

Albany Dougherty Flood Hazard Mitigation Plan Annual Progress Report

Prepared by
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City of Albany, Georgia

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2018 Drainage Pond, Radium Springs Golf Course Area. Photo by Dougherty County Public Works

ALBANY-DOUGHERTY FLOOD HAZARD MITIGATION PLAN

ANNUAL PROGRESS REPORT 2018

Purpose of Annual Progress Report

The City of Albany and Dougherty County participate in the National Flood Insurance Program (NFIP) through the Community Rating System (CRS) Program, which enables property owners in the city and county to obtain flood insurance. The city joined the CRS Program in 1993 and the county joined in 1992. A requirement for participation in this program is the adoption and utilization of a flood hazard mitigation plan. This process includes a procedure by which certain city and county departments incorporate, as appropriate, the requirements of the mitigation plan into other plans and planning implementation tools, such as the Pre-Disaster Mitigation Plan, Emergency Operations Plan, Comprehensive Plan, Zoning Ordinances, Subdivision Ordinances, Development Handbook, Floodplain Management Ordinances, Stormwater Management Plans, and Capital Improvement Plans. The current Albany Dougherty Flood Hazard Mitigation Plan was adopted by the City of Albany on September 23, 2014, and by Dougherty County on September 22, 2014. An update of the Flood Hazard Mitigation Plan is due in 2019.

Ratings in the NFIP Community Rating System are the result of various ongoing mitigation activities and public education. These efforts have resulted in lowering the cost of flood insurance in the city and county. The City of Albany is a Class 7; a 15% discount in the high risk zone and a 5% discount in the lower risk zones. Dougherty County is a Class 6; a 20% discount in the high risk zone and a 10% discount in the lower risk zones.

A requirement in the annual recertification process for the CRS Program is to monitor, evaluate, and update the mitigation actions recommended in the Flood Hazard Mitigation Plan. This review is to be presented in an Annual Progress Report made available to the public. This 2018 Annual Progress Report constitutes the third review of the plan by the Flood Hazard Mitigation Plan Committee since its adoption. The review year begins on October 1st of each year and runs through September 30th of the following year. The information in this report presents the progress made to date on specific mitigation actions proposed in the Flood Hazard Mitigation Plan and in previous years' progress reports.

Mitigation Actions

Mitigation Action 1 - Ongoing

Apply for Flood Mitigation Assistance funds to make the buyout option available to willing owners of properties vulnerable to flood damage in the City of Albany and Dougherty County. Repetitive Loss Properties would be top priority.

In January 2017, Albany and Dougherty County experienced two severe storm events, both declared Major Disasters by FEMA (DR-4294 and DR-4297). Following the declarations, additional HMGP funds for buyout or elevation of homes were made available. Eligible homeowners were notified of funds availability. Approximately 32 willing owners submitted application information by the June 2017 deadline. As of October 2018, 31 property owners remain willfully interested in the HMGP funded by FEMA. The HMGP project implementation and completion deadlines have not been set.

Albany and Dougherty County did not specifically target repetitive loss or severe repetitive loss properties in 2017 and 2018 since outreach included all homes in the SFHA. Outreach did not identify any willing owners of Repetitive or Severe Repetitive Loss properties.

Federal funds for buyout of Severe Repetitive Loss properties were made available to willing owners, with applications due February 2016 to Georgia Emergency Management Agency. Staff informed eligible property owners of the availability of funds, which would cover 80 percent of the value of the properties. The balance of the property value would be the responsibility of the owner. None of the eligible property owners expressed interest in program participation.

The expense of funding 10% to 25% of the cost to purchase repetitive loss area properties under the Flood Mitigation Assistance Programs and the expense of maintaining these additional properties as deed-restricted open space continues to be an issue. In 2013, 100% funding was available through a competitive grant process to buy out qualified Severe Repetitive Loss properties. The planning department did some preliminary research on a potentially eligible county property; however, the property owners were not interested in selling.

Staff will determine if there are repetitive loss area properties in the river corridor available for purchase. If so, staff will meet with the Greenspace Committee to discuss the possibility of matching funds to assist with the purchase of these repetitive loss area properties. Staff could also request the owner to provide the matching funds towards

the purchase price and will research the utilization of Transfer of Development Rights. However, the maintenance of the deed-restricted open space remains an issue.

In previous years, there was discussion on the deed-restricted land being utilized for community gardens or publicizing the leasing program to adjacent property owners as a way of maintaining the land. It was determined that community gardens need to be located in multi-family housing areas, where residents do not have their own backyards, in order for the community gardens to be utilized. It was recommended that a mailing to adjacent property owners publicize the leasing program be undertaken. The lease needs to be amended for clarification as to the restrictions placed on the deed-restricted lot, before this mailing occurs.

Mitigation Action 2 – Ongoing

Maintain the three-foot freeboard requirement in effect for Dougherty County since 1999. (Freeboard is the elevation of the finished floor above the level of the 100-year flood required for new construction). Propose that the City of Albany amend its Floodplain Management Ordinance to adopt this standard.

As of September 2018, the City of Albany has taken no action to consider recommendations forwarded in 2016 (see below) by the Flood Management Review Board regarding an amendment to increase freeboard to three feet for new construction within the city.

The existing three-foot freeboard requirement is maintained in the county's Floodplain Management Ordinance, adopted August 17, 2009.

The Flood Management Review Board met April 20, 2016 and May 25, 2016, to discuss increase of the City's required freeboard from one foot to three feet. The Board agreed to propose to the City Commission that the Floodplain Management Ordinance be amended to provide for a required three (3) foot freeboard for new construction and a one (1) foot freeboard for all substantial improvements. As of September 2017, the City had yet to consider this proposal.

This recommendation follows several discussions since 2011 and following the 2017 storms, concluding that, because the City is so built out, raising the freeboard requirement by two feet would result in too many Substantial Improvement regulation issues and variance requests.

Until the City increases the required freeboard, it is recommended that if the Department of Community and Economic Development (DCED) does build homes in the SFHA, the freeboard should be at least two feet above the BFE in order to further lower

the flood insurance premiums for home buyers or renters. This recommendation will be made to other agencies building low and moderate income housing as well, such as the Albany Housing Authority, Habitat for Humanity and other such agencies.

Mitigation Action 3 - Ongoing

Continue diligent enforcement of building codes and floodplain management regulations to maximize property protection and safety of residents and to maintain the good standing of the city and county with the National Flood Insurance Program.

Beginning in late October 2017, the City of Albany Development Services began contracting inspections and permitting services with Charles Abbott Associates. Throughout this transition period, all permitting procedures have been re-evaluated for completeness and streamlining, including adherence to floodplain management requirements.

In January 2017, Albany and Dougherty County experienced two severe storm events, both declared Major Disasters by FEMA (DR-4294 and DR-4297). Approximately 2,300 building permits were issued for storm-related repairs. All permit applications were reviewed for location in the SFHA, and for Substantial Damage determination in compliance with local Flood Ordinances. The planning department conducts staff meetings to coordinate efforts to educate and assist owners and their contractors. These meetings provide networking and communication between all city and county staff tasked with maintaining a good standing with the NFIP.

Staff also participated in a 1-day training workshop about FEMA's Substantial Damage Estimator Tool, conducted March 7, 2017 in Albany, GA and sponsored by Georgia Department of Natural Resources.

Education of the staff in all departments with responsibilities in construction and enforcement of building codes and floodplain management regulations has been ongoing in order to clarify regulations in regard to the siting of structures, construction standards, flood vents, Substantial Improvement, and Elevation Certificates. The *Floodplain Management in Georgia Quick Guide* and a number of FEMA publications have been distributed to the staff for their reference in regard to regulations. Links to these publications and many helpful websites are on the city website and accessible to the staff and public. A five-page handout was prepared to explain the basic requirements for construction, Substantial Improvements, and the placement of manufactured homes and accessory buildings in the flood hazard zone. Staff members have attended seminars, conferences and webinars in regard to building codes and regulations in the flood hazard zone.

An additional packet of information, forms and contractor and owner affidavits was prepared specifically for the Substantial Improvement/Damage regulations.

An ongoing problem in flood hazard areas is the conversion of non-living space below the required design elevation into living space. Planning & Development Services prepared a non-conversion agreement and affidavit to be signed by the property owner that will be recorded with the county clerk of court.

The DCED is utilizing engineered flood vents in the buildings they construct in the flood hazard area. They are also retrofitting existing buildings they own with engineered vents in order to bring these buildings into compliance with flood vent requirements, as necessary.

Floodplain Management Ordinance regulations are enforced through the subdivision and site plan review process and the building permitting process. The Floodplain Management Review Board reviews applications for variances to the ordinance and follows ordinance guidelines for the granting or denial of variances.

Additional training and outreach is needed for staff, builders and associated professionals. It is recommended that annual workshops and seminars be scheduled for these groups. Subjects to be covered include the following: wetlands and stream regulations, presented by the Army Corps and DNR; Elevation Certificates, construction in the flood hazard zone, including flood vents and retrofitting; and Substantial Improvement and Damage. These topics should also be addressed in outreach meetings with neighborhood associations and the general public.

In September 2013, a one day training session for the SWGA area was conducted in Albany through the Georgia Association of Floodplain Managers. Topics included wetlands, erosion and sedimentation control, and Protected River Corridor regulations and permitting. The training also included information on the Biggert-Waters Flood Insurance Reform Act and an Elevation Certificate workshop. SWGA area builders, planners, realtors, engineers, surveyors, inspectors and others who work in floodplain management were in attendance.

The city and county floodplain management regulations should be reviewed, updated, clarified, and brought into compliance, as necessary. The city floodplain management regulations were brought into compliance with federal requirements in 2012. The county ordinance was amended to clarify requirements for non-substantial improvements on Pre-FIRM buildings in 2013. The floodplain management regulations need to be reformatted and revised; particularly the procedures sections. The revised regulations should be based on recent model ordinances available. It is recommended that we utilize the model ordinances of the Metropolitan North Georgia Water Planning District.

The GA EPD Office of Floodplain Management conducted a Community Assistance Visit/audit of the city and county's floodplain management efforts and records in January of 2013 for which the governments received an excellent rating.

Mitigation Action 4 - Ongoing

Continue to protect from additional development properties that are vulnerable to flood damage; Flint River Corridor properties and other wetlands are priorities.

In February 2018, Dougherty County completed demolition of the former Radium Springs Clubhouse, purchased December 2017 for redevelopment as a trailhead facility. The Clubhouse building was demolished, the pool removed and filled in, and the ground leveled. The parking lot was left intact for use in the trailhead project. This 10,813 s.f. 1960s structure was in the Special Flood Hazard Area, with a small portion in the Floodway. Now in County ownership, new development will be limited to a public restroom facility approximately 18 ft. X 24 ft. Building activity will be in compliance with the Dougherty County Floodplain Management Ordinance. The Trailhead project will be funded in part through the GA RTP Grant Program, administered by the Dept. of Natural Resources. This parcel is located within the Flint River Corridor.

In July 2016, the County approved purchase of 5.37 acres of land along the Flint River for Greenspace preservation purposes. This land included 136 linear feet of river frontage, and fills a gap in the desired contiguous public ownership and protection of the Flint River Corridor.

The County Greenspace Committee continues to seek funding to buy properties that are in the flood hazard area, when available. They were awarded \$400,000 in funding for acquisition of property, planning and signage improvements from the SPLOST VI referendum. In 2012, Greenspace purchased 16 acres of land along the Flint River with about 2,000 linear ft. of river frontage. In December of 2012, Greenspace acquired an additional 32.27 acres of land along the Flint River, with about 5,000 linear feet of river frontage. All Greenspace land is permanently restricted from development.

Planning & Development Services will look into a cluster zoning option for the zoning ordinance, which would encourage developers to avoid environmentally sensitive lands such as flood hazard areas and wetlands. Currently, this option is only allowed in the RG zone in the county as a Conservation Subdivision and does provide a density bonus. The Community Rating System encourages and rewards low density and open space in the flood hazard area. The Subdivision Ordinance will be reviewed in order to allow for conservation subdivisions in additional residential zones.

Federal regulations protect wetlands adjacent to navigable waters. State regulations under the Mountain and River Corridor Protection Act require a 100 foot buffer along the Flint River and Kinchafoonee Creek. State regulations require a 25 foot buffer along streams. In the county, the zoning ordinance requires a minimum 75 foot staged buffer from streams. Regulations on river, stream and wetland buffers will be reviewed for clarification and the inclusion of best practice and No Adverse Impact protection measures to mitigate flooding. In particular, the zoning ordinance should be revised in order to clarify whether or not a 75 foot staged buffer from wetlands is required in the county.

Staff has continued an ongoing process to map and audit the following deed-restricted conservation properties: FEMA Hazard Mitigation funded properties, Greenspace properties, and Rivercare properties. A Protected River Corridor GIS layer has been prepared. The Repetitive Loss Area delineations were reviewed based on the criteria of the revised CRS Manual and the LIDAR topography information acquired in 2011. A GIS layer of the Repetitive Loss Areas was prepared.

As noted in the previous action, training on floodplain management issues was offered in Albany in September, 2013.

It is recommended that a Natural Floodplain Functions Plan (NFP) be developed, adopted to provide policy and implementation steps to protect natural functions with the Flint River Corridor and the community's floodplain.

Mitigation Action 5 - Complete

When the final report is received from Phase II of the USGS 2-dimensional model study of the Flint River corridor, carefully assess the resulting recommendations. Take action as indicated. Include the results in the review of this document.

In late 2017, a FEMA Risk MAP Project discovery phase was undertaken for Lower Flint Watershed (HUC-8 Code 03130008). Local staff reported existence of Phase I and II of the USGS 2-dimensional model study as a data source for the Risk MAP Project. Local staff also identified completion of Phase III as a funding need as part of the MAP project, as reported to the discovery team at the January 31, 2018 meeting.

Albany and Dougherty County completed LiDAR imaging in early 2018, which will lead to more accurate mapping.

Phase II of the USGS 2-Dimensional Model Study of the Flint River Corridor has been completed and is posted at <http://pubs.usgs.gov/sir/2008/5223/>. This is Phase II of a three-phase study. Phase III of this study has not received funding.

Over the years, a number of measures has been proposed by various engineers and the US Army Corps of Engineers' 205 Study to reduce the impact of floods on the Flint River. These include dredging and widening the Flint River channel beneath the Oakridge Drive Bridge, digging an overflow canal across the ox-bow above the Oakridge Drive Bridge, and removing the man-made island located just downstream from the Oglethorpe Boulevard Bridge. The idea is that if water moves downstream faster, then the overall height of the Flint River will be reduced during flood stage.

These would be costly measures to implement. The flood model developed by the U.S. Geological Survey (USGS) provides a cost effective means of testing the results of these actions without actually having to implement them. The results of the study are that none of these proposed solutions would significantly reduce the impact of flooding.

In addition, Albany and Dougherty County worked with USGS to produce a model that indicates, in one-foot increments, adjacent land areas that flood as the Flint River rises during flood stage. This mapping is currently featured as an emergency response tool on the National Weather Service (NWS) website webpage:

<http://water.weather.gov/ahps2/inundation/inundation.php?wfo=tae&gage=abng1>

The original study area for the inundation map extends from the Georgia Power Dam at Lake Chehaw south to about a quarter mile below the Oakridge Drive Bridge. Albany and Dougherty County, the USGS, and the NWS would like to extend the coverage area north into Lee County and south to the Mitchell County Line. LiDAR and a high quality Digital Elevation Model (DEM) are required data sources to complete this project. Both governments and participating agencies are seeking a funding source to extend the inundation map.

In 2011, the City of Albany acquired LiDAR data and a DEM for Albany and Dougherty County. The purpose of the LiDAR and DEM is to produce high quality elevation/topographic maps and models. This project was paid for with SPLOST V funds. Lee County also participated in the project. Lee County purchased LiDAR and a DEM for an area that includes all of Lee County from Forrester Parkway south to the Dougherty County Line. This data will be available for projects as well.

In addition to providing high quality elevation/topographic data for local use, FEMA has reported that LiDAR will be used for the next update of FIRMs for Dougherty County. The LiDAR and DEM are the highest quality data available for mapping and modeling. GIS distributes this data to the public as needed.

In 2010, Planning & Development Services requested two corrections to Panel 105 of the FIRM. The 2009 revised FIRMs did not include two Letters of Map Revision (LOMRs) that previously had been approved and were still valid. FEMA re-issued these two LOMRs; one in March of 2010 and the other in February of 2011.

These re-issued LOMRs significantly reduced the delineated Special Flood Hazard Area along the drainage canals. Property owners affected by the LOMRs were notified by mail. The existing National Flood Hazard layer on the Albany-Dougherty GIS web browser was replaced by an updated National Flood Hazard layer containing the revised floodplain delineations. Paper FIRMs were updated with LOMR attachments. The digital FIRM on the FEMA Map Service Center website was updated with the LOMRs.

Another LOMR was applied for in 2012; also for an area on FIRM Panel 105. The LiDAR topographic survey information was utilized in a Percosin Tributary Flood Study to determine Base Flood Elevations and a more accurate floodplain delineation for the two arms of the tributary of Percosin Creek, from Gillionville Road north up the Lakeview Branch to approximately the intersection of Lakeview Drive and Magnolia Street; and northwest up the Kingswood Branch to the termination of the floodplain just south of Pheasant Drive. This study included the neighborhoods of Kingswood, Audubon, Westover, Lake Park and Florary Merry Acres. The LOMR was granted by FEMA in April, 2013 and became effective September 6, 2013. This LOMR results in a more accurate Special Flood Hazard Area delineation and re-designates it from a Zone "A" to Zone "AE", which should reduce the flood insurance premiums for many homeowners in this study area. Property owners affected by this LOMR were notified by mail and a public information meeting was held in June, 2013.

A flood study for the Special Flood Hazard Area south of the completed Percosin Tributary Flood Study has been recommended by the consulting engineer. A study for this and other Zone "A" areas will be considered if and when funding becomes available.

Mitigation Action 6 - Ongoing

Increase the level of citizen education on flood issues in Albany and Dougherty County.

Since the disastrous storms of 2017 and throughout 2018, the city and county have distributed handouts and flyers providing additional education throughout the SFHA. New construction and re-habilitation efforts continue within much of the areas heavily impacted by the storms of 2017. Many properties are located within the SFHA. Owners and contractors are encouraged to work closely with staff in all departments to ensure all Federal, State and Local regulations are followed.

Annual public outreach efforts continue to expand, including more use of the internet for information. The Planning & Development Services conducts most of the outreach activities. Other departments conduct additional outreach activities. County Public Works mails an information letter and brochure to property owners whose ponds are inspected by the department. City Engineering participates in a storm drain "No

Dumping” campaign in partnership with Keep Albany Dougherty Beautiful. Department of Community and Economic Development staff provides flood insurance information to housing loan recipients.

The existing and additional outreach efforts of previous years have been continued and updated as necessary in order to educate the public, maintain Community Rating System level and work toward improving our level. A number of outreach activities have been added in the past few years. A flooding and flood protection information section on the city website presents links to helpful websites and publications, a brochure on flood insurance, information on the Biggert-Waters Flood Insurance Reform Act, a brochure on flood safety and flood protection, directions on how to use the public GIS web browser, a flood fact sheet, severe weather alert information, and a ready.gov brochure on preparing a three day kit and a plan.

Additional information was added in 2012 to the mailing to Repetitive Loss Area residents on retrofitting homes and obtaining mitigation financing. The Floodplain Management Review Board now has a section on the city website. Packets of information on Substantial Improvements and on Construction in the Special Flood Hazard Area have been prepared for the public, and are updated and added to as necessary. A full page on flood safety is published annually in the Community Information section of the Plantation Publishing Albany Area phone book. Flood-related reference materials in the Central Public Library and the Planning & Development Services library continue to expand, and the *Floodplain Management in Georgia Quick Guide* has been distributed to city and county staff dealing with construction in the flood hazard area, public libraries in the city and county and is a link on the city website.

The public GIS Web Browser, with use instructions, allows the public to view Special Flood Hazard Areas as an overlay on aerial photo and parcel boundary layers. In 2011, GIS added a Base Flood Elevation Points layer and Letter of Map Amendment layer to the staff and public GIS web browser. The 2006 aerial photo layer was updated with a 2011 aerial photo layer.

Information or press releases on flood protection, flood insurance, flood hazard areas, and floodplain management regulations is sent to the local newspapers. This information was presented to the public through a county-wide Flood and Severe Weather Information and Preparedness Fair held in November of 2012 at the local Thronateeska Heritage Science Museum. The fair was covered by both local news channels and the local newspaper.

Outreach in 2013 also included mailings to builders, insurance agents, realtors and lenders on the Biggert-Waters Insurance Reform Act, a presentation on local flood hazard mitigation efforts to Albany State graduate students in Public Administration;

and the one-day training session on flood insurance, Elevation Certificates, wetlands, erosion and sedimentation control to be held in Albany in September 2013 and open to all who have an interest in attending.

The revised CRS Manual was reviewed to ascertain additional outreach activities which will benefit CRS ratings. A Program for Public Information Committee had been formed in previous years to identify and develop the outreach activities. It is recommended that a Program for Public Information Committee be re-established and a Public Information Program be developed and implemented to provide guidance for this Mitigation Action. The formation of this committee will result in the city and county receiving more points in the CRS Program for an outreach plan with outreach activities that are implemented. Guidance for additional outreach will come from the revised CRS Manual.

It is recommended that a Natural Floodplain Functions Plan (NFP) be developed, adopted and implemented in support of citizen education on flood issues and floodplain management.

Mitigation Action 7 – Ongoing

Continue to maintain and refine warning systems to provide timely, accurate information to citizens of the City of Albany and Dougherty County, thus promoting public safety.

As of October 2018, Albany is awaiting funding for sirens from the initial HMGP requests.

In January 2017, Albany and Dougherty County experienced two severe storm events, both declared Major Disasters by FEMA (DR-4294 and DR-4297). Following the declarations, additional HMGP funds were made available to local governments. Dougherty County submitted application for additional sirens to expand the existing coverage area.

The city and county continue to utilize the CodeRED phone alert system and the siren warning system. CodeRED is a voice notification system designed to meet emergency alert situations on a 24/7 basis; it is used in the event of an emergency requiring immediate notification. Flash flooding notification has been added in 2014 to the existing tornado and thunderstorm alerts. CodeRED can also be utilized to send warnings out to specific delineated areas, if necessary, such as low-lying areas that tend to flood.

Dougherty County and City of Albany citizens are encouraged to register for CodeRED via the City of Albany Website. Citizens may also call the Albany Fire Department's

Emergency Management Agency. At this time, there are about 32,100 subscribers to the CodeRED system.

The siren warning system continues to be utilized and maintained. There are 14 sirens within the city limits. If funding becomes available, EMA should upgrade the existing sirens and consider installing additional sirens in developed areas of the county, such as the Putney, College Park and Radial Subdivisions.

The Dougherty County Floodplain Management Ordinance requires commercial and multi-family properties constructed in or within 100 feet of the floodway to include an automated flood warning system that is activated by rising flood waters. The audible alarm sounds at one-foot below the base flood elevation.

There is a river gauge on the railroad trestle below the bridge downstream from Liberty Expressway. River gauge information can be viewed on the NWS website webpage: <http://water.weather.gov/ahps2/hydrograph.php?wfo=tae&gage=abng1&view=1,1,1,1,1,1,1&toggles=10,7,8,2,9,15,6>. The flood stage at this location was raised from 20 feet to 26 feet in 2011 due to flood mitigation measures.

A number of flood information websites involving warning systems are now included in the public outreach materials and as links on the City of Albany website, www.albany.ga.us, on the home page under "Public Safety Links", "Flooding and Flood Protection". This page provides links to CodeRED, the NOAA NWS Advanced Hydrologic Prediction Service (including the hydrograph indicating real-time river gauge information and the flood inundation map), NOAA Weather Radio information and the USGS live Flint River Rivercam at Riverfront Park. CodeRED also has a direct link on the City of Albany website homepage.

A handout was prepared for the November 2012 flood information fair which lists severe weather alerts for Albany and Dougherty County. This has been placed on the city website's Flood Information web page. Links to the Pre-Disaster Mitigation Plan and the Fire Department's severe weather information page have also been added to the flood information page.

Emergency Response in the event of flood is detailed in the Albany Dougherty Pre-Hazard Mitigation Plan, which was updated in February 2016. This plan also includes objectives of the Albany Dougherty Flood Hazard Mitigation Plan. A five year update of the plan will be required in 2021.

City and county staff gave presentations on local flood mitigation, warning and response efforts at a regional Flood Fight conference in Albany in July of 2011. This conference was attended by emergency responders.

Mitigation Action 8 – Ongoing

In preparation for the next SPLOST referendum and other funding opportunities, identify needed storm water management projects to be included in infrastructure work in city and county.

Since October 2017, Dougherty County began rapid implementation of multi-phase Road and Drainage Plan in the heavily storm-damaged Radium Springs area, reallocating \$2 million in SPLOST funds to the first phase. Nearly all this area is in the SFHA and will greatly improve storm water management. This includes reconstruction of severely damaged roads, conversion from open ditch drainage to curb and gutter, and construction of two new drainage ponds. One of the ponds has been completed in recent months.

In July 2018, City of Albany contracted a \$15 million Eastside-Westside Sewer Interceptor project to rehabilitate a crumbling 60-year-old section of drainage system serving a 6.2-mile area on both sides of the Flint River. This system evaluation and repair will greatly reduce infiltration and inundation, thereby increasing efficiency in draining storm water from the city. Sections of the city still use Combined Sewer Overflow drainage.

The City initiated plans in August 2018 to hire a firm to develop a comprehensive storm drainage and sewer upgrade plan. Necessary repairs and long-term upgrades to the city's aging system are estimated to cost well in excess of \$100 million.

As of October 2018, Albany is awaiting funding for emergency generators to power wastewater lift stations from the initial HMGP requests. During the past year, additional funding requests for remaining unmet needs have been submitted under CDBG-DR.

In January 2017, Albany and Dougherty County experienced two severe storm events, both declared Major Disasters by FEMA (DR-4294 and DR-4297). Following the declarations, additional HMGP funds were made available to local governments. The City of Albany made application for emergency generators to power wastewater lift stations in the event of flooding or other extended power outages.

In preparation of the SPLOST VII re-authorization in 2016, the following projects were identified for funding by the City of Albany:

| | |
|---|-------------|
| • 3 rd Avenue Outfall Storm Sewer Improvements | \$4,000,000 |
| Completion of the 3 rd Avenue 96-inch diameter Storm Sewer Outfall from N. Washington St. under the railroad tracks to the Flint River | |
| • Storm Pumping Stations for Minor Holding Ponds | \$700,000 |

| | | |
|---|---|-------------|
| | Install pumping infrastructure to accommodate temporary pumping operations for storm water and flooding control at minor holding ponds. | |
| • | Holloway-Mercer Drainage Improvements | \$615,000 |
| | Improvements to the Holloway-Mercer Drainage Basin. Funding Level represents debt service after \$6 million allocated in SPLOST V is exhausted. | |
| • | GPS/GIS Infrastructure Mapping | \$1,000,000 |
| | Provide accurate and complete infrastructure data on the entire public infrastructure system. This is a continuation of SPLOST V and SPLOST VI projects | |

After the floods of March and April 2009, Dougherty County Public Works prepared a priority list of 48 storm drainage improvements with the final list approved in August 2009. These projects will be implemented as funding becomes available.

In the priority list of storm drainage improvements, Public Works has completed the following priority projects since 2009:

| Project | Location |
|--|--------------------------------|
| 1 Construct a drainage structure | Mockingbird Drive |
| 2 Construct a force main | Clover Lane/Antioch Road |
| 3 Construct a force main | Plumcrest/Countryside Dr. |
| 4 Replace driveway pipes | Lindsey Road/Lumpkin St. |
| 6 Construct force main | Nichols St./Foxridge S/D |
| 7 Construct a pump station and force main | Betty's Drive |
| 8 Construct a force main | Toni Lynn Lane |
| 9 Construct a force main | Pinebluff Road |
| 10 Construct a pond and force main | Nichols St. S. of McKenzie Rd. |
| 11 Construct a force main | Nichols St. N. of McKenzie Rd. |
| 13 Replace culvert | S. County Line Road |
| 14 Ditch piping | Nelms Rd. @ Railroad |
| 15 Construct a pond and force main | Ramsey Road |
| 16 Elevate roadway | Gaissert Road |
| 18 Elevate roadway | Honeysuckle Drive |
| 19 Raised earthen berm, built drainage structure | Nelms Rd. & Cooper St. |
| 34 Upgrade culvert, elevate roadway | Gravel Hill Rd. @ Antioch Rd. |
| 36 Construct an overflow pipe | Holly Drive Canal |

Project No. 5, to construct a pump station and force main, cannot be completed because the R.O.W. for the retention pond cannot be acquired from the property owner. In regard to Project No. 12, to construct a force main, Public Works has been

unable to acquire an easement from the property owner. Project No. 22, to construct a force main, is delayed due to right-of-way issues.

Funding to the city of \$9,000,000 in SPLOST VI funds was approved for Pump Station 50, sewer upgrade/extensions, sewer replacement and GIS mapping. The county was approved for \$4,300,000 in SPLOST VI funds for continued improvements in storm drainage and equipment.

In September 2012, the City Commission passed Resolution 12-R169, authorizing the Engineering Department to proceed with the second phase of the development of a storm water management program (SWMP) to address high priority needs. The Engineering Department contracted with a consultant to assist with SWMP development. The primary impetus behind this effort is the City's increasing responsibilities related to compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Permit regulations, as well as ongoing drainage system operations & maintenance (O&M) activities, and capital improvement projects (CIP). Among other things, the NPDES Phase II regulations require permit holders to inspect their storm water infrastructure, note any deficiencies, and perform necessary O&M, upgrades and/or repairs. Furthermore, the City has preliminarily identified over 20 drainage capital projects to address recurring flooding and water quality issues throughout the City totaling approximately \$12 million dollars. Successful implementation of these SWMP activities will also enable the City to meet its service delivery obligations as well as the expectations of its citizens, property owners and businesses.

Approximately 50 communities in Georgia have implemented a Stormwater Utility to provide the necessary funding for implementation of a comprehensive SWMP that is capable of addressing the community's various drainage needs and issues. To that end, the City staff has worked with the consultant team to develop an equitable user fee based system for allocating and recovering the costs associated with delivery of SWMP services. One of the primary benefits of utilizing a fee-based system to fund the SWMP is that it ensures that all developed properties, regardless of their tax status, pay their fair share towards the cost of managing their parcel-specific stormwater run-off impacts and the provision of SWMP services by the City.

The City has the advantage of already operating a viable Sanitary Sewer System Enterprise Fund, which is fully capable of incorporating a user fee based stormwater services component into its operational model. It has been calculated that full implementation of a user fee based Stormwater Utility system at the appropriate billing rate will generate sufficient revenue to fund the SWMP services.

The City Commission voted to move forward with the establishment of a Stormwater Utility at its August 2013 meeting.

Mitigation Action 9 – Completed

Analyze need for backup power for Joshua Street Wastewater Treatment Plant.

The need for back-up power is not an issue except in extreme conditions with widespread, long-term loss of power. In that instance, loss of fresh water would also be an issue. Generally, the wastewater treatment facility is safeguarded from a loss of power since electrical service can be routed from two separate substations if one of either power grid is off-line.

The Joshua Street Wastewater Treatment Plant serves all municipal sewer customers in Albany and unincorporated Dougherty County. It is identified as a critical facility located within the Special Flood Hazard Area.

Mitigation Action 10 – Ongoing

Assist Low & Moderate Income census tracts to alleviate hazard risks associated with flood and seek to reduce annual flood insurance premiums.

Under FY 2016/2017, Flood Mitigation was completed on sixteen (16) single-family homes. A significant reduction in flood insurance premiums was seen by low income households. This reduction was especially seen by one homeowner as the insurance reduction decreased from \$3,200 a year to \$407.00 a year. The main objective of the Flood Mitigation Program was achieved by bringing the properties up to FEMA's standard thus, qualifying the property to have flood insurance reinstated at a much more affordable rate for the low income household.

Under FY 2017/2018, DCED funded three (3) Flood Mitigation projects for homeowner properties. Flood mitigation was completed in June 2018, and all three homeowners were able to qualify for flood insurance. Unfortunately, due to FEMA's 18% across the board increase in flood insurance rates, the last three homeowners did not see a significant change in their insurance premiums due to the automatic increase. However, the benefit to the homeowner was the cost savings of the mitigation. Additionally, their property meets FEMA's new criteria since the change in 2010 which mandated the types and number of flood vents (based upon the livable square footage) required to be on housing units located within Special Flood Hazard Areas.

Department of Community and Economic Development implemented a pilot project in 2016 seeking to reduce annual flood insurance premiums for qualifying homeowners. A total of 16 homes were selected to receive improvements. It was determined that each property needed a different combination of improvements, and these included

additional fill in the crawlspace, relocation or additional flood vents, vented garage and vented crawlspace access door.

Conclusion

The City of Albany and Dougherty County strive to improve their flood mitigation, outreach, warning and response measures, with guidance from the Community Rating System. Progress on meeting the Flood Hazard Mitigation Plan objectives has been steadily moving forward.

In July 2016, Albany and Dougherty County received notice that, following a five-year Field Certification of the CRS application, Dougherty County retained a Class 6, and City of Albany was increased to a Class 7.

Release of Annual Progress Report for Public Review

Copies of this Annual Progress Report were submitted to the Mayor and Board of City Commissioners, the Chairman and Board of County Commissioners and The Albany Herald in October 2018. A press release announcing the report and its availability to the public has been sent to the Albany Herald. The Annual Progress Report is available for public review at the following locations:

Planning & Development Services
240 Pine Avenue, Suite 300
Albany GA 31701
229-438-3901

Central Library
Reference Section
300 Pine Avenue
Albany, GA 31701
229-420-3200

A copy of this report is posted on the City of Albany Website (www.albanyga.gov) under the City of Albany Planning and Development Services section, "Plans, Ordinances, & Regulations."