and their occupants by modifying existing structures or relocating them from hazard-prone areas. These measures include retrofitting structures to increase resistance to natural hazards and reduce risk to occupants; elevating, floodproofing, or otherwise protecting buildings; relocating vulnerable structures and populations from high-risk locations; and converting developed land to permanent open space through acquisition and demolition. Property protection measures provide long-term risk reduction by directly addressing exposure and vulnerability within the built environment.

- *Acquisition Projects.*

Acquisition of properties located in highly vulnerable hazard areas permanently reduces risk to life and property while providing environmental and community benefits through conversion to open space. Acquisition, followed by demolition and a deed restriction to create permanent open space, is an appropriate mitigation strategy for structures that have experienced repeated flood losses or recurring flood insurance claims. This approach may also be considered for older structures with finished floor elevations significantly below predicted flood elevations. Because acquisition can be costly, benefit-cost analysis is required to ensure that avoided damages justify project costs, and lower-cost alternatives should be evaluated where feasible.

- *Flood Proofing.*

Elevating flood-prone structures above the base flood elevation is an effective mitigation technique to prevent flood damage. Elevation is often less costly than acquisition or relocation and can preserve community continuity by avoiding vacant lots. Local flood plain regulations require elevation of new and substantially improved structures in special flood hazard areas, and elevation is a widely accepted flood-mitigation practice for existing buildings.

- ✓ *Dry Floodproofing:* Sealing a structure to prevent floodwater from entering by applying waterproof coatings, installing shields over openings, or using removable barriers.
- ✓ *Wet Floodproofing:* Allowing floodwaters to enter portions of a structure to equalize pressure and reduce structural damage; typically limited to unfinished or non-habitable areas such as garages or warehouses.
- ✓ *Barriers:* Installation of small levees, floodwalls, or berms to redirect or block shallow floodwater from reaching structures.
- ✓ *Additional Measures:* Relocating valuable contents to higher elevations or redesigning floodable areas can significantly reduce damage at relatively low cost.

- *Building Retrofits.*

Existing structures may be retrofitted to reduce vulnerability to multiple hazards. Retrofit measures include adding roof straps or braces to resist high winds, removing hazardous overhangs, installing storm shutters or impact-resistant window treatments, and anchoring major appliances or contents. These measures strengthen buildings and reduce damage from hurricanes, severe storms, earthquakes, and other hazards.

- *Building Relocations.*

Relocating structures from high-risk areas such as floodplains, dam-failure inundation zones, landslide-prone slopes, or areas subject to land subsidence permanently reduces exposure to hazards. Because relocation is expensive and disruptive, it is generally reserved for situations where other mitigation options are not feasible or cost-effective.

- *Critical Facilities Protection.*

Protecting critical facilities is essential to maintain community lifelines during hazard events. Mitigation actions may include retrofitting or relocating existing facilities located in high-risk areas and ensuring that new facilities are sited and designed to withstand anticipated hazards. Protection efforts extend beyond buildings to include utilities, transportation infrastructure, and other essential systems.

- *Emergency Power Generation.*

Reliable backup power is necessary to maintain operations at critical facilities during power outages caused by severe storms or other hazards. Installation of permanent or portable generators supports continuity of operations for emergency services, healthcare facilities, water and wastewater systems, and facilities serving vulnerable populations, reducing secondary impacts and service disruptions.

- *Sewer Backup Protection.*

Heavy rainfall and stormwater overloads can cause sanitary sewer backups into structures. Mitigation measures include eliminating improper connections to sanitary systems, directing stormwater away from buildings, and installing protective devices such as floor drain plugs, standpipes, overhead sewer systems, and backflow prevention valves. These actions reduce interior flooding and property damage during heavy rain events.

Public Education and Awareness

Public education and awareness measures inform and engage the public about local hazard risks and the actions available to reduce potential threats to life, property, and infrastructure. These measures support long-term risk reduction by encouraging informed decision-making and voluntary adoption of mitigation practices.

- *Community Hazard Mitigation Plan Distribution.*

Mitigation plans and summary materials may be distributed through electronic platforms, including websites and downloadable files, as well as through printed materials such as summary brochures or inserts in local publications. Broad dissemination ensures public access to hazard information and mitigation priorities.

- *Flood Map Information.*

Flood Insurance Rate Maps (FIRMs) developed by FEMA delineate flood hazard areas and provide critical information on flood risk. Participating National Flood Insurance Program (NFIP) communities may make flood map information available to real estate professionals, builders, developers, and property owners to support informed property and development decisions.

- *Outreach Projects.*

Outreach initiatives proactively provide hazard and mitigation information to the public and encourage protective actions. Effective outreach emphasizes not only awareness of hazards, but also practical steps residents and businesses can take to reduce risk. Locally designed outreach efforts may include newsletters, targeted mailings, public displays, media features, informational videos, community presentations, and locally tailored guidance materials.

- ✓ Articles on hazard mitigation are published in city or county government newsletters.
- ✓ Targeted notices to residents in flood-prone areas encouraging consideration of flood insurance coverage.
- ✓ Informational displays at public buildings, shopping centers, festivals, fairs, and other community venues, including maps, brochures, and hazard mitigation handouts.
- ✓ Newspaper articles and special sections addressing hazards.

- ✓ Radio and TV news releases and interviews addressing hazard risks and mitigation actions.
 - ✓ Educational floodproofing videos for cable TV programs or made available to community organizations.
 - ✓ Locally tailored property owner handbooks describing hazard risks and practical mitigation options.
 - ✓ Presentations and briefings delivered at neighborhood association meetings or other community gatherings.
- *Hazard Insurance Awareness.*

Public education efforts may promote awareness of hazard insurance options, including flood insurance available through the NFIP and additional coverage options for other hazards such as earthquakes, landslides, or sinkholes. Outreach should emphasize that flood risk may extend beyond mapped flood hazard areas and that insurance can help reduce financial risk.
 - *Real Estate Disclosure.*

Early disclosure of hazard-related information during real estate transactions allows prospective buyers to understand risks and consider mitigation options prior to purchase. State laws, local practices, and coordination with real estate professionals can enhance early access to flood and hazard information.
 - *Library.*

Libraries and other public facilities may serve as repositories for hazard mitigation information, including maps, guidance documents, and educational materials. These resources can supplement other public outreach efforts.
 - *Technical Assistance.*

Local governments and partner agencies may provide technical assistance to property owners regarding mitigation options, such as one-on-one consultations or site-specific hazard audits. These services help translate general mitigation concepts into actionable property-level solutions

- *Education Programs.*

Educational programs for children and adults can increase long-term hazard awareness and promote a culture of resilience. Programs may be delivered through schools, community organizations, parks and recreation programs, conservation groups, or public signage and materials.

- *Mass Media Relations.*

Use of traditional and digital media—including newspapers, radio, television, websites, social media, podcasts, and video platforms—supports widespread dissemination of mitigation information. Coordinated media engagement enhances the reach and effectiveness of public education campaigns.

- *NOAA Weather Radio Programs.*

Promotion of weather radios for homes and businesses supports hazard awareness and early warning. Some communities may partner with sponsors or organizations to distribute radios at reduced or no cost as part of a broader public education initiative.

Natural Resources Protection Measures

Natural resource protection measures involve the preservation, restoration, and management of natural systems to reduce the impacts of hazards and support sustainable community development. These measures maintain and enhance the natural functions of floodplains, wetlands, coastal areas, watersheds, and other environmentally sensitive features, thereby mitigating hazards while balancing environmental constraints with the social and economic needs of the community.

- *Wetlands Protection.*

Wetlands provide natural flood storage, reduce downstream flood peaks, and improve water quality through filtration. Development within wetlands is regulated by federal and state agencies, including, where applicable, the U.S. Army Corps of Engineers. Local wetland protection ordinances may further restrict development to preserve these natural functions. When impacts cannot be avoided, mitigation techniques, such as wetland restoration or creation at alternative sites, may be required to offset losses.

- *Open Space Easements and Acquisitions.*

Conservation easements and fee-simple acquisitions of environmentally sensitive lands—including floodplains, wetlands, and steep slopes—provide permanent protection and reduce future hazard exposure. Lands may be acquired or protected by public agencies or land trusts to support public safety, environmental conservation, and community resilience. Voluntary land dedication or easements may also provide tax benefits to property owners.

- *River and Stream Corridor Restoration and Protection.*

Protection and restoration of riverbanks, stream channels, and riparian buffers enhance natural flood management, reduce erosion, and filter stormwater runoff. Preventing dumping and encroachment within stream corridors preserves hydraulic capacity and water quality. Greenways and linear parks along waterways can provide compatible recreational uses while maintaining natural mitigation functions.

- *Urban Forestry Programs.*

Urban forestry programs support hazard mitigation by maintaining healthy tree canopies in public rights-of-way and developed areas. Programs aligned with recognized standards, such as the Tree City USA principles, can reduce wildfire risk, control erosion, stabilize slopes, mitigate urban heat island effects, and support the restoration of stream and river corridors. Landscaping regulations may extend these benefits to private development.

- *Water Resources Conservation Programs.*

Water conservation programs protect the water supply and quality and reduce vulnerability to drought conditions. Conservation measures support long-term resilience by managing demand and preserving critical water resources.

- *Dune and Beach Restoration.*

Dune and beach restoration and maintenance enhance natural protection against coastal flooding, storm surge, and erosion. Dunes function as natural barriers that absorb wave energy and reduce inland impacts from hurricanes and severe coastal storms.

Structural Projects Measures

Structural project measures consist of engineered modifications to natural systems, public infrastructure, and the built environment designed to reduce the potential impacts of natural hazards on a community. These measures include the construction, enhancement, or retrofitting of structural systems intended to control, redirect, or withstand hazard forces and provide long-term risk reduction for people, property, and critical infrastructure.

- *Reservoirs.*

Reservoirs reduce flooding by temporarily storing excess water behind dams or within engineered storage basins and releasing it at controlled rates that downstream channels can safely convey. These projects are most effective in deeper valleys or smaller watersheds and may be the only feasible option to protect development located near a watercourse. Reservoirs may include purpose-built impoundments, excavated basins, or repurposed sites such as abandoned quarries. Reservoir projects require careful consideration due to their high cost, land requirements, maintenance needs, potential environmental impacts, and the possibility of being exceeded by floods larger than their design capacity. As such, reservoirs should be pursued only after a comprehensive watershed analysis to ensure they do not increase flood risk elsewhere. These projects are typically implemented with state or federal assistance, such as through the U.S. Army Corps of Engineers.

- *Levees and Floodwalls.*

Levees (earthen embankments) and floodwalls (engineered barriers constructed of concrete, steel, or similar materials) are structural barriers designed to prevent floodwaters from reaching developed areas. These measures can provide significant protection when properly designed, constructed, and maintained.

- *Diversions.*

Diversions redirect excess floodwater away from vulnerable areas by conveying flows through alternate channels, overflow weirs, or tunnels. Under normal conditions, water remains in the primary channel; during flood events, excess flows are diverted to reduce flooding along the original watercourse.

- Channel Modifications.

Channel modifications involve widening, deepening, straightening, or smoothing stream channels to increase conveyance capacity. While these measures can reduce localized flooding, careful analysis is required to avoid increasing downstream flood risk.

- Dredging.

Dredging restores channel capacity by removing accumulated sediments and debris from streambeds. Although dredging may improve flood conveyance in the short term, it can be costly, requires disposal of dredged materials, and may need to be repeated if sediment deposition continues.

- Drainage Modifications.

Drainage modifications include construction or improvement of ditches, culverts, and stormwater conveyance systems in areas where natural drainage is inadequate. These projects are typically designed to manage runoff from smaller, more frequent storm events.

- Storm Sewer Improvements.

Storm sewer mitigation projects may include installing new systems, enlarging undersized pipes, improving roadway drainage, or adding backflow prevention devices. Because storm sewers convey water rapidly, improvements should be limited to locations where receiving waterways can accommodate increased flows without adverse impacts. In some cases, allowing streets to temporarily store runoff during larger storm events may be more effective and cost-efficient than expanding sewer capacity.

- Drainage System Maintenance.

Routine maintenance of streams, drainage channels, culverts, bridges, and stormwater facilities is essential to preserve conveyance capacity and system performance. Maintenance activities may include sediment removal, vegetation management, debris clearance, and bank stabilization. Proper maintenance can also reduce wildfire risk by removing dead vegetation and fallen trees.

- *Dam Modifications.*

Structural modifications to existing dams, such as enlarging spillways or providing structural reinforcements, can reduce the risk of dam failure and associated downstream flooding. In some cases, removal of unsafe or obsolete dams may be the most effective mitigation option.

- *Ground Stabilization.*

Engineering techniques may be applied to stabilize slopes or subsurface conditions in areas prone to landslides or sinkholes, thereby reducing the likelihood of ground failure and structural damage.

- *Community Storm Shelter and Safe Room Construction.*

Construction of freestanding community storm shelters or safe rooms integrated into existing buildings provides protection from tornadoes, hurricanes, and severe storms. These facilities are designed to withstand extreme wind forces and offer life-safety protection during hazard events.

Appendix G

Committee Meeting Documents

Appendix G – Committee Meeting Documentation

I. Establishment of Hazard Mitigation Planning Committee

The Hazard Mitigation Planning Committee (HMPC) was originally established to guide development of the 2004 Baldwin County Hazard Mitigation Plan, and this continued for the 2026 plan. The HMPC serves as the primary mechanism for coordinating and documenting participation by all jurisdictions, agencies, and stakeholders involved in the multi-jurisdictional planning process.

During the 2026 update, the HMPC met regularly throughout the plan development period. These meetings served as open public forums for identifying hazards affecting Baldwin County communities and for collaboratively developing mitigation strategies to reduce those risks. Each participating jurisdiction maintains representation on the HMPC, ensuring consistent engagement and local input throughout the planning process.

In addition to jurisdictional representatives, HMPC membership was expanded to include state and federal partners, regional agencies, and other organizations with mitigation-related responsibilities or expertise. This expanded participation enhanced interagency coordination and supported a whole-community approach to mitigation planning. All HMPC meetings were open to the public, and opportunities for public involvement were provided throughout the drafting process.

II. Committee Meetings and Sign-in Sheets

This appendix documents the HMPC's meeting activities conducted during the development of this plan, including participating members and agencies. Materials in this appendix include meeting agendas and sign-in sheets that demonstrate stakeholder involvement throughout the planning process.

In addition, prior to the formal plan update period, the HMPC conducted periodic reviews of the mitigation plan in accordance with the plan maintenance procedures outlined in Chapter 7, *Plan Maintenance*. Documentation associated with these meetings is also included in this appendix. Official meeting minutes are maintained on file at the Baldwin County Emergency Management Agency (EMA).

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations Center

Upstairs Training Room (WebEx, limited)

23100 McAuliffe Drive

Robertsdale, AL 36567

Thursday, April 20, 2023

0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks – Chairperson Brandan Franklin
- III. Old Business
 - A. Approval of Minutes from the 01/19/2023 Meeting
 - B. DR-4632 HMGP Applications Update
 - C. DR-4563 HMGP Applications Update-RFIs
 - i. Updated cost estimates, appraisals, and benefit cost analysis
- IV. New Business
 - A. Hazard Mitigation Plan – Checkup
 - i. Does anyone have/need any revisions or additions?
 - B. Mitigation Minute: Discussion of the Hazard Mitigation Assistance (HMA) Guidance.
 - i. Video summary of updates - <https://www.youtube.com/watch?v=D0Ykm-gQxso>
 - ii. Summary of Changes (attached)
- V. Comments and Questions from the Full Body
- VI. Announce Next Meeting Date – **July 20, 2023** - and Adjourn

HAZARD MITIGATION PLANNING COMMITTEE			
Meeting Location:	BCEMA – WebEx and Upstairs Training Room	Meeting Date:	Thursday, April 20, 2023 – 9:00 AM
Facilitator:	HMPC Chair – Brandan Franklin	Place/Room:	Baldwin County EOC-Upstairs Training Room + WebEx

Name:	Vernon Dandridge	Email:	vernon.dandridge@baldwincounty.al.gov
Company:	BCEMA	Phone:	251-753-7740
		Job:	Planning & Grants Div. Mang.
Name:	Danon Smith	Email:	donan.smith@baldwincounty.al.gov
Company:	BCEMA	Phone:	251-972-8510
		Job:	Emergency Management Officer
Name:	Dalton Hamby	Email:	dalton.hamby@baldwincounty.al.gov
Company:	BCEMA	Phone:	251-972-6807
		Job:	EM Specialist
Name:	Brandan Franklin	Email:	bfranklin
Company:	City of Gulf Shores	Phone:	
		Job:	
Name:	Eddie Culpepper -online	Email:	X
Company:		Phone:	
		Job:	
Name:	Anna Buford -online	Email:	
Company:		Phone:	
		Job:	
Name:	Nicole Woerner -online	Email:	
Company:		Phone:	
		Job:	
Name:	Logan Eberly -online	Email:	
Company:		Phone:	
		Job:	
Name:	Tosh Newman -online	Email:	
Company:		Phone:	
		Job:	

HAZARD MITIGATION PLANNING COMMITTEE			
Meeting Location:	BCEMA – WebEx and Upstairs Training Room	Meeting Date:	Thursday, April 20, 2023 – 9:00 AM
Facilitator:	HMPC Chair – Brandan Franklin	Place/Room:	Baldwin County EOC-Upstairs Training Room + WebEx

	Name: Janie Simer - online	Email:	
	Company: BCC - Building Dept.	Phone:	Job:
	Name: Brian Underwood -online	Email:	
	Company: BCC - Grants	Phone:	Job:
	Name: Karen Giordano	Email: karen.giordano@baldwincountyal.gov	
	Company: BCEMA	Phone: 912-6807	Job: Admin Asst.
	Name:	Email:	
	Company:	Phone:	Job:
	Name:	Email:	
	Company:	Phone:	Job:
	Name:	Email:	
	Company:	Phone:	Job:
	Name:	Email:	
	Company:	Phone:	Job:
	Name:	Email:	
	Company:	Phone:	Job:

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations Center
Ops. Room
23100 McAuliffe Drive
Robertsdale, AL 36567
Thursday, July 20, 2023
0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 04/20/2023 Meeting
 - B. DR-4632 HMGP Applications Update
 - C. DR-4563 HMGP Applications Update-RFIs
- IV. New Business
 - A. Hazard Mitigation Plan – Checkup
 - i. Does anyone have/need any revisions or additions?
 - B. Website Update/Renovation
 - C. Meeting Schedule
- V. Comments and Questions from the Full Body
- VI. Announce Next Meeting Date – **October 19, 2023** - and Adjourn

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations
Center Upstairs Training Room

23100 McAuliffe Drive

Robertsdale, AL 36567

Thursday, January 18, 2024

0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 10/20/2023 Meeting
 - B. DR-4632 HMGP Applications- Update
 - C. DR-4563 HMGP Applications- Update
 - D. Request for AEMA/FEMA conference call- Update
- IV. New Business
 - A. Vacant Officer Position
 - B. HMA Guidance Changes Summary Highlights
 - C. Hazard Mitigation Plan – Checkup
- V. Comments and Questions from the Full Body
- VI. Adjourn Next Meeting Date – April 18, 2024

17. VERNON Dandridge BCEMA
 18- Tom Tyler BCEMA

HAZARD MITIGATION PLANNING COMMITTEE			
Meeting Location:	BCEMA – WebEx and Upstairs Training Room	Meeting Date:	Thursday, January 18, 2024 – 9:00 AM
Facilitator:	HMPC Chair – Brandan Franklin	Place/Room:	Baldwin County EOC-Upstairs Training Room + WebEx

1	Name: Bradley Cooper	Email:	
	Company: ADPH	Phone:	Job:
2	Name: Mark Acreman	Email: mark.acreman@baldwincountyal.gov	
	Company: BC Highway	Phone: 251-269-7350	Job: Asst. County Eng.
3	Name: Michelle Pennington	Email: michelle.pennington@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-620-1561	Job: EM Specialist
4	Name: Jesi Ward	Email: jward@daphneal.com	
	Company: City of Daphne	Phone: 251-620-1561	Job:
5	Name: Natalie Roberts	Email: nroberts@belforestfiredepartment.com	
	Company: Belforest VFD	Phone: 251-509-1465	Job: R + R
6	Name: A. Cinco	Email: acinco@belforestfiredepartment.com	
	Company: BVFD	Phone: (707) 685-6518	Job: Grant Admin
NEBEX 7	Name: Alex Godfrey	Email:	
	Company:	Phone:	Job:
8	Name: Brian Underwood	Email:	
	Company: BCC	Phone:	Job:
9	Name: Janie Joiner	Email:	
	Company: BC Bldg. Dept.	Phone:	Job:

over. →

10 Kathryn Byrd BE E-911

11 Daron Smith BEEMA

12 Karen Giordano BEEMA

13 Josh Newman Daphne

14 Logan Eberly Foley

15 Mariam Boone Foley

16 Anna Odom ADPH

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations
Center Upstairs Training Room

23100 McAuliffe Drive

Robertsdale, AL 36567

Thursday, July 18, 2024

0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 04/18/2024 Meeting
 - B. HMGP Applications- Update
 - AEMA/FEMA
- IV. New Business
 - A. Executive Committee Nominations
 - B. Hazard Mitigation Plan
- V. Comments and Questions from the Full Body
- VI. Adjourn Next Meeting Date – October 17, 2024

SIGN-IN SHEET – HMPC MEETING			
Meeting Location:		Baldwin County EOC	Meeting Date: Thursday, July 18, 2024
Facilitator:		HMPC Chair: Brandan Franklin	Place/Room: EOC UPSTAIRS TRAINING ROOM

1	Name: Anna Odom	Email: anna.odom@adph.state.al.us	
	Company: ADPH/HCC	Phone: 251-979-5855	Job: Healthcare Coalition Coordinator
2	Name: Nicole Woerner	Email: nwoerner@orangebeach.al.gov	
	Company: City of OB	Phone: 251-747-7176	Job: EMC
3	Name: Jesi Ward	Email: jward@daphneal.com	
	Company: City of Daphne	Phone: 251-243-5182	Job: EPM
4	Name: Brian Underwood (Virtual)	Email:	
	Company: Baldwin County Commission	Phone:	Job: Grant Director
5	Name: Logan Eberly (Virtual)	Email:	
	Company:	Phone:	Job:
6	Name: Janie Joiner (Virtual)	Email:	
	Company: Baldwin County Building Dept.	Phone:	Job:
7	Name: Josh Newman (Virtual)	Email:	
	Company: City of Daphne	Phone:	Job:
8	Name: DJ Hart (Virtual)	Email:	
	Company: Baldwin County Building Dept.	Phone:	Job:
9	Name: Erik Cortinas (Virtual)	Email:	
	Company: City of Fairhope	Phone:	Job:

SIGN-IN SHEET – HMPC MEETING			
Training Location:		Baldwin County EOC	Meeting Date: Thursday, July 18, 2024
Facilitator:		HMPC Chair: Brandan Franklin	Place/Room: EOC UPSTAIRS TRAINING ROOM

10	Name:	Brandan Franklin (Virtual)		Email:	
	Company:	City of Gulf Shores	Phone:		Job:
11	Name:	Karen Giordano (Virtual)		Email:	
	Company:	Baldwin County EMA	Phone:		Job:
12	Name:			Email:	
	Company:		Phone:		Job:
13	Name:			Email:	
	Company:		Phone:		Job:
14	Name:			Email:	
	Company:		Phone:		Job:
15	Name:			Email:	
	Company:		Phone:		Job:
16	Name:			Email:	
	Company:		Phone:		Job:
17	Name:			Email:	
	Company:		Phone:		Job:
18	Name:			Email:	
	Company:		Phone:		Job:

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations Center
Upstairs Training Room
23100 McAuliffe Drive
Robertsdale, AL 36567
Friday, November 8, 2024
0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 07/18/2024 Meeting
 - B. HMGP Applications- Update
 - HMGP DR 4503 (Covid)
 - HMGP DR 4563 (Sally)
 - Grant Process Accountability Letter
 - C. Updated Contact List
- IV. Presentation
 - A. Flood Hazard Management Plan
 - Public Announcement of Plan Process Update
- V. New Business
 - A. Executive Committee Members
 - Nominations
 - Elections
 - B. Hazard Mitigation Plan
 - Jurisdiction Action Plans
 - C. Mitigation Grants Opportunities
 - FMA
 - BRIC
 - CDBG-DR Sally & Zeta
- VI. Comments and Questions from the Full Body
- VII. Adjourn Next Meeting Date – **January 16, 2025**

SIGN-IN SHEET – HMPC MEETING				
Meeting Location:		Baldwin County EOC		Meeting Date: Friday, November 8, 2024
Facilitator:		HMPC Chair: Brandan Franklin		Place/Room: EOC UPSTAIRS TRAINING ROOM

1	Name: <i>Brandan Franklin</i>	Email: <i>bfranklin@gulfshoresal.gov</i>	
	Company: <i>City of Gulf Shores</i>	Phone: <i>251-269-7363</i>	Job: <i>EM Coord.</i>
2	Name: <i>Nikhil Woerner</i>	Email: <i>nwoerner@orangebeachal.gov</i>	
	Company: <i>COB</i>	Phone: <i>251-981-1180</i>	Job: <i>EM Coord</i>
3	Name: <i>Adam Roberson</i>	Email: <i>aroberson@orangebeachal.gov</i>	
	Company: <i>City of Orange Beach</i>	Phone: <i>251-981-2610</i>	Job:
4	Name: <i>Zachary Balle</i>	Email: <i>zachary.balle@baldwincountyal.gov</i>	
	Company: <i>BCHD</i>	Phone: <i>251-487-0254</i>	Job: <i>GIS Coordinator</i>
5	Name: <i>Shannon Spivey</i>	Email: <i>sspivey@baldwincountyal.gov</i>	
	Company: <i>BCC Service Center</i>	Phone: <i>251-920-4014</i>	Job:
6	Name: <i>Bradley Cooper</i>	Email: <i>bradley.cooper@dph.state.al.us</i>	
	Company: <i>ADPH - SW EP</i>	Phone: <i>205-459-6056</i>	Job: <i>EP Coordinator</i>
7	Name: <i>Josh Newman</i>	Email: <i>joshua.newman@baldwincountyal.gov</i>	
	Company: <i>County P&Z</i>	Phone:	Job:
8	Name: <i>Jesi Ward</i>	Email: <i>jward@daphneal.com</i>	
	Company: <i>City of Daphne</i>	Phone: <i>251-243-5182</i>	Job: <i>EPM</i>
9	Name: <i>Tom Tyler</i>	Email: <i>tom.tyler@baldwincountyal.gov</i>	
	Company: <i>BCEMA</i>	Phone: <i>251-525-6556</i>	Job: <i>Dir</i>

SIGN-IN SHEET – HMPC MEETING			
Training Location:	Baldwin County EOC	Meeting Date:	Friday, November 8, 2024
Facilitator:	HMPC Chair: Brandan Franklin	Place/Room:	EOC UPSTAIRS TRAINING ROOM
10	Name: Janie Joiner Company: BCE Building Dept.	Email: janie.joiner@baldwincountyal.gov Phone: 251-232-0102	Job: Hazard Mitigation Coord.
11	Name: Corey Flowers Company: BCE Building Dept	Email: Corey.Flowers@baldwincountyal.gov Phone: 251-635-6340	Job: CRG Coordinator
12	Name: Daren Smith Company: BCEMA	Email: daren.smith@baldwincountyal.gov Phone: 251-972-8510	Job: Deputy Director
13	Name: Doug Hatten Company: BCEMA	Email: doug.hatten@baldwincountyal.gov Phone: 251-972-6807	Job: Operations Division Manager
14	Name: Amanda Thweatt Company: BCEMA	Email: Athweatt@baldwincountyal.gov Phone: 251-465-0118	Job: EM Specialist - Operations
15	Name: Michelle Pennington Company: BCEMA	Email: michelle.pennington@baldwincountyal.gov Phone: 251-504-7820	Job: EM Specialist
16	Name: Company:	Email: Phone:	Job:
17	Name: Company:	Email: Phone:	Job:
18	Name: Company:	Email: Phone:	Job:

Baldwin County
Hazard Mitigation Planning Committee
Full Body

Meeting Location & Time:

Baldwin County EMA / Emergency Operations Center
Upstairs Training Room
23100 McAuliffe Drive
Robertsdale, AL 36567
Thursday, January 16, 2025
0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 11/8/2024 Meeting
 - B. HMGP Applications- Update
 - HMGP DR 4563 (Sally)
- IV. New Business
 - A. Hazard Mitigation Plan
 - Jurisdiction Action Plans
 - Hazard Mitigation Plan Implementation Status Surveys
- V. Comments and Questions from the Full Body
- VI. Adjourn Next Meeting Date – April 17, 2025

IN PERSON 12
VIRTUAL 2

SIGN-IN SHEET – HMPC MEETING			
Training Location:	Baldwin County EOC	Meeting Date:	Thursday, January 16 th 2025
Facilitator:	HMPC Chair: Brandan Franklin	Place/Room:	EOC UPSTAIRS TRAINING ROOM

10	Name: Erik Cortinas	Email: erikc@fairhopeal.gov	
	Company: City of Fairhope	Phone: 251-990-0141	Job: Building Official
11	Name: Amanda Thweatt	Email: Athweatt@baldwincountyal.gov	
	Company: BCEMA	Phone: 851-445-0118	Job: EM Specialist
12	Name: Michelle Pennington	Email: michelle.pennington@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-524-7820	Job: EM Specialist
13	Name: Miriam Boone	Email: mboone@cityoffoley.org	
	Company: City of Foley	Phone: 251-952-4011	Job: City Bldg. Official/Planner
14	Name: Zachary Badke	Email: zachary.badke@baldwincountyal.gov	
	Company: BC Hwy Dept	Phone:	Job: GIS Coordinator
15	Name: Chandler Tolbert	Email: chandler.tolbert@baldwincountyal.gov	
	Company: BC Hwy Dept	Phone:	Job: Maint Tech III
16	Name: Tom Tyler	Email: tom.tyler@baldwincountyal.gov	
	Company: BCEMA	Phone: 972-6807	Job: Director
17	Name: Jessica Waters	Email: jessica.waters@baldwincountyal.gov	
	Company: BCEMA	Phone: 972-6807	Job: PIO
18	Name:	Email:	
	Company:	Phone:	Job:

SIGN-IN SHEET – HMPC MEETING			
Meeting Location:		Baldwin County EOC	Meeting Date: Thursday, January 16 th 2025
Facilitator:		HMPC Chair: Brandan Franklin	Place/Room: EOC UPSTAIRS TRAINING ROOM

1	Name: <u>Damon Smith</u>	Email: <u>damon.smith@baldwincounty-al.gov</u>	
	Company: <u>BCEMA</u>	Phone: <u>251-972-8510</u>	Job: <u>Deputy Director</u>
2	Name: <u>Natascha Dilley</u>	Email: <u>Natascha.Dilley@baldwincountyal.gov</u>	
	Company: <u>BCEMA</u>	Phone: <u>251-401-4334</u>	Job: <u>Specialist BCEMA Specialist</u>
3	Name: <u>Josh Newen</u>	Email:	
	Company: <u>Baldwin Co. P&Z</u>	Phone:	Job:
4	Name: <u>Nicole Woerner</u>	Email: <u>nwoerner@orangebeachal.gov</u>	
	Company: <u>City of OB</u>	Phone: <u>251-747-7176</u>	Job: <u>EMAC</u>
5	Name: <u>MIRIAM BOONE</u>	Email: <u>mboone@cityofcaley.org</u>	
	Company: <u>CITY OF FALCY</u>	Phone: <u>251-952-4011</u>	Job: <u>Planner/Bldg Official</u>
6	Name:	Email:	
	Company:	Phone:	Job:
7	Name:	Email:	
	Company:	Phone:	Job:
8	Name:	Email:	
	Company:	Phone:	Job:
9	Name:	Email:	
	Company:	Phone:	Job:



Baldwin County
Hazard Mitigation Planning Committee
Quarterly Meeting

Meeting Location & Time:

Baldwin County EMA / Emergency Operations Center
Upstairs Training Room
23100 McAuliffe Drive
Robertsdale, AL 36567
Thursday, October 16, 2025
0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 1/16/2025 Meeting
 - B. HMGP Applications- Update
 - HMGP DR 4563 (Sally)
- IV. New Business
 - A. Hazard Mitigation Plan
 - Jurisdiction Assessment Teams
 - Jurisdiction Action Plans
 - Hazard Mitigation Plan Implementation Status Survey
- V. Comments and Questions from the Full Body

Adjourn Next Meeting Date – **January 15, 2026**

SIGN-IN SHEET – HMPC MEETING					
Meeting Location:		Baldwin County EOC		Meeting Date:	Thursday, October 16, 2025
Facilitator:		HMPC Chair: Brandan Franklin / Anna-Marie O'Brien		Place/Room:	EOC Upstairs Training Room – Webex and In - Person

1	Name: Danon Smith	Email: danon.smith@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-972-8510	Job: Deputy Director
2	Name: Anna-Marie O'Brien	Email: annamarie.obrien@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-495-0952	Job: Planning & Grants Mgr
3	Name: Michelle Pennington	Email: michelle.pennington@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-504-7820	Job: EM Specialist
4	Name: Erik Cortinas	Email: erikc@fairhopeal.gov	
	Company: City of Fairhope	Phone: 251-990-0141	Job: Building Official
5	Name: Amanda Thweatt	Email: Athweatt@baldwincountyal.gov	
	Company: BCEMA	Phone: 251-465-0118	Job: Ops. Div. Manager
6	Name: Mark Acreman	Email: markha mark.acreman@baldwincountyal.gov	
	Company: BC Highway	Phone: 251-269-7350	Job: Asst. County Eng.
7	Name: Jamie Joiner	Email: jamie.joiner@baldwincountyal.gov	
	Company: Bald Co. Bldg Insp.	Phone: 251-972-4831	Job: Haz. Mitig. Coord.
8	Name: Corey Flowers	Email: Corey.Flowers@baldwincountyal.gov	
	Company: Bald Co Bldg insp	Phone: 251-635-6340	Job: CERS Coordinator
9	Name: Tom Tyler	Email: tom.tyler@baldwincountyal.gov	
	Company: BC EMA	Phone: 251-525-6556	Job: Dir

SIGN-IN SHEET			
Meeting Location:	Baldwin County EOC	Meeting Date:	Thursday, December 16, 2021
Facilitator:	HMPC Chair: Brandan Franklin	Place/Room:	EOC Ops Room
28	Name: Josh Newman Company: Baldwin Co	Email: josh.newman@baldwincounty.al.gov	Phone: Job:
29	Name: Krystal Bodiford Company: City of Foley	Email: kbodiford@cityoffoley.org	Phone: 251-209-4638 Job: EM Coordinator
30	Name: Nicole Woerner Company: City of Orange Beach	Email:	Phone: 251-747-7176 Job: EM
31	Name: Adam Roberson Company: City of O.B.	Email: aroberson@orangebeachal.gov	Phone: 251-269-7342 Job:
32	Name: Brandan Franklin Company: City of Gulf Shores	Email: bfranklin@gulfshoresal.gov	Phone: 251-968-1149 Job:
33	Name: Natalascha Dilley Company: Baldwin EMA	Email: Natalascha.Dilley@BaldwinCountyal.gov	Phone: 251-401-4334 Job: EMA Specialist
34	Name: Company:	Email:	Phone: Job:
35	Name: Company:	Email:	Phone: Job:
36	Name: Company:	Email:	Phone: Job:

Baldwin County
Hazard Mitigation Planning Committee
Quarterly Meeting

**Meeting Location & Time:**

Baldwin County EMA / Emergency Operations Center
Upstairs Training Room
23100 McAuliffe Drive
Robertsdale, AL 36567
Thursday, January 8, 2026
0900-1000

Agenda

- I. Call to Order
- II. Welcome and Opening Remarks
- III. Old Business
 - A. Approval of Minutes from the 10/16/2025 Meeting
 - B. HMGP Applications- Update
 - HMGP DR 4563 (Sally)
- IV. New Business
 - A. Update on Multi-Jurisdiction Hazard Mitigation Plan
 - Review HMPC Document & Contents (HMPC, JATs, etc.)
 - Jurisdiction Action Plans
 - Remaining Hazard Mitigation Plan Implementation Status Surveys (*Silverhill, Summerdale, Perdido Beach, Elberta, Loxley, BCBE*)
 - B. Approval for Executive Committee to Meet Frequently Until Plan Draft is Completed – Proposed Executive Meeting: Friday, January 30, 2026 @ BCEMA 1000-1100.
- V. Comments and Questions from the Full Body
- VI. Adjourn Next Meeting Date – February 26, 2026

23 in person
12 virtual

SIGN-IN SHEET – HMPC MEETING			
Meeting Location:	Baldwin County EOC	Meeting Date:	Thursday, January 8, 2026
Facilitator:	HMPC Chair: Brandon Franklin / Anna-Marie O'Brien	Place/Room:	EOC Upstairs Training Room – Webex and In - Person

1	Name: <u>Brodley Cooper</u>	Email: <u>brodley.cooper@alph.state.al.us</u>	
	Company: <u>ADPH</u>	Phone: <u>205-459-6050</u>	Job: <u>EP Director</u>
2	Name: <u>Eddie McDonald</u>	Email: <u>emcdonald@spanishfortal.gov</u>	
	Company: <u>City of Spanish Fort</u>	Phone: <u>251-349-9709</u>	Job: <u>PW Supervisor</u>
3	Name: <u>Shannon Burrage</u>	Email: <u>publzworke@spanishfortal.gov</u>	
	Company: <u>City of Spanish Fort</u>	Phone: <u>251-513-0482</u>	Job: <u>PW Dir</u>
4	Name: <u>Caleb Harper</u>	Email: <u>CHarper@spanishfortal.gov</u>	
	Company: <u>City of Spanish Fort</u>	Phone: <u>251-395-3429</u>	Job: <u>Env. Mgr.</u>
5	Name: <u>Josh Newman</u>	Email: <u>josh.newman@baldwincountyal.gov</u>	
	Company: <u>Baldwin County</u>	Phone:	Job: <u>Permit Eng</u>
6	Name: <u>JEFF SPALLER</u>	Email: <u>Jspaller@bcbe.org</u>	
	Company: <u>BCBE</u>	Phone: <u>(251) 802-1115</u>	Job: <u>BCBE DISTRICT SAFETY SUPERVISOR</u>
7	Name: <u>Anna-Marie O'Brien</u>	Email: <u>annamarie.obrien@baldwincountyal.gov</u>	
	Company: <u>BCEMA</u>	Phone: <u>251-495-0952</u>	Job: <u>EMA Planning / Grants Mgr.</u>
8	Name: <u>Danon Smith</u>	Email: <u>Danon.Smith@baldwincountyal.gov</u>	
	Company: <u>BCEMA</u>	Phone:	Job: <u>EMA Deputy Director</u>
9	Name: <u>Amanda Thweatt</u>	Email: <u>athweatt@baldwincountyal.gov</u>	
	Company: <u>BCEMA</u>	Phone:	Job: <u>EMA Ops Div Mgr</u>

SIGN-IN SHEET – HMPC MEETING				
Meeting Location:		Baldwin County EOC		Meeting Date: Thursday, January 8, 2026
Facilitator:		HMPC Chair: Brandan Franklin / Anna-Marie O'Brien		Place/Room: EOC Upstairs Training Room – Webex and In - Person

1	Name: TONYA HARRINGTON	Email: tonya.k.harrington@usace.army.mil	
	Company: USACE	Phone: 251-264-8637	Job: ARGM MGR/SR PLANNER/ECON.
2	Name: Michael Murgase	Email: michael.murgase@noaa.gov	
	Company: NWS Mobile	Phone:	Job: Meteorologist
3	Name: Morgan Barry	Email: morgan.barry@noaa.gov	
	Company: NWS MOBILE	Phone:	Job: SENIOR METEOROLOGIST
4	Name: Thurston Bullock	Email: tbullock@cityoffoley.org	
	Company: City of Foley	Phone: 251-424-0626	Job: Ex Dir of Public Safety
5	Name: Krystal Bedford	Email: kbedford@cityoffoley.org	
	Company: City of Foley	Phone: 251-809-4638	Job: EM Coordinator
6	Name: Lily Jackson	Email: ljackson@rivierautilities.com	
	Company: Riviera Utilities	Phone: 251-597-6966	Job: Comms Coordinator
7	Name: Corey Flowers	Email: corey.flowers@baldwincounty.al.us	
	Company: BCC	Phone: 251-635-0340	Job: CRS Coordinator
8	Name: Anna Odum	Email: anna.odum@adph.state.al.us	
	Company: ADPH/SWB	Phone: 251-979-5855	Job: HCC Coordinator
9	Name: Deborah Leigh Dixon	Email: deboraleigh.dixon@adph.state.al.us	
	Company: ADPH	Phone: 334-531-5856	Job: DRTD

SIGN-IN SHEET – HMPC MEETING			
Meeting Location:		Baldwin County EOC	Meeting Date: Thursday, January 8, 2026
Facilitator:		HMPC Chair: Brandon Franklin / Anna-Marie O'Brien	Place/Room: EOC Upstairs Training Room – Webex and In - Person

1	Name: Jessica Waters	Email: Jessica.Waters@baldwincountyal.gov	
	Company: BCEMA	Phone:	Job: PIO/communications
2	Name: Kanika Duff	Email: kanika.duff@baldwincountyal.gov	
	Company: BCEMA	Phone:	Job: logistics DW Mgr
3	Name: Natascha Torres	Email: Natascha.Torres@baldwincountyal.gov	
	Company: BCEMA	Phone:	Job: EM Specialist
4	Name: Robert Quates	Email: robert.quares@baldwincountyal.gov	
	Company: BCEMA	Phone:	Job: EM Specialist
5	Name:	Email:	
	Company:	Phone:	Job:
6	Name:	Email:	
	Company:	Phone:	Job:
7	Name:	Email:	
	Company:	Phone:	Job:
8	Name:	Email:	
	Company:	Phone:	Job:
9	Name:	Email:	
	Company:	Phone:	Job:

Appendix H

Community Involvement Documentation

Appendix H – Community Involvement Documentation

I. Community Involvement Opportunities

This Appendix includes additional documentation of the community involvement opportunities in the planning process for the 2026 Baldwin County Multi-Hazard Mitigation Plan update, which are summarized as follows (see Section 4, *Planning Process*, for a complete discussion of community involvement in the planning process):

1. **The Baldwin County Hazard Mitigation Planning Committee (HMPC):** The Baldwin County Hazard Mitigation Planning Committee (HMPC) serves as the primary body responsible for overseeing the development, update, and ongoing implementation of the Baldwin County Multi-Hazard Mitigation Plan. The HMPC was originally established in 2004 to guide the preparation of the county's first mitigation plan. It was reconvened to support the development of the 2026 plan update. The HMPC comprises representatives from all participating Baldwin County jurisdictions, along with key stakeholder agencies and organizations involved in hazard mitigation, emergency management, planning, infrastructure, and public safety. The Committee meets at least annually and more frequently as needed during plan development and update cycles to ensure continued coordination, oversight, and compliance with mitigation planning requirements. Complete documentation of HMPC meetings, including agendas, sign-in sheets, and meeting records, is provided in *Appendix G – "Committee Meeting Documentation."* A detailed description of the HMPC's composition, roles, and participation in the planning process is included in *Chapter 4 – "Planning Process."*
2. **2026 Baldwin County Multi-Hazard Mitigation Plan Website:** During development of the 2026 Baldwin County Multi-Hazard Mitigation Plan, Baldwin County Emergency Management Agency (BCEMA) maintained an online platform to support public and stakeholder participation during the plan drafting phase. The website served as a central location for posting draft plan materials and providing information on the hazard mitigation planning process and applicable federal requirements. The website encouraged public involvement by inviting comments and mitigation recommendations through a dedicated hazard mitigation email address and by providing information on Hazard Mitigation Planning Committee (HMPC) membership, meeting schedules, and public meeting announcements. This approach ensured opportunities for public participation consistent with 44 CFR §201.6(b)(1) and (b)(2). Following adoption, the finalized and FEMA-approved 2026 Baldwin County Multi-Hazard Mitigation Plan is maintained on the Baldwin County Emergency Management Agency website for public access.

3. **Social Media:** Public participation and awareness of the mitigation planning process were supported through Baldwin County Emergency Management Agency's social media platforms and public notices. Social media posts were used to announce Hazard Mitigation Planning Committee (HMPC) meetings, public meetings, and opportunities to review draft plan materials and submit comments, providing an additional, accessible method for public involvement during the plan development process.
4. **Community Meeting:** A community survey was used to collect public input, concerns, and mitigation suggestions during the planning process. The survey was made available on the mitigation plan website and distributed at the community meeting. Survey responses were compiled and reviewed by the Hazard Mitigation Planning Committee (HMPC) for consideration during plan development.
5. **Community Survey:** A community survey allowed the public to report their concerns and suggestions. This survey questionnaire was posted on the plan website and distributed at the community meeting. Responses were noted for review and consideration by the HMPC members.
6. **Interagency Involvement:** Agencies and organizations representing neighboring counties, federal and state agencies, businesses, educational institutions and school boards, and other interested private and nonprofit stakeholders were invited to participate in the hazard mitigation planning process. Each invitation included a survey form to solicit written comments and recommendations on the draft plan. Copies of the invitation and survey are included in this Appendix.
7. **Public Hearing Prior to Adoption:** Final opportunities for public comment were provided through public hearings held by each participating jurisdiction prior to plan adoption, in accordance with applicable Alabama public notice and hearing requirements.
8. **Baldwin County EMA Community Relations:** Baldwin County Emergency Management Agency (BCEMA) maintains ongoing community outreach and engagement efforts that support public awareness of, and participation in, the 2026 hazard mitigation plan update.

II. Documentation

This appendix included the following documentation on community involvement activities and opportunities:

- An image of the 2026 plan update website at (xxx).
- Images of Facebook pages.
- The public invitation by the Baldwin County EMA to attend the February community meeting.
- Sign-In sheets documenting attendance at the community meeting.
- The Community Survey form.
- Sections of the PowerPoint presentation shown at the community meeting.
- The invitations to interested agencies, organizations, and stakeholders, including the survey form.

Appendix I

Multi-Jurisdictional Participation Activities

Appendix I – Multi-Jurisdictional Participation Activities

I. Participation Requirements

Pursuant to 44 CFR §201.6(a)(4), multi-jurisdictional mitigation plans may be accepted provided each jurisdiction has participated in the planning process. The table in this Appendix documents participation by each Baldwin County jurisdiction during the 2026 plan update, demonstrating compliance with multi-jurisdictional planning requirements.

All participating jurisdictions were provided opportunities to engage throughout the plan update process, including participation in planning meetings, review of draft materials, and formal adoption of the plan by resolution. When a jurisdiction’s representative was unable to attend a meeting, meeting materials (agendas and approved minutes) were posted to the Baldwin County Commission website to ensure continued awareness and opportunity for input.

II. Participation Requirements

Table I.1 in this Appendix summarizes participation by each Baldwin County jurisdiction across the meetings and activities associated with the plan update. An “X” indicates those meetings and activities in which a jurisdiction participated. Supporting examples, outcomes, and documentation of these activities are provided in *Appendices B through F*, with detailed meeting records included in *Appendices G and H*.

Table I.1 - Multi-Jurisdictional Participation Activities

*Multi-Jurisdictional Participation Activities Baldwin County 2015 Plan Update	Baldwin Co.	Bay Minette	Daphne	Elberta	Fairhope	Foley	Gulf Shores	Loxley	Mag. Springs	Orange Beach	Perdido Beach	Robertsdale	Silverhill	Spanish Fort	Summerdale	**Baldwin BOE
HMPC Initial Planning Meeting – July 18, 2024																
HMPC Elections/Reorganization – Oct 17, 2024																
HMPC Planning Kickoff Meeting – Nov 8, 2024																
Exercise 1 – Hazard Identification & Risk Assessment Review																N/A
HMPC Committee Meeting – Jan 16, 2025																
Exercise 2 – Community Capability Assessment																N/A
HMPC Full Body Meeting – October 16, 2025																
Exercise 3 – Mitigation Action Review & Prioritization																
Exercise 4-Multi-Jurisdiction Mitigation Action Program																
HMPC Committee Meeting – Jan 8, 2026																
Public Community Meeting – Feb 11, 2026																
HMPC Plan Approval – Feb 26, 2026																

X Denotes participation in activity

* All communities were given opportunities to participate in missed HMPC meetings through access to the plan website at <http://baldwin.hazardmitigationplan.com/>.

** The Baldwin County Board of Education participated as a stakeholder in all jurisdictions.

III. HMPC Exercises

The HMPC exercises included in this section were completed by participating jurisdictions, school boards, and other stakeholders serving on the Hazard Mitigation Planning Committee (HMPC) as part of the 2026 plan update. Results from these exercises were compiled, evaluated, and incorporated throughout the plan to inform the risk assessment, mitigation strategy, and plan maintenance components. The following exercises were conducted as part of the 2026 planning process:

1. HMPC Hazard Identification and Ratings Exercise

This exercise evaluated the location, probability, and potential impacts of hazards affecting Baldwin County and its jurisdictions. Results are documented in Appendix D, “Hazard Identification and Ratings,” and were incorporated into Chapter 5, “Risk Assessment,” to support updated hazard identification, hazard profiles, and vulnerability analyses.

2. Baldwin County Community Capabilities Assessment.

This exercise assessed each jurisdiction’s planning, regulatory, administrative, technical, and financial capabilities to implement mitigation actions. Results are documented in Appendix B, “Community Mitigation Capabilities,” and were used to inform the development, prioritization, and feasibility of mitigation actions included in the *Community Action Programs*.

3. Mitigation Plan Implementation Status Review.

This exercise evaluated the implementation status of mitigation actions from the previously approved plan to assess progress, identify completed or deferred actions, and determine which measures should be modified, continued, or removed. Results-informed updates to mitigation priorities and strategies are documented in Appendix C, “Mitigation Plan Implementation Status.”

4. Multi-Jurisdictional Mitigation Action Program Exercise.

This exercise supported the identification, evaluation, and selection of mitigation actions for inclusion in Chapter 6, “Mitigation Strategy,” and the jurisdiction-specific *Community Action Programs*, ensuring consistency with local capabilities, risk conditions, and FEMA eligibility requirements.

Baldwin County 2026 Multi-Hazard Mitigation Plan Update

HMPC Hazard Identification and Ratings Exercise

Completed by (insert your name and title): _____

Representing (insert your organization): _____

Today's date: _____

Instructions: Please complete the ratings for your jurisdiction(s) using the following key.

Key:

LOCATION - WHETHER THE JURISDICTION IS AFFECTED BY THE HAZARD
1 = YES
0 = NO
PROBABILITY - THE LIKELIHOOD THAT THE HAZARD WOULD OCCUR IN THIS JURISDICTION
5 - VERY HIGH
4 - HIGH
3 - MEDIUM
2 - LOW
1 - MINIMUM OR NONE
EXTENT - THE SEVERITY OR MAGNITUDE OF THE HAZARD SHOULD IT OCCUR IN THIS JURISDICTION
5 - VERY HIGH
4 - HIGH
3 - MEDIUM
2 - LOW
1 - MINIMUM OR NONE

Hazard Identification and Ratings Exercise

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Hurricanes	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Severe Storms	Baldwin County			
	Bay Minette			
	Daphne			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Severe Storms (cont'd)	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Tornadoes	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Tornadoes (cont'd)	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Floods	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Floods (cont'd)	Spanish Fort			
	Summerdale			
Wildfires	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Droughts/Heat Waves	Baldwin County			
	Bay Minette			
	Daphne			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Droughts/Heat Waves (cont'd)	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Winter Storms/Freezes	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Winter Storms/Freezes (cont'd)	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Earthquakes	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Earthquakes (cont'd)	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Dam/Levee Failures	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Landslides	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Sinkholes (Land Subsidence)	Baldwin County			
	Bay Minette			
	Daphne			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Sinkholes/Land Subsidence (cont'd)	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			
	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			
Tsunamis	Baldwin County			
	Bay Minette			
	Daphne			
	Elberta			
	Fairhope			
	Foley			
	Gulf Shores			

Hazard	Geographic Area	Location (2026)	Probability (2026)	Extent (2026)
Tsunamis (cont'd)	Loxley			
	Magnolia Springs			
	Orange Beach			
	Perdido Beach			
	Robertsdale			
	Silverhill			
	Spanish Fort			
	Summerdale			

Comments:

2026 Baldwin County Communities Capabilities Assessment Exercise

This table presents a range of criteria that demonstrate each community's capacity to undertake various hazard mitigation activities.

Please review the responses for your jurisdiction and mark any corrections needed.

Return the completed exercise to Anna-Marie O'Brien. We need one response for each jurisdiction. **Y = Yes and N = No**

JURISDICTION	enforce zoning ordinance	administer subdivision regulations	enforce building and technical codes	up-to-date comprehensive plan adopted in the last 5 years	5-6 year capital improvements plan updated annually	experience with FEMA grant programs for hazard mitigation projects	professional urban planner on staff	professional engineer on staff	certified floodplain manager on staff	full-time building inspector on staff
Baldwin County										
Bay Minette										
Daphne										
Elberta										
Fairhope										
Foley										
Gulf Shores										
Loxley										
Magnolia Springs										
Orange Beach										
Perdido Beach										
Robertsdale										
Silverhill										
Spanish Fort										
Summerdale										

2026 Baldwin County Multi-Hazard Mitigation Plan

2021 PLAN IMPLEMENTATION STATUS SURVEY

Completed by: _____

(Name and Title)

Instructions:

1. Please return the completed survey to Anna-Marie O'Brien.
2. Please limit your response to one per community. If your community has more than one representative on the Hazard Mitigation Planning Committee, you will need to agree on a single response.
3. Please note the status of each mitigation measure your community approved in your Community Action Program from the 2010 Plan. Use the following abbreviations:

C = Completed this 2021 mitigation measure.

O = Completed this ongoing measure and will continue in the 2026 Plan.

D = This 2021 mitigation measure was not completed, but deferred to the 2026 Plan.

X = Delete: this 2021 mitigation measure was not completed or will no longer be ongoing for the 2026 Plan.

4. If a mitigation measure from the 2021 Plan was not completed, provide the primary reason for not completing it, using one of the following categories:

Lack of Funding – Lack of funding or budget constraints impeded the implementation of the mitigation measure.

Administrative – Inadequate staff resources to implement and maintain the mitigation measure.

Political – Lacks local political support of the mitigation measure.

Technical – Mitigation measure was not technically feasible.

Legal – Lacks the legal authority to implement the mitigation measure.

#	Mitigation Measures	Status	Reason Why Measure was not Completed
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.		
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.		
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implement the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.		
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/leaves, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.		
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.		
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.		
1.2.4	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.		
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Mobile County that have the most potential for losses from natural hazard events and identify needed structural upgrades.		
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods and develop a program for construction upgrades as appropriate.		
1.3.4	Inventory and map existing fire hydrants throughout the county and identify areas in need of new fire hydrants.		
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.		
1.4.1	Consider large lot size restriction on flood prone areas designated on Flood Insurance Rate Maps.		
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.		
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.		
1.4.4	Enact local ordinance that require community storm shelters within sizeable mobile home parks and subdivisions.		
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.		
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.		
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.		
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.		
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.		
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.		
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."		
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.		
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.		
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.		
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.		
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.		
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.		
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.		
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.		
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.		
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.		
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.		
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.		
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.		
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.		
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.		
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.		
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.		
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.		
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damage.		
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damage in high-risk areas.		
2.7.1	Install lightning and/or surge protection on existing critical facilities.		
2.7.2	Conduct ongoing tree trimming programs along power lines.		
2.8.1	Pursue grant funding for the installation of backup power generators for critical facilities.		
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.		
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.		
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.		
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.		
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.		
3.5.1	Distribute hazard mitigation brochures to students through area schools.		
3.6.1	Distribute the 2010 plan to local officials, stakeholders, and interested individuals through internet download.		
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.		
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.		
3.9.1	Promote the use of weather radios in households and businesses.		
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.		
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.		
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.		
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.		
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.		
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.		
3.10.5	Upgrade critical communications infrastructure.		

#	Mitigation Measures	Status	Reason Why Measure was not Completed
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.		
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.		
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.		
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).		
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.		
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.		
4.4.1	Restore and protect wetlands to enhance storm water drainage.		
4.4.2	Develop a coastal renourishment program.		
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.		
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.		
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.		
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.		
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.		
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.		

Multi-Jurisdictional Mitigation Action Program Exercise

Baldwin County Hazard Mitigation Planning Committee

Name of Community (town, city, or county), School Board, or Agency:

Prepared

by: _____

(name and position)

Instructions for selecting mitigation measures:

1. For Communities, which include all municipalities and the county government, place an X in the column under the Communities column for all those measures your jurisdiction would like to include in your five-year Community Action Program—Mark through those you want to exclude.
2. For School Boards, place the name of the community next to the mitigation measures to be undertaken within the selected community. Only address those measures that will be undertaken by your school board.
3. For Agencies (State, local, non-profit, etc.), place the name of the community next to the mitigation measure recommended for the selected community. These measures are not necessarily the responsibility of your agency.

If you have additional measures to include, please write them down on the back of this page. Please keep in mind your capabilities to carry out the measure. Some measures may be implemented jointly through the Baldwin County EMA (e.g., outreach activities), Baldwin County (e.g., shared GIS resources), or other agencies. You do not need to identify the funding source at this time.

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.		All	Both	Action	Existing
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.		All	Both	Action	Existing
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.		All	Both	Action	Existing
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.		All	Both	Action	HMA
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.		All	Both	Action	HMA
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.		Flooding	Both	Action	Existing

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.		Flooding	Both	Action	HMA
1.3.2	Identify existing culturally or socially significant structures and critical facilities within the jurisdiction that have the most potential for losses from natural hazard events and identify needed structural upgrades.		All	Existing	Action	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods and develop a program for construction upgrades as appropriate.		Flooding	Existing	Action	TBD
1.3.4	Inventory and map existing fire hydrants throughout the jurisdiction and identify areas in need of new fire hydrants.		Wildfires	Existing	Action	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.		Flooding	Both	Action	HMA
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restrictions on flood prone areas designated on Flood Insurance Rate Maps.		Flooding	Both	Action	Existing
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.		Flooding	Both	Action	Existing
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.		Flooding	Both	Action	Existing
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.		Tornadoes, Hurricanes, Severe Storms	New	Action	Existing

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.		Flooding	New	Action	Existing
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator and FEMA's training center in Emmitsburg, Maryland.		Flooding	Both	Action	Existing
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.		Flooding	Both	Action	Existing
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.		Flooding	Both	Action	Existing
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.		Flooding	Existing	Project	Other
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.		Flooding	Both	Project	HMA
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.		All	New	Action	Existing
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."		Tornadoes, Hurricanes, Severe Storms	New	Action	Existing
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.		Tornadoes, severe storms, winter storms/freezes, hurricanes	Both	Action	HMA

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.		Wildfires	Both	Action	Existing
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.		All	Existing	Action	Existing
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.		Tornadoes, Hurricanes, Severe Storms	New	Project	HMA
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.		New	Action	Action	Existing
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.		Wildfires	Both	Action	Existing
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.		Wildfires	Both	Actions	Existing
1.9	<u>Storm Water Management.</u> Manage the impacts of development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.		Flooding	Existing	Action	Existing
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.		Flooding	Existing	Action	Existing
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.		Flooding	Both	Action	TBD

Goal, Objectives and Mitigation Measures	Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
1.10 <u>Dam Safety Management.</u> Establish a comprehensive dam safety program.					
1.10.1 Support legislation to establish a State dam safety program.		Dam/Levee Failure	Both	Action	Existing
1.11 <u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1 Apply for/maintain membership in the CRS Program; continue to upgrade rating.		Flooding	Both	Action	Existing
1.12 <u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1 Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.		Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Existing	Action	HMA
1.12.2 Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.		Wildfire	Both	Project	HMA
2 <u>Goal for Property Protection:</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1 <u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1 Pursue FEMA grant funds to relocate buildings out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.		Flooding	Existing	Project	HMA
2.2 <u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.		Flooding	Existing	Project	HMA
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.		Flooding	Existing	Project	HMA
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.		Flooding	Existing	Project	HMA
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.		Flooding	Existing	Project	HMA
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.		Flooding	Existing	Project	HMA
2.5	<u>Flood Control Measures.</u> Small flood control measures built to reduce/prevent flood damage					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.		Flooding	Both	Project	HMA
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.		Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Existing	Action	HMA

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.		Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Existing	Action	Existing
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquakes, landslides, sinkholes, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damage in high-risk areas.		All	Existing	Action	Existing
2.7.2	Promote the purchase of crop insurance to cover potential losses due to drought.		Drought	Existing	Action	Existing
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.		Severe storms	Existing	Project	TBD
2.9	<u>Back Up Power:</u> Assure uninterrupted power supplies during emergency events.					
2.9.1	Pursue grant funding for the installation of backup power generators for critical facilities.		Hurricanes, Tornadoes, Severe Storms	Existing	Project	HMA
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.		All	Both	Action	Existing
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.		All	Both	Action	Existing
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.		All	Existing	Action	Existing
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.		All	Both	Action	Existing
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.		Flooding	Both	Action	Existing
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain location disclosure when a property is listed for sale.		Flooding	Existing	Action	Existing
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.		All	Both	Action	Existing
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.		All	Both	Action	Existing
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.		Earthquake	Both	Action	Existing
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
3.6.1	Distribute the 2015 plan to local officials, stakeholders, and interested individuals through internet download.		All	Both	Action	Existing
3.6.2	Distribute the 2015 plan summary to the public through local jurisdictions, via the internet and other media.		All	Both	Action	Existing
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.		Flooding	Both	Action	Existing
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.		All	Both	Action	Existing
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.		All	Both	Action	Existing
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.		All	Both	Action	Existing
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.		All	Both	Action	Existing
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.		Flooding	Both	Project	HMA

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.		Flooding	Both	Project	HMA
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.		Flooding	Both	Project	HMA
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.		All	Both	Project	HMA
3.10.5	Upgrade critical communications infrastructure.		All	Both	Project	HMA
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.		Flooding	Existing	Project	HMA
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.		Flooding	Both	Action	Other
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.		Flooding	Existing	Action	Existing
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wildfires within urban areas.					

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).		Flooding	Existing	Action	Existing
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.		Wildfire	Both	Action	Existing
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.		Wildfire	Both	Action	Existing
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and renourish.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.		Flooding, Hurricanes	Existing	Action	Other
4.4.2	Develop a coastal renourishment program.		Flooding, Hurricanes	Existing	Action	Other
4.5	<u>Water Resources Conservation Programs.</u> Protect water quantity and quality through water conservation programs to mitigate the effects of droughts and ensure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.		Droughts/heat waves, wildfires	Both	Action	Existing
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.		Flooding	Both	Action	Existing
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					

Goal, Objectives and Mitigation Measures		Communities	Hazards Addressed	Affects New or Existing Buildings or Infrastructure	Action or Project	Funding Source
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.		Flooding	Both	Project	HMA
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.		Drought	Both	Project	HMA
5.3	<u>Community Shelters and Safe Rooms:</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.		Hurricanes, Tornadoes, Severe Storms	New	Project	HMA
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.		Tornadoes, Hurricanes, Severe Storms	Existing	Project	HMA
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.		Tornadoes, Hurricanes, Severe Storms	Both	Project	HMA

Appendix J

Adopting Resolution

Appendix J – Adopting Resolutions

I. Purpose

The sample resolution presented herein serves as a model for the governing bodies of the participating jurisdictions to formally adopt the 2026 mitigation plan update following a publicly noticed hearing. Each jurisdiction may modify the sample resolution, as necessary, to conform to its specific legal and procedural requirements.

II. Sample Adopting Resolution

A sample of the Adopting Resolution follows:

RESOLUTION OF THE (INSERT NAME OF GOVERNING BODY)

A RESOLUTION ADOPTING THE 2026 BALDWIN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, IN FULFILLMENT OF THE FEDERAL DISASTER MITIGATION ACT OF 2000 AND THE LOCAL MITIGATION PLAN REQUIREMENTS OF 44 C.F.R. § 201.6

WHEREAS, the Disaster Mitigation Act of 2000 (DMA 2000), as amended, establishes a national program for pre-disaster hazard mitigation to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural hazards; and,

WHEREAS DMA 2000 and the implementing regulations at **44 C.F.R. § 201.6** require local governments to develop and adopt a FEMA-approved hazard mitigation plan as a condition of eligibility for certain federal hazard mitigation assistance programs; and,

WHEREAS, the 2026 Baldwin County Multi-Jurisdictional Hazard Mitigation Plan has been prepared through a collaborative planning process led by the Baldwin County Hazard Mitigation Planning Committee, with participation from affected jurisdictions and stakeholders; and,

WHEREAS the plan identifies natural hazards that pose a risk to life, property, critical facilities, and infrastructure within Baldwin County and establishes mitigation goals, strategies, and actions intended to reduce those risks; and,

WHEREAS the plan has been reviewed by the **Alabama Emergency Management Agency** and received an *Approvable Pending Adoption* determination from the **Federal Emergency Management Agency**; and,

WHEREAS federal regulations require each participating jurisdiction to formally adopt the hazard mitigation plan for FEMA to grant final approval and maintain eligibility for hazard mitigation funding.

NOW, THEREFORE, BE IT RESOLVED that the **(INSERT NAME OF GOVERNING BODY)** hereby adopts the **2026 Baldwin County Multi-Jurisdictional Hazard Mitigation Plan**, and authorizes its implementation in accordance with applicable federal, state, and local laws.

BE FURTHER RESOLVED that this plan shall serve as the official hazard mitigation plan for **(INSERT JURISDICTION NAME)** and shall guide mitigation planning, policy development, and project prioritization to reduce risk from natural hazards.

ADOPTED this the _____ day of _____, 2026.

APPROVED: _____

ITS: _____

ATTEST: _____

ITS: _____

Volume II

Community Action Programs

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	County EMA/ Planning Department / Building Official-Floodplain Manager /County Engineer-Highway Department	High	Mid-Range/Ongoing	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions (Baldwin County Unincorporated with active comprehensive planning programs.	County EMA/ Planning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implement the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	County EMA/ Planning Department / Building Official-Floodplain Manager /County Engineer-Highway Department	Medium	Mid-Range	Local Funds	TBD
1.1.4	Prepare a floodplain management plan.	Building Official-Floodplain Manager	High	Completed/Ongoing	HMA/Local	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	County EMA/ GIS Staff in the CIS, Planning, & Highway Departments/ Engineering Department	Medium	Mid-Range/Ongoing	HMA/Local	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up to date within GIS to apply the full loss estimation capabilities of HAZUS.	GIS Staff in the CIS, Planning, & Highway Departments (May also include Baldwin County 9-1-1 GIS Manager)	Medium	Mid-Range/Ongoing	Local	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Building Official-Floodplain Manager /County Engineer-Highway Department/ County EMA	High	Short-Range/Ongoing	Local	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Building Official-Floodplain Manager / County Engineer-Highway Dept/Planning Department/County EMA	Medium	Mid-Range/Ongoing	HMA	TBD

1.3.2	Identify local culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Building Official- Floodplain Manager / County Engineer- Highway Dept/Planning Department/County EMA	Medium	Mid-Range	Local Funds	TBD
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Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.3.3	Evaluate elevation and culvert sizing of local roadways in flash flood-prone areas to ensure compliance with current standards for design year floods and develop a program for construction upgrades as appropriate.	County Engineer-Highway Department/Floodplain Manager -Building Official/County EMA	Medium	Mid-Range/Ongoing	Local Funds	TBD
1.3.4	Inventory and map local fire hydrants throughout the county and identify areas in need of new fire hydrants.	9-1-1 GIS./County EMA/Planning Department	Medium	Mid-Range/Ongoing	Local Funds	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Building Official-Floodplain Manager / County Engineer-Highway Dept/Planning Department/County EMA	Medium	Mid-Range/Ongoing	HMA	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restriction on flood prone areas designated on Flood Insurance Rate Maps.	Planning Department/ Building Official-Floodplain Manager	Medium	Mid-Range/Ongoing	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, and restrictive development of flood ways, among others.	Planning Department/ Building Official-Floodplain Manager	Medium	Mid-Range/Ongoing	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Planning Department/ Building Official-Floodplain Manager	Medium	Mid-Range	Local Funds	TBD
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	Local Government/County EMA/Planning Department/ Building Official-Floodplain Manager	Medium	Mid-Range	HMA/Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline	Funding Source	Estimated Cost
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Building Official-Floodplain Manager / County Engineer-Highway Dept/Planning Department/County EMA	Medium	Mid-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	Local Government	Medium	Mid-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the Building Official-Floodplain Manager.	Building Department-Floodplain Manager/County EMA/Planning Department	Medium	Mid-Range	Local Funds	TBD
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Building Department-Floodplain Manager/County EMA/Planning Department	Medium	Mid-Range	Local Funds	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Building Department-Floodplain Manager/County EMA/Planning Department	Medium	Mid-Range/Ongoing	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	County EMA/County Engineer-Highway Department	Medium	Mid-Range	Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.	Floodplain Manager/County EMA	Medium	Short-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Official	Medium	Mid-Range	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Building Official	Medium	Mid-Range	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters	Building Official	Medium	Mid-Range	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Building Official	Medium	Mid-Range	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Building Official- Floodplain Manager/ Planning Department/County EMA	Medium	Mid-Range	HMA	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Mid-Range	Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Building Official-Floodplain Manager/ County Engineer-Highway Dept/Planning Department/Baldwin County EMA	Medium	Ongoing	Local Funds	TBD
1.9.2	Develop, adopt, and implement subdivision regulations that require proper storm water infrastructure design and construction.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager/Planning Department	High	Short-Range	Local Funds	TBD
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	County EMA/Building Official-Floodplain Manager/Planning Department	Medium	Long-Range	HMA	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Fire Department(s)/County EMA	Medium	Mid-Range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Ongoing	HMA	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	High	Ongoing	HMA	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Building Official-Floodplain Administrator	High	Ongoing	TBD	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damage.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Ongoing	HMA	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize Local Funds homes for low- to moderate-income families.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Ongoing	HMA	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of building in hazardous flood areas to safeguard against damages.					

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	High	Ongoing	HMA	TBD
2.5	<u>Flood Control Measures.</u> Construct small flood control measures to reduce/prevent flood damage.					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Building Official	Low	Long-Range	HMA/Local Funds	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Ongoing	HMA	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Building Official-Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkholes, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	Power-Utility Companies	Medium	Ongoing	Local	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.8	Critical Facilities Protection. Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Building Official/Building Maintenance	Medium	Mid-Range	Local Funds	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines					
2.9	Back Up Power. Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	County EMA	Medium	Mid-Range	HMA	TBD
3	Goal for Public Education and Outreach. Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	Map Information. Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Planning Department/Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Low	Mid-Range	Local Funds	TBD
3.2	Outreach Projects. Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department/Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	High	Short-Range	Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Planning Department/Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	High	Short-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	County EMA	High	Short-Range	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	High	Ongoing	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Floodplain Manager	Medium	Complete/Ongoing	Local Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	Floodplain Manager/County EMA	Medium	Long-Range	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	County EMA	High	Short-Range	Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.	Building Official-Floodplain Manager/County EMA	Low	Long-Range	Local Funds	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2026 plan to local officials, stakeholders, and interested individuals through internet download.	County EMA	High	Short-Range	Local Funds	TBD
3.7	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manager	Medium	Short-Range	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government/County EMA	Medium	Ongoing	Local Funds	TBD
3.9	Weather Radios. Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government/County EMA	High	Short-Range	Local Funds	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	High	Short-Range	Local Funds	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government/May be assisted by County EMA (Guidance & Info.)	High	Short-Range	Local Funds	TBD
3.10	Disaster Warning. Improve public warning systems.					

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data. Establish a Mass Notification System with IPAWS capability, and a public outreach program to keep the public information of hazards and notified of emergency situations using real-time data from flood gauges and the National Weather Service.	Local Government/County EMA	High	Ongoing	HMA	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	HMA	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Local Government	High	Mid-Range	HMA	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	Goal for Natural Resources Protection. Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	Open Space Easements and Acquisitions. Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other floodplain acquisition efforts.	Local Government	Medium	Mid-Range	HMA	TBD
4.2	River/Stream Corridor Restoration and Protection. Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Planning Department/Building Official-Floodplain Manager	Medium	Mid-Range	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Planning Department/Local Government	Medium	Long-Range	Local Funds	TBD

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.3	Urban Forestry Programs. Maintain a healthy forest that can help mitigate damaging impacts of flooding, erosion, landslides and wildfires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Medium	Mid-Range	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Local Government	Medium	Mid-Range	Local Funds	TBD
4.4	Beach and Dune Protection/Renourishment. Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	Local Government	Medium	Mid-Range	Local Funds	TBD
4.4.2	Develop a coastal renourishment program	Local Government	Medium	Mid-Range	Local Funds	TBD
4.5	Water Resources Conservation Programs. Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance. Develop a coastal renourishment program	Local Government	Medium	Mid-Range	Local Funds	TBD
5	Goal for Structural Projects. Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	Drainage System Maintenance. Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department/Building Official-Floodplain Manager/County Engineer-Highway Department	Medium	Long-Range	Local Funds	TBD
5.2	Reservoirs and Drainage System Improvements. Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Planning Department/Building Official-Floodplain Manager/County Engineer-Highway Department t	Medium	Ongoing	HMA	TBD
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.	Local Government	Medium	Long-Range	HMA	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Planning Department/Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Mid-Range	HMA	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Local Government/County EMA	Medium	Mid-Range	HMA	TBD
5.3.3	Encourage the construction of safe rooms in new and Local Funds homes and buildings.	Planning Department/Building Official-Floodplain Manager/Hazard Mitigation Coordinator/County EMA	Medium	Mid-Range	HMA	TBD
5.4	<u>Miscellaneous Mitigation Actions.</u> Actions needed to protect lives and preserve property that are specialized and do not fit in another category.					

Baldwin County Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.4.1	Fairground Rd Project, River Rd Re-Alignment (and similar projects) that identify roadways providing access to residents and public safety which can be improved to mitigate loss of access due to flooding.	Planning, Highway Department, and EMA	Medium	Mid-Range	HMA	TBD
5.4.2	Coroner's Office – Capacity Building Improvement for handling multiple decedents in emergencies/disasters	Coroner, EMA	Medium	Mid-Range	HMA	TBD

A.2 Bay Minette Community Action Program

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Planning Department	High	Done/Ongoing	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Planning Department	High	Ongoing	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	High	Ongoing	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	GIS Department/ Engineering Department/ Baldwin County EMA	Low	Mid-Range	HMA	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	GIS Department/ Engineering Department/ Baldwin County EMA	Low	Mid-Range	HMA	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3.4	Inventory and map existing fire hydrants throughout the community, and identify areas in need of new fire hydrants.	Planning Department, GIS, and Fire Department	Medium	Mid-Range	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Planning Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider lot size requirements on flood prone areas designated on Flood Insurance Rate Maps.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, and restrictive development of flood ways, among others.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	Planning Department	Medium	Done/Ongoing	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	Mayor and Council	High	Short-Range	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.	Floodplain Manager	Medium	Mid-Range	Local Funds	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.	Floodplain Manager	Medium	Mid-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	City Building Official	High	Ongoing	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	City Building Official	High	Ongoing	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	City Building Official	High	Ongoing	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	City Fire Department	High	Ongoing	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	City Building Official	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	City Building Official	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	City Building Official	Medium	Long-Range	Local Funds	TBD
1.8.3	Establish ordinance for the planting of new urban forests or replacement of the hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	City Building Official	Medium	Long-Range	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	City Building Official/Planning Department	Medium	Ongoing	Existing	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	City Building Official	Medium	Ongoing	Existing	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	City Building Official	Medium	Ongoing	Existing	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	City Building Official	Medium	Long-Range	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Fire Department	Medium	Mid-Range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Building Official/Building Maintenance	High	Short-Range	FEMA HMA Grant	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines.	Street Department/ Planning Department	Medium	Ongoing	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.9	<u>Backup Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of backup power generators for critical facilities.	Building Maintenance	High	Ongoing	Local Funds	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Manager	High	Ongoing	Local Funds	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Emergency Management Coordinator/Fire Department	Medium	Ongoing	Local Funds	TBD
3.2.2	Distribute materials, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Emergency Management Coordinator/Fire Department	Medium	Mid-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Emergency Management Coordinator/Fire Department/Floodplain Manager	Low	Mid-Range	Local Funds	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Emergency Management Coordinator/Building Official/Floodplain Manager	Low	Mid-Range	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain location disclosure when a property is listed for sale.	Mayor and Council	Medium	Mid-Range	Local Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	Floodplain Manager/Emergency Management Coordinator/Mayor/City Council	Medium	Ongoing	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Emergency Management Coordinator & Staff	Medium	Ongoing	Local Funds	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020-2021 plan to local officials, stakeholders, and interested individuals through internet download.	Emergency Management Coordinator & Staff	Medium	Ongoing	Local Funds	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Mayor and Council	Medium	Mid-Range	Local Funds	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Ongoing	HMA	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Long-Range	TBD	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile Counties.	Local Government	High	Long-Range	TBD	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD

City of Bay Minette Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

A.12 Baldwin County Board of Education Community Action Program

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.		High	Mid-Range/Ongoing	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions (Baldwin County Unincorporated with active comprehensive planning programs.		Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.		Medium	Mid-Range	Local Funds	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.1.4	Prepare a floodplain management plan.		High	Short-Range	HMA/Local	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.		Medium	Mid-Range/Ongoing	HMA/Local	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up-to-date within GIS to apply the full loss estimation capabilities of HAZUS.		Medium	Mid-Range/Ongoing	Local	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.		High	Short-Range	Local	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.		Medium	Mid-Range/Ongoing	HMA	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.		Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.		Medium	Mid-Range	Local Funds	TBD
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.		Medium	Mid-Range	Local Funds	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.		Medium	Mid-Range/Ongoing	HMA	TBD
1.4	Zoning. Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restriction on flood prone areas designated on Flood Insurance Rate Maps.		Medium	Mid-Range	Local Funds	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, and restrictive development of flood ways, among others.		Medium	Mid-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.		Medium	Mid-Range	Local Funds	TBD
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.					
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.		Medium	Mid-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.		Medium	Mid-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.		Medium	Mid-Range	Local Funds	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.		Medium	Mid-Range	FEMA HMA Grant	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.		Medium	Mid-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.		Medium	Mid-Range	Local Funds	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.		Medium	Short-Range	TBD	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.		Medium	Mid-Range	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."		Medium	Mid-Range	Local Funds	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters		Medium	Mid-Range	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.		Medium	Mid-Range	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.		Medium	Mid-Range	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.		Medium	Mid-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.		Medium	Ongoing	Existing	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.		Medium	Ongoing	Existing	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.		Medium	Ongoing	Existing	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.		High	Short-Range	Local Funds	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.		Medium	Long-Range	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.		Medium	Mid-Range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.		Medium	Ongoing	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.		High	Short-Range	FEMA HMA Grant	TBD

2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.		High	Short-Range	TBD	TBD
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Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damage.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.		Medium	Mid-Range	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.		Medium	Mid-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of building in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.		High	Short-Range	FEMA HMA Grant	TBD
2.5	<u>Flood Control Measures.</u> Construct small flood control measures to reduce/prevent flood damage.					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.		Low	Long-Range	FEMA HMA Grant	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.		Medium	Mid-Range	FEMA HMA Grant	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.		Medium	Mid-Range	Local Funds	TBD
2.7	Hazard Insurance Awareness. Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.		Medium	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.					
2.8	Critical Facilities Protection. Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.		Medium	Mid-Range	Local Funds	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines					
2.9	Back Up Power. Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of back-up power generators for critical facilities.		Medium	Mid-Range	FEMA HMA Grant	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.		Low	Mid-Range	Existing	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.		High	Short-Range	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.		High	Short-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.		High	Short-Range	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.		High	Short-Range	Local Funds	TBD

3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.
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Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.		Medium	Mid-Range	Local Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.		Medium	Long-Range	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.		High	Short-Range	Local Funds	TBD
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.		Low	Long-Range	Local Funds	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.		High	Short-Range	Existing	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.		Medium	Short-Range	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.		Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.		High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.		High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.		High	Short-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.		High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.		High	Mid-Range	FEMA HMA Grant	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.		High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.		High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.		Medium	Mid-Range	FEMA HMA Grant	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.		Medium	Mid-Range	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.		Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate damaging impacts of flooding, erosion, landslides and wildfires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).		Medium	Mid-Range	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.		Medium	Mid-Range	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.		Medium	Mid-Range	Local Funds	TBD
4.4.2	Develop a coastal renourishment program		Medium	Mid-Range	Local Funds	TBD

4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.
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Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.5.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance. Develop a coastal renourishment program		Medium	Mid-Range	Local Funds	TBD
5	Goal for Structural Projects. Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	Drainage System Maintenance. Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.		Medium	Long-Range	Local Funds	TBD
5.2	Reservoirs and Drainage System Improvements. Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.		Medium	Mid-Range	FEMA HMA Grant	TBD
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.		Low	Long-Range	FEMA HMA Grant	TBD
5.3	Community Shelters and Safe Rooms. Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.		Medium	Mid-Range	FEMA HMA Grant	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.		Medium	Mid-Range	FEMA HMA Grant	TBD

Baldwin County Board of Education Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.		Medium	Mid-Range	FEMA HMA Grant	TBD

A.2 Daphne Community Action Program

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Community Development Department	High	Short- Range	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Mayor and Council	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.3.4	Inventory and map existing fire hydrants throughout the jurisdiction, and identify areas in need of new fire hydrants.	Community Development Department	Medium	Mid-Range	Local Funds	TBD

1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Community Development Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
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City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restrictions on flood prone areas designated on Flood Insurance Rate Maps.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Community Development Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	Mayor and Council	High	Short-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Floodplain Manager	High	Short-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.	Floodplain Manager	Low	Long-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Inspection Department	High	Ongoing	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Building Inspection Department	High	Ongoing	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Community Development Department	High	Ongoing	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Building Inspection Department	High	Ongoing	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Building Inspection Department	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Community Development Department	Medium	Long-Range	Local Funds	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Community Development Department	Medium	Long-Range	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	Community Development Department	Medium	Long-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Community Development Department	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Community Development Department	Medium	Ongoing	Existing	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	Community Development Department	Medium	Ongoing	Existing	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Community Development Department	Medium	Ongoing	Existing	TBD
1.10	<u>Dam Safety Management.</u> Establish a comprehensive dam safety program.					
1.10.1	Support legislation to establish a State dam safety program.	Community Development Department	Medium	Long-Range	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Community Development Department	Medium	Long-Range	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Community Development Department	Medium	Long-Range	FEMA HMA Grant	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Inspection Department	High	Short-Range	FEMA HMA Grant	TBD
2.5	<u>Flood Control Measures.</u> Construct small flood control measures to reduce/prevent flood damage.					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Community Development Department	Medium	Long-Range	FEMA HMA Grant	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Building Department	High	Ongoing	TBD	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lighting and/or surge protection on existing critical facilities.	Building Inspection Department	High	Ongoing	Local Funds	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines.	Public Works	Medium	Ongoing	Local Funds	TBD
2.9	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.9.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Community Development Department	Medium	Ongoing	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Community Development Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Community Development Department	Medium	Ongoing	Local Funds	TBD
3.2.2	Distribute materials, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Community Development Department	Medium	Mid-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Floodplain Manger	Medium	Ongoing	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain location disclosure when a property is listed for sale.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2015 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.6.2	Distribute the 2015 plan summary to the public through local jurisdictions, via the internet and other media.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	High	Ongoing	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Mayor and Council	High	Long-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Mayor and Council	Medium	Mid-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	FEMA HMA Grant	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Community Development Department	Medium	Mid-Range	FEMA HMA Grant	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Community Development Department	Medium	Mid-Range	FEMA HMA Grant	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Community Development Department	Medium	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Community Development Department	Medium	Mid-Range	FEMA HMA Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	Community Development Department	Medium	Mid-Range	FEMA HMA Grant	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Community Development Department	Medium	Mid-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Community Development Department	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Community Development Department	Medium	Long-Range	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Community Development Department	Medium	Long-Range	Local Funds	TBD
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Community Development Department	Medium	Long-Range	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Community Development Department	Medium	Long-Range	Local Funds	TBD
4.4.2	Develop a coastal renourishment program.	Community Development Department	Medium	Long-Range	Local Funds	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.5	Water Resources Conservation Programs. Protect water quantity and quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Community Development Department	High	Short-Range	Local Funds	TBD
5	Goal for Structural Projects. Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	Drainage System Maintenance. Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Building Inspection Department	Medium	Long-Range	Local Funds	TBD
5.2	Reservoirs and Drainage System Improvements. Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD
5.3	Community Shelters and Safe Rooms. Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD

City of Daphne Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD

A.2 Elberta Community Action Program

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager/Emergency Management Coordinator	High	Short-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Long-Range	Local Funds	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Existing	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	Local	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.					
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Administrator	Medium	On-going	TBD	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.1.2	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Government	Medium	Ongoing	Local Funds	TBD
3.3	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.3.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	High	Ongoing	Local Funds	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Local Government	Medium	Ongoing	Local Funds	TBD
3.4	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.4.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.5	Weather Radios. Improve public access to weather alerts.					
3.5.1	Distribute hazard mitigation brochures to students through area schools	Local Government	Medium	Ongoing	Local Funds	TBD
3.5.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	Existing	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
37	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
37.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Building Department	Medium	Ongoing	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Short-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
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Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

Town of Elberta Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

A.2 Fairhope Community Action Program

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Planning Department	High	Mid-range	RESTORE /Local Funds	\$650k
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Planning Department	High	Part of Comp Plan	RESTORE /Local Funds	Included in item above
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	High	Ongoing	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	City Engineer/Baldwin County EMA	High	Short-Range	FEMA HMA Grant	\$35,000
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up-to-date within GIS to apply the full loss estimation capabilities of HAZUS.	City GIS Department/Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	City GIS Department/Planning Department	Moderate	Ongoing	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	City GIS Department/Planning Department/ City Engineer/ Floodplain Manager	High	Ongoing	Local Funds/ FEMA HMA Grant	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning Department	Low	Long-Range	TBD	TBD

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	City GIS Department/Planning Department/ City Engineer	Medium	Long-Range	FEMA HMA Grant	TBD
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.	Fire Department/Water Dept/GIS	Medium	Ongoing	Local Funds	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works Department	High	Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.4	Enact local ordinance that require community storm shelters within sizeable mobile home parks and subdivisions.	Planning Department/ Floodplain Manager	Low	Long-Range	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.	Floodplain Manager	Medium	Mid-Range	TBD	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Building Official/ Planning Department/ Baldwin County EMA	Medium	Long-Range	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.2	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	High	Approved/Ongoing Evaluations	TBD	TBD
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	City Council	Low	Long-Range	TBD	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Low	Long-Range	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official/ Planning Department/ City Engineer	High	Long-Range	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Building Official/ Planning Department/ City Engineer	high	Long-range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Official/ Floodplain Manager	High	Ongoing	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Official/ Floodplain Manager	High	Ongoing	FEMA HMA Grant	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Building Official/ Floodplain Manager	High	Ongoing	FEMA HMA Grant	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					

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#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Official/ Floodplain Manager	High	Ongoing	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Building Official	Medium	Long-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Official/ Floodplain Manager	Medium	Long-Range	FEMA HMA Grant	TBD
2.5	<u>Flood Control Measures.</u> Small flood control measures built to reduce/prevent flood damage.					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Building Official/ Floodplain Manager	Medium	Long-Range	FEMA HMA Grant	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official/ City Engineer	High	Ongoing	FEMA HMA Grant	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Building Official/ Floodplain Manager	Medium	Ongoing	Local Funds	TBD

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#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Building Official/ Floodplain Manager	High	Ongoing	Local Funds	TBD
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	Low	Long-Range	TBD	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines	Streets/Public Works	Medium	Ongoing	TBD	TBD
2.9	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of backup power generators for critical facilities.	Grants Manager	High	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Floodplain Administrator / Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	City Staff/EM Coordinator, and Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Floodplain Administrator, Mayor, and State of Alabama	High	Ongoing	State Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	City Staff/EM Coordinator, Baldwin County EMA	Low	Long-Range	Local Funds	TBD

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.5	Education Programs. Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.6.2	Distribute the 2015 plan summary to the public through local jurisdictions, via the internet and other media.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.7	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Floodplain Manager/ Building Official	High	Ongoing	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	City Staff/EM Coordinator, Baldwin County EMA	High	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	City Staff/EM Coordinator, Baldwin County EMA	Medium	Mid-Range	Local Funds	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Public Works Dept/ Facility Maintenance	High	Ongoing	FEMA HMA Grant	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	City Staff/EM Coordinator, Baldwin County EMA	Medium	Mid-Range	Local Funds	\$150,000
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	City Staff/EM Coordinator, Baldwin County EMA	High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	City Staff/EM Coordinator, Baldwin County EMA	High	Mid-Range	FEMA HMA Grant	TBD

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Baldwin County EMA	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	City Staff/EM Coordinator, Baldwin County EMA	High	Mid-Range	FEMA HMA Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	Floodplain Manager/ Planning Department	Medium	Ongoing	FEMA HMA Grant	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Manager/ Planning Department	High	Ongoing	Other	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Building Official	High	Ongoing	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Planning Department	Medium	Ongoing	Local Funds	TBD

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Planning Department	Medium	Ongoing	TBD	TBD
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant species.	Planning Department	Medium	Ongoing	TBD	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.5	<u>Water Resources Conservation Programs.</u> Protect water quantity and quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Fairhope Water and Sewer Dept	High	Ongoing	Local Funds	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.	City Engineer/Public Works	High	Ongoing	FEMA HMA Grant	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					

City of Fairhope Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Building Official/ Baldwin County EMA	Medium	Long-Range	Local Funds	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Planning Department/ Baldwin County EMA	Medium	Long-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	Building Official/ City Council	Medium	Long-Range	FEMA HMA Grant	TBD

A.2 *Foley Community Action Program*

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Community Development Department	High	Short- Range	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Community Development Department	High	Short-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Finance Department	High	Short-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	IT/GIS Department	High	Short-Range	HMA	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	Community Development Department	High	Short-Range	Local Funds	TBD
1.2.4	Create GIS systems for inventorying and assessing urban forest for in order to identify current and potential hazards and develop a comprehensive plan for managing urban forests.	Fire, Horticulture & Environmental Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Engineering Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within the jurisdiction that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Engineering Department	Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Engineering Department	High	Short-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.	Fire Department Riviera Utilities	High	Short-Range	Local Funds	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Engineering Department	High	Short-Range	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restrictions on flood prone areas designated on Flood Insurance Rate Maps.	Community Development Department	High	Short-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Community Development, Engineering & Environmental Department	High	Short-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Community Development, Environmental & Engineering Department	High	Short-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	Building Official	High	Long-Range	TBD	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Community Development, Engineering & Environmental Department	High	Short-Range	Existing	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator and FEMA's training center in Emmitsburg, Maryland.	Community Development Department	Medium	Mid-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Community Development Department	High	Short-Term	Local Funds	TBD
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Floodplain Administrator	High	On-going	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Community Development, Engineering & Public Works Department	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.	Engineering Department & Public Works	High	Mid-Range	Local Funds	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.	Community Development, Engineering & Public Works Department	High	Ongoing	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Community Development Department	High	Short-Range	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Community Development Department	High	Short-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Engineering Department	Medium	Mid-Range	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Fire Department	High	Short-Range	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Community Development & Environmental Department	High	Short-Range	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Building Official	High	Ongoing	Local Funds	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce stormwater runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Engineering & Environmental Department	High	Short-Range	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	Environmental & Horticulture Department	Medium	Short-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Horticulture Department	High	Short-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Engineering & Environmental Department	High	Ongoing	Local Funds	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	City Council Engineering & Environmental Department	High	Ongoing	Local Funds	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Environmental, Engineering & Horticulture Department	High	Short-Range	Local Funds	TBD
1.10	<u>Dam Safety Management.</u> Establish a comprehensive dam safety program.					
1.10.1	Support legislation to establish a State dam safety program.	Mayor and Council	Medium	Mid-Range	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Community Development Department	Medium	Long-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Community Development & Fire Department	Medium	Long-Range	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Fire Department/ Environmental Services	High	Short-Range	FEMA HMA Grant	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD

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#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Community Development Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.5	<u>Flood Control Measures.</u> Small flood control measures built to reduce/prevent flood damage					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Community Development & Engineering Department	Medium	Long-Range	FEMA HMA Funds	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Community Development Department	High	Short-Range	FEMA HMA Funds	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Community Development Department	High	Short-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.7	Hazard Insurance Awareness. Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Community Development & Marketing Department	High	Short-Range	Local Funds	TBD
2.7.2	Promote the purchase of crop insurance to cover potential losses due to drought.	Community Development & Marketing Department	High	Long-Range	Local Funds	TBD
2.8	Critical Facilities Protection. Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Maintenance Department	High	Short-Range	Local Funds	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines					
2.9	Back Up Power. Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	City Council	High	Short-Range	FEMA HMA Grant	TBD
3	Goal for Public Education and Outreach. Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	Map Information. Increase public access to Flood Insurance Rate Map (FIRM) information.					

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Community Development & Marketing Department	High	Ongoing	Local Funds	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Community Development Department	High	Short-Range	Local Funds	TBD
3.2.2	Distribute materials, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Fire Department	High	Short-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Chamber of Commerce	Low	Long-Range	Existing	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Community Development Department	High	Short-Range	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Floodplain Administrator, Mayor, Local Government, State Government	High	Long-Range	Local Funds	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	City Library	High	Short-Range	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.6.2	Distribute the 2020 plan summary to the public through local jurisdictions, via the internet and other media.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Community Development Department	High	Short-Range	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Marketing Department	High	Short-Range	TBD	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Public Safety	High	Short-Range	Local Funds	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	City Council	Medium	Mid-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Public Safety	Medium	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Public Safety	Medium	Mid-Range	FEMA HMA Grant	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Public Safety	Medium	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Public Safety	High	Short-Range	FEMA HMA Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	City Council	Medium	Mid-Range	FEMA HMA Grant	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Environmental Department	High	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Environmental Department	High	Ongoing	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Environmental Department	High	Short-Range	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Horticulture Department	High	Short-Range	Local Funds	TBD
4.3.3	Develop and urban forestry management plans to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Horticulture Department	High	Short-Range	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	Environmental Department	Medium	Mid-Range	TBD	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Ongoing	Local	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Engineering & Public Works Department	Medium	Long-Range	Existing	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Engineering Department	High	Short-Range	FEMA HMA Grant	TBD
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.	Riviera Utilities	Medium	Long-Range	Local Funds	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Council	High	Short-Range	FEMA HMA Grant	TBD

City of Foley Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	Community Development Department	High	Short-Range	FEMA HMA Grant	TBD

A.2 Gulf Shores Community Action Program

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Planning and Zoning Department	High	Ongoing	Local Funds	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	Engineering Department	Medium	Mid-Range	Local Funds	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Engineering Department	High	Ongoing	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning and Zoning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Engineering Department	High	Ongoing	Local Funds	TBD
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.	Fire Department	High	Ongoing	Local Fund	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Engineering Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.4.1	Consider lot size requirements on flood prone areas designated on Flood Insurance Rate Maps.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning and Zoning Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	Mayor and Council	High	Short-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Building Department	High	Ongoing	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Building Department	High	Ongoing	Local Funds	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Building Department	High	Ongoing	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Public Works Department	High	Short-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Department	High	Ongoing	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Building Department	High	Ongoing	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Engineering Department	High	Ongoing	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Building Department	High	Ongoing	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Building Department	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning and Zoning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning and Zoning Department	Medium	Long-Range	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	Fire Department	Medium	Long-Range	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Planning and Zoning Department	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Engineering Department	High	Ongoing	Local Funds	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	Engineering Department	Medium	Ongoing	Local Funds	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning and Zoning Department	Medium	Ongoing	Local Funds	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.10.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Building Department	High	Long-Range	Local Funds	TBD
1.11	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.11.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Engineering Department	High	Ongoing	FEMA HMA Grant	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Engineering Department	High	Ongoing	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Fire Department	Medium	Long-Range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Floodplain Manager	High	Ongoing	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	High	Ongoing	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	High	Ongoing	FEMA HMA Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	FEMA Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Building Department	High	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	High	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Department	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	Engineering Department	High	Ongoing	Local Funds	TBD
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of backup power generators for critical facilities.	Engineering Department	High	Ongoing	FEMA HMA Funds	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Floodplain Manager	High	Ongoing	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Building Department	High	Ongoing	Local Funds	TBD
3.2.2	Distribute materials, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Building Department	High	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Building Department	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Building Department	High	Ongoing	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	City Library	High	Ongoing	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Fire Department	High	Ongoing	Local Funds	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.7	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Floodplain Manager	High	Ongoing	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.9	Weather Radios. Improve public access to weather alerts					
3.9.1	Promote the use of weather radios in households and businesses.	Mayor and Council	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Mayor and Council	High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	FEMA HMA Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.10	Disaster Warning. Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Ongoing	TBD	TBD
4	Goal for Natural Resources Protection. Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	Open Space Easements and Acquisitions. Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	Planning and Zoning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
4.2	River/Stream Corridor Restoration and Protection. Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Building Department	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Planning and Zoning Department	High	Ongoing	Local Funds	TBD
4.3	Urban Forestry Programs. Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Planning Department	Medium	Ongoing	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Planning Department	Medium	Ongoing	TBD	TBD
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant species.	Planning Department	Medium	Ongoing	TBD	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	Engineering Department	High	Ongoing	Local Funds	TBD
4.4.2	Develop a coastal renourishment program.	Engineering Department	High	Ongoing	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Mayor/City Council	Medium	Long Range	Local Funds	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Engineering Department	High	Ongoing	Local Funds	TBD

City of Gulf Shores Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Engineering Department	High	Ongoing	FEMA HMA Grant	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Planning and Zoning Department	High	Short-Range	FEMA HMA Grant	TBD
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Engineering Department	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

A.2 Orange Beach Community Action Program

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Planning Department	Medium	Mid-Range	Existing	TBD
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Planning Department	Medium	Mid-Range	Existing	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Low	Mid-Range	Existing	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	Baldwin County EMA	Low	Mid-Range	HMA	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	City GIS Department	Low	Long-Range	FEMA HMA Grant	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	City GIS Department	Medium	Mid-Range	Existing	TBD
1.3	<u>Planning Studies. Conduct special studies, as needed, to identify hazard risks and mitigation measures.</u>					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Building Official	Low	Long-Range	FEMA HMA Grant	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Building Official	Low	Long-Range	TBD	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Building Official	Low	Long-Range	TBD	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	City Engineer	Medium	Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	Building Official	Medium	Long-Range	TBD	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Ongoing	Existing	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator and FEMA's training center in Emmitsburg, Maryland.	Floodplain Manager	High	Ongoing	Existing	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Floodplain Manager	Medium	Ongoing	Existing	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Ongoing	Existing	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.5	Participate in the "Turn Around Don't Drown" program by purchasing and installing signs in known flash flood bridge overpass locations.	Floodplain Manager	Medium	Short-Range	Existing	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory and revising and updating regulatory floodplain maps.	Floodplain Manager	Medium	Long-Range	FEMA HMA Grant	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Official	High	Ongoing	Existing	TBD
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	City Engineer	Medium	Ongoing	TBD	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Fire Chief	Medium	Ongoing	Existing	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Code Enforcement	Medium	Ongoing	Existing	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Building Official	High	Ongoing	TBD	TBD

City of Orange Beach Community Action Program						
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1.7.7	Require wind load design by a registered engineer for all new residential construction.	Building Official	High	Ongoing	Existing	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Low	Mid-Range	TBD	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	City Forester	Low	Low	TBD	TBD
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	City Forester	Low	Low	TBD	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.10	<u>Dam Safety Management.</u> Establish a comprehensive dam safety program.					
1.10.1	Support legislation to establish a State dam safety program.	Mayor and Council	Medium	Mid-Range	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager	High	Ongoing	Existing	TBD

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#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	FEMA HMA Grant	TBD
1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Building Official	Medium	Ongoing	TBD	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Floodplain Manager	Medium	Long-Range	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	Medium	Long-Range	FEMA HMA Grant	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.5	<u>Flood Control Measures.</u> Small flood control measures built to reduce/prevent flood damage					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Short-Range	Existing	TBD
2.6.3	Promote and assist homeowners to apply for funding for building retrofits through the Alabama Department of Insurance "Strengthen Alabama Homes Grant Program."	Building Official	Medium	Short-Range	Existing	None
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Existing	TBD
2.7.3	Participate in education efforts to encourage citizens to research rates and carriers for wind coverage.	Building Official	Medium	Ongoing	Existing	None
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	Low	Long-Range	TBD	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines					
2.9	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of backup power generators for critical facilities.	Public Works	Low	Long-Range	FEMA HMA Grant	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.3.1	Arrange with the Multiple Listing Service (MLS) to require floodplain location disclosure as a condition for each real estate listing.	Floodplain Manager	Medium	Ongoing	TBD	TBD
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Floodplain Manager	Medium	Ongoing	TBD	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Floodplain Manager	Medium	Ongoing	Existing	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Floodplain Manager	High	Ongoing	Existing	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Baldwin County EMA	High	Short-Term	Existing	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Baldwin County EMA	Medium	Long-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Baldwin County EMA	Medium	Long-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Baldwin County EMA	Low	Long-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Baldwin County EMA	Low	Long-Range	FEMA HMA Grant	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Baldwin County EMA	Low	Long-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Baldwin County EMA	Low	Long-Range	FEMA HMA Grant	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.10.5	Upgrade critical communications infrastructure.	Baldwin County EMA	Low	Long-Range	FEMA HMA Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	Local Government	Medium	Ongoing	FEMA HMA Grant	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Building Official	High	Ongoing	Other	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	City Forester	Medium	Ongoing	Existing	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	City Forester	Low	Ongoing	TBD	TBD
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant species.	City Forester	Low	Ongoing	TBD	TBD

City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	City Engineer	Medium	Ongoing	TBD	TBD
4.4.2	Develop a coastal renourishment program.	Coastal Resource Manager	High	Short-Range	Other	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	City Engineer	Medium	Ongoing	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	City Engineer	High	Short-Range	Existing	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	City Engineer	High	Ongoing	FEMA HMA Grant	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					

5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Building Official	High	Ongoing	TBD	TBD
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City of Orange Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Baldwin County EMA	Medium	Mid-Range	FEMA HMA Grant	TBD

Perdido Beach Community Action Program

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures, smart growth opportunities and methodologies, and increase /maintain hazards database, socioeconomic data, infrastructure, and critical facilities inventories.					
1.1.1	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.2	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Inventory and map existing fire hydrants throughout the community, and identify areas in need of new fire hydrants.	Fire Department, Planning & Zoning Department	Medium	Mid-Range	TBD	TBD
1.1.4	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					

1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.
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Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager/Emergency Management Coordinator	High	Short-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Long-Range	Local Funds	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Existing	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	Local	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	Utilities, Public Works	High	Ongoing	Local Funds	TBD
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Administrator	Medium	On-going	TBD	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.1.2	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Government	Medium	Ongoing	Local Funds	TBD
3.3	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.3.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	High	Ongoing	Local Funds	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Local Government	Medium	Ongoing	Local Funds	TBD
3.4	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.4.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.5	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.5.1	Distribute hazard mitigation brochures to students through area schools	Local Government	Medium	Ongoing	Local Funds	TBD
3.5.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	Existing	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
37	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
37.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Building Department	Medium	Ongoing	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Short-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
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Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

Town of Perdido Beach Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

A.13 Silverhill Community Action Program

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures, smart growth opportunities and methodologies, and increase /maintain hazards database, socioeconomic data, infrastructure, and critical facilities inventories.					
1.1.1	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.2	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Inventory and map existing fire hydrants throughout the community, and identify areas in need of new fire hydrants.	Fire Department, Planning & Zoning Department	Medium	Mid-Range	TBD	TBD
1.1.4	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					

1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.
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Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager/Emergency Management Coordinator	Low	Ongoing	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	Medium	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Long-Range	Local Funds	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Existing	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	Local	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	Utilities, Public Works	Medium	Ongoing	Local Funds	TBD
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Administrator	Medium	On-going	TBD	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.1.2	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Government	Medium	Ongoing	Local Funds	TBD
3.3	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.3.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	Med	Ongoing	Local Funds	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Local Government	Medium	Ongoing	Local Funds	TBD
3.4	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.4.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.5	Weather Radios. Improve public access to weather alerts.					
3.5.1	Distribute hazard mitigation brochures to students through area schools	Local Government	Low	Ongoing	Local Funds	TBD
3.5.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	Medium	Short-Range	Existing	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
37	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
37.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Building Department	Medium	Ongoing	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government	Low	Ongoing	TBD	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	Low	Ongoing	TBD	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	Low	Ongoing	TBD	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	Low	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	Low	Mid-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Local Government	Low	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
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Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

Town of Silverhill Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

A.14 Robertsdale Community Action Program

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Municipal Planning Commission	Medium	Short- Range	Local Funds	\$36,000
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Municipal Planning Commission	Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Municipal Planning Commission	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	County GIS Department	High	Mid-Range	FEMA HMA Grant	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up-to-date within GIS to apply the full loss estimation capabilities of HAZUS.	City Engineer	Medium	Long-Range	\$10,000	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	City Engineer	Medium	Long-Range	TBD	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	City Engineer	Medium	Mid-Range	\$50,000	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	City Engineer	Medium	Long-Range	TBD	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	City Engineer	Medium	Mid-Range	\$20,000	TBD
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.	Fire Department	Medium	Mid-Range	Local Funds	TBD

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works	Medium	Mid-Range/Ongoing	\$120,000	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restriction on flood prone areas designated on Flood Insurance Rate Maps.	Municipal Planning Commission	Low	Long-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Municipal Planning Commission	Low	Long-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	City Engineer	Medium	Mid-Range	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	City Engineer	Medium	Short-Range	Local Funds	\$1,500
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	City Engineer	Medium	Short-Range	Local Funds	TBD

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	City Engineer/Floodplain Administrator	Medium	Long-Range	TBD	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Municipal Planning Commission	Low	Long-Range	Local Funds	TBD
1.6.6	Improve flood risk assessment by documenting high water marks post event, verification of FEMA's repetitive loss inventory, and revising and updating regulatory floodplain maps.	Building Official	Medium	Ongoing	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Official	Medium	Mid-Range	Local Funds	TBD
1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Building Official	High	Mid-Range	Local Funds	TBD
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Municipal Planning Commission	Low	Long-Range	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters	Building Official/Fire Department	High	Ongoing	TBD	TBD

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Building Official	Medium	Short-Range	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Building Official	Medium	Short-Range	Local Funds	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Municipal Planning Commission	Medium	Long-Range	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	Municipal Planning Commission/Local Government	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	Municipal Planning Commission	Medium	Ongoing	Existing	TBD
1.10	<u>Dam Safety Management.</u> Establish a comprehensive dam safety program.					
1.10.1	Support legislation to establish a State dam safety program.	Municipal Planning Commission	Medium	Ongoing	Existing	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
2	<u>Goal for Property Protection:</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Official	Medium	Ongoing	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damage.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low-to moderate-income families.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of building in hazardous flood areas to safeguard against damages.					

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.5	<u>Flood Control Measures.</u> Small flood control measures built to reduce/prevent flood damage.					
2.5.1	Examine use of minor structural projects (small berm or floodwalls) in areas that cannot be mitigated through non-structural mitigation techniques.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.6	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.6.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.6.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	City Engineer	Medium	Mid-Range	Local Funds	TBD
2.7	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.7.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Building Official	Medium	Mid-Range	Local Funds	TBD
2.7.2	Promote the purchase of crop insurance to cover potential losses due to drought.	Building Official	Medium	Mid-Range	Local Funds	TBD
2.8	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.8.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	Medium	Mid-Range	Local Funds	TBD
2.8.2	Conduct ongoing tree trimming programs along power lines.	Public Works/Utilities	Medium	Ongoing	Local Funds	TBD
2.9	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.9.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Baldwin County EMA	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Map Information.</u> Increase public access to Flood Insurance Rate Map (FIRM) information.					
3.1.1	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	Building Official	Medium	Ongoing	Existing	TBD
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Building Official	Medium	Ongoing	Existing	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Building Official	Medium	Ongoing	Existing	TBD

City of Robertsdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Emergency Management Coordinator	Medium	Ongoing	Local	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Building Official	Medium	Ongoing	Existing	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain location disclosure when a property is listed for sale.	Building Official	Medium	Mid-Range	Existing	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	City Engineer	Low	Long-Range	Existing	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs on topics related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Building Official	Medium	Mid-Range	Existing	TBD
3.5.2	Educate homeowners about structural and non-structural retrofitting of vulnerable homes.	Building Official	Medium	Mid-Range	Existing	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD

City of Robertsdale Community Action Program						
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3.6.2	Distribute the 2020 plan summary to the public through local jurisdictions, via the internet and other media.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	Medium	Short-Range	Local Funds	TBD
3.8	<u>Mass Media Relations.</u> Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Public Works Director	High	Mid-Range	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Public Works Director	High	Mid-Range	Local Funds	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Public Works Director	High	Mid-Range	HMA	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Municipal Planning Commission	Medium	Long-Range	Local Funds	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Municipal Planning Commission	Medium	Long-Range	Local Funds	TBD

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3.10.5	Upgrade critical communications infrastructure.	Public Works Director	Medium	Short-Range	FEMA HMA Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	City Engineer	Low	Mid-Range	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Engineer	Medium	Mid-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate damaging impacts of flooding, erosion, landslides and wildfires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	City Engineer	Medium	Mid-Range	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Public Works Director	Low	Mid-Range	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	Public Works Director	High	Mid-Range	FEMA HMA Grant	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					

City of Robertsedale Community Action Program						
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4.5.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance. Develop a coastal renourishment program	City Engineer	Medium	Mid-Range	Local Funds	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	City Engineer	High	Long-Range	Local Funds	\$10,000
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Public Works Director	High	Mid-Range	FEMA HMA Grant	\$500,000
5.2.2	Improve and retrofit water supply systems to save water during drought events and to eliminate breaks and leaks.	Public Works Director	High	Mid-Range	FEMA HMA Grant	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Public Works Director	High	Mid-Range	FEMA HMA Grant	\$1,500,000
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Public Works Director	High	Mid-Range	FEMA HMA Grant	TBD

5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings	Public Works Director	High	Mid-Range	FEMA HMA Grant	TBC
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A.15 Spanish Fort Community Action Program

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.1	Maintain up-to-date comprehensive plans for all jurisdictions. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	Planning Department	High	Short- Range	Local Funds	\$60,000
1.1.2	Integrate the findings and recommendations of this plan into comprehensive plan amendments for jurisdictions with active comprehensive planning programs.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	City Council	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.2.1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	Baldwin County EMA	High	Short-Range	HMA	TBD
1.2.2	Integrate FEMA HAZUS-MH applications for hazard loss estimates within local GIS program. Maintain up-to-date within GIS to apply the full loss estimation capabilities of HAZUS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3.2	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3.3	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Planning Department	Medium	Mid-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.3.4	Inventory and map existing fire hydrants throughout the county, and identify areas in need of new fire hydrants.	Fire Department	High	Short-Range	Local Fund	TBD
1.3.5	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					
1.4.1	Consider large lot size restriction on flood prone areas designated on Flood Insurance Rate Maps.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.4.2	Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.4.3	Require delineation of flood plain fringe, floodways, and wetlands on all plans submitted with a permit for development within a flood plain.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.4.4	Enact local ordinance that requires community storm shelters within sizeable mobile home parks and subdivisions.	City Council	Low	Long-Range	Local Funds	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					

City of Spanish Fort Community Action Program						
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1.6.1	Train local flood plain managers through programs offered by the State Flood Plain Coordinator or FEMA's training center in Emmitsburg, Maryland.	City Council	High	Short-Range	Local Funds	TBD
1.6.2	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.3	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Floodplain Manager	High	Short-Range	FEMA HMA Grant	TBD
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager	Medium	Mid-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	Building Official	High	Ongoing	Local Funds	TBD

City of Spanish Fort Community Action Program						
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1.7.2	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Building Official	High	Ongoing	Local Funds	TBD
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	High	Ongoing	Local Funds	TBD
1.7.4	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Building Official	High	Ongoing	Local Funds	TBD
1.7.5	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	Building Official	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Long-Range	Local Funds	TBD
1.8.2	Establish ordinances to help mitigate fire hazards related to fuel buildup due to recent hurricanes, by raising tree canopies close to homes, thinning forests near urban areas, and removing trees that are too close to homes.	City Council	Low	Long-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
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1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	City Council	Low	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.1	Promote the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Planning Department	Medium	Ongoing	Existing	TBD
1.9.2	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	Planning Department	Medium	Ongoing	Existing	TBD
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	City Council	Low	Long-Range	Local Funds	TBD
1.11	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.11.1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Planning Department	Medium	Long-Range	FEMA HMA Grant	TBD

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1.12.2	Conduct wildfire vulnerability assessments, including the vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.	Building Official	Medium	Long-Range	Local Funds	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.1.1	Pursue FEMA grant funds to relocate buildings and infrastructure out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Building Official	High	Short-Range	FEMA HMA Grant	TBD
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.2.2	Utilize the recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages					

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Floodplain Manager	Medium	Ongoing	FEMA HMA Grant	TBD
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					

2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
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City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	High	Ongoing	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.2	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Planning Department	Medium	Mid-Range	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Building Official	Medium	Long-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Floodplain Manger	Medium	Ongoing	Local Funds	TBD
3.3	<u>Real Estate Disclosure.</u> Encourage real estate agents to disclose flood plain location for property listings.					
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain location disclosure when a property is listed for sale.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.4	<u>Library.</u> Use local library resources to educate the public on hazard risks and mitigation alternatives.					
3.4.1	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.5	<u>Education Programs.</u> Use schools and other community education resources to conduct programs related to hazard risks and mitigation measures.					
3.5.1	Distribute hazard mitigation brochures to students through area schools.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.6	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
3.7	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.7.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	High	Ongoing	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	Weather Radios. Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Planning Department	Medium	Mid-Range	Local Funds	TBD
3.9.2	Promote the use of weather radios in households and businesses.	Planning Department	Medium	Mid-Range	Local Funds	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Short-Range	Existing	TBD
3.10	Disaster Warning. Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
3.10.3	Evaluate the feasibility of a shared tri-county ALERT system covering Baldwin, Escambia, and Mobile counties.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.10.5	Upgrade critical communications infrastructure.	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.	City Council	Low	Long-Range	Local Funds	TBD
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Planning Department	Medium	Mid-Range	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate damaging impacts of flooding, erosion, landslides and wildfires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Floodplain Manger	Medium	Ongoing	Local Funds	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	City Council	Low	Long-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	City Council	Low	Long-Range	Local Funds	TBD
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance storm water drainage.	Local Floodplain Manger	Medium	Ongoing	Local Funds	TBD
4.4.2	Develop a coastal renourishment program	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	City Council	Low	Ongoing	Local Funds	TBD
4.5.2	Prepare and implement standard operating procedures and guidelines for drainage system maintenance. Develop a coastal renourishment program	Local Floodplain Manger	Medium	Long-Range	Local Funds	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Building Official	Medium	Long-Range	Local Funds	TBD

City of Spanish Fort Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Public Works Department	Medium	Mid-Range	FEMA HMA Grant	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	Planning Department	High	Short-Range	FEMA HMA Grant	TBD
5.3.2	Encourage the construction of safe rooms in new and existing homes and buildings.	Planning Department	High	Short-Range	Local Funds	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

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Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures, smart growth opportunities and methodologies, and increase /maintain hazards database, socioeconomic data, infrastructure, and critical facilities inventories.					
1.1.1	Identify existing culturally or socially significant structures and critical facilities within Baldwin County that have the most potential for losses from natural hazard events and identify needed structural upgrades.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.2	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods, and develop a program for construction upgrades as appropriate.	Planning and Zoning Department	Medium	Mid-Range	Local Funds	TBD
1.1.3	Inventory and map existing fire hydrants throughout the community, and identify areas in need of new fire hydrants.	Fire Department, Planning & Zoning Department	Medium	Mid-Range	TBD	TBD
1.1.4	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Public Works Department	Medium	Mid-Range/Ongoing	FEMA HMA Grant	TBD
1.4	<u>Zoning.</u> Establish effective zoning controls, where applicable, to vulnerable land areas to discourage environmentally incompatible land use and development.					

1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.
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Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					
1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager / Community Development	High	Long Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager/Emergency Management Coordinator	High	On-going	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	High	Ongoing	Local Funds Grant	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	On-going	Local Funds	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Floodplain Manager Community Development	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Existing	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	Local	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager Community Development	Medium	Ongoing	Local Funds	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager/Community Development	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager/Community Development	Medium	Ongoing	Local Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager/Community Development	Medium	Ongoing	Local Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager/Community Development	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager/Community Development	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager/Community Development	Medium	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	N/A	N/A			
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Administrator /Community Development	Medium	On-going	TBD	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.1.2	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Government	Medium	Ongoing	Local Funds	TBD
3.3	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.3.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manger	medium	Ongoing	Local Funds	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Local Government	Medium	Ongoing	Local Funds	TBD
3.4	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.4.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.5	Weather Radios. Improve public access to weather alerts.					
3.5.1	Distribute hazard mitigation brochures to students through area schools	Local Government	Medium	Ongoing	Local Funds	TBD
3.5.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	Existing	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
37	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
37.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Building Department	Medium	Ongoing	Local Funds Grant	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Short-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	medium	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	Grant	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
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Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	low	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department/ Water Dept	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

Town of Summerdale Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

A.2 Magnolia Springs Community Action Program

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1	<u>Goal for Prevention.</u> Manage the development of land and buildings to minimize risks of loss due to natural hazards.					
1.1	<u>Comprehensive Plans and Smart Growth.</u> Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development.					
1.1.3	Prepare a five-year capital improvements plan (CIP) to include capital projects that implements the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.2	<u>Geographic Information Systems (GIS).</u> Maintain a comprehensive database of hazards locations, socio economic data, infrastructure, and critical facilities inventories.					
1.2.3	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Planning Department	Medium	Mid-Range	Local Funds	TBD
1.3	<u>Planning Studies.</u> Conduct special studies, as needed, to identify hazard risks and mitigation measures.					
1.3.1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Planning Department	Medium	Mid-Range	FEMA HMA Grant	TBD
1.5	<u>Open Space Preservation.</u> Minimize disturbances of natural land features and increased storm water runoff through regulations that maintain critical natural features such as open space for parks, conservation areas, landscaping, and drainage.					

1.5.1	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Planning Department	Medium	Long-Range	Local Funds	TBD
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Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
1.6	<u>Flood Plain Management Regulations.</u> Effectively administer and enforce local floodplain management regulations.					
1.6.4	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association Flood Plain Managers and encourage active participation.	Floodplain Manager	High	Short-Range	Local Funds	TBD
1.6.5	Participate in the "Turn Around, Don't Drown" program by purchasing and installing signs in known flash flood overpass locations.	Floodplain Manager/Emergency Management Coordinator	High	Short-Range	Local Funds	TBD
1.7	<u>Building and Technical Codes.</u> Review local codes for effectiveness of standards to protect buildings and infrastructure from natural hazard damages.					
1.7.3	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Planning Department	High	Ongoing	Local Funds	TBD
1.7.6	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Planning Department	High	Ongoing	FEMA HMA Grant	TBD
1.8	<u>Landscape Ordinances.</u> Establish minimum standards for planting areas for trees and vegetation to reduce storm water runoff and improve urban aesthetics.					
1.8.1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Planning Department	Medium	Long-Range	Local Funds	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
1.8.3	Establish ordinance for the planting of new urban forests or replacement of hurricane damaged urban forests using hurricane resistant tree species to mitigate wind and erosion problems, help beautify and promote healthy urban environments and reduce heating, cooling and storm runoff costs.	Floodplain Manager	Medium	Long-Range	Local Funds	TBD
1.9	<u>Storm Water Management.</u> Manage the impacts of land development on storm water runoff rates and to natural drainage systems.					
1.9.3	Establish urban forestry program to help mitigate storm water runoff common in areas with large impervious surfaces.	Planning Department	Medium	Ongoing	Existing	TBD
1.10	<u>Community Rating System Program (CRS).</u> Increase participation of NFIP member communities in the CRS Program.					
1.12	<u>Critical Facilities Assessments.</u> Perform assessments of critical facilities (hospitals, schools, fire and police stations, emergency operation centers, special needs housing, and others) to address building and site vulnerabilities to hazards, identify damage control and retrofit measures to reduce vulnerability to damage and disruption of operations during severe weather and disaster events.					
1.12.1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Building Official	Medium	Ongoing	Local	TBD
2	<u>Goal for Property Protection.</u> Protect structures and their occupants and contents from the damaging effects of natural hazards.					
2.1	<u>Building Relocation.</u> Relocate buildings out of hazardous flood areas to safeguard against damages and establish permanent open space.					
2.2	<u>Acquisition.</u> Acquire flood prone buildings and properties and establish permanent open space.					
2.2.1	Pursue grant funds to acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.2.2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3	<u>Building Elevation.</u> Elevate buildings in hazardous flood areas to safeguard against damages.					
2.3.1	Pursue grant funds to subsidize the elevation of certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings; where feasible, elevation is preferable to flood proofing.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.3.2	Pursue grant funds to repair, elevate and weatherize existing homes for low- to moderate-income families.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.4	<u>Flood Proofing.</u> Encourage flood proofing of buildings in hazardous flood areas to safeguard against damages.					
2.4.1	Pursue FEMA grant funds for flood proofing pre-FIRM non-residential buildings, where feasible.	Floodplain Manager	Medium	Ongoing	FEMA HMA Funds	TBD
2.5	<u>Building Retrofits.</u> Retrofit vulnerable buildings to protect against natural hazards damages, including flooding, high winds, tornadoes, hurricanes, severe storms, and earthquakes.					
2.5.1	Pursue FEMA grant funds to retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
2.5.2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.6	<u>Hazard Insurance Awareness.</u> Increase public awareness of flood insurance and special riders that may be required for earthquake, landslide, sinkhole, and other damages typically not covered by standard property protection policies.					
2.6.1	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	Floodplain Manager	Medium	Ongoing	Local Funds	TBD
2.7	<u>Critical Facilities Protection.</u> Protect critical facilities from potential damages and occupants from harm in the event of hazards through retrofits or relocations of existing facilities located in high-risk zones or construction of new facilities for maximum protection from all hazards.					
2.7.1	Install lightning and/or surge protection on existing critical facilities.	Building Official	High	Ongoing	Local Funds	TBD
2.7.2	Conduct ongoing tree trimming programs along power lines.	Utilities, Public Works	Medium	Ongoing	Local Funds	TBD
2.8	<u>Back Up Power.</u> Ensure uninterrupted power supply to critical facilities during emergency events.					
2.8.1	Pursue grant funding for the installation of back-up power generators for critical facilities.	Building Official	Medium	Mid-Range	FEMA HMA Grant	TBD
3	<u>Goal for Public Education and Outreach.</u> Educate and inform the public about the risks of hazards and the techniques available to reduce threats to life and property.					
3.1	<u>Outreach Projects.</u> Conduct regular public events to inform the public of hazards and mitigation measures.					
3.1.1	Publicize the availability of FIRM information to real estate agencies, builders, developers, and homeowners.	Floodplain Administrator	Medium	On-going	TBD	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.1.2	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Planning Department	Medium	Ongoing	Local Funds	TBD
3.2	<u>Community Hazard Mitigation Plan Distribution.</u> Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.2.1	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as City/County Day, Hurricane Awareness Week, and Severe Weather Week.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.2	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.3	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	Local Government	Medium	Ongoing	Local Funds	TBD
3.2.4	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Local Government	Medium	Ongoing	Local Funds	TBD
3.3	<u>Technical Assistance.</u> Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
3.3.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Local Floodplain Manager	High	Ongoing	Local Funds	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range-more than five years	Funding Source	Estimated Cost
3.3.2	Consider the enactment of a local ordinance or state law to require floodplain disclosure when a property is for sale.	Local Government	Medium	Ongoing	Local Funds	TBD
3.4	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					
3.4.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Mayor and Council	Medium	Ongoing	Local Funds	TBD
3.5	Weather Radios. Improve public access to weather alerts.					
3.5.1	Distribute hazard mitigation brochures to students through area schools	Local Government	Medium	Ongoing	Local Funds	TBD
3.5.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Mayor and Council	High	Short-Range	Existing	TBD
3.6	Community Hazard Mitigation Plan Distribution. Distribute the hazard mitigation plan to elected officials, interested agencies and organizations, businesses, and residents, using all available means of publication and distribution.					
3.6.1	Distribute the 2020 plan to local officials, stakeholders, and interested individuals through internet download.	Baldwin County EMA	High	Short-Range	Existing	TBD
37	Technical Assistance. Make qualified local government staff available to advise property owners on various hazard risks and mitigation alternatives.					
37.1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Building Department	Medium	Ongoing	Local Funds	TBD
3.8	Mass Media Relations. Utilize all available mass media, such as, newspapers, radio, TV, cable access, internet blogs, podcasts, video sharing, and on-line social networking to increase public awareness and distribute public information on hazard mitigation topics.					

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
3.8.1	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	Local Government	Medium	Ongoing	Local Funds	TBD
3.9	<u>Weather Radios.</u> Improve public access to weather alerts.					
3.9.1	Promote the use of weather radios in households and businesses.	Local Government	High	Short-Range	Existing	TBD
3.9.2	Require the installation of weather radios in all public buildings and places of public assembly.	Local Government	High	Short-Range	Existing	TBD
3.9.3	Pursue grant funding to distribute weather radios and emergency response instructions to municipal residents.	Local Government	High	Short-Range	Existing	TBD
3.10	<u>Disaster Warning.</u> Improve public warning systems.					
3.10.1	Establish an ALERT flood warning system at strategic locations in the county, including at a minimum, sensors that provide real-time access to stream flow, stream stage, and precipitation data.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.2	Ensure that the ALERT warning system links data into GIS with the ability to use measured and forecasted rainfall to predict potential flood levels and create real-time maps of flooded areas.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.4	Upgrade siren-warning systems to provide complete coverage to all jurisdictions.	Local Government	High	Mid-Range	FEMA HMA Grant	TBD
3.10.5	Upgrade critical communications infrastructure.	Local Government	High	Long-Range	TBD	TBD
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4	<u>Goal for Natural Resources Protection.</u> Preserve and restore the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.					
4.1	<u>Open Space Easements and Acquisitions.</u> Acquire easements and fee-simple ownership of environmentally beneficial lands, such as hillsides, flood plains, and wetlands to assure permanent protection of these natural resources.					
4.1.1	Increase open space acquisitions through the FEMA HMA Grant Programs and other flood plain acquisition efforts.					
4.2	<u>River/Stream Corridor Restoration and Protection.</u> Restore and protect river and stream corridors within areas.					
4.2.1	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Floodplain Administrator/Building Official	Medium	Ongoing	Local Funds	TBD
4.2.2	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	City Building Official	Medium	Long-Range	Local Funds	TBD
4.3	<u>Urban Forestry Programs.</u> Maintain a healthy forest that can help mitigate the damaging impacts of flooding, erosion, landslides, and wild fires within urban areas.					
4.3.1	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Local Government	Low	Long-Range	TBD	TBD
4.3.2	Increase overall green spaces in cities by planting hurricane resistant trees with site and location taken into consideration.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	TBD	TBD

4.3.3	Develop an urban forestry management plan to ensure a progressive urban forestry program aimed at increasing forestry canopy, increased safety and planting hurricane resistant tree species.	Floodplain Administrator/Building Official/Planning Department	Medium	Ongoing	Local Funds	TBD
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Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
4.4	<u>Beach and Dune Protection/Renourishment.</u> Protect beaches and dunes from coastal and man-made erosion and implement renourishment programs.					
4.4.1	Restore and protect wetlands to enhance stormwater drainage.	Planning Department	Medium	Long-Range	Local Funds	TBD
4.5	<u>Water Resources Conservation Programs.</u> Protect water quality through water conservation programs to mitigate the effects of droughts and assure uninterrupted potable water supplies.					
4.5.1	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Local Government	Medium	Long-Range	TBD	TBD
5	<u>Goal for Structural Projects.</u> Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable.					
5.1	<u>Drainage System Maintenance.</u> Improve maintenance programs for streams and drainage ways.					
5.1.1	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Planning Department	Medium	Long-Range	Local Funds	TBD
5.2	<u>Reservoirs and Drainage System Improvements.</u> Control flooding through reservoirs and other structural improvements, where deemed cost effective and feasible, such as levees/floodwalls, diversions, channel modifications, dredging, drainage modifications, and storm sewers.					
5.2.1	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Floodplain Administrator, Street Department, Local Government	Medium	Long-Range	TBD	TBD
5.3	<u>Community Shelters and Safe Rooms.</u> Provide shelters from natural hazards for the safety of community residents.					
5.3.1	Ensure the inclusion of storm shelters and/or safe rooms in public buildings such as schools and multi-purpose community centers.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD

Magnolia Springs Community Action Program						
#	Goal, Objectives and Mitigation Measures	Lead Responsibility for Carrying Out Measure	Priority	Timeline Short-Range=less than two years Mid-Range=2-5 years Long-Range=more than five years	Funding Source	Estimated Cost
5.3.2	Pursue grant funds to establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD
5.3.3	Encourage the construction of safe rooms in new and existing homes and buildings.	City Building Official	High	Short-Range	FEMA HMA Grant	TBD