

# SECTION 9

## MITIGATION ACTION PLAN

This section includes the listing of the mitigation actions proposed by the participating jurisdictions in Augusta-Richmond County. It consists of the following two subsections:

- ❖ 9.1 Overview
- ❖ 9.2 Mitigation Action Plans

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### 44 CFR Requirement

**44 CFR Part 201.6(c)(3)(iii):** The mitigation strategy shall include an action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction.

## 9.1 OVERVIEW

As described in the previous section, the Mitigation Action Plan, or MAP, provides a functional plan of action for each jurisdiction. It is designed to achieve the mitigation goals established in Section 8: *Mitigation Strategy* and will be maintained on a regular basis according to the plan maintenance procedures established in Section 10: *Plan Maintenance*.

Each proposed mitigation action has been identified as an effective measure (policy or project) to reduce hazard risk for Augusta-Richmond County. Each action is listed in the MAP in conjunction with background information such as hazard(s) addressed and relative priority. Other information provided in the MAP includes potential funding sources to implement the action should funding be required (not all proposed actions are contingent upon funding). Most importantly, implementation mechanisms are provided for each action, including the designation of a lead agency or department responsible for carrying the action out as well as a timeframe for its completion. These implementation mechanisms ensure that the Augusta-Richmond County Hazard Mitigation Plan remains a functional document that can be monitored for progress over time. The proposed actions are not listed in priority order, though each has been assigned a priority level of “high,” “moderate,” or “low” as described below and in Section 8 (page 8.2).

The Mitigation Action Plan is organized by mitigation strategy category (Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, or Public Education and Awareness). The following are the key elements described in the Mitigation Action Plan:

- ❖ Hazard(s) Addressed—Hazard which the action addresses.
- ❖ Relative Priority—High, moderate, or low priority as assigned by the jurisdiction.
- ❖ Lead Agency/Department—Department responsible for undertaking the action.
- ❖ Potential Funding Sources—Local, State, or Federal sources of funds are noted here, where applicable.
- ❖ Implementation Schedule—Date by which the action the action should be completed. More information is provided when possible.

- ❖ Implementation Status (2017)—Indication of completion, progress, deferment, or no change since the previous plan. If the action is new, that will be noted here.

## 9.2 MITIGATION ACTION PLANS

The mitigation actions proposed by each of the participating jurisdictions are listed in 11 individual MAPs on the following pages. **Table 9.1** shows the location of each jurisdiction’s MAP within this section as well as the number of mitigation actions proposed by each jurisdiction.

**TABLE 9.1: INDIVIDUAL MAP LOCATIONS**

| Location                       | Page       | Number of Mitigation Actions |
|--------------------------------|------------|------------------------------|
| <b>Augusta-Richmond County</b> | <b>9:3</b> | <b>29</b>                    |
| Blythe                         | 9:13       | 12                           |
| Hephzibah                      | 9:17       | 12                           |

## Augusta-Richmond County Mitigation Action Plan

| Action #          | Description  | Hazard(s) Addressed                                    | Relative Priority | Lead Agency/ Department   | Potential Funding Sources  | Implementation Schedule | Implementation Status (2017)   |
|-------------------|--|--|-------------------|---|--|-------------------------|--|
| <b>Prevention</b> |  |  |                   |   |  |                         |  |
| P-1               | <b>Public Tree Maintenance</b> – Continue tree maintenance on city streets and city-owned property (reduce debris, impacts of falling).  | Tornado/<br>Windstorm/<br>Hail; Severe<br>Winter Storm | Moderate          | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah               | Georgia Forestry Commission Urban and Community Forestry Grant, Operational Budget | 2021                    | Deferred; Tree maintenance is an ongoing project.                                    |
| P-2               | <b>Drainage and Stormwater Management.</b> Implement central database for staff to record drainage and flooding problems (build on existing software). Train staff of all departments that receive citizen calls to use the database to register appropriate information to ensure quality data. Develop method to consider the database contents in setting priorities for drainage projects and to support identification of flood mitigation opportunities. Formalize inventory of detention basin maintenance procedures system to prioritize maintenance. | Flood  | Low               | Engineering Services with support of Planning and Zoning  | Stormwater Utility of the City of Augusta  | 2021                    | Deferred; Implementation has just started in 2016.                                   |
| P-3               | <b>Soil Erosion and Sediment Control.</b> Request GDOT’s continued attention to exemplary sediment and erosion control practices. Communicate with City crews and contractors that City projects are to be undertaken with exemplary sediment and erosion control practices. Examine the feasibility of offering training for local contractors to reinforce proper installation and maintenance of sediment control measures; seek cooperative partners, including the  | Flood  | Low               | Augusta Engineering Services, License and Inspections, supported by Soil and Conservation and Planning and Zoning | Additional staff and funding needed  | 2021                    | Deferred; Building an ongoing relationship with GDOT to facilitate sediment control. |

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| Action # | Description   | Hazard(s) Addressed | Relative Priority | Lead Agency/ Department                      | Potential Funding Sources | Implementation Schedule | Implementation Status (2017)   |
|----------|---|---------------------|-------------------|--|---------------------------|-------------------------|--|
|          | District Soil Conservation Office, Georgia DOT, and GA Department of Natural Resources. Increase frequency of inspections of sediment control measures and work with project owner/contractor to maintain effective measures throughout construction. Continue cooperative efforts with Columbia County regarding installation and maintenance of sediment and erosion control measures on active construction sites in the upper portions of waterways that drain into Augusta, with particular attention to Crane Creek, Rae’s Creek, and Butler Creek.   |                     |                   |  |                           |                         |  |
| P-4      | <b>Flood Hazard Map Revisions and Updates.</b> Continue pursuit of City-wide revision of the Flood Insurance Rate Maps, building on the City’s new digital topography and work underway by the U.S. Army Corps of Engineers to prepare flood studies as part of the <i>Flood Reduction Study</i> and including other studies and identified watersheds. Communicate to the Georgia DNR and FEMA Region IV the importance of conducting new engineering studies to produce revised maps in the Digital Flood Insurance Rate Map format for incorporation into the City’s existing GIS DFIRMs. Annotate digital map with the “lower floodway fringe” delineation to facilitate awareness of and application of the Flood Damage Prevention Ordinance and to more clearly identify areas targeted for greenspace purposes. Develop a database of property owners for use in public awareness activities. | Flood               | High              | Planning and Zoning, support Engineering, IT | Operational Budget        | 2021                    | Deferred; Preliminary Updated Maps due to the Community in Dec 2016 or early 2017, which will start the community appeal process and the necessary steps to adoption of the maps by the community. |

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| Action # | Description   | Hazard(s) Addressed | Relative Priority | Lead Agency/ Department                                    | Potential Funding Sources   | Implementation Schedule | Implementation Status (2017)   |
|----------|---|---------------------|-------------------|--|---|-------------------------|--|
| P-5      | <b>Economic Analysis related to Flood Hazard and Critical Facilities.</b> Perform economic analysis related to identifying the most effective flood mitigation projects. Utilize newly developed FEMA DFIRMs and new topography to ascertain economic impact of flooding at various frequencies. Develop several scenarios and identify the most cost-beneficial mitigation measures. Map critical facilities information using the city GIS platform.  | Flood               | Moderate          | Planning and Zoning/EMA/ Engineering, with support from IT | ESRI Government Grant Program, Federal Grants   | 2020                    | Deferred; Action cannot be started until after new flood maps are adopted by the community which is due to happen in 2017. |
| P-6      | <b>Policies &amp; Procedures for Flood Mitigation Projects.</b> Develop Flood Mitigation Project Policies and Procedures Manual. Establish systematic method for using and prioritizing funds, including a mechanism to account for changes in priorities as a function of several variables. Continue to gather data on buildings in FEMA-mapped floodways and repetitive loss areas to have available in the post-flood period; use to target efforts for recovery, permitting, and grant application development. Obtain FEMA's Residential Substantial Damage Estimator software and maintain ability to use it to facilitate damage estimates and substantial damage determinations. Develop policy on abandoned homes in SFHA. Examine the Corps' database of buildings in the SFHA and pre-identify those most likely to sustain significant damage if floods equivalent to the SFHA or greater occur, i.e., those predicted to have more than 2-feet of water above the | Flood               | Moderate          | Planning and Zoning, other Departments/ Committee          | Additional funds and additional staff required, FEMA Planning Grant, GDOT ISTEAs Grants | 2021                    | Deferred; Due to staff constraints this action has not been completed.   |

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| Action # | Description  | Hazard(s) Addressed | Relative Priority | Lead Agency/ Department  | Potential Funding Sources                    | Implementation Schedule | Implementation Status (2017)  |
|----------|--|---------------------|-------------------|--|--|-------------------------|---|
|          | lowest floor. Coordinate with EMA and GIS Departments to determine and map areas likely to experience flooding and target post-flood inspections. Maintain awareness of different sources of mitigation funding and seek mitigation grant funds to implement mitigation in high priority actions. Explore with GDOT if funding could support additional buyouts areas where the frequency of flooding indicates that hydrology would support allowing areas to return to wetland functions. Include consideration of flood mitigation opportunities in the City's identification of projects for which ISTEAs applications will be prepared. |                     |                   |  |  |                         |   |
| P-7      | <b>NFIP CRS.</b> NFIP flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: 1) Reduce flood losses; 2) Facilitate accurate insurance rating; and 3) Promote the awareness of flood insurance. Work to improve Augusta's CRS rating.  | Flood               | High              | Emergency Management; support Planning and Zoning, Engineering, IT   | Operational Budget                           | 2017                    | Augusta, GA has started the process in 2016 to join the CRS program; CAV completed and passed 11/28/2016. |
| P-8      | <b>Dam Safety.</b> For State-designated Category I dams that are located in the City or on waterways that drain through the City, estimate potential impacts and determine if the downstream risks are sufficient to contact owners to encourage their development of limited emergency action plan procedures, and period inspections, that are coordinated with the City.  | Flood               | Moderate          | Emergency Management with support of Engineering Department, Planning and Development, and GA DNR Dam Safety Program | Operational Budget, Federal and State Grants | 2021                    | Deferred; Funding was not available.  |

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|----------|---|---------------------|-------------------|--|--|-------------------------|---|
| P-9      | <b>Flood Mitigation Staffing.</b> Seek new staff position to coordinate the City's floodplain management and mitigation efforts. Administer mitigation grants; coordinate the City's CRS program.   | Flood               | High              | Augusta Emergency Services, Planning and Zoning  | Federal and State Grants   | 2021                    | Deferred; Currently, funding is not available to increase staffing; however, many of the mitigation actions in this Plan aimed at reducing the impacts from flood events and flooding are dependent on funding to fill this very needed void in the government's personnel. |
| P-10     | <b>Pre-suppression planning for city-owned lands.</b> Request assistance from the GA Forestry Commission to evaluate fire risks on City-owned parks and greenspace to develop prevention plans to improve forest health.  | Wildfire            | High              | Augusta and Hephzibah Fire Departments with support from EMA and Georgia Forestry Commission | Georgia Forestry Urban & Community Forestry Grant, Southern Wildfire Risk Assessment Project, Operational Budget | 2021                    | Deferred; Working on building a strong relationship with the GA Forestry Commission to support this effort.   |
| P-11     | <b>Subdivisions &amp; driveway access for fire vehicles.</b> Request that the Quarterly Subdivision Regulations Review Committee consider new standards for widths of subdivision roads and shoulders, and for common driveways for multiple flagpole lots to provide safer access by larger fire trucks. | Wildfire            | High              | Planning Divisions with Augusta Fire Department  | Operational Budget   | Complete                | This is in place and is reviewed on every site plan received by the Fire Department.  |
| P-12     | <b>Outreach and seismic inspection.</b> Request that building inspectors conduct field verification of the building structural soundness and field operator seismic inspection of residential structures.   | Earthquake          | High              | Planning and Development Department  | Operational Budget   | 2021                    | Deferred; Removed EMA as a responsible agency. The action has been moved to the Planning and Development Department as it is their function.  |
| P-13     | <b>Conduct safe communities' audit.</b> Request that the Planning and Development Department create a safe growth steering committee to develop vision for the community, conduct workshops, and post analysis information and reports on local   | All                 | High              | Planning and Development with EMA, Engineering, and HMPC Members                             | Operational Budget   | 2019                    | Deferred; This effort has been started but has not reached completion.  |

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|----------------------------|---|---|-------------------|--|--|-------------------------|--|
|                            | government websites. Develop potential safe growth regulations, policies, and processes to revise existing community documents, regulations, and plans.   |   |                   |  |  |                         |  |
| P-14                       | <b>Assess Vulnerability to Drought Risk.</b><br>Gathering and analyze water and climate data to gain a better understanding of local climate and drought history. Determine how the community and its water sources have been impacted by droughts in the past. | Drought                                       | Low               | Augusta-Richmond County Emergency Management/ Water Utilities                  | Departmental budget  | 2019                    | New  |
| <b>Property Protection</b> |   |   |                   |  |  |                         |  |
| PP-1                       | <b>Promote enhanced anchoring of manufactured homes</b> – making them less susceptible to tornado damages and detachment from the pad.  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | FEMA PA  | 2021                    | Deferred; Need to create a campaign to support home owners in working through the process.   |
| <b>Structural Projects</b> |   |   |                   |  |  |                         |  |
| SP-1                       | <b>Sewer Line Infiltration and Inflow.</b><br>Continue to undertake projects to identify and resolve infiltration and inflow.   | Flood   | Low               | Augusta Utilities  | City of Augusta CIP  | 2021                    | Deferred; This is an ongoing effort that the City is continuously working on.  |
| <b>Emergency Services</b>  |   |   |                   |  |  |                         |  |
| ES-1                       | <b>Review capacity of the existing tornado shelters, construct new ones if needed.</b>  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | HMPG, PDM  | 2021                    | Deferred; Existing tornado shelters do not exist in Richmond County. Funding for construction was requested in 2014 but it was not a funded project. |
| ES-2                       | <b>Debris Management Plan</b> – Work with the cities, GEMA, FEMA, power companies, and other entities to revise and gain approval, support, and funding of existing Debris Management Plan.   | Tornado/ Windstorm/ Hail; Severe Winter Storm | High              | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | GEFA Grants for Communities and Solid Waste Authorities, FEMA PA, HMPG, Operational Budget | Complete                | FEMA has approved Augusta’s Debris Management Plan.  |

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|----------|--|-----------------------|-------------------|---|---|-------------------------|--|
| ES-3     | <b>Flood Warning</b> –Use GIS and flood maps to identify buildings within flood hazard areas and develop phone groups for automated, generalized flood warning announcements through 911 Messages; exercise the announcement system periodically. Explore if automated rain gages installed by Augusta Utilities as part of watershed assessments can be used to augment the City’s preparations. Improve the list of flood-prone roads; evaluate whether the most frequently flooded areas warrant warning signs to alert the traveling public. | Flood                 | Moderate          | Emergency Management with support of Engineering, IT, Utilities | NOAA Integrated Flood Observing and Warning System (IFLOWS – 11.450 Grant), exploring grant funds to support gages, implantation within existing budget | 2021                    | Deferred; It is partially completed as an updated list of flood prone areas is maintained by EMA, GIS, and Planning and Development. The emergency notification system is used to alert the public of possible flooding and emergency actions if it happens. Rain gauges have not been purchased for these areas. Vulnerable populations need to be assessed as well as notification and potential evacuation of those vulnerable populations. |
| ES-4     | <b>Plan for Drought.</b> Develop a drought emergency plan, criteria or triggers for drought-related actions and a drought communication plan and early warning system to facilitate timely communication of relevant information to officials, decision makers, emergency managers, and the general public.  | Drought               | Low               | Augusta-Richmond County Emergency Management/ Water Utilities   | Departmental budget   | 2019                    | New  |
| ES-5     | <b>Assist Vulnerable Populations.</b> Organize an outreach plan to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community. Create a database to track those individuals at high risk of death, such as the elderly, homeless, etc.  | Extreme Temperature   | Moderate          | Augusta-Richmond County Emergency Management                    | Departmental budget   | 2020                    | New  |
| ES-6     | <b>Assist Vulnerable Populations.</b> Identify specific at-risk populations that may be exceptionally vulnerable in the event of long-term power outages. Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.   | Severe Winter Weather | Moderate          | Augusta-Richmond County Emergency Management                    | Departmental budget   | 2020                    | New  |

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|---------------------------------------|--|--------------------------------|-------------------|---|---|-------------------------|---|
| <b>Public Education and Awareness</b> |  |                                |                   |   |   |                         |   |
| PEA-1                                 | <b>Severe Storm Awareness</b> – Continue public outreach on severe storm and tornado risks; encourage families to prepare Disaster Supply Kits and people with special medial needs to notify Augusta EM. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including nonprofit and neighborhood organizations and others, to look at outreach efforts and materials provided by the NWS, FEMA, ARC, and others and determine whether changes are appropriate. Expand use of Augusta’s website to make information readily available to the public.   | Tornado/<br>Windstorm/<br>Hail | High              | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah | State Farm Safety Grant, Operational Budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including: a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations.          |
| PEA-2                                 | <b>Public Awareness Initiative.</b> Convene a work group to prepare and implement a multi-year plan for public awareness. Prepare articles for publication on what property owners can do to plan and prepare for floods and to reduce losses. Coordinate with campaigns undertaken by the State. Develop web-based materials and link to other sites. Co-op with stormwater management initiative to distribute periodic mailing to property owners along waterways to inform them of their responsibility to keep drainage ways clear. Develop materials for the Planning Commission and License and Inspections to hand out with permits or mailings. Establish a hotline for citizen reports of flooding and drainage problems. Create a database to record citizens and local government personnel reports of drainage issues and to document | Flood                          | High              | Emergency Management with support   | Additional staff and training funds needed  | 2019                    | Deferred; Emergency management currently provides readiness information to the community through various outlets, including a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations. |

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|----------|---|--------------------------|-------------------|---|--|-------------------------|--|
|          | mitigation actions. Request and sponsor periodic NFIP workshops provided by others (GADNR, FEMA) for lenders, insurance agents, real estate professionals and others. Post database of elevation benchmarks and reference marks on the City's webpage and notify local surveyors and engineers of its availability. Conduct training to developers, contractors, citizens, and others on the preparation of Elevation Certificates. Research options to improve disclosure of flood hazards as part of the property transfer process.   |                          |                   |   |  |                         |  |
| PEA-3    | <b>Savannah River Flood Protection and Awareness.</b> Convene a City workgroup to review and revise the Emergency Levee Closure Plan. Examine lease conditions for City-owned property on the riverside of the Levee leased to private entities, for adequate language to protect the City. Consider if lessees should be notified of the flooding risk; the levee closing exercise, and that predicted flood levels by the U.S. Army Corps of Engineers may prompt the City to require evacuation. Notify owners of private property on the river side of the Levee about flooding risk, closing procedures, requirement to evacuate, flood insurance availability, and the requirement to obtain permits. Continue the Emergency Levee Closure Plan exercise every two years. | Flood                    | Moderate          | Engineering with support from EMA and Planning                              | Implementation of current standards and activities within Operational Budget; State and Federal Grants | 2021                    | Deferred; The lead department was listed as EMA, however that plan is developed, maintained and updated by the Engineering Department so the agency was updated. A plan currently exists for levee closure. A drill is planned for March 2017. |
| PEA-4    | <b>Water Conservation Awareness.</b> Augusta Utilities to continue implementation of the Water Conservation Plan; continue to comment on proposed development   | Drought and Extreme Heat | High              | Augusta Utilities, Blythe, Hephzibah, County Extension Service, Georgia DNR | Implementation within Operational Budget   | 2021                    | Deferred; This is an ongoing process for the Cities to work with Augusta Utilities and GADNR to create awareness.  |

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|----------|--|---------------------|-------------------|---|--|-------------------------|--|
|          | site and landscaping plans; continue to report on and encourage conservation and to highlight water conservation tips on its web page. Blythe and Hephzibah will continue to follow and implement the State's water conservation guidelines and well as water use ordinances.  |                     |                   |   |  |                         |  |
| PEA-5    | <b>Severe Winter Storm Awareness</b> – Continue public outreach on severe winter storm and ice; encourage families to prepare Disaster Supply Kits; encourage people with special medical needs to notify Augusta Emergency Management Agency. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including non-profit and neighborhood organizations and others, to look at outreach efforts and materials provided by the NWS, FEMA, ARC, and others and determine whether changes are appropriate. Expand use of EMA and Augusta's website to make information readily available to the public. | Severe Winter Storm | Moderate          | Augusta-Richmond County EMA and the Cities of Blythe and Hephzibah with support of Recreation and Parks | NOAA Integrated Flood Overserving and Warning System (IFLOWS-11.450 Grant), Operational Budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including a community emergency ready day held every Fall, social media, TV, and radio, the city website, through the emergency notification system text and email, and through small group presentations. |
| PEA-6    | <b>Increase Awareness of Extreme Temperature Risk and Safety.</b> Educate citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves.   | Extreme Temperature | Moderate          | Augusta-Richmond County Emergency Management  | Departmental budget  | 2020                    | New  |
| PEA-7    | <b>Conduct Lightning Awareness Programs.</b> Develop a lightning brochure for distribution by the Recreation Department to county sports groups. Post warning signage at local parks. Teach school children about the dangers of lightning and how to take safety precautions.   | Lightning           | Low               | Augusta-Richmond County Emergency Management/ Recreation  | Departmental budget  | 2020                    | New  |

## City of Blythe Mitigation Action Plan

| Action #          | Description  | Hazard(s) Addressed                                    | Relative Priority | Lead Agency/ Department   | Potential Funding Sources  | Implementation Schedule | Implementation Status (2017)   |
|-------------------|--|--|-------------------|---|--|-------------------------|--|
| <b>Prevention</b> |  |  |                   |   |  |                         |  |
| P-1               | <b>Public Tree Maintenance</b> – Continue tree maintenance on city streets and city-owned property (reduce debris, impacts of falling).  | Tornado/<br>Windstorm/<br>Hail; Severe<br>Winter Storm | High              | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah | Georgia Forestry Commission Urban and Community Forestry Grant, Operational Budget | 2020                    | Deferred; Tree maintenance is an ongoing project.  |
| P-2               | <b>Economic Analysis related to Flood Hazard and Critical Facilities.</b> Perform economic analysis related to identifying the most effective flood mitigation projects. Utilize newly developed FEMA DFIRMs and new topography to ascertain economic impact of flooding at various frequencies. Develop several scenarios and identify the most cost-beneficial mitigation measures. Map critical facilities information using the city GIS platform. | Flood  | Low               | Planning and Zoning, IT   | ESRI Government Grant Program, Federal Grants                                      | 2020                    | Deferred; Action cannot be started until after new flood maps are adopted by the community which is due to happen in 2017.                   |
| P-3               | <b>Dam Safety.</b> For State-designated Category I dams that are located in the City or on waterways that drain through the City, estimate potential impacts and determine if the downstream risks are sufficient to contact owners to encourage their development of limited emergency action plan procedures, and period inspections, that are coordinated with the City.  | Flood  | Moderate          | Emergency Management with support of Engineering Department and GA DNR Dam Safety Program           | Operational Budget, Federal and State Grants                                       | 2021                    | Deferred; Funding was not available.   |
| P-4               | <b>Outreach and seismic inspection.</b> Request that building inspectors conduct field verification of the building structural soundness and field operator seismic inspection of residential structures.  | Earthquake   | High              | License Inspections Department  | Operational Budget   | 2021                    | Deferred; Removed EMA as a responsible agency. The action has been moved to the Planning and Development Department as it is their function. |

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|----------------------------|---|---|-------------------|--|--|-------------------------|--|
| P-5                        | <b>Conduct safe communities' audit.</b><br>Request that the Planning and Development Department to create a safe growth steering committee to develop vision for the community, conduct workshops, and post analysis information and reports on local government websites. Develop potential safe growth regulations, policies, and processes to revise existing community documents, regulations, and plans. | All   | High              | Planning and Development   | Operational Budget   | 2019                    | Deferred; This effort has been started but has not reached completion.   |
| P-6                        | <b>Assess Vulnerability to Drought Risk.</b><br>Gathering and analyzing water and climate data to gain a better understanding of local climate and drought history. Determine how the community and its water sources have been impacted by droughts in the past.   | Drought                                       | Low               | Augusta-Richmond County Emergency Management/ Water Utilities                  | Departmental budget  | 2019                    | New  |
| <b>Property Protection</b> |   |   |                   |  |  |                         |  |
| PP-1                       | <b>Promote enhanced anchoring of manufactured homes</b> – making them less susceptible to tornado damages and detachment from the pad.  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | FEMA PA  | 2021                    | Deferred; Need to create a campaign to support home owners in working through the process.   |
| <b>Emergency Services</b>  |   |   |                   |  |  |                         |  |
| ES-1                       | <b>Review capacity of the existing tornado shelters, construct new ones if needed.</b>  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | HMGF, PDM  | 2021                    | Deferred; Existing tornado shelters do not exist in Richmond County. Funding for construction was requested in 2014 but it was not a funded project. |
| ES-2                       | <b>Debris Management Plan</b> – Work with the cities, GEMA, FEMA, power companies, and other entities to revise and gain approval, support, and funding of existing Debris Management Plan.   | Tornado/ Windstorm/ Hail; Severe Winter Storm | High              | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | GEFA Grants for Communities and Solid Waste Authorities, FEMA PA, HMPG, within existing budget | Complete                | FEMA has approved Augusta's Debris Management Plan.  |

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|---------------------------------------|--|--------------------------------|-------------------|---|---|-------------------------|--|
| <b>Public Education and Awareness</b> |  |                                |                   |   |   |                         |  |
| PEA-1                                 | <b>Severe Storm Awareness</b> – Continue public outreach on severe storm and tornado risks; encourage families to prepare Disaster Supply Kits; encourage people with special medial needs to notify Augusta Emergency Management Agency. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including nonprofit and neighborhood organizations and others, to look at outreach efforts and materials provided by the National Weather Service, FEMA, the American Red Cross, and others and determine whether changes are appropriate. Expand use of Augusta’s website to make information readily available to the public. | Tornado/<br>Windstorm/<br>Hail | High              | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah | State Farm Safety Grant, within existing budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including: a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations. |
| PEA-2                                 | <b>Water Conservation Awareness.</b> Augusta Utilities to continue implementation of the Water Conservation Plan; continue to comment on proposed development site and landscaping plans; continue to report on and encourage conservation and to highlight water conservation tips on its web page. The Cities of Blythe and Hephzibah will continue to follow and implement the State’s water conservation guidelines and well as water use ordinances.  | Drought and Extreme Heat       | High              | Augusta Utilities, Blythe, Hephzibah, County Extension Service, Georgia DNR                         | Implementation within Operational budget        | 2021                    | Deferred; This is an ongoing process for the Cities to work with Augusta Utilities and GADNR to create awareness.  |

**SECTION 9: MITIGATION ACTION PLAN**

| Action # | Description   | Hazard(s) Addressed | Relative Priority | Lead Agency/ Department   | Potential Funding Sources   | Implementation Schedule | Implementation Status (2017)   |
|----------|---|---------------------|-------------------|---|---|-------------------------|--|
| PEA-3    | <p><b>Severe Winter Storm Awareness –</b> Continue public outreach on severe winter storm and ice; encourage families to prepare Disaster Supply Kits; encourage people with special medical needs to notify Augusta Emergency Management Agency. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including non-profit and neighborhood organizations and others, to look at outreach efforts and materials provided by the National Weather Service, FEMA, the American Red Cross, and others and determine whether changes are appropriate. Expand use of EMA and Augusta’s website to make information readily available to the public.</p> | Severe Winter Storm | High              | Augusta-Richmond County EMA and the Cities of Blythe and Hephzibah with support of Recreation and Parks | NOAA Integrated Flood Overserving and Warning System (IFLOWS-11.450 Grant), within Operational budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including: a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations. |

## City of Hephzibah Mitigation Action Plan

| Action #          | Description  | Hazard(s) Addressed                                    | Relative Priority | Lead Agency/ Department   | Potential Funding Sources   | Implementation Schedule | Implementation Status (2017)   |
|-------------------|--|--|-------------------|---|---|-------------------------|--|
| <b>Prevention</b> |  |  |                   |   |   |                         |  |
| P-1               | <b>Public Tree Maintenance</b> – Continue tree maintenance on city streets and city-owned property (reduce debris, impacts of falling).  | Tornado/<br>Windstorm/<br>Hail; Severe<br>Winter Storm | High              | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah | Georgia Forestry Commission Urban and Community Forestry Grant, within Operational budget | 2021                    | Deferred; Tree maintenance is an ongoing project.  |
| P-2               | <b>Economic Analysis related to Flood Hazard and Critical Facilities.</b> Perform economic analysis related to identifying the most effective flood mitigation projects. Utilize newly developed FEMA DFIRMs and new topography to ascertain economic impact of flooding at various frequencies. Develop several scenarios and identify the most cost-beneficial mitigation measures. Map critical facilities information using the city GIS platform. | Flood  | Low               | Planning and Zoning, IT   | ESRI Government Grant Program, seek various grants  | 2020                    | Deferred; Action cannot be started until after new flood maps are adopted by the community which is due to happen in 2017.                   |
| P-3               | <b>Dam Safety.</b> For State-designated Category I dams that are located in the City or on waterways that drain through the City, estimate potential impacts and determine if the downstream risks are sufficient to contact owners to encourage their development of limited emergency action plan procedures, and period inspections, that are coordinated with the City.  | Flood  | Moderate          | Emergency Management with support of Engineering Department and GA DNR Dam Safety Program           | Operational Budget, Federal and State Grants  | 2021                    | Deferred; Funding was not available.   |
| P-4               | <b>Outreach and seismic inspection.</b> Request that building inspectors conduct field verification of the building structural soundness and field operator seismic inspection of residential structures.  | Earthquake   | High              | License Inspections Department  | Operational Budget  | 2021                    | Deferred; Removed EMA as a responsible agency. The action has been moved to the Planning and Development Department as it is their function. |

**SECTION 9: MITIGATION ACTION PLAN**

| Action #                   | Description   | Hazard(s) Addressed                           | Relative Priority | Lead Agency/ Department  | Potential Funding Sources  | Implementation Schedule | Implementation Status (2017)   |
|----------------------------|---|---|-------------------|--|--|-------------------------|--|
| P-5                        | <b>Conduct safe communities' audit.</b><br>Request that the Planning and Development Department to create a safe growth steering committee to develop vision for the community, conduct workshops, and post analysis information and reports on local government websites. Develop potential safe growth regulations, policies, and processes to revise existing community documents, regulations, and plans. | All   | High              | Planning and Development   | Operational Budget   | 2019                    | Deferred; This effort has been started but has not reached completion.   |
| P-6                        | <b>Assess Vulnerability to Drought Risk.</b><br>Gathering and analyzing water and climate data to gain a better understanding of local climate and drought history. Determine how the community and its water sources have been impacted by droughts in the past.   | Drought                                       | Low               | Augusta-Richmond County Emergency Management/ Water Utilities                  | Department budget  | 2019                    | New  |
| <b>Property Protection</b> |   |   |                   |  |  |                         |  |
| PP-1                       | <b>Promote enhanced anchoring of manufactured homes</b> – making them less susceptible to tornado damages and detachment from the pad.  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | FEMA PA  | 2021                    | Deferred; Need to create a campaign to support home owners in working through the process.   |
| <b>Emergency Services</b>  |   |   |                   |  |  |                         |  |
| ES-1                       | <b>Review capacity of the existing tornado shelters, construct new ones if needed.</b>  | Tornado/ Windstorm/ Hail                      | Moderate          | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | HMGF, PDM  | 2021                    | Deferred; Existing tornado shelters do not exist in Richmond County. Funding for construction was requested in 2014 but it was not a funded project. |
| ES-2                       | <b>Debris Management Plan</b> – Work with the cities, GEMA, FEMA, power companies, and other entities to revise and gain approval, support, and funding of existing Debris Management Plan.   | Tornado/ Windstorm/ Hail; Severe Winter Storm | High              | Augusta-Richmond County EMA with support of the Cities of Hephzibah and Blythe | GEFA Grants for Communities and Solid Waste Authorities, FEMA PA, HMPG, within existing budget | Complete                | FEMA has approved Augusta's Debris Management Plan.  |

**SECTION 9: MITIGATION ACTION PLAN**

| Action #                              | Description  | Hazard(s) Addressed            | Relative Priority | Lead Agency/ Department   | Potential Funding Sources                       | Implementation Schedule | Implementation Status (2017)   |
|---------------------------------------|--|--------------------------------|-------------------|---|---|-------------------------|--|
| <b>Public Education and Awareness</b> |  |                                |                   |   |   |                         |  |
| PEA-1                                 | <b>Severe Storm Awareness</b> – Continue public outreach on severe storm and tornado risks; encourage families to prepare Disaster Supply Kits; encourage people with special medial needs to notify Augusta Emergency Management Agency. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including nonprofit and neighborhood organizations and others, to look at outreach efforts and materials provided by the National Weather Service, FEMA, the American Red Cross, and others and determine whether changes are appropriate. Expand use of Augusta’s website to make information readily available to the public. | Tornado/<br>Windstorm/<br>Hail | High              | Augusta-Richmond County with support of Recreation and Parks and the Cities of Blythe and Hephzibah | State Farm Safety Grant, within existing budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including: a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations. |
| PEA-2                                 | <b>Water Conservation Awareness.</b> Augusta Utilities to continue implementation of the Water Conservation Plan; continue to comment on proposed development site and landscaping plans; continue to report on and encourage conservation and to highlight water conservation tips on its web page. The Cities of Blythe and Hephzibah will continue to follow and implement the State’s water conservation guidelines and well as water use ordinances.  | Drought and Extreme Heat       | High              | Augusta Utilities, Blythe, Hephzibah, County Extension Service, Georgia DNR                         | Implementation within Operational budget        | 2021                    | Deferred; This is an ongoing process for the Cities to work with Augusta Utilities and GADNR to create awareness.  |

**SECTION 9: MITIGATION ACTION PLAN**

| Action # | Description   | Hazard(s) Addressed | Relative Priority | Lead Agency/ Department   | Potential Funding Sources  | Implementation Schedule | Implementation Status (2017)   |
|----------|---|---------------------|-------------------|---|--|-------------------------|--|
| PEA-3    | <p><b>Severe Winter Storm Awareness –</b><br/>Continue public outreach on severe winter storm and ice; encourage families to prepare Disaster Supply Kits; encourage people with special medical needs to notify Augusta Emergency Management Agency. Convene a working group of representatives from Augusta, Blythe, Hephzibah, and members of the public, including non-profit and neighborhood organizations and others, to look at outreach efforts and materials provided by the National Weather Service, FEMA, the American Red Cross, and others and determine whether changes are appropriate. Expand use of EMA and Augusta’s website to make information readily available to the public.</p> | Severe Winter Storm | High              | Augusta-Richmond County EMA and the Cities of Blythe and Hephzibah with support of Recreation and Parks | NOAA Integrated Flood Overserving and Warning System (IFLOWS-11.450 Grant), within existing budget | Complete                | Emergency management currently provides readiness information to the community through various outlets, including: a community emergency ready day held every Fall, through social media, TV, and radio, on the city website, through the emergency notification system text and email, and through small group presentations. |