4 Capability Assessment

4.1 Emergency Management Accreditation Program (EMAP) Assessment

Since November 2002, AEMA has used the Emergency Management Accreditation Program (EMAP) assessment process to evaluate its pre- and post-disaster hazard management policies, programs, and capabilities. The EMAP assessment has happened three times since then in 2004, 2008, and most recently in 2017. EMAP provides AEMA with a baseline for continuing assessments that will be considered in future plan reviews and updates. AEMA is an active participant in EMAP, and in the past the AEMA Director served on the EMAP Commission. Findings from the EMAP assessment are highlighted throughout this section.

The last EMAP evaluation in 2017 found the State's emergency management program strategy to be compliant in all areas, and AEMA is therefore EMAP certified based on the results of an all-hazards identification, risk assessment, and impact analysis (as required by the EMAP standard). The State was also found to be in compliance with all the other qualifying "sub-elements", including:

a) Use of appropriate building construction standards;
b) Hazard avoidance through appropriate land use practices;
c) Relocation, retrofitting, or removal of structures at risk;
d) Removal or elimination of the hazard;
e) Reduction or limitation of the amount or size of the hazard;
f) Segregation of the hazard from that which is to be protected;
g) Modification of the basic characteristics of the hazard;
h) Control of the rate of release of the hazard (met for natural hazards);
i) Provision of protective systems or equipment;
j) Establishment of hazard warning and communication procedures; and
k) Redundancy or duplication of critical systems, equipment, information, operations or materials.

4.2 Laws, Regulations, Policies and Programs for Pre- and Post-Disaster Hazard Management

4.2.1 Laws

The following is a review of the State laws of pre-disaster and post-disaster hazard management. AEMA was established through Section 4 of Alabama Law, 1955, Act No. 47, commonly known as the Alabama Emergency Management Act of 1955 (also as Code of Alabama 31-9, 1955).[1] No changes have been made as of the 2013 State Hazard Mitigation Plan update.

Section 10, Alabama Law, 1955, Act No. 47, authorized and directed local governments to establish organizations for emergency management.[2] Under this legislation, each county is required to have an emergency management organization, either individually or jointly. Appropriate ordinances and/or resolutions are required to establish each local organization and must provide for the organization, powers, duties, divisions, services, and staff of the agency. The Emergency Management Agency (EMA) office must maintain and display current functional statements and organizational charts. Initial submittals of annual budgets must be accompanied by a functional statement and an organizational chart. Subsequent submissions of the organizational chart and functional statement are required only when a change/revision is published. FEMA Form 85-17, Staffing Pattern for each participating political jurisdiction, is a required part of the State's annual Comprehensive Cooperative Agreement. Thus, the current annual State submission reflects local agencies meeting eligibility criteria to receive EMA funds.

One of the most significant state enabling statutes related to hazard mitigation can be found in Title 11, Chapter 52, *Planning, Zoning, and Subdivisions* of the Code of Alabama. Section 11-52 et seq. is the State planning enabling legislation for municipalities only. First enacted in 1935, the statute provides municipalities' broad powers for comprehensive planning, capital improvements programming and the regulation of land use, development, and conservation of land areas through zoning ordinances and subdivision regulations. It permits municipalities to create planning commissions to oversee planning and land use controls, and Boards of Adjustments to hear appeals. It is the basis for floodplain management regulations within all municipalities and provides additional powers to control the location and types of development activities that might be affected by other natural hazards, including landslides and land subsidence.

Unincorporated areas of counties in Alabama are severely restricted by the lack of a state planning enabling statute. Only three counties statewide – Baldwin, Jefferson, and parts of

[1] AL Code § 31-9-4, 1955. Retrieved at: https://law.justia.com/codes/alabama/2012/title-31/chapter-9/section-31-9-4/.
[2] AL Code § 31-9-10, 2012. Retrieved at: https://law.justia.com/codes/alabama/2012/title-31/chapter-9/section-31-9-10/.

Shelby County – are permitted to establish zoning ordinances by special acts adopted by the State. County regulation of subdivisions within unincorporated areas, however, is granted by Title 11, Chapter 24 of the Code of Alabama. County commissions are permitted to regulate the subdivision of land and the construction of streets and utilities with the advice of an advisory board. Municipalities may enforce subdivision regulations within its police jurisdictions, which extend two miles beyond the municipal boundaries within unincorporated areas of a county.

Code of Alabama, Title 11, Chapter 19, Sections 11-19-1 through 11-19-24, entitled *The Comprehensive Land Use Management Act* was enacted to prevent economic and human loss in flood-prone areas and permit counties to manage floodplain development within unincorporated areas. This act provides the established county commission the authority to create a comprehensive land-use management program for floodplain management, in accordance with the NFIP criteria. As a result, unincorporated communities are eligible for flood insurance through the NFIP. The program helps mitigate damages caused by floods by controlling land use and development and improving the long-range management of flood prone areas. The statute authorizes each county commission to adopt floodplain management ordinances for unincorporated areas. County Planning Commissions are granted broad authority to control development in flood-prone zones by adopting ordinances and Flood Insurance Rate Maps that delineate the various flood zones controlled by the adopted ordinances. Each county must appoint an administrator of the program and provide for a Board of Adjustment to hear appeals to the ordinance requirements.

Title 41, Article 6, Code of Alabama, establishes a State Building Commission and adopts the Standard Building Code of the Southern Building Code Congress. The Standard Building Code has since been superseded by the 2009 International Code Series of the International Code Council. The Building Commission oversees the planning, acquisition, and construction of all State buildings. Section 41-9-166 of Article 6 authorizes municipalities and counties to adopt and enforce building and technical codes.

Title 24, Chapters 4, 4A, and 5, Code of Alabama, establishes the Alabama Manufactured Housing Commission to regulate manufactured and modular homes and buildings, including anchoring requirements. Manufactured Homes must meet Federal specifications of the U.S. Department of Housing and Urban Development.

Executive Order No. 14 June 14, 1971 provides for "Assignment of Emergency Preparedness Functions to State Departments and Agencies," as of June 14, 1971, and was adopted by reference by AEMA.

Executive Order No. 27 March 3, 1966 provides for the "Creation of the State Office of Emergency Planning," as of March 3, 1966, and was adopted by reference by the Alabama Emergency Management Agency. Executive Orders 27 and 14 authorize the Governor to use the services, equipment, supplies and facilities of existing State departments, offices and agencies for emergency management purposes. In the event of an impending or actual attack or manmade, technological or natural disaster, Section 4 of Executive Order 14 authorizes the transfer of

direction, personnel or functions of state agencies, boards, and commissions for the purpose of performing or facilitating disaster or emergency services.

Executive Order No. 40, July 23, 1985 states that AEMA shall act as the coordinating agency for the state in the event of an incident/accident involving a leak, spill, or release of hazardous material, or threat of same. AEMA shall develop, in cooperation with other departments and agencies of State government, the necessary plans, rules and procedures for responding to these incidents/accidents. AEMA will be responsible for ensuring that these plans, rules, and procedures are implemented and carried out in the State of Alabama. This executive order further requests that departments and agencies of state government who have response capability cooperate with the AEMA, the Department of Public Safety, and the Department of Environmental Management in the establishment of a coordinated and unified system that will assure the citizens of Alabama have the best protection available from hazardous materials, spills, leaks, and releases. This executive order was adopted by AEMA.

Executive Order 19, February 24, 2004 established Alabama's State Hazard Mitigation Team directing all State agencies to participate in development of the State Hazard Mitigation Plan. The SHMT is directed to develop the Plan, and to assist in prioritizing and selecting of hazard and pre-disaster mitigation grant program project applications. The SHMT is intended to function for the duration of Plan development and remain in place until the three-year plan to update the hazard mitigation plan has been approved by FEMA. The SHMT is active in development of local plans statewide, with a focus on information sharing, issues resolution, and commonality of approach and objectives.

The Alabama Drought Planning and Response Act (Code of Alabama, 1975, §§9-10C-1 et seq.) became law on April 9, 2014 and formally established the state government's role in planning, monitoring, and responding to severe drought conditions. This law replaced a previously issued executive order, established the Alabama Drought Assessment and Planning Team (ADAPT), and defined permanent roles for the Alabama Department of Economic and Community Affairs (ADECA) Office of Water Resources (OWR) as well as other state agencies.

4.2.2 Regulations

Much of the authority to perform pre-disaster planning and mitigation through development regulations is allocated to the local level counties and municipalities. Alabama has granted localities very limited authority to regulate development through its planning enabling legislation. Based on the New York City Zoning Ordinance of 1925, Alabama's 1935 enabling legislation has remained virtually unchanged to this day. It restricts enabling authority to cities and towns only, requiring counties to seek special acts to extend zoning controls to unincorporated communities. "Smart Growth" efforts have recently begun to examine and modernize the State legislation to better promote improved land development practices.

While Smart Growth efforts have not amended the State planning legislation, it is improving land development practices. One example of this is the 2003 Alabama Land Recycling and Economic

Redevelopment Act. This legislation established a revolving loan program (funded by a $1 million EPA grant) to be administered through the Alabama Department of Environmental Management (ADEM). The purpose of legislations is to encourage voluntary cleanup and reuse of Brownfield sites in Alabama.

Alabama enacted the Comprehensive Land Use Management Act to give individual counties the right to establish commissions to control development in flood-prone and hazard areas through land use planning and zoning. Each commission has the right to establish and enforce zoning and construction limits in flood-prone areas. While this method is a reasonable approach for permitting floodplain management within unincorporated areas, a state-wide program to enable localities to plan for and manage the full range of land use and development in all areas, both incorporated and unincorporated areas, should be considered.

Administered by the State's Department of Conservation and Natural Resources and enforced by ADEM, the ADEM Division 8 Coastal Program Regulations contain explicit guidance on regulation of development in the Coastal Zone, mandating specific requirements and restrictions relevant to building in flood prone or storm surge vulnerable areas. Development throughout Alabama's coastline in Mobile and Baldwin Counties continues to accelerate, illustrating the conflicting objectives of community development and natural resource protection under hazard mitigation guidelines.

4.2.3 Policies

Alabama has instituted hazard management policies through various state agencies and authorities to properly address and manage projects that reduce risk to natural and manmade hazards. Each agency is responsible for drawing up guidelines to mitigate and manage hazards associated with operations normally handled through the agency's daily functions and operations as well as while recovering from a disaster. Agencies with these hazard management/mitigation policies include AEMA, Alabama Department of Conservation and Natural Resources (ADCNR), Alabama Department of Environmental Management (ADEM), and ADECA. The relevant policies of each agency are discussed below.

While appropriate policies appear to be in place, funding mechanisms are substantially reliant on Federal funding with local match requirements. To achieve the desired result these sound policies, some additional dedicated State funding source would be beneficial from a management, enforcement, and implementation standpoint. Current policies describe comprehensive organizational responsibilities and interactive capabilities between state and local authorities, coordinating agencies and local populations. Disaster response policies, it may be noted, are particularly established.

4.2.3.1 Alabama Emergency Management Agency

AEMA is the leading agency responsible for coordinating the hazard management activities for Alabama. As previously described, the Alabama Emergency Management Act of 1955 (Code of Alabama 31-9, 1955), first established the AEMA and defined the roles, powers, and duties for

emergency management within the state. Furthermore, as a result of the state's continuing legislative review process, Code of Alabama 31-9, Act 522 was signed into law by Governor Bob Riley on April 20, 2006.[3] The act amended Sections 31-9-3, 4, 8, and 10, related to state emergencies and AEMA were strengthened to provide for emergency proclamations, expand the authority of state and local responders, establish degrees of emergency classifications, and provide for the powers of political subdivisions for emergency management.

In 2004, AEMA began to comprehensively reviewed Alabama's legislation related to their emergency management responsibilities. Prior to Hurricane Ivan, AEMA's Director formed the AEMA Legislation Committee. The purpose for this committee was to review current Alabama Emergency Management statutes (Code of Alabama 31-9, 1975, as amended) and compare them to emergency management statutes of other states to determine if new legislation (or amendments to existing legislation) were needed to better support the mission and goals of AEMA in its service to the citizens of Alabama.

The legislative committee noted above is now a single individual. However, the same review process continues as needed. Between the 2007 and 2010 update, only one piece of AEMA-related legislation was reviewed – The Alabama Disaster Recovery Program (Act 342). This legislation and the program are discussed in more detail in Section 4.2.4.6. No additional legislation was reviewed between 2010 and this update in 2018.

The Alabama Emergency Operations Plan (EOP) is the primary guiding document for Alabama's post-disaster hazard management policy. In June 2017, Governor Kay Ivey issued the 2017 State of Alabama EOP to replace the previous plan approved in 2012. According to the 2017 EOP:

The EOP, using the National Response Plan (NRP) and the National Incident Management System (NIMS), establishes the mechanisms to:

- Maximize the integration of incident-related prevention, preparedness, response, and recovery activities;
- Improve coordination and integration of State, County, local, Tribal, private-sector, and nongovernmental organization partners;
- Maximize efficient utilization of resources needed for effective incident management;
- Improve communications and increase situational awareness;
- Facilitate mutual aid and State support to County, local, and Tribal governments;
- Facilitate State-to-State support;
- Provide proactive and integrated State response to catastrophic events; and

[3] Code of Alabama 31-9, 1975. Retrieved at: http://alisondb.legislature.state.al.us/alison/codeofalabama/1975/coatoc.htm.

- Determine priorities and coordinate protection, response, and recovery of critical infrastructure.[4]

This EOP is based upon guidelines contained in the NRP and the Comprehensive Preparedness Guide (CPG) 101 version 2. The NRP, as a core plan for national incident management, is linked to an array of incident or hazard-specific federal contingency plans that are designed to implement the specific statutory authorities and responsibilities of various departments and agencies. Therefore, state agencies that partner with federal agencies should be operating under the same guidelines to ensure complete and comprehensive coordination.

Alabama Emergency Support Functions (ESFs) are functional and expand upon the concept of operations contained in the basic plan. Annexes provide specific responses for agencies of government and define their responsibilities. The Standard Operating Guidelines (SOGs) required for the implementation of the state EOP are not included because of their voluminous nature. SOGs are the general operating guidelines for departments and agencies and are maintained by those departments and agencies.

An annual review of the EOP will be undertaken by the AEMA director and those agencies and departments of State government having emergency assignments. The director will insure that a list of all plan holders is maintained at the AEMA Office and that updates are sent to each one of these individuals. AEMA intends to continuously update and revise the EOP to reflect current emergency management requirements and conditions. The most recent update of Alabama's EOP included the National Response Framework (NRF) 2nd Edition and the FEMA Region IV Response Plan.[5] The next revision of the State's EOP is anticipated in 2018 and will incorporate concepts/elements of the National Frameworks and associated Response Support Functions. This includes the National Disaster Recovery Framework, NRF 3rd Edition, and the other three Frameworks (Prevention, Protection, and Mitigation) as they become available.

This plan requires fair and equal treatment to all regardless of race, creed, color, national origin, sex, age, or handicap. The priorities will be life safety, incident stabilization, and the protection of property and the environment.

4.2.3.2 Alabama Department of Conservation and Natural Resources

The ADCNR State Lands Division-Coastal Section (SLD-Coastal Section), is the lead agency for the Alabama Coastal Area Management Program (ACAMP) which is described further in Section 4.2.4.3**.** As such, the SLD-Coastal Section is responsible for developing policies and programs, coordinating fiscal management, conducting education and outreach, managing state submerged lands and leading the overall administration of the ACAMP. The policies of the ACAMP recommend pre-disaster mitigation planning and are intended to discourage development in higher risk coastal zones, which are more vulnerable to natural threats such as flooding and

[4] AEMA, 2012. State of Alabama Emergency Operations Plan. Retrieved at: https://alabamaema.files.wordpress.com/2017/11/alabama-eop-11-basic-plan-final.pdf.
[5] AEMA, 2017. State of Alabama Emergency Operations Plan.

hurricanes. The primary authority for the coastal management program is the Alabama Coastal Area Act of 1976 (Act 534). The Alabama coastal zone extends inland to the continuous 10-foot contour in Mobile and Baldwin Counties.

4.2.3.3 Alabama Department of Environmental Management

ADEM, through its Administrative Code and Division 8 Coastal Program Regulations, permits, regulates, and monitors uses and activities having a direct or significant impact on coastal Alabama and its resources. These regulations specifically control development in higher risk coastal zones, which are more vulnerable to natural threats such as flooding and hurricanes. Activities regulated under these regulations include construction and other activities on Gulf of Mexico beaches and dunes in the Alabama Coastal Zone. The Division 8 regulations address construction along beaches and dunes and any developments greater than five acres to provide protection for the primary dunes, beach sands, and covering vegetation by regulating construction or alteration of the beach from the mean high tide line to the Construction Control Line (CCL). The CCL is a defined, surveyed line essentially paralleling, and setback from, the Gulf shoreline. Structures located seaward of this line are not permitted by the program. The CCL was designed to provide long-term protection of the beaches and dunes by prohibiting construction seaward of this established setback line. The CCL helps protect property values and minimize damage from storm surge and other natural hazards. Developers are not allowed to remove primary dune or beach sands and/or vegetation between the CCL and the mean high tide.

The regulations relevant to the CCL require an environmental impact and natural hazards study for any condominium, motel, hotel, or similar development located on a property intersected by the CCL. This requirement includes a wave height study addressing the flood and erosion potential at the project site using eroded beach profiles for pre- and post-development. Additional components of the Division 8 regulations include:

- A beach and dune enhancement plan which calls for dune fencing, dune walkovers and planting of vegetation to control shoreline erosion and minimize impacts to beaches and dunes;
- Control of the use of bulkheads, retaining walls and similar structures which could impact beaches, dunes and structures during storm surge; and
- Permitting and certification requirements for dredging and fill in the coastal area.

For the most part, coastal communities follow ADEM guidelines and restrictions for coastal construction, and most coastal communities have adopted the 2009 International Building Code Series to replace the previous Standard Building Codes of the Southern Building Code Congress.[6] Enforcement of local building codes is included in all local mitigation plans, and in addition, all coastal municipalities have zoning and subdivision regulations in effect. Mobile and Baldwin, the coastal counties, both have flood hazard ordinances in effect for unincorporated areas, but, of

[6] International Code Council, 2018. Alabama. Retrieved at: https://www.iccsafe.org/about-icc/government-relations/map/alabama/.

these two, only Baldwin County is authorized by State law to administer comprehensive zoning regulations within its unincorporated jurisdiction.

4.2.4 Programs

In the past, primary responsibility for coordination and facilitation of hazard mitigation activities was assigned to AEMA, with the primary focus on responding to local requests from private citizens, citizen groups, planning agencies, and municipal and county governments for assistance with grant applications and coordination with FEMA for judgment on applicability and justification. Transition from a reactive to a more pre-emptive hazard mitigation protocol currently is underway, as local plans are developed and updated and more specific and detailed risk assessment models are developed in accordance with ongoing State Plan initiatives.

Pre-disaster management programs in Alabama are established primarily at the local, rather than State or Federal level. However, the State of Alabama does manage two programs aimed at pre-disaster mitigation planning, the Alabama Shoreline Erosion and Hazard Mitigation Plan and the ACAMP. In addition, the State of Alabama promotes FEMA grant programs (**Section X.4.2**) and the Community Rating System (CRS) program as Federal pre-disaster management programs.

Post-disaster management programs in Alabama are established primarily at the State level. The State of Alabama manages the Alabama Emergency Operations Plan program aimed at post-disaster response and mitigation (**Section 1.2.1.2.)**. In addition, Alabama has the Disaster Recovery Program and the Emergency Watershed Protection Program.

4.2.4.1 Alabama Floodplain Management Program

FEMA created and funded the Map Mod program (FY 2003 – FY 2008) through the recognized connection between reliable flood maps and effective flood damage reduction. Map Mod focused on updating existing Special Flood Hazard Areas (SFHAs) and converting paper flood maps to a digital platform. The Cooperating Technical Partners (CTPs) program was created through Map Mod, providing opportunities to states and jurisdictions to manage flood map development at the local level, realizing that local involvement leads to increased flood risk awareness and product acceptance. The Alabama OWR entered into a CTP agreement with FEMA on September 30, 2002, assuming responsibility for the technical accuracy of the FIRMs across the State.[7] The OWR's FY17 Risk MAP Program Business Plan was referenced in this plan update and outlines the Alabama OWR's floodplain management capabilities and accomplishments (see Section 7.10).

The Alabama Floodplain Management Program (AFPMP) was created by the OWR to effectively and efficiently deliver the Map Mod program within the State of Alabama. Over the years, AFPMP has grown to include a variety of floodplain management activities including flood hazard mapping, community engagement and risk communication, outreach, community trainings, data

[7] State of Alabama Office of Water Resources Risk MAP Program Business Plan, FY 2017

management, program management, project planning, project management, Letter of Map Revision (LOMR) review partnership, and state coordination of the National Flood Insurance Program (NFIP).

In FY 2010, FEMA transitioned into the Risk Mapping, Assessment, and Planning (Risk MAP) Program. The Risk MAP program focuses on increasing flood risk awareness and resilience at the local level through effective community engagement and sustainable mitigation actions, and the development of enhanced risk identification products, including watershed-based studies that cross political boundaries. To allow for the successful implementation of the Risk MAP vision within the State of Alabama, OWR further expanded the AFPMP to include a Risk MAP Coordinator role, the production of flood risk assessment data, hazard mitigation planning coordination activities, and mitigation action tracking at the local level.

Risk MAP projects in Alabama are underway in several watersheds throughout the state. Since the previous plan update, the joint storm surge study with Florida has been completed and Preliminary FIRMs were released for Mobile and Baldwin counties at the end of 2017 and early 2018. In Mobile County, public meetings to review new maps were held throughout February and March of 2018.[8] While in Baldwin County, public meetings to review new maps were held throughout late summer and early fall of 2017.[9] The maps in Mobile and Baldwin are anticipated to be adopted and go effective by the end of 2018 and early 2019.

There are also several new flood insurance studies that have been completed recently in the northern counties of Alabama, including the two large metropolitan areas of Birmingham and Huntsville. New FIRMs are pending adoption in the City of Huntsville and surrounding Madison county as well as several other counties that border the Tennessee River. The City of Birmingham and Jefferson County's Preliminary FIRMs were released for review in March of 2017.

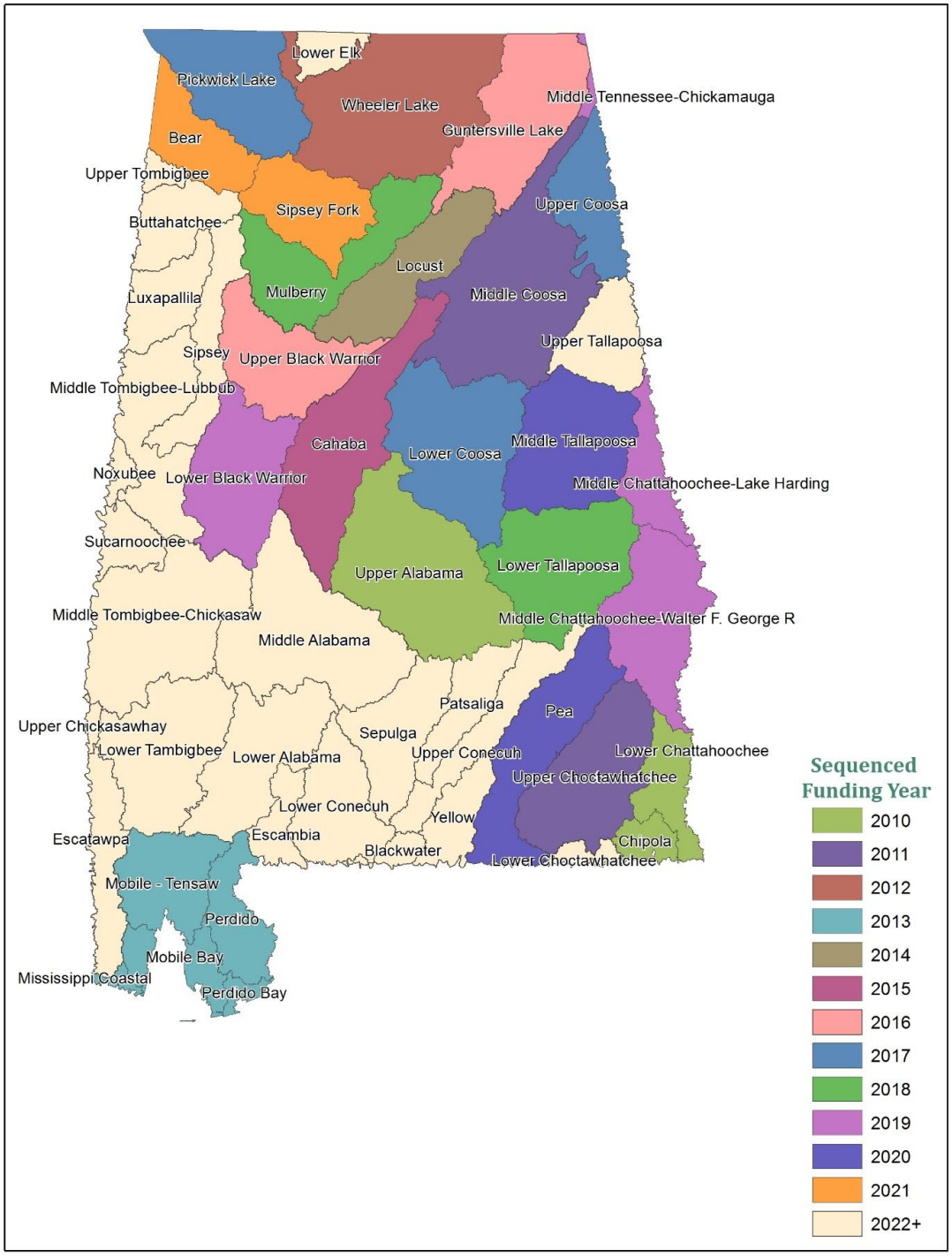
In accordance with FEMA guidance, all watersheds within the State have been prioritized for study based on current flooding risk, the need for engineering updates, and the availability of quality topographic data, parcel data and building footprints. Alabama's FY17 Risk MAP Business Plan outlines the state's plan to restudy various watersheds and build capabilities related to flood risk analysis. According to the plan, Alabama estimates that approximately 47% (2,378 miles) of existing AE Zones (detailed) studies are still in need of updated engineering to meet FEMA's New, Validated or Updated (NVUE) goals. In order to meet these NVUE requirements and the additional program goals and performance measures outlined in this Business Plan, OWR estimates that approximately $5,100,000 will be needed each year over the next five years, and the total program funding level required for FY 2017 to FY 2021 is estimated to be approximately

[8] Specker, Lawrence, 2018. New FEMA flood maps coming for Mobile County; public meetings start today. Retrieved at: https://www.al.com/news/index.ssf/2018/02/new_fema_flood_maps_coming_for.html.

[9] Mullen, John, 2017. Baldwin County's Federal Flood Maps Revamped. Retrieved at: https://lagniappemobile.com/baldwin-countys-federal-flood-maps-revamped/.

$25,500,000. Figure 4-1 below shows the year each HUC-8 watershed in the state was funded or will be funded in the future for a new flood insurance study.

Figure 4-1 - HUC 8 Watershed Sequencing for Fiscal Funding Years 2010 to 2022+[10]



The AFPMP is also responsible for overseeing the implementation of the National Flood Insurance Program (NFIP). The NFIP provides affordable insurance for property owners, renters, and business owners to reduce the financial impact of flooding. As of 2017, 432 Alabama communities participate in the NFIP with more than 54,800 flood insurance policies in force.[11] Also, since 2013, 26 individuals have earned their CFM certification. This brings the total number of CFMs in the State to 112.

The State has added new engineers, planners, and administrative support personnel to the State NFIP Coordinator's office to enhance its technical capabilities. The OWR, through FEMA's Community Assistance Program funding process, provides technical assistance to communities to achieve and maintain compliance and good standing in the NFIP program. The primary objectives of the NFIP are:

- Reducing flood losses in participating communities through adherence to participating communities' Flood Damage Prevention Ordinance, NFIP regulations, mitigation planning, education, and awareness,
- Working with communities during post disaster operations to provide needed technical assistance to address NFIP issues; and
- Recruiting nonparticipating communities into the NFIP program.[12]

In partnership with FEMA, the OWR uses federal and state funds to meet the overall objective of reducing flood hazards in communities participating in the NFIP. Each year, the state NFIP staff conduct approximately 20 in-depth Community Assistance Visits (CAV) and 65 Community Assistance Contacts (CAC) through telephone contact or a brief visit with public officials. The outreach efforts of this program include technical consultations with public officials, telephone contact providing published material to the public, and presenting seminars and conferences on floodplain management and mitigation. The State NFIP Coordinator also conducts floodplain management and NFIP training courses such as Floodplain Management 101 and L273: Managing Floodplain Development through the NFIP. These courses target floodplain administrators throughout the State to provide them with a working understanding of their position and responsibilities and the tools available to them to perform their duties.[13]

In June 2013, OWR prepared a Strategic Plan for NFIP State Coordination to evaluate the current role of the State NFIP Coordinator within the comprehensive AFPMP and to form recommendations so this role may be improved and/or expanded to ensure coordination efforts of the NFIP are effective and best serve the citizens, property, and resources within the State. The NFIP coordination efforts were reviewed and evaluated per the elements of the Community Assistance Program – State Support Services Element (CAP-SSSE) methodology, and both long-

[10] State of Alabama Office of Water Resources Risk MAP Program Business Plan, FY17
[11] Ibid.
[12] Ibid.
[13] Ibid.

term and short-term strategies are identified including defining the overall goals of the Alabama program, while identifying specific actions and implementation schedules, deliverables, budget, staffing, and support monitoring and evaluating tasks, as necessary.[14]

In January 2015, OWR developed an automated process for performing CACs to obtain and/or confirm floodplain management statistics and practices for NFIP communities within Alabama. The process also provides the local floodplain administrators with educational resources and updated information on the National Flood Insurance Program. The Alabama CAC survey system streamlines the interview process for communities identified as Tier 2 by FEMA's CAV Tier 1 Prioritization Tool; increases the number of communities reached each year; and allows OWR to maintain a good understanding of the current status of compliance for rural and smaller communities in Alabama. In 2016, OWR continued to update the functionality of the CAC survey system improving upon management and filtering of community contact and response information; streamlining email communication and storage; and enhancing capabilities for reporting community metrics.[15]

The Community Rating System (CRS) Program was implemented by the FEMA through the NFIP and allows policy holders within participating communities to receive a discount on NFIP policies after communities implement community level flood mitigation solutions. Any NFIP community may apply for inclusion in the CRS Program and be credited for a range of flood hazard mitigation activities that exceed NFIP minimum standards.

Through the Insurance Services Office (ISO), a community applicant is graded based on criteria set forth in CRS guidelines for flood hazard mitigation. The grade assigned to each community results in a CRS classification. The CRS class determines the applicable insurance discount for the policy holders within the community.

The CRS class rating is a scale of one through ten, with Class 1 communities receiving a 45 percent discount and Class 10 communities receiving no discount. **Error! Reference source not found.** summarizes each CRS class and the applicable discount.

Table 4-1: CRS Class and Discount

CRS Class	Discount (percent)	CRS Class	Discount (percent)
1	45	6	20
2	40	7	15
3	35	8	10
4	30	9	5
5	25	10	0

[14] State of Alabama Office of Water Resources Risk MAP Program Business Plan, FY17
[15] Ibid.

According to data compiled by FEMA through October 1, 2016, Alabama has 15 communities participating and three communities whose eligibility was rescinded for non-compliance with continuing program eligibility requirements. Three new communities have joined the CRS program since the 2013 State Hazard Mitigation Plan Update. Table 4-2 lists the participating communities in Alabama and the current CRS class and status of each community.

Table 4-2: Alabama Participating CRS Communities and CRS Class[16]

FEMA Community Number	Community Name	CRS Entry Date	Current Effective Date	Current CRS Class	Status
010146	Athens, City of	10/1/91	10/1/98	10	Rescinded
010071	Atmore, City of	05/1/02	10/1/13	9	Current
010144	Auburn, City of	05/1/14	05/1/14	7	Current
015000	Baldwin County	10/1/95	05/1/17	7	Current
010116	Birmingham, City of	10/1/94	10/1/17	5	Current
010418	Dauphin Island, Town of	04/1/01	05/1/01	8	Current
010176	Decatur, City of	10/1/91	10/1/05	10	Rescinded
010007	Foley, City of	05/1/17	05/1/17	8	Current
015005	Gulf Shores, Town of	10/1/93	10/1/13	8	Current
015006	Homewood, City of	10/1/01	10/1/01	9	Current
010123	Hoover, City of	10/1/91	10/1/91	9	Current
010153	Huntsville, City of	10/1/91	10/1/12	8	Current
010151	Madison County	05/1/14	05/1/14	9	Current
015007	Mobile, City of	10/1/92	10/1/93	10	Rescinded
015011	Orange Beach, City of	10/1/91	10/1/07	7	Current
010189	Pell City, City of	10/1/92	5/1/12	8	Current
010002	Prattville, City of	10/1/91	5/1/08	8	Current
010203	Tuscaloosa, City of	05/1/16	05/1/17	8	Current
010070	Wetumpka, City of	10/1/91	10/1/91	9	Current

According to FEMA, each community must submit a recertification document by October 1 each year to maintain eligibility for the program. The recertification requirement includes documentation that mitigation program activities initially credited to the community have continued, in addition to documenting any new strategies implemented since the previous October 1. Any community that has received a Class 9 or better classification will revert to Class 10 on the following May 1 unless it submits the signed recertification worksheet by October 1 of each year. If the recertification does not include all the needed documentation, the community may lose

[16] Community Rating System. FEMA, 2017. Retrieved at: https://www.fema.gov/media-library-data/1503240360683-30b35cc754f462fe2c15d857519a71ec/20_crs_508_oct2017.pdf

enough points to cause a retrograde in its CRS classification. A repetitive loss community that fails to submit a copy of its annual outreach project or a community that fails to submit its annual progress report will revert to a Class 10.

4.2.4.2 Alabama Shoreline Erosion and Hazard Mitigation Plan

The Alabama Shoreline Erosion and Hazard Mitigation Plan incorporates strategies into the ACAMP. Working with local planners to coordinate storage of GIS, management, density, and development restriction, and effective building codes to promote hazard mitigation.[17]

4.2.4.3 Alabama Coastal Area Management Program

The Alabama Coastal Area Management Program (ACAMP) was approved by NOAA in 1979 as part of the National Coastal Zone Management Program.[18] ACAMP is a joint effort: ALDCNR State Lands Division (SLD) is responsible for planning and policy development while ADEM is responsible for permitting, monitoring and enforcement activities, as detailed in the ADEM Division 8 Coastal Programs Rules (ADEM Admin. Code R 335-8).

The ACAMP consists of comprehensive management policies and guidance for the protection and enhancement of the quality, quantity, and viability of coastal resources and the management of the uses of these resources. Resource protection includes addressing such issues as shoreline erosion, water and air quality, wildlife habitat protection, wetland protection, dune protection, urban development, and hazard management. This program also helps protect coastal resources by providing technical assistance on zoning regulations and hazard mitigation to local governments. ACAMP has an annual grant program that provides funding for projects that protect coastal environments and communities. The ACAMP Strategic Plan (2013-2018) describes actions the ACAMP staff plan to undertake to achieve the goals and objectives of the program. In fiscal year 2016, NOAA evaluated the ACAMP performance, focusing on three target areas: program administration, state and local partnerships, and the coastal nonpoint pollution control program. Overall, the evaluation concluded that the ACAMP was successfully implementing and enforcing its federally approved coastal management program.

4.2.4.4 Alabama Drought Management Plan

The OWR completed the most current version of the Alabama Drought Management Plan in 2013. The risk assessments and mitigation strategies of the drought plan are integrated into the mitigation strategies of the 2013 Plan and were updated in this update. According to the plan,

> *The Alabama Drought Management Plan defines a process to address drought and drought related activities, such as monitoring climatic conditions, vulnerability assessments, impact assessments, response, and mitigation. This plan creates a*

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[17] Alabama Coastal Hazards Assessment, n.d. Alabama Shoreline Erosion and Hazard Mitigation Plan Summary. Retrieved at: http://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/4288138/FID1019/HTM/alshore.htm.
[18] http://www.adem.state.al.us/programs/coastal/default.cnt

statewide regional structure to identify the different areas impacted by drought conditions, identify risks associated with drought conditions and identify ways to possibly avoid droughts and when drought emergencies cannot be avoided, identify ways to mitigate the impacts of droughts. These objectives are accomplished through the development of drought triggers and indicators and by providing guidance on responses to drought conditions for the various sectors impacted by droughts.[19]

On June 24, 2011, Governor Bentley issued Executive Order 19 on Drought Planning and Management, formally tasking OWR to support drought planning throughout the state and streamlining the organizational structure.

4.2.4.5 Alabama Dam Security and Safety Program Creation

Over the years, Alabama has tried to organize an Alabama Dam Security and Safety Program. There has been less progress in recent years to develop legislation to establish this program. Starting in 2008, ADECA-OWR began an effort to inventory the dams in Alabama and categorize them based on their hazard potential. ADECA-OWR continues to move forward with the inventory despite the dam safety legislation. The program proposes an up-to-date inventory and survey of private dams in Alabama. This inventory should strengthen public safety and emergency response operations in the event of a dam related disaster. In addition to the inventory, the program proposes regular inspections and permitting (certification) of certain dams for increased protection of life and property in the event of dam failure. The creation of this dam security and safety program was an action on the 2013 action plan and remains an on-going action on the 2018 action plan.

4.2.4.6 Alabama Disaster Recovery Program

The Alabama Disaster Recovery Program was created in April of 2009 through Act 342. This Act also established the Disaster Recovery Fund to fund the program and assist counties and municipalities in satisfying local needs during and "immediately following certain disasters when an emergency or major disaster declaration is not requested by the Governor or has been denied by the President. The act also creates the Alabama Disaster Recovery Program Committee and provides for the disbursement of funds upon a proclamation of the Governor or Legislature and a proclamation by the affected local governing body." To receive funds, local governments have a hazard mitigation plan in place.

4.2.4.7 Alabama Long-Term Recovery Program

ADECA established a Long-Term Recovery program with a full time State Coordinator in response to Hurricane Katrina in 2005 to coordinate long term disaster recovery planning. ADECA worked alongside the FEMA Long Term Recovery Team to prepare a Long-Term Recovery Plan

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[19] ADECA, 2004. Alabama Drought Management Plan. Retrieved at: http://www.allianceforwaterefficiency.org/uploadedFiles/Resource_Center/Library/United_States/Alabama/Alabama-Statewide-Drought-Plan-2004.pdf.

for the communities of Mobile County. The plan was adopted by all communities and incorporated by amendment into local mitigation plans. Following the April 2011 tornadoes, the Governor established ADECA as the official coordinating agency for long term community recovery efforts through Executive Order 18, which was signed on June 13, 2011.[20] During this process, six areas of recovery were identified, and task forces assigned to each: housing, economic recovery, infrastructure, health and social services, community planning and capability building and natural and cultural resources. The long-term recovery program is locally driven but draws on guidance from ADECA. Nine communities participated in long-term recovery efforts following the April 2011 tornadoes: Cordova, Geiger, Hackleburg, Holt, Jefferson County, Phil Campbell, Pleasant Grove, Rainsville and DeKalb County, and Sipsey. Planning is currently still in progress.

4.2.4.8 USDA Natural Resources Conservation Service (NRCS) Emergency Watershed Program (EWP)

The USDA NRCS is authorized under the 1996 Farm Bill to provide technical and financial assistance for emergency watershed protection. The rules for administration of this Emergency Watershed Protection (EWP) program are codified under 7 CFR 624. The EWP program "consists of measures to reduce hazards to life and property from floods, drought, and the products of excessive runoff or erosion on any watershed impaired by a natural occurrence."[21] The program offers technical and financial assistance to land owners and land managers, through a sponsor (state or local government or Indian tribe), upon a Presidential Emergency Declaration or an emergency declaration by the state conservationist. The Alabama Natural Resources Conservation Service developed an Emergency Recovery Plan (ERP) in 2017 that outlines guidance and establishes responsibilities for the administration of the EWP program in Alabama.[22] This plan addresses the recovery actions and inter-agency coordination that the Alabama NRCS will follow when an emergency is declared, and the Emergency Watershed Protection Program is initiated and/or implemented. Alabama NRCS worked with a variety of cooperating technical partners to develop this plan, including AEMA, Alabama Soil and Land Water Conservation Committee, USACE, ADEM, AFC, ADCNR, and USFWS.

According to the 2017 plan, the EWP program has been primarily used in Alabama to recovery from heavy rainfall events, flooding, hurricanes, and tornados. Typical recovery projects largely include stabilizing gully erosion, removing sediment from drainage ways, removing log jams (especially from under bridges), and installing stream bank protection.

4.2.4.9 U.S. Fish and Wildlife Service Coastal Impact Assistance Program

The U.S. Congress authorized the Coastal Impact Assistance Program (CIAP) in October 2000, pursuant to the H.R. 5548-2001 Amendment to the Outer Continental Shelf Lands Act. Alabama

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[20] Executive Order Number 18 by Governor Robert Bentley. Alabama Department of Archives & History. Retrieved at: http://digital.archives.alabama.gov/cdm/singleitem/collection/executive/id/540/rec/20
[21] Emergency Watershed Protection (EWP) Program Alabama Emergency Recovery Plan, October 2017
[22] Ibid.

developed its first CIAP Plan in June 2001. U.S. Congress re-established the CIAP in August 2005 by Section 384 of The Energy Policy Act of 2005 (also known as Public Law 109-59) for funds between 2007 and 2010.[23] The CIAP was passed to assist coastal states with mitigating environmental impacts, related directly or indirectly, to Outer Continental Shelf oil and gas production. Just six states, including 67 coastal political subdivisions, are eligible for these funds. The ADCNR, Coastal Section entered into a contract with the South Alabama Regional Planning Commission (SARPC) to assist with the development of the plan and to work with the two county governments in the development of their plans. AEMA is currently working with the ADCNR, Coastal Section and the SARPC to identify mitigation opportunities.

A CIAP Plan must be approved by the Bureau of Ocean Energy Management, Regulation and Enforcement before funding can be received. Alabama received $51,000,000 for CIAP projects in FY 2007 and 2008. The money was distributed between the State, Baldwin County Commission, and Mobile County Commission to implement CIAP projects. This is the last finalized CIAP Plan document available. The last noted CIAP Plan was for FY 2010 to be submitted in 2011. The U.S. Congress authorizes the funds for the following uses:

- Projects and activities for the conservation, protection or restoration of coastal areas, including wetlands;
- Mitigation of damage to fish, wildlife or natural resources;
- Planning assistance and the administrative costs of complying with CIAP;
- Implementation of a federally approved marine, coastal or comprehensive conservation management plan; and
- Mitigation of the impact of OCS activities through funding of onshore infrastructure projects and public service needs.

As of May 17, 2010, states with an approved four-year CIAP Plan may submit applications for funds. Funds not addressed in the approved plan will be eligible to a state with the submission and approval of an amendment to a state plan. An amendment to a state plan should contain all the components required in the plan. This is the process that continues as of the 2018 State Hazard Mitigation Plan update.

4.2.4.10 U.S. Army Corps of Engineers

With respect to flooding, historically, there have been several cooperative ventures initiated by local interests over the past two decades involving the U.S. Army Corps of Engineers (USACE). With the specific intention of mitigating hazards in several notable flood-prone areas within metropolitan areas, several waterway improvement studies, notably in Shelby, Jefferson, Mobile, and Baldwin Counties (which together comprise the majority of flood damage claims in the State) have been prepared. Several studies have performed comprehensive cost/benefit analyses to mitigate prospective flood zones, and some limited structural improvements are on record, but

[23] Public Law 109-58, August 8, 2005. Retrieved at: https://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf

many of the studies have typically culminated prior to execution of specific mitigation actions, due to local funding constraints.

4.3 Funding Capabilities for Hazard Mitigation Projects

4.3.1 Grant Administration

In Alabama, the Governor has designated the Director of the AEMA as the officer of the State authorized to accept Federal funding for emergency management purposes through Section 18, Alabama Law, 1955, Act No. 47. Funds received are deposited by the State Treasurer and disbursed by the State Comptroller, subject to requisition by the AEMA Director.

AEMA operates its funding mechanisms in accordance with the following enabling state and federal legislation, regulations, and program criteria. Funds for the operation of AEMA are authorized in an appropriation made by the legislature based on a budget submitted in accordance with Code of Ala. 1975, §§ 41-4-80 through 41-4-96. Funding for local emergency management organizations is authorized by Code of Ala. 1975, §§ 31-9-10, 31-9-24. Budgets are submitted as required by the political subdivision, and as specified in paragraph V.C.2c (2) of the *Alabama Emergency Management Agency Administrative Manual*, dated October 1, 1985, and revised December 15, 1988. Accounts to manage local funding should be established within the local government's existing accounting system.

There is a hazard mitigation plan requirement for many emergency related federal grants. This means that the grants are dependent upon the state and local governments' demonstration that a comprehensive management process is in place by applicants and sub-applicants having a FEMA approved hazard mitigation plan in place. States, state agencies, and local jurisdictions are required to have a state hazard mitigation plan in place by the application deadline for PDM and FMA funding and at the time of the Presidential major disaster declaration for HMGP funding, with limited exception.[24]

Local jurisdictions desiring project application funds and maintenance and services funds must follow the criteria as outlined in the *Alabama Emergency Management Agency Administrative Manual*, dated October 1, 1985, and revised December 15, 1988. State and local agencies will maintain such accounts, records, papers and other pertinent supporting materials, which will permit an accurate determination of the status of Federal and other contributions

Alabama relies exclusively on a local matching approach to secure appropriate levels of funding. Alabama's current strategy is to access federal funds for qualifying initiatives and facilitate

[24] FEMA, 2015. Hazard Mitigation Assistance Guidance. Retrieved at: https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Guidance_022715_508.pdf.

development of local funding sources through municipal and county entities to fund local match requirements. To date, the State of Alabama has continually met the local match requirements associated with funding of Federal sponsored programs, due in part to the continual financial support of the hazard mitigation programs and initiatives by local city and county governments.

AEMA hosts a robust grants management website, Alabama EMA Grant Manager[25], that includes an online grants management portal to track applications, a wealth of information about the PA program and HMGP, template forms and reference documents, and state contact information.

4.3.2 FEMA Funding Opportunities

4.3.2.1 FEMA Hazard Mitigation Grant Program

Some of the most significant mitigation actions in Alabama have been accomplished with the Hazard Mitigation Grant Program (HMGP) funding. FEMA uses a sliding scale to determine the amount of HMGP funds that it provides after a presidential disaster declaration. FEMA provides 15 percent of the first $2 billion spent in overall assistance. FEMA then provides 10 percent of each dollar between $2 billion and $10 billion and 7.5 percent for each dollar between $10 billion and $35.3 billion. In the State of Alabama, local governments are currently the prime source of funding for the local match associated with this program. At this time, the SHMT believes that local municipalities will continue at their current level of participation about funding local match requirements.

Since Hurricane Ivan in 2004, a little over half of all HMGP dollars spent in Alabama has gone towards building or retrofitting safe rooms in shelters, public facilities, and private residences. The second largest bucket of HMGP projects have been the acquisition of vulnerable properties or "buyouts" that move people out of damage-prone areas. Two summary tables of Alabama's HMGP projects can be found in Section 5.4 Mitigation Successes. While HMGP funding is not sufficient to accomplish all the desired projects, it continues to be the centerpiece of the Alabama Hazard Mitigation Strategy.

The State of Alabama Hazard Mitigation Administrative Plan documents the State's process for administering HMGP funds. While specifically intended as the primary guidance for state management of HMGP activities only, it represents the current administrative model for the state's acquisition and stewardship of funding mechanisms generally; and, as such, it is the best current framework describing Alabama's financial management capabilities. The plan defines applicant eligibility criteria, the application process, and management procedures for distribution of funding under the program. These plans are used by the State Staff Emergency Coordinators, Emergency Management Coordinators (EMC), the SHMT, and the individual county Emergency Coordinators. On January 9, 2004, the *State of Alabama Hazard Mitigation Administrative Plan* was approved by FEMA. The plan provides procedures at the State level for the management of

[25] https://grants.ema.alabama.gov/index.cfm

HMGP funds. The plan is designed to interlock the *Public Assistance Plan* and the *Individual and Family Grant Administrative Plan*. These last two mentioned plans are part of the comprehensive approach that AEMA has fostered toward hazard mitigation.

4.3.2.2 FEMA Flood Mitigation Assistance

The Flood Mitigation Assistance (FMA) Program provides funding to States and communities so that measures are taken to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes and other structures insurable under the NFIP. FEMA distributes FMA funds to States that, in turn, provide funds to communities. The State serves as the grantee and program administrator for the FMA grant. Federal funding is available for up to 75 percent of the eligible activity costs, however under certain circumstances, FEMA will provide 100 percent Federal cost share for projects that address SRL properties and 90 percent for RL properties. Alabama's mitigation strategy emphasizes the mitigation of RL and SRL properties and includes actions to provide outreach and education to local communities about how to apply for these specific grants.

AEMA has utilized the Flood Mitigation Assistance (FMA) program grants in association with numerous projects consistent with its purpose of providing funding to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the NFIP. Typical examples of eligible FMA projects funded in Alabama under this program in recent years include: elevation, acquisition, and relocation projects involving NFIP-insured structures, and advanced assistance to prioritize and develop future mitigation projects. In FY17, eight FMA projects were submitted from Alabama communities. Four projects were identified for further review, two projects were not selected, and two projects did not meet HMA requirements.

4.3.2.3 FEMA Pre-Disaster Mitigation

The Pre-Disaster Mitigation (PDM) Program was authorized by §203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC, as amended by §102 of the Disaster Mitigation Act of 2000. Funding for the program is provided through the National Pre-Disaster Mitigation Fund to assist states and local governments (to include Indian tribal governments) in implementing cost-effective hazard mitigation activities that complement a comprehensive mitigation program. Funds are used for the implementation of pre-disaster hazard mitigation measures that are cost-effective and designed to reduce injuries, loss of life, and damage and destruction of property, including damage to critical services and facilities under the jurisdiction of the states or local governments. The DMA2K emphasizes the importance of strong state and local planning and comprehensive program management at the state level.

Alabama has facilitated several initiatives consistent with PDM objectives, enabling the State and it's served communities to implement more preventive, pre-disaster activities. Funds are applied for and used to implement a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures, while also reducing reliance on funding from actual disaster declarations. Alabama recognizes that the PDM program provides a significant opportunity to raise risk awareness and to reduce the State's disaster losses through pre-disaster mitigation planning and the implementation of planned, pre-identified, cost-effective mitigation

measures, with a focus on funding mitigation projects that address NFIP repetitive flood loss properties.

FEMA made $250,000 in planning grants available to the State to facilitate development of the initial State Plan in 2004, and additional funding for the subsequent plan updates. The State of Alabama has also helped administer PDM funds to local EMA offices and Regional Planning Councils (RPCs) for a variety of mitigation activities, including planning. There are currently 17 open PDM grants related to hazard mitigation plan projects that total about $1 million. Excluding planning grants, there are about $10 million in PDM grants for other activities such as drainage projects, safe rooms, and acquisitions. Section 5.3 Mitigation Successes contains a table that summarizes these different PDM projects.

4.3.2.4 FEMA Public and Individual Assistance

The State has performed many projects utilizing Public Assistance (PA) funding. *The Alabama Public Assistance Plan* provides procedures to manage Public Assistance funds, while *The Individual and Family Grant Plan* provides criteria and procedures for Individual Assistance. The Public Assistance Program provides supplemental Federal disaster grant assistance for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities, and the facilities of certain private non-profit (PNP) organizations. The Federal share of assistance is at least 75 percent of the eligible cost for emergency measures and permanent restoration. The State determines how the non-federal share (up to 25 percent) is split with the applicants (typically half). Eligible applicants include the states, local governments, Indian tribes, and certain PNP organizations. The State is the grant administrator for all funds provided under the Public Assistance Program. Part 13 of the Code of Federal Regulations gives the states more discretion to administer federal programs in accordance with their own procedures and thereby simplify the program and reduce delays. As grantee, the State is responsible for administering the programmatic and grants management requirements of the Public Assistance Program. Key among the programmatic requirements is informing the applicants of the assistance available to them: what is eligible and how to apply for it. Grant management includes applying for federal assistance, monitoring and closing out the grant. The State and FEMA work in partnership to provide prompt and consistent service to all applicants.

Under the revised Public Assistance Program, the State has many of the same roles and responsibilities as the initial system. FEMA recognizes that states have different capabilities to perform their assigned duties. FEMA continues to work in partnership with those states requiring technical assistance to serve the needs of their applicants.

Once insurance requirements are established, FEMA will reduce otherwise eligible costs by the actual or anticipated insurance recoveries the applicant receives. The State must notify FEMA of any entitlement to insurance settlement or recoveries for a facility and its contents. For insurable buildings located in a special flood hazard area and damaged by flood, the reduction is the maximum amount of insurance proceeds the applicant would have received had the building and its contents been fully covered by a standard flood insurance policy under the NFIP. The applicant is required to buy insurance in the amount of the eligible damages for flood and general hazards.

For small projects, a grant is based on an estimate of the cost of the work. For large projects, a final grant is based on actual eligible costs. In large projects, the State disburses progress payments, as required. The dollar amount of a small or large project changes each fiscal year and is based on the Consumer Price Index.

There have been five new federal disaster declarations in Alabama as of January 2018, including emergency declarations and major disaster declarations. At the time when this update was written, $70,874,680.77 have been obligated for Alabama PA projects.[26]

4.3.2.5 FEMA Community Assistance Program State Support Services Element

The Community Assistance Program State Support Services Element (CAP-SSSE) Program provides funding to states to meet negotiated objectives for reducing flood hazards in NFIP communities. Emphasis is placed on adherence to the NFIP and to floodplain management practices voluntarily adopted by participating NFIP communities. Objectives are to identify, prevent, and resolve floodplain management issues in participating communities before they result in a compliance action by FEMA. In 2011, FEMA Region IV has identified nine core activities and assigned work hours for CAP-SSSE funding: enrollment of NFIP non-participating communities, CAVs, CACs-visits, CACs-phone, ordinance adoption associated with remapping, floodplain management courses, training and education, general technical assistance, and professional development.[27] According to ADECA's FY17 Plan, the agency received about $250,000 in CAP-SSSE grant money that has gone towards funding these different activities.[28]

4.3.2.6 FEMA Emergency Management Performance Grant Program

Under the Emergency Management Performance Grant (EMPG) Program, funds are provided by FEMA as authorized in Public Law 81-920 for the purpose of increasing operational capability at the state and local level. These funds can be expended for necessary and essential personnel and administrative expenses, including but not limited to salaries, benefits, travel, office supplies, equipment, and administrative communications. The State and/or local governments must match on a one-for-one basis financial assistance provided for EMGP Program purposes. To be eligible to receive EMGP Program funds to support a local emergency management program, a political subdivision must meet the criteria as referenced in the *Alabama Emergency Management Agency Administrative Manual*, dated October 1, 1985, and revised December 15, 1988.

[26] FEMA, 2018. Disasters. Retrieved at: https://www.fema.gov/disasters.
[27] https://www.hsdl.org/?abstract&did=787789
[28] http://adeca.alabama.gov/News/cid/Annual%20Reports/2017%20Annual%20Report.pdf

4.3.3 Other Federal Funding Opportunities

4.3.3.1 U.S. Economic Development Administration

The U.S. Economic Development Administration supports economically distressed areas of the United states by fostering job creation and attracting investments through a variety of grants and loan programs. The EDA has six funding programs that Alabama can use for hazard mitigation projects:

- **Public Work Grants:** These grants are given to public and private non-profit organizations as well as to Indian Tribes for the building or expansion of public facilities that are essential to industrial and commercial growth.
- **Technical Assistance Grants:** Funding is made available through these grants to communities and firms for economic feasibility studies of resource development in the establishment of jobs. The funding also provides on-sight support for innovative economic development techniques.
- **Planning Grants:** Funding is available through planning grants help to pay for the expertise needed to plan, coordinate, and implement comprehensive economic development programs.
- **University Center Program Grants:** These grants are awarded to colleges and universities to utilize available resources to provide technical assistance to clients and address the economic development problems and opportunities of their service area.
- **Revolving Loan Fund (RLF) Grants:** This funding is aimed at helping depressed areas overcome specific capital market gaps and to encourage greater private sector participation in economic development activities. In concert with private leaders, RLF grantees make fixed asset and/or working capital loans to area businesses.
- **Economic Adjustment Program Grants:** Assist state and local governments in solving recent and anticipated severe adjustment problems, resulting in abrupt and serious job losses and to help areas implement strategies to reverse and halt long-term economic deterioration (e.g., natural disasters and military installation closures).

The EDA also has a critical role in disaster recovery by facilitating the delivery of Federal economic development assistance to support the long-term community economic recovery planning, project implementation, redevelopment and resiliency. The EDA's FY16 report for Alabama shows significant investments in disaster relief, public works, and economic adjustment assistance, as summarized in Table 4-3.

Table 4-3: FY16 EDA Investments in Alabama

Program	# of Grants	EDA Funds
Disaster Relief	2	$3,758,725.00
Economic Adjustment Assistance	1	$2,028,092.00
Partnership Planning	2	$123,000.00
Public Works	2	$2,607,093.00

Program	# of Grants	EDA Funds
Regional Innovation Strategies	1	$500,000.00
Technical Assistance	1	$128,592.00
Total	9	$9,145,502.00

One of the EDA's Disaster Relief grants listed in the table above is a $2,912,142 investment made September 2016 to Mobile Area Chamber of Commerce Foundation, Inc./Mobile Area Chamber of Commerce to create an innovation hub and support entrepreneurial development. This EDA investment funded the acquisition and renovation of the former Threaded Fasteners Building in Mobile to house Innovation PortAL, a high-tech business incubator and accelerator program. The program included a number of outreach activities in the surrounding distressed communities to promote workforce development initiatives and strengthen innovation and entrepreneurial capacity.[29]

4.3.3.2 U.S. Department of Housing and Urban Development (HUD)

The Department of Housing and Urban Development's (HUD) annual Community Development Block Grant (CDBG) program funds are administered through ADECA and used for community development projects at the local level. Funds support a variety of projects including, but not limited to, public infrastructure improvements, housing, and economic development initiatives. ADECA reserves a portion of CDBG funds for local planning grants. These grants may be used for developing and updating comprehensive plans. Up to $50,000 may be awarded to a community. The grant provides a funding mechanism for addressing hazard risks and incorporating hazard mitigation actions into local comprehensive plans.

CDBG funds can also be allocated following a major disaster through the Community Development Block Grant Disaster Recovery (CDGB-DR) program. The Disaster Relief Initiative for Hurricane Katrina Recovery added approximately $95 million in CDGB-DR funding for recovery and mitigation projects. This funding has gone towards developing long term community recovery plans for the communities of Mobile County as well as towards providing the required local matching funds for HMGP projects. CDBG-DR funding was also allocated to Alabama following the April 2011 tornadoes and after Hurricane Ivan in 2004.

4.3.3.3 NOAA

NOAA's Office for Coastal Management (OCM) provides funding for a grant program that is available through ADCNR's Alabama Coastal Areas Management Program (ACAMP). The grants are awarded annually for coastal management projects located in Alabama's Coastal Area (Baldwin and Mobile counties) and can relate to, but are not limited to, planning, coastal hazards, wetland protection, and coastal nonpoint source pollution control.

[29] Retrieved from https://www.eda.gov/annual-reports/fy2016/states/al.htm

In addition, NOAA also offers the following potential funding programs:

- **Section 303:** This program focuses on the protection of natural resources that mitigate wind and flooding impacts including beaches, dunes, and barrier islands.
- **Section 305:** States developing coastal programs are eligible to receive funding under this section of the CZMP.
- **Section 306:** Funding is primarily provided through implementation grants to administer State programs, including staff salaries, equipment purchases, public education and outreach, enhancement of public access and the undertaking of projects that monitor and/or enhance elements of the regulatory program.
- **Section 309:** This section provides detailed objectives calling for states to prevent or significantly reduce threats in high hazard areas or manage development in other hazard areas. A portion of this section is the Coastal Zone Enhancement Program (CZEP).
- **Coastal Zone Enhancement Program:** This program allows states to compete for additional funding by creating enhancements to the existing State Coastal Zone Management Program in eight priority areas including coastal hazard mitigation, wetlands protection, and the control of cumulative and secondary impacts of development.

4.3.3.4 US Army Corps of Engineers (USACE)

The US Army Corps of Engineers (USACE) maintains an active involvement in Alabama activities, particularly waterways and flood control management under its continuing watershed management mission. The State of Alabama can make a unique claim to have more miles of navigable waterways and shoreline than any other state in the continental US. Accordingly, among other natural hazards, it has numerous locations where population development and floodplain locations overlap and evolve into vulnerabilities. The USACE is active throughout the State supervising Federal waterways management components to prevent and reduce hazards as an ongoing part of maintaining navigation channels and drainage in major watersheds. AEMA works in concert with the USACE in some of these activities and promotes funding of hazard mitigation projects through USACE funding sources when it is possible.

4.3.3.5 US Department of Agriculture (USDA)

In watersheds damaged by severe natural events, the USDA's Natural Resources Conservation Service can provide assistance through the Emergency Watershed Protection (EWP) Program. These funds can be used for activities such as debris removal from streams and culverts, reshape and protect eroded banks, correct damaged drainage facilities, prevent erosion through planting, repair levees and structures, and to repair conservation practices. If funds are available, Natural Resource Conservation Service (NRCS) can provide 100 percent of the cost of exigency situations and 80 percent of the cost of non-exigency situations.

Since the previous plan update in 2013, Alabama has utilized over $3.5 million in NRCS EWP funding to complete projects that removed debris, restored stream corridors and drainage, and

prevented future flooding, as summarized in Table 4-4. Typical EWP projects in Alabama include sediment or debris removal, stream bank stabilization, and gully stabilization.[30]

Table 4-4: EWP Recovery Projects in Alabama since 2013

FY	State	NRCS' Investment	Description of Work
			A 2014 tornado clogged streams and caused other damage in northern Alabama. Work will help remove debris and prevent future flooding.
2015	Alabama	$2,933,854.00	A 2014 storm with torrential rain caused severe erosion in coastal Alabama, threatening public utilities and infrastructure and posing water quality issues. Work will help restore stream corridors, curb erosion and prevent future flooding.
2016	Alabama	$522,337.00	A storm in December 2015 brought heavy rains and resulted in a presidentially-declared disaster in several counties. The resulting runoff caused deep gullies in residential areas of Dale and Jefferson Counties, and within the cities of Mobile and Prattville, threatening homes and roads. EWP funds will be used to repair the gullies and restore normal drainage.

4.3.3.6 Utility Funding

AEMA negotiates with the Alabama Power Company and the Tennessee Valley Authority for utility funds that are required to support off-site emergency planning at their nuclear power plants. These negotiations are based on Federal mandates for emergency preparedness.

4.4 Local Mitigation Policies, Programs, and Capabilities

The State began the process of local mitigation plan development in early 2003 through planning grants ranging from $10,800 to $15,000 awarded to 22 county EMAs within the most populated and highest risk counties. As a result of this effort, the county EMAs have become the central coordinating agencies for local hazard mitigation planning. The following year, the State entered into an agreement with the Alabama Association of Regional Councils to provide funding, training, and technical support for the regional councils to develop the capabilities to support local mitigation planning. Grants were awarded to complete plans for the remaining 47 counties. Since then, many counties are working with contractors and other mechanism to complete local plan updates though the Regional Councils remain active in hazard mitigation assistance. Details on

[30] Alabama EWP Recovery Plan 2017

the status of local planning are contained in Section 7.3.2, which describes the status of each county plan as well as funding sources for each.

The results of the mitigation plan development program in the State have tremendously increased the capabilities for local mitigation and community awareness. EMA staff across the State have become proficient in administering local planning programs and overseeing the activities of local hazard mitigation planning committees. The Regional Planning Counties continue to provide technical assistance where needed. These improvements in technical and administrative capability are continued throughout the local plan update process.

4.4.1 Local Mitigation Policies

The framers of Alabama's 1901 Constitution designed a system of State government that concentrates power at the State level. Alabama is not a "home rule" state, meaning that local authority must be granted by State acts, special legislation, or constitutional amendments. Due to the restraints placed in the Alabama Constitution, all but seven counties (Jefferson, Lee, Mobile, Madison, Montgomery, Shelby, and Tuscaloosa) in the state have little to no home rule. Instead, most counties in the state must lobby the Local Legislation Committee of the state legislature to get simple local policies such as waste disposal to land use zoning.

Despite the constitutional limitations on home rule, local governments have been able to function adequately. Legislation has been enacted over the years to allow localities with the capabilities to implement planning and regulatory tools for hazard mitigation. In 1935, the State passed legislation that empowered any municipality to establish planning commissions, pursue comprehensive planning, and enforce zoning ordinances and subdivision regulations, among other planning activities. This planning enabling legislation, however, did not include unincorporated areas of counties. Only Jefferson, Shelby, and Baldwin Counties have authority by special legislation to extend planning and zoning regulations into unincorporated areas of these counties only. By State Act, all local governments have authority to enact floodplain management ordinances, building codes, and subdivision regulations.

4.4.2 Local Mitigation Capabilities

The capabilities of the localities to perform local mitigation measures and implement mitigation projects vary significantly among local governments. Beginning with the 2007 State Plan Update, a table summarizing local capabilities was developed and included as an appendix**.** Subsequent plan versions review and update local capabilities in this table. For the 2018 Plan Update, the Local Capability Table is included in **Appendix C**. The summary table lists all counties and municipalities of Alabama and notes various criteria for evaluating the capabilities of each of these localities, as follows:

- **Adopted Hazard Mitigation Plan –** Has the jurisdiction adopted a hazard mitigation plan that has been approved by FEMA?

- **National Flood Insurance Program –** Is the jurisdiction a regular member of the National Flood Insurance Program?
- **Community Rating System –** Does the jurisdiction participate in the Community Rating System Program, and if so, what is its class?
- **Comprehensive Plan –** Does the jurisdiction have a comprehensive plan that has been adopted in the last five years or is an update in progress?
- **Zoning –** Does the jurisdiction administer a zoning ordinance?
- **Subdivision Regulations –** Does the jurisdiction administer subdivision regulations?
- **Building Codes –** Does the jurisdiction administer building codes?
- **Capital Improvements Plan –** Does the jurisdiction program its annual capital expenditures on a multi-year capital improvements plan?
- **Building Code Effectiveness Grade Schedule –** What is the ISO classification of the jurisdiction under the Building Code Effectiveness Grade Schedule?
- **Property Protection Classification –** What is the ISO classification of the jurisdiction under the Property Protection Classification for fire protection?
- **Planner on Staff** – Does the jurisdiction have a full-time professional planner on staff?
- **Engineer on Staff –** Does the jurisdiction have a full-time professional engineer on staff?
- **Building Inspector on Staff –** Does the jurisdiction have a full-time building inspector on staff?
- **Certified Floodplain Manager –** Does the jurisdiction have a Certified Floodplain Manager on staff to administer its floodplain management ordinance?
- **Mitigation Project Experience**. What is the jurisdiction's level of experience with mitigation projects funded through a FEMA grant program?

The Local Capability Table in the 2013 Plan Update indicated that the results of this assessment show a wide disparity in capabilities, and this pattern continues with the 2018 Plan Update. Generally, jurisdictions with the largest populations and revenues have the most capabilities. For instance, the City of Birmingham, the largest urban jurisdiction in the State possesses significant capabilities that most other jurisdictions do not. Birmingham has participated in the NFIP since 1978 and maintains a Floodplain Management and Disaster Mitigation Services within the city's Planning, Urban Design & Watershed Management Division. This includes a full-time Certified Floodplain Manager (CFM) with at least two full-time supporting staffers, all of whom are responsible for managing the city's flood hazard mitigation efforts, including ordinance administration, outreach, property acquisitions, FEMA grant administration, and a host of other mitigation activities.[31] The City participated in the development of and adopted the Jefferson County hazard mitigation plan and supplemented that plan with its own Floodplain and Storm Water Management Plan that was funded through an FMA planning grant. Birmingham has a CRS rating of five, which is the lowest of all CRS-rated communities in Alabama; however, only

[31] Floodplain Management. City of Birmingham, Alabama, 2018. Retrieved at: https://www.birminghamal.gov/about/city-directory/planning-engineering-permits/floodplain-management/.

14 jurisdictions in the state are CRS-rate.[32] It maintains a comprehensive plan and a CIP, administers a zoning ordinance, building codes, and subdivision regulations, and has a staff of professional planners, engineers, and building inspectors. It has extensive experience with FEMA grant programs, having implemented over $12 million in flood hazard mitigation buyouts of structures in Birmingham. Previously, the USACE completed a $30 million flood buyout.

Similar robust mitigation capabilities are reflected in the other large and well-populated jurisdictions in Alabama. For example, Jefferson County, in which Birmingham is located and which ranks as the most densely populated county in Alabama, reflects similar advantages, having implemented over $24 million in flood hazard mitigation buyouts in the county. Other large cities in Alabama, such as the City of Huntsville, also closely follow Birmingham's lead in demonstrating local hazard mitigation capabilities.

In contrast to the larger cities, however, most county and municipal jurisdictions in Alabama have rural populations and very limited revenue resources. The clear majority of jurisdictions in Alabama fall into this category. Consequently, capabilities in rural counties are typically very low. As shown in the Local Capability Table, typical rural Alabama towns rarely employ any planners, engineers, or building inspectors. Further, most cities and towns in Alabama have no comprehensive plans, building codes, zoning ordinances, subdivision regulations, or other regulatory means to implement mitigation measures. Small communities depend on support from their county governments, which, even in rural locations, have greater means to lend some local support to hazard mitigation.

Another nationwide community preparedness program that Alabama communities participate in is the National Weather Service's (NWS) StormReady Program (SRP). SRP helps communities develop plans to handle all types of severe weather, including, but not limited to tornadoes and tsunamis. By providing emergency managers with clear guidelines on how to improve their hazardous weather operations, SRP encourages communities to take a proactive approach toward improving their weather operations. These guidelines help communities implement procedures that reduce the potential for disastrous, weather related consequences.

To become a StormReady community, several guidelines must be met. The guidelines include the following:

- Establish a 24-hour warning point and emergency operations center
- Have more than one way to receive severe weather warnings and forecasts and to alert the public
- Create a system that monitors weather local weather conditions
- Promote the importance of public readiness through community seminars and other outreach methods

[32] Alabama Top 50 National Flood Insurance Program (NFIP) Policy Count Communities and Community Rating System (CRS) Participation, October 2017. https://crsresources.org/files/100/maps/states/alabama_crs_map_october_2017.pdf

- Develop a formal hazardous weather plan to include training severe weather spotters and conducing emergency exercises.

Some benefits of being a StormReady community include increased scores on the Community Rating System (CRS) which in turn can lower NFIP insurance rates, along with maintaining local plans and increased public awareness and preparedness. Counties, communities, and supporters that are StormReady are identified below.

- Counties
  - Autauga
  - Baldwin
  - Blount
  - Calhoun
  - Cherokee
  - Cleburne
  - Coffee
  - Colbert
  - Covington
  - Cullman
  - Dale
  - Dallas
  - Defiance
  - DeKalb
  - Elmore
  - Etowah
  - Fayette
  - Franklin
  - Geneva
  - Henry
  - Houston
  - Jackson
  - Jefferson
  - Lauderdale
  - Lawrence
  - Lee
  - Limestone
  - Madison
  - Marion
  - Marshall
  - Mobile
  - Monroe
  - Montgomery
  - Morgan
  - Randolph
  - Russell
  - Shelby
  - St. Clair
  - Talladega
  - Tallapoosa
  - Tuscaloosa
  - Walker
  - Winston
- Communities
  - City of Livingston, Sumter County
  - City of Oneonta, Blount County
- Universities
  - Auburn University
  - Jacksonville State University
  - University of Alabama
  - University of Alabama, Huntsville
  - University of North Alabama
  - University of Southern Alabama
- Commercial Sites
  - Rheem Corp (Montgomery)
- Government/Military Sites
  - Fort Rucker
  - Marshall Space Flight Center
- Supporters
  - Eastdale Mall, Montgomery
  - Quintard Mall, Oxford
  - Summit Lifestyle Center, Birmingham
  - Talladega Super Speedway, Talladega
  - General Electric, Decator
  - Huntsville Utilities, Huntsville

- Oakwood College, Huntsville
- Marshall Space Flight Center, Huntsville
- Sci-Quest Hands on Science Museum, Huntsville
- U.S. Space and Rocket Center, Huntsville
- Northeast Alabama Community College, Rainsville

Since the 2010 plan update, there are 3 new counties (1 county no longer of SRP status), 1 new community (1 community no longer of SRP status), 2 new universities, 2 new government/military sites, 1 new supporter (1 supporter no longer of SRP status), and 1 new corporation now participating in the program. The new additions are bolded. (The specific date of recognition will be updated as the information becomes available.) All StormReady participants must be recertified every three years.

This overall state of capabilities in Alabama points to the need for a strong State program of support to increase the capabilities of these rural communities and sustain and strengthen the capabilities of larger jurisdictions. The State EMA fully recognizes these needs for continuing mitigation planning support and has been actively taking steps to expand its technical support and work with locals to identify funding opportunities, as reflected in several new proposed mitigation actions in this plan update. The State intends to increase support for localities to receive professional planning and engineering services for hazard mitigation. This can be accomplished through continuing coordination with county EMAs, increasing participation in NWS's StormReady Program, and working to obtain planning funds (e.g., PDM, CDBG, HMGP) available to improve and expand local mitigation activities.

4.5 Integration into Other Ongoing State Planning Efforts

4.5.1 Ongoing State Planning Efforts and Integration Process

As noted above, AEMA works closely with several agencies to ensure ongoing planning efforts and integration. The agencies with substantial integration into mitigation planning include the Regional Planning Councils (RPCs), Alabama Association of Floodplain Managers (AAFM), Alabama Department of Economic and Community Affairs (ADECA), Alabama Department of Coastal and Natural Resources (ADCNR), Geological Survey of Alabama (GSA), and the Alabama Forestry Commission (AFC).

Other hazard mitigation initiatives by Federal agencies are described in **Sections 4.3.2 and 4.3.3.** These are primarily funding mechanisms to augment state and local mitigation activities.

4.5.1.1 Regional Planning Councils

FEMA has a long-standing relationship with the RPCs beginning with the 2004 version of the State Hazard Mitigation Plan. AEMA recruited assistance from the 12 RPCs within the State of Alabama, represented by the AARC. The RPCs had agreements in place with AEMA to develop local hazard mitigation plans for some counties within their jurisdictions. Since 2004, AEMA has provided considerable technical support and training to RPC planners to gain proficiency in hazard mitigation planning. Several of the RPCs have a mitigation planner on staff to provide ongoing planning services to all jurisdictions within their respective regions.

The RPCs completed 47 county-level plans from 2004 to 2005. In 2006, AEMA provided additional funding to seven of the twelve RPCs to update 34 plans across the State. As of the 2018 update, the RPCs continue to be involved in mitigation planning and have contributed to 41 of the 67 currently approved county-level plans. However, a trend noticed during the 2013 update towards using consultants to complete the plan updates continues to be observed. Further, many of the RPCs are no longer completing mitigation plans due to lack of funding so the decline is RPC mitigation planning is expected to continue. Complete details about the local hazard mitigation plan development and update process are included in Section 7.3 Coordination with Local Planning.

The RPCs are also involved in comprehensive planning activities with local jurisdictions (counties, cities, and towns) and other local or regional interest groups, either by directly developing and updating the plans or assisting in development of the local comprehensive plans. With a thorough knowledge of hazard mitigation planning and strong partnership with AEMA, the RPCs work with the local agencies to integrate hazard mitigation planning into local and regional comprehensive planning initiatives. AEMA continues to improve and solidify this process.

The RPCs often work in conjunction with the Alabama Planning Institute (API) to provide regular training to local planning officials and planners throughout Alabama. The Alabama Planning Institute, housed within the University of North Alabama Center for Continuing Education, is sponsored by the Alabama Chapter of the American Planning Association. The Institute has a long-standing and successful record of achievement and its courses are always in high demand. Topics in hazard mitigation have been recently added to the API courses, and AEMA continues to work to expand these course offerings to emphasize the integration of hazard mitigation planning into local and regional comprehensive planning processes.

4.5.1.2 Alabama Association of Floodplain Managers

Alabama established its own chapter of State Floodplain Managers, the Alabama Association of Floodplain Managers (AAFM), in 2008. As demonstrated in the past, the Association offers technical support materials for flood hazard mitigation planning and offers a certification program, the Certified Floodplain Manager (CFM), for State and local officials involved with floodplain management. The AAFM works closely with ADECA OWR to provide training courses and webinars for floodplain managers. The AAFM has also contributed to the development of several ADECA OWR publications, including Alabama's Quick Guide to Floodplain Management (2009). AARM has hosted an annual conference for the last 10 years that provides a key opportunity to

networking. The most recent conference was held September 25-27, 2017 and had over 100 participants representing 32 different governments and municipalities.

4.5.1.3 Alabama Department of Economic and Community Affairs

ADECA Office of Water Resources (ADECA-OWR) plays a major role in statewide hazard mitigation planning. ADECA-OWR oversees the Drought Management Program, administers the National Flood Insurance Program (NFIP), and manages the Dam Inventory. Lastly, ADECA-OWR oversees the State's flood mapping program, including Risk MAP, a FEMA program. ADECA's Community and Economic Development Programs Office administers the CDBG program, including the Disaster Recovery Initiative (DRI) and administers grants for local planning activities.

As discussed above, the Alabama Drought Planning and Response Act of 2014 established the Alabama Drought Assessment and Planning Team (ADAPT). The purpose of the ADAPT is to provide guidance and make recommendations on drought-related matters to the Governor and the ADECA-OWR, and to coordinate intergovernmental drought response, management, and implementation of all drought related activities. ADAPT developed and maintains the Alabama Drought Plan, which establishes state-level operating procedures and a framework for the assessment of drought conditions, assists stakeholders and water managers in mitigating drought conditions, and encourages water conservation practice. Additionally, ADAPT maintains the Alabama Drought Information Center, an online clearinghouse of drought-related information available to the public, including a GIS portal and links to current climactic conditions such as soil moisture, reservoir levels, and streamflows.[33]

4.5.1.4 Alabama Department of Conservation and Natural Resources

The Coastal Zone Management Program (CZMP) is jointly administered through the Alabama Department of Conservation and Natural Resources (ADCNR) and the ADEM. ADCNR is responsible for grant management, planning and policy development, and ADEM is responsible for permitting, regulatory, and enforcement.

The ADCNR, State Land Division, Coastal Section administers the Alabama Coastal Area Management Program (ACAMP), a program designed to balance preservation, conservation, enhancement and development of coastal resources, while promoting a sustainable economy in coastal areas. An important component of the program is natural hazards mitigation. Considering this, the Commissioner of ADCNR is among those designated to participate on the SHMT by EO 19. Planning efforts are coordinated with ADCNR through:

- Discussions of planning activities and mitigation plans with key staff;
- Review of the ACAMP; and
- Review of the Alabama Coastal Impact Assistance Program (CIAP) Plan.

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[33] Drought Planning and Management in Alabama. ADECA (2015). Retrieved at: http://www.adeca.alabama.gov/Divisions/owr/Pages/Drought.aspx

In the past, the ADCNR, Coastal Section has provided grant funds to local communities to fund hazard mitigation plans and plan updates. This has included Baldwin County, Orange Beach and Gulf Shores. Currently, no such grants are in place. However, prior to each fiscal year, the ADCNR, State Lands, Coastal Section issues a request for proposals under which hazard mitigation projects, plans and plan updates are an eligible category that may receive Federal funding if a project receives a priority ranking.

Projects which have potential impacts on Alabama's coastal resources are regulated through the ADEM permitting and enforcement programs. These regulated projects include the following activities:

- Construction on Gulf-fronting properties;
- Commercial and residential development on properties greater than 5 acres;
- Projects with impacts on wetlands and/or water bottoms;
- Construction of new or expansion of existing marinas;
- Installation of groundwater wells with a capacity greater than 50 GPM;
- Siting, construction and operation of energy facilities;
- Shoreline stabilization projects; and
- Discharges to coastal waters.

4.5.1.5 Geological Survey of Alabama

The Geological Survey of Alabama (GSA) supports mitigation planning for geological hazards including sinkholes, earthquakes, and landslides. GSA has developed and maintains maps showing the distribution of known sinkholes, faults, underground mines, and landslides. The agency also maintains maps of ecologic formations, complete with descriptions of the characteristics, and prepares reports of findings and recommendations. The GSA also maintains records of historical earthquakes and monitors current seismic activity. In March of 2010, GSA completed a statewide basement fault map and is working to complete a soil amplification/liquefaction map. The GSA also has provided data to map earthquake epicenters, liquefaction susceptibility and landslide susceptibility for the 2018 Plan update. Both items have been incorporated into the Risk Assessment. The information and technical resources of the GSA are critical to the statewide risk assessment of this plan and the development of mitigation strategies that respond to pervasive geological hazards across the State. In addition, the GSA conducts public outreach through the distribution of educational brochures on geological hazards.

4.5.1.6 Alabama Forestry Commission

The Alabama Forestry Commission (AFC) incorporated mitigation elements into its Forestry Resources Handbook. The AFC partnered with several agencies, including AEMA, to complete the handbook. AEMA provided hazard mitigation expertise throughout the development including information from the State Hazard Mitigation Risk Assessment to incorporate into the handbook. AEMA was present during the AFC's strategy development process when the AFC and partnering agencies identified 9 threats, one of which was storms (e.g., catastrophic events, floods, hurricanes). AEMA provided mitigation expertise on the storm section of the Forestry Resources

Assessment Handbook. Mitigation was made a priority for both urban and rural settings. In urban setting mitigation priorities were to remove debris and incorporate lessons learned from previous plans. In rural settings, mitigation priorities included developing community wildfire mitigation plans and incorporating scalability.

4.5.2 Potential Improvements

The State of Alabama has many opportunities to strengthen or improve the integration of its existing statewide planning initiatives. These opportunities were first identified in the 2007 version of the plan and were included in subsequent plan updates. Several items have been completed which are listed in **Section 4.5.3** following this subsection. Below lists the potential improvements and their status:

- Continue to use the AARC to disseminate planning information among local government planning. This agency became the main source of information sharing when the All Hazards Task Force dissolved in 2010.
    - This agency continues sharing information as of the 2018 State Plan update.
- Continue NFIP training and enlarge the scope of training to address other natural hazards. The lead hazard mitigation planning agencies (defined as Alabama Department of Economic and Community Affairs, Alabama Department of Environmental Management, Forestry Commission of Alabama, Geological Survey of Alabama, and Alabama Department of Conservation and Natural Resources) can improve coordination and delivery of mitigation planning courses to interested individuals throughout the State. The AARC can also become a partner in enlarging training opportunities along with the Alabama Planning Institute (API). Expanded and coordinated training presents one of the best opportunities to assure integration of planning initiatives among State, Federal, and other interest groups, and best deliver hazard mitigation planning principles at the local level.
    - Floodplain Management 101 was conducted on at least 5 occasions, Managing Floodplain Development through the NFIP (L-273) is held once or twice a year, and Basics of Hydrology and Hydraulics and GIS for the Floodplain Manager has been held three times. There are plans to provide training on NFIP Policy and Reform, Hazus, Community Rating System, Online LOMC, and a Floodplain Management Summary and review in addition to various seminars provided through the Alabama Association of Floodplain Managers conferences.
    - Additional training is also offered through FEMA's Risk MAP program.
    - The AARC works through the state to provide information to local governments. The state is not currently working with API to providing training exercises specific to hazards.
    - Additional training for earthquake and hurricane hazards continues:
        - Earthquake: There are several counties at risk to earthquake in Alabama. AEMA works primarily through the Central United States Earthquake Consortium (CUSEC) and FEMA to provided courses to these counties. In the past, seismic courses have also been provided by the Applied

Technology Council (ATC). A scheduled course was offered in 2011 as part of a national exercise. There is a CUSEC Earthquake Program Manager's meeting in late 2012.

    - Hurricane: HURREVAC training was conducted in the coastal counties (Baldwin and Mobile). AEMA is also working with the National Hurricane Center to provide information to inland counties affected by wind. HURREVAC training is offered at least once annually. Trainings were held in March 2010, April 2011, and April 2012.

- Maintain a clearinghouse and repository of hazard mitigation plans and technical support publications. AEMA can serve this function and maintain documents and materials in a centralized location for printed distribution and access through the internet.
    - An official clearinghouse has not been established due to funding.
- Coordinate outreach services among statewide planning agencies. A coordinated public outreach program should more effectively communicate the complete plan and keep the public informed of risks and statewide efforts underway to mitigate those risks.
    - AEMA's website is the primary public outreach tool. It provides information to the public about the different hazards that impact the state, access to the state and county hazard mitigation plans, links to live weather updates, and resources for disaster assistance. AEMA is also continuously working to revise all their documents available on the AEMA website to make them more user-friendly. For example, the documents will be easy to search and broken down into smaller, more manageable documents (by subject area), when appropriate.
- AEMA should work in conjunction with the ADCNR, Coastal Section to update the ACAMP program document, specifically those parts related to natural hazard mitigation. The resulting information should be incorporated into the State Hazard Mitigation Plan. Updates to the ACAMP program document should be coordinated with the scheduling of updates to the State Hazard Mitigation Plan to assure consistency. The ACAMP should schedule time updates of the ACAMP program document to allow for a direct feed of the latest data from the State Hazard Mitigation Plan into the ACAMP program document.
    - AEMA provided input on hazard mitigation planning, post-disaster mitigation planning, repetitive flood loss policies including relocations and buyouts.
    - ACAMP updates occur approximately every 5 years; the last completed draft is dated 2013.

4.5.3 Completed Improvements

The State of Alabama has worked to complete many of the potential improvements listed above. The following is a list of those accomplishments.

- State association of Floodplain Managers: The Alabama Association of Floodplain Managers was created in 2008.
- AEMA has continuously added new Certified Floodplain Managers (CFM) to its staff.

- NFIP Training: NFIP seminars are provided through the Alabama Association of Floodplain Managers conferences which began in October 2008. There is a Spring training and a Fall training.
- AEMA website: As of 2009, the AEMA website has become a central location for many hazard mitigation documents. The State Hazard Mitigation Plan and all county hazard mitigation plans can be found on the website. In addition, there are links to the Alabama NFIP website, benefit-cost guidance, mitigation grant applications, and several other technical assistance documents.
    - As of the 2018 State Plan update, all documents are online, but no changes have been made regarding their readability.
- AEMA is using social media outlets, including Facebook and Twitter, to reach and educate the public on hazard mitigation measures.
- Continue the functions of the All Hazard Task Force among the Regional Planning Councils: The Task Force was formed as means to exchange mitigation planning information among the RPCs. The Task Forced remained active until 2010. As of the 2013 State Plan update, the All Hazard Task Force has dissolved and is no longer functional. Many of the RPCs are no longer completing mitigation plans, so there is less of a need for a formalized information-sharing network.
- Another important outreach tool is ADECA OWR's flood map viewer: https://alabamaflood.com/map This tool allows the public to determine what flood risk they are exposed to given their specified location. This web map hosts effective and preliminary flood hazard data as well as a suit of non-regulatory products that are being developed in various counties in Alabama.
- In 2011, ADCNR's Coastal Section completed a preparedness guide titled, "Homeowner's Handbook to Prepare for Natural Hazards." The handbook was funded through a Sea Grant and was modeled off the University of Hawaii's version of a similar document. The purpose of the handbook is to reduce the risk of natural hazards on people and property. It provides homeowners with basic guidance on how to prepare for nearly any hazard event, including hurricanes, tsunamis, earthquake, and several other hazards. The Coastal Section worked directly with AEMA to include information from the Alabama Hazard Mitigation Plan into their handbook. The Coastal Section solicited involvement from other agencies, such as AFC, through the SHMT.

4.6 Integration into Other FEMA Mitigation Programs and Initiatives

4.6.1 Summary

AEMA administers and oversees Federal mitigation grant programs for the State of Alabama that are related to hazard mitigation, emergency management, and disaster relief, and serves as the lead agency for the State in disaster mitigation efforts. Due in part to the agency's dual roles,

AEMA has the opportunity to integrate the dissemination of mitigation information with the FEMA grant application process for the programs listed in **Section 4.3.2**.

The Alabama Office of Water Resources (OWR) administers the National Flood Insurance Program (NFIP) within the State of Alabama, with responsibilities assigned to the State NFIP Coordinator and support staff. The primary responsibilities of the office of the State NFIP Coordinator include facilitating participation in the NFIP among Alabama communities, providing technical support and training to local administrators, and encouraging participation in the Community Rating System (CRS) Program.

4.6.2 List of Ongoing FEMA Mitigation Programs and Initiatives

FEMA Grant Programs (see Section 4.3.2 for an overview of all FEMA grant programs and initiatives):

Hazard Mitigation Assistance (HMA) Grants provide funding for mitigation activities:

- Hazard Mitigation Grant Program (HMGP) – requires a disaster declaration;
- Pre-Disaster Mitigation Grant Program (PDM); and
- Flood Mitigation Assistance Program (FMA);

In addition, Public Assistance money (Public Assistance Grant Program – PA), received following a disaster declaration, can be used towards mitigation projects.

- National Flood Insurance Program (NFIP):
  - State NFIP Coordination;
  - Community Rating System (CRS);
- Risk MAP:
  - Risk MAP is focused towards the flood hazard and has several goals including addressing gaps in flood hazard data, public awareness/outreach, mitigation planning, enhanced digital platform, and alignment and synergies of risk analysis program to enhance decision-making capabilities. It is not a grant program though it does provide resources to the states to reach the aforementioned goals.

4.6.3 Integration Process and Potential Improvements

The SHMT first identified and reviewed State of Alabama laws, regulations, policies, and programs pertaining to mitigation and FEMA sponsored programs and supporting regulations in the 2007 version of this plan. They were reviewed and updated as necessary subsequent versions.

- FEMA Grant Programs:

- The Alabama EMA administers all FEMA grant programs. It notifies communities and eligible applicants of the availability of program funds, provides applicant briefings and technical assistance, reviews applications for eligibility and compliance, and recommends funding to FEMA. AEMA serves as the grantee of FEMA grant awards and oversees the implementation of funded projects by subgrantees (communities and other eligible applicants). AEMA should continue to facilitate and monitor grant awards to eligible applicants.
    - AEMA continues to administer and monitor the grant process.
- Consistency of project applications with local mitigation plans is required by AEMA to assure integration of local mitigation activities with the hazard mitigation planning process.
- The grant award process can be improved by adhering to established prioritization criteria presented in the State plan.
    - The grant award process using the prioritization criteria is now adhered to as of the 2007 State Plan update.
- Beginning with projects for disaster number 4052 (Severe Storms, Tornadoes, Straight-line Winds, and Flooding) which occurred on January 2012, project applications will be submitted online. In addition, money will be allocated to counties and they will be able to decide how to spend their grant money. Previously, applications were used for a variety of projects, but the Governor would decide how a majority of the money was spent.

- National Flood Insurance Program (NFIP)
    - The NFIP Coordinator should continue to maintain a five-year plan for its community assistance programs.
    - The State NFIP Coordinator and staff should continue to provide statewide support for local participation in the NFIP, facilitating NFIP membership, assisting with flood hazard prevention ordinance development and Federal compliance, providing training and technical support to local floodplain ordinance administrators, encouraging the floodplain management practices of the NFIP, and promoting flood insurance.
        - NFIP guidance and support continues throughout the state.
    - The NFIP staff should continue to regularly conduct Community Assistance Visits (CAVs) among NFIP participating communities throughout the State. During these visits the staff should not only check for program compliance but offer guidance and support for improved flood hazard mitigation practices.
    - In addition to regular NFIP participation, the State office should encourage Community Rating System (CRS) program participation by NFIP communities and assist current CRS communities to continually seek higher CRS classifications.
    - The NFIP Coordinator should continue working closely with the Alabama EMA to assure strong integration of local flood hazard mitigation practices into local and state hazard mitigation planning policies.
    - The OWR should complete its statewide flood map modernization program for the State, including the development of Flood Insurance Rate Maps (FIRMs) that will

readily provide flood GIS data for local and statewide risk assessments for hazard mitigation planning.

- The State NFIP Coordinator should continue to conduct formalized training and distribute technical publications to local floodplain administrators, building officials, public works engineers, planners, and state and local officials involved in hazard mitigation.
- Continue to coordinate with Alabama Association of Floodplain Managers to build capacity across the state.