



SAVANNAH

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2018 ANNUAL RECERTIFICATION ACTION ITEM EVALUATION REPORT OF THE JULY 2015 FLOODPLAIN MANAGEMENT PLAN (FMP)

512.a. Floodplain management planning (FMP)

Documentation for FMP Provided by the Community

(2) With each annual recertification,

A copy of the annual evaluation report as specified in Step 10. The report must review each action item, describe what was implemented (or not implemented), and recommend changes to the action plan as appropriate. If not in the evaluation report document, the recertification submittal must also include the minutes of the committee meeting(s) (if getting credit for Step 10(b)) and a description of how the report was submitted to the governing body, released to the media, and made available to the public

How the City provided the Report to the media and public:

1. The City of Savannah provided the report to the media through a press release by the City's Public Information Office.
2. The Report is posted on the City's Flood Protection Information Web Page.
3. Copies of the report are available at the City's Development Service Department, Located at: 5515 Abercorn St, Savannah GA, 31405

ID	2014 Action	Related to Goal	Address Current Development	Address Future Development	Continue Compliance with NFIP	Mitigation Category		2016 Comments	2017 Comments	2018 Comments
Existing Mitigation Actions Carried Forward from 2010 Plan										
1	Comprehensive evaluation of drainage system and implementation of selected projects.	4	✓	✓		Structural Projects		Strategic plan to advance this goal is to perform basin studies in proper detail to evaluate and conceptualize 100 year improvements for each basin, prioritized by risk of structural flooding. Individual projects remain unfunded to date.	<p>On August 31, 2017 City Council adopted "Savannah Forward: Implementation Plan for City Strategic Plan" that includes having a hydraulic analysis on all City of Savannah basins by 2023.</p> <ul style="list-style-type: none"> • By 2025, the City of Savannah will reduce by 25% structure flooding resulting from a 25-year rain event (8 inches of rain within a 24-hour period). • By 2013 complete a hydraulic analysis on all City of Savannah basins. • By 2025, the City of Savannah will experience a 5% reduction in street flooding resulting from a 25-year rain event (4.9" inches of rain within a 2-hour period). <p>Individual projects remain unfunded to date.</p>	<p>On August 31, 2017 City Council adopted "Savannah Forward: Implementation Plan for City Strategic Plan" that includes having a hydraulic analysis on all City of Savannah basins by 2023.</p> <ul style="list-style-type: none"> • By 2025, the City of Savannah will reduce by 25% structure flooding resulting from a 25-year rain event (8 inches of rain within a 24-hour period). • By 2013 complete a hydraulic analysis on all City of Savannah basins. • By 2025, the City of Savannah will experience a 5% reduction in street flooding resulting from a 25-year rain event (4.9" inches of rain within a 2-hour period). <p>Individual projects remain unfunded to date.</p>
2	Enhance Drainage system maintenance program to unclog storm drains/ clear drainage channels and a public education component on proper yard waste disposal and eliminate brush disposal in canals.	1, 4	✓	✓		Prevention, Natural Resource Protection, Public Information and Outreach		Staff provided Stormwater education presentations for the Lion's Club, the Local Emergency Planning Committee, the Georgia Association of Water Professionals District 8, the Episcopal Diocesan of Georgia, the Georgia and South Carolina Forestry Commissions, Jacob G Smith Elementary School 4th Grade, and 8 other public school 5th grades. Currently, Stormwater efforts have been redirected toward keeping grass cut, while diverting resources from cleaning ditches. Additionally, creeping environmental regulations (WOTUS and state of Georgia stream buffer requirements) are potentially making maintaining ditches an activity requiring environmental permitting.in advance of activity	Finding employees and keeping equipment running has limited Stormwater Management's ability to focus upon anything other than basic response to citizen complaints, much less an enhanced program. Staff resources continue to be a limiting factor to an enhanced program. that said public education has increased through means of social media, utility bill inserts, and our drain marking program. We use the tag "Only Rain Down This Drain" and detail how a blocked drain can lead to flooding.	Staff produced a video educating public "only rain down the drain". It is posted on City's website, played on the City's TV channel, and shown at community meetings when staff presenting.

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3	Ensure the City's new zoning code limits development in floodplains and wetlands to low density, and that a certain percentage of land remains protected as open space to provide a natural buffer from water bodies.	4	✓	✓		Prevention, Natural Resource Protection		The third edition of New Zoning Ordinance Dated Oct 2014 (www/newzo.org) has yet to be adopted. Tom Thomson is retiring as the Director of MPC, but Charlotte Moore, AICP is the Project Coordinator. Over the past year Unincorporated Chatham County and COS have added new language to their respective ordinances.	City of Savannah (COS) is current reviewing the Zoning Ordinance for the COS jurisdiction only. Tom McDonald is working with the City's Zoning Administrator to add open space and low density floodplain language.	City of Savannah (COS) is current reviewing the Zoning Ordinance for the COS jurisdiction only. Tom McDonald is working with the City's Zoning Administrator to add open space and low density floodplain language.
4	Reserve vacant low-lying/flood-prone/wetland areas for open space through acquisition or regulation	4	✓	✓		Prevention, Natural Resource Protection		New draft flood plain maps are incrementally removing low lands from floodplains as BFE's are lowered, making the goal harder to achieve, without writing new regulations.	New draft flood plain maps are incrementally removing low lands from floodplains as BFE's are lowered, making the goal harder to achieve, without writing new regulations.	New draft flood plain maps are incrementally removing low lands from floodplains as BFE's are lowered, making the goal harder to achieve, without writing new regulations.
5	Evaluate FEMA-purchased properties for the highest use in floodwater/storm water storage.	4	✓	✓		Prevention, Property Protection		The City did use FEMA purchased property to reduce flooding in the Bacon Park neighborhood (Betty Drive Drainage project). Continue to evaluate open space. Additionally, the City plants trees on the property that contribute in absorbing saturated ground water.	City is evaluating has developed a plan to use 4 larger FEMA properties as a tree farm/nursery. The purpose is to supply the City's Park and Tree Department with stock and to train citizens on professional arboriculture practices to increase the skilled labor pool. The growing trees will help absorb flood waters and limit the need to spend resources on mowing.	COS is currently Over the past year, Nick Deffley, Environmental Services and Sustainability Director, has hosted a program meeting and conference call with the steering committee. The program will last up to five years to plant, cultivate, and transplant the trees.
6	Require in the revision of the Subdivision Ordinance that all new subdivisions dedicate 20% of land as green space.	4	✓	✓		Prevention, Property Protection		City has adopted the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual by reference in its Stormwater ordinance.	City has adopted the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual by reference in its Stormwater ordinance.	City has adopted the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual by reference in its Stormwater ordinance.
7	Designate GDOT properties that are unused as areas for flood storage.	4	✓	✓		Prevention, Property Protection		No action this year. Will continue use consider GA DOT properties as a possible solution option when evaluating flooded areas.	GA DOT is clearing areas as a result of Matthew after affects.	GA DOT continues to clear the trees

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8	Reduce future vulnerability of Valambrosa area through acquisition or regulation.	2, 4	✓	✓		Prevention, Property Protection		Vallambrosa Plantation is currently being developed toward a natural and hunting preserve by its owner. Draft Flood maps add property that may be developed in this area of concern, without additional development regulations.	Vallambrosa Plantation is currently being developed toward a natural and hunting preserve by its owner. Draft Flood maps add property that may be developed in this area of concern, without additional development regulations.	Vallambrosa Plantation is currently being developed toward a natural and hunting preserve by its owner. Draft Flood maps add property that may be developed in this area of concern, without additional development regulations.
9	Add additional higher regulations to the Flood Damage Prevention Ordinance that will prohibit enclosures of areas of greater than 300 square feet below the BFE.	4	✓	✓	✓	Prevention, Floodplain Management Regulatory Property Protection		In Summer of 2017 the COS will adoption Preliminary FIRM that are now undergoing the 90 day appeal process phase (July 19 - Oct 16, 2016). At that time the COS will review the change.	Working with the City Engineer to add the language into the Flood Damage Prevention Ordinance when the new FIRM maps are adopted in 2018. One concern is that the development community will not accept the changes by considering the 299 sq.ft. limit a "taking."	The City has decided not to pursue this requirement at this time. Hopes are that if the City is awarded a grant from NOAA for a Sea Level Rise Study, the higher regulation will be pursued when the study is completed and presented to City Council.
10	Continue acquisition/demolition of high-risk flood-prone properties.	2, 4	✓			Prevention, Property Protection		David Keating, Director of Real Property Department, administers the acquisition program. In 2015 to date the COS has acquired ten (10) structures. Three of the structures are in FEMA's RLA Database. 1108 East Waldburg St, 1312 Eleanor St, 12430 Deerfield Rd, 410 Montclair Blvd, 1310 Eleanor St, 202 Chatham St, 1715 Delesseps Ave, 12411 Woodley Rd, 16 Paradise Dr, and 1320 Eleanor St,	The City did not purchase any dwellings in 2016. I continue maintain a list of properties as citizens inquire a buyout. At this time the City is not actively pursuing properties while the City undergoes budget concerns.	The City did not purchase any dwellings in 2017. I continue maintain a list of properties as citizens inquire a buyout. At this time the City is not actively pursuing properties while the City undergoes budget concerns.
11	Evaluate the feasibility of a floodproofing program for homes where acquisition is not an option – especially historic structures.	2, 4	✓			Prevention, Property Protection		The COS continues to promote homeowners to contact City staff for "on site visit" through the annual community outreach. When contacted, City staff provided retrofitting advice. In 2015-2016 City staff were contacted and provided advice John Seaman (Montgomery at West Hall St) and Mr. Gillman at 2013 W Waldburg.	The city did not pursue purchasing any flooded structures this year. However, Lynette Allen, of Real Property Services Department continues to review potential sites for possible elevation vs. demo. Additionally, the COS continues to promote in all the annual outreaches that business and homeowners should contact Tom McDonald, CFM for an "on site visit" to provide retrofitting recommendations. When contacted, City staff provides retrofitting advice that includes elevation of the dwelling. In 2016-2017 City staff were contacted and provided advice Patrick Symmed (10611 Abercorn)	The City continues to advise home and business owners about retrofitting floodproofing measures to protect their structures from flooding in annual outreach publications, meetings, and phone calls. City continues to promote "on site visit" to provide retrofitting recommendations.

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12	Target repetitive loss structures by conducting a detailed study as outlined in the RLAA.	2	✓			Prevention, Property Protection		In 2015 to date the COS has acquired ten (10) structures. Three structures are in FEMA's RLA Database: 12430 Deerfield Rd_ 202 Chatham St_1715 Delesseps Ave,	840 letters were mailed to the Repetitive Loss area encouraging owners to contact the City for mitigation solutions. City conducted site investigation of known flooded structures caused by Hurricane Matthew and mailed a flood protection information letter along with a questionnaire to capture owner's flooding data.	On August 1, 2018 The City mailed 840 letters to the Repetitive Loss Area encouraging owners to contact the City for mitigation solutions and Flood Insurance information..
13	Target critical facilities for flood mitigation.	3	✓			Prevention, Property Protection, Emergency Services		Critical facilities continuing to be checked for compliance with the Flood Prevention Ordinance. This year several properties for fire and police stations were rejected because the property or access routes fall within the 500 year floodplain.	Critical facilities continuing to be checked for compliance with the Flood Damage Prevention Ordinance. This year several properties for fire and police stations were rejected because the property or access routes fall within the 500 year floodplain.	Critical facilities continuing to be checked for compliance with the Flood Damage Prevention Ordinance. This year several properties for fire and police stations were rejected because the property or access routes fall within the 500 year floodplain. However, due to the City of Savannah and Chatham County Police Department demerger, two precedents were place in the SFHA to meet the deadline.
14	Post flood mitigation information at libraries, post offices, heavily trafficked municipal buildings and community centers. Develop and post "potential high water mark" signs.	1	✓		✓	Public Information and Outreach		The City continues to provide updated flood information in the library and Development Services buildings. I organized to have Ms. Lynn Keating of FEMA Region IV to present a presentation about FEMA' Highwater Mark at the Local Coastal CRS user Group meeting. I forward the information to the City's Emergency Manager for his input.	The City continues to provide updated flood information in the library, City buildings and CEMA office. Tom McDonald is working with City's new Emergency Manager to seek a grant for implementing the High Water Mark program.	The City continues to provide updated flood information in the library, City buildings and CEMA office. Tom McDonald and David Donnelly, Emergency Manager, have sidelined the High Water Mark program to concentrate on the Georgia Tech University's "Smart Sea Level Sensor Project." The program will add several tide sensors and possibly rain gages through out Savannah and Chatham County. Local Emergency and City storm water personnel will have access to an app that provides real time tide levels and rain fall measures. Form More information see: http://smarcities.ipat.gatech.edu/chatham-county .

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15	Continue to enhance newly implemented City website "flood protection information" webpage.	1	✓		✓	Public Information and Outreach		The City's Flood Protection Information web page (savannahga.gov) has been greatly enhanced to provide flooding information, FMP 2015, Historic FIRMs, Flood Damage Prevention Ordinance, Elevation Certificates, LOMA, river gages, alternative street flooding routes, pertinent web links and 2016 Preliminary Maps.	The City is currently undergoing a new web design. Over the year Tom McDonald maintained or added to the web site Preliminary maps, links to new flood information websites, updates to the flood ordinance, post disaster insurance adjusting training, and 311 on line survey for reporting flooding.	The city continues to update the website. This years activity includes a new AE Floodplain Worksheet for building permits, Hurricane Irma information, and updates of the 2018 Preliminary FIRM that will go into effect August 16, 2017.
16	Continue coordination with CEMA, NWS and USGS to enhance flood warning system.	4	✓	✓		Emergency Services		CEMA continues to update the warning system and other promotional products through Federal grants. CEMA now has an App "ChathamEMA" that they forward NWS weather alerts.	During the Hurricane Matthew and Irma CEMA and the City of Savannah posted updated storm information on their websites.	During the Hurricane Matthew and Irma CEMA and the City of Savannah posted updated storm information on their websites.
17	Continue flood preparedness and outreach activities at local community events	1	✓		✓	Public Information and Outreach		Continued to be done. GIS day: Wednesday November 18, 2015. Earth Day: Saturday - April 16, 2016 & Home Depot Day: Saturday - May 21, 2016	Continued to be done. GIS day: Wednesday November 16, 2016 . Earth Day: Saturday - April 15, 2017 & Home Depot Day: Saturday - June 3, 2017	Continued to be done. GIS Day: Wednesday – Nov. 15, 2017 ; Earth Day: Saturday - April 21, 2018 ; and Home Depot Expo: Saturday - June 18, 2018 .
18	Mail information to all structures in the floodplain promoting flood insurance and sound floodplain management practices.	1	✓		✓	Public Information and Outreach		Complete	Complete	Complete
19	Organize public information campaign and organize public cleanups to reduce litter/debris in storm drains.	1	✓		✓	Public Information and Outreach, Natural Resource Protection		Staff organized the annual river clean up in conjunction with the statewide River's Alive effort. In addition a bill insert was included in the utility bills for 78,000 customers and in the community newspaper outreach. The theme was "If it is on the ground, it is in the water" highlighting the importance of pet waste cleanup and natural or no fertilizer application. In 2016 Staff will implement an anti-litter campaign focused on a tributary of the Vernon River.	Due to hurricane Mathew the 2016 annual river cleanup usually held in October was pushed back to April 2017. The October 2017 is scheduled and if completed will account for 2 events in 2017. These events are in conjunction with the statewide River's Alive effort.	In addition to a video staff produced educating public "only rain down the drain", staff conducted a pilot program paying the homeless to pick up litter in wetlands and waterways. The pilot is still underway but hoping to apply for grant funds to increase the budget and lengthen the project.

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20	Conduct public outreach and direct technical assistance – particularly targeting repetitive loss properties and discussion of potential funding.	1, 2	✓		✓	Public Information and Outreach		One of the ways to reach parents is through their children. COS has provided several educational presentation in the school system to include Heard Elementary school, Jacob G Smith Elementary School 4th Grade, and 8 other public school 5th grade. Additional presentations include the Lion's Club, Episcopal Diocesan of Georgia, and Savannah Realtors. City Staff held neighborhood meeting for areas that flood such as Bacon Park and Liberty City	Staff has completed presentations and workshops at the following events: Jacob G Smith, Heard, and May Howard Elementary Schools; Savannah's Earth Day Festival, Savannah's March for Science Event, Savannah's Southern Family Food and Music Festival, Savannah High Special Ed Class, Highlands High School Special Ed Class, Ardsley Chatham Crescent Neighborhood Association, YFace Festival (Youth For A Cleaner Environment), and COS employees.	Staff has completed presentations and workshops at the following events: Heard Elementary School, Elementary Schools; Edgemere/Sackville neighborhood; Savannah's Earth Day Festival, Low Country Improvement Home and Garden Show. Staff completed a New Water Customer Packet which is given to every new and existing water customer. The packet includes information on Water as well as Stormwater and Sewer. 4000 were distributed last year and approximately 10,000 will be distributed annually. Additional Outreaches by the City's Stormwater Department. * Savannah State Summer Campers 30 - 4th thru 9th grades * City of Savannah Police Summer Campers 25 - 5th thru 12th grades * Kicklighter Summer School 30 -1st thru 7th grades * Heard Elementary School 40 - 4th graders * Pooler Elementary School 40 - 4th graders * Hancock Elementary School 250 - 1st thru 5th graders * Oglethorpe Charter School - 40 - 7th Graders * The Southeastern Forestry Commissioners 25 * 5 Home School Groups totaling 18 * St Peters Engineering Club 15 - 6th - 8th graders * Boy Scouts 30 scouts
21	Establish program aimed at providing flood protection assistance to owners of flood-prone properties, including site visits and advice on retrofitting and other flood mitigation measures.	1,2	✓		✓	Property Protection, Public Information and Outreach		The City has set up a program to provide the information through the three annual written outreaches (community newspaper insert, mailer to the SFHA flyer, and letters to the RLA). The publications also include informational topics addressing potential funding sources. Additionally, as part of the program, the City participates at the annual Hurricane Expo and Earth Day events.	The City has set up a program to provide the information through the three annual written outreaches (community newspaper insert, mailer to the SFHA flyer, and letters to the RLA). The publications also include informational topics addressing potential funding sources. Additionally, as part of the program, the City participates at the annual Hurricane Expo and Earth Day events.	The City has set up a program to provide the information through the three annual written outreaches (community newspaper insert, mailer to the SFHA flyer, and letters to the RLA). The publications also include informational topics addressing potential funding sources. Additionally, as part of the program, the City participates at the annual Hurricane Expo and Earth Day events. Citizens can contact the City's 311 Customer Service to request a site visit from a supervisor within the Stormwater Department to discuss their local storm water flooding concerns.

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22	Educate the public on the use of permeable concrete paving and establishment of rain gardens to reduce flash flooding impacts.	1	✓	✓	✓	Public Information and Outreach		Staff assisted Jacob G Smith Elementary School install two demonstration rain gardens in 2016. Staff is working on designs for the new municipal building on Liberty Street. The City has Bi weekly Site Plan Review meeting for engineers and developers. During the meeting the attendees are informed of permeable products they can utilize in their development.	City Staff wrote articles that were published in neighborhood newsletters and magazines in the impacts of impervious surfaces to water quality and flooding. City continues to promote permeable products during Site Plan Review meeting with designers and owners.	Staff is working on designs for the new municipal building on West Gwinnet St. The City has Bi weekly Site Plan Review meeting for engineers and developers. During the meeting the attendees are informed of permeable products they can utilize in their development. The City has been awarded a FEMA Mitigation Grant the will utilize purchased Repetitive Loss properties to grow trees that will be transplanted through out Savannah. The Zoning ordinance provided incentives to language for Green Roof construction. Staff received a Coastal Incentive Grant to design green infrastructure in a popular mid-town shopping center and a green roof located in the tourist downtown district. Both of these projects when completed will have public information and an education component.
23	Interview and coverage on local news, in newspaper articles and through advertisement to promote flood mitigation.	1	✓		✓	Public Information and Outreach		We will probably have to lead this, as only time news media want to talk about this is when we have a storm approaching, and cannot divert resources to media contacts.	Tom McDonald was interview few time: WTGS on September 1, 2017 and WSAV on July 18, 2016 and May 21, 2016	Savannah had a major rain event on July 20, 2018 during rush hour that flooded several streets, trapping several vehicles in the flood waters. The local TV station covered the flooding event.
24	Provide flood mitigation update and outreach to neighborhood groups and other interested parties via an email group address.	1	✓		✓	Public Information and Outreach		No progress	CEMA send out emails. Continue to encourage citizens view the City website.	CEMA and City of Savannah send out emails, tweets, and posting on Face Book. Continue to encourage citizens view the City website.
25	Organize annual/semi-annual single-focus public workshops/meetings to discuss flood mitigation.	1	✓		✓	Public Information and Outreach		We conduct project focused meetings with the public as our projected. July 19 April 27, 2016 for the Casey canal. March 23, 2-15 LeedsGate Neighborhood.	Sent out reach notices after Hurricane Matthew and Stormwater Department has neighborhood meetings	Sent out reach notices after Hurricane Matthew and Stormwater Department has neighborhood meetings

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26	Provide flood protection assistance to vulnerable populations (elderly, disabled and low-income individuals) so they can purchase flood insurance.	1	✓		✓	Public Information and Outreach		No change at this time	No change at this time	No change at this time due to funding
27	Strategically focus SPLOST funds toward identified drainage improvement projects.	4	✓	✓		Structural Projects		Over \$300 M in improvements have been identified and remain unfunded	Over \$300 M in improvements have been identified and remain unfunded. However the On August 31, 2017 City Council adopted "Savannah Forward: Implementation Plan for City Strategic Plan" that includes reviewing funding options.	Over \$300 M in improvements have been identified and remain unfunded. However the On August 31, 2017 City Council adopted "Savannah Forward: Implementation Plan for City Strategic Plan" that includes reviewing funding options.
28	Complete AW-501 forms for acquired Repetitive Loss properties to remove from FEMA Repetitive Loss Property list (or classify each as "mitigated").	2	✓		✓	Prevention, Property Protection		* 12430 Deerfield Rd (HMGP 1973) * 202 Chatham St & 1715 Delesseps Ave. (PDM 2011) and * 404 E 58TH ST Private owner.	No changes this year from 2016	Additional addresses have been removed from the 2017 RL Database 6 Liberty Heights Dr and 207 Fell St
29	Promote flood insurance through community notification to citizens and business personnel by newspapers, letters, and public outreach.	1	✓		✓	Public Information and Outreach		Newspaper publication in Sunday's paper October 25, 2015. Outreach to the SFHA completed on December 4, 2015	Newspaper publication in Sunday's paper October 7, 2016 . Outreach to the SFHA completed on November 18, 2016	Flood Insurance information is part of every flood determination letter and included in other outreaches to include the August 1, 2018 mailing of 840 letters to the Repetitive Loss Area, October 28, 2017 community outreach publication through Savannah Morning News, and December 18, 2017 mass mailing outreach to all structures in the SFHA.
30	Document drainage improvements in SFHAs and request revisions to the applicable FIRM maps to reflect new conditions through the FEMA LOMR process.	4		✓	✓	Prevention		Funding request for LOMA for Abercorn/Deerfield area remains unfunded. The Pipe Maker's Canal received a LOMR 16-1717P. Although it the LOMR pertains to the City of Pooler, GA the canal effects Savannah.	No additional projects completed since 2016.	As part of updating the Flood Damage Prevention Ordinance, language is being added to ensure a LOMR is completed by the owner prior to completing a development that alters a watercourse. If the LOMR has not been approved by FEMA prior to site acceptance, the owner shall post a bond that the COS can use to complete the necessary LOMR.

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End of Existing Mitigation Actions Carried Forward from 2010 Plan

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New Mitigation Actions

1	Remove building code/insurance disconnect through education of builders/realtors and modification of technical review checklist (cross-check NFIP/Insurance/Ordinance/IBC).	4		✓	✓	Prevention, Property Protection		This year COS conducted three training session: * January 12, 2016 for the Homebuilders Association (HBA) of Savannah. * November 5, 2015 and August 25, 2016 for the Savannah Area Board of Realtors (SABOR). The training was conducted by Tom McDonald and Michael Blakely. Some of the topics covered included backfill material in the SFHA, no petition walls or separate rooms in the enclosure area, hydrostatic venting, The 50% Rule, job-site trailers, swimming pools, elevators in the SFHA, and Coastal A-Zones	This year COS conducted three training session: * June 21, 2017 for the Homebuilders Association (HBA) of Savannah. * December 5, 2016 and June 22, 2017 for the Savannah Area Board of Realtors (SABOR). The training was conducted by Tom McDonald and Michael Blakely. Some of the topics covered included backfill material in the SFHA, no petition walls or separate rooms in the enclosure area, hydrostatic venting, The 50% Rule (SD/SI), job-site trailers, swimming pools, elevators in the SFHA, and Coastal A-Zones. Tom McDonald created a plan review sheet for home builders to use when submitting a building permits. See "AE ZONE FLOODPLAIN WORKSHEET" at http://www.savannahga.gov/DocumentCenter/View/10453	This year COS conducted five training session: * November 16, 2017 and June 14, 2018 for the Savannah Area Board of Realtors (SABOR), February 14, 2018 with Structural Engineers Association of Georgia (SEAG), March 7, 2018 with Builder Owners and Managers Association (BOMA), and April 10, 2018 with Surveying and Mapping Society of Georgia (SAMSOG). Additionally, February 9-11, 2018 participated in the "Low country Improvement Home and Garden Show" to discuss construction practices with attendees. The training was conducted by Tom McDonald and Michael Blakely. Some of the topics covered included backfill material in the SFHA, no petition walls or separate rooms in the enclosure area, hydrostatic venting, The 50% Rule (SD/SI), job-site trailers, swimming pools, elevators in the SFHA, and Coastal A-Zones. The City continue to use the "AE ZONE FLOODPLAIN WORKSHEET" for building permits in the SFHA. Link to worksheet see: http://www.savannahga.gov/DocumentCenter/View/10453...
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2	Develop outreach strategy to educate building community on new flood maps.	1		✓	✓	Public Information and Outreach		The COS has set up a program to promote the new FIRM through community meetings and publications. COS conducted several training sessions to include the Community Public meetings on July 19, 2016 and September 22, 2016, Homebuilders Association (HBA) of Savannah on January 12, 2016, the Savannah Area Board of Realtors (SABOR) on November 5, 2015 and August 25, 2016, and the Commercial Realtor Alliance on September 22, 2016. Additional strategy includes adding the promotional information in the newspaper outreach to the community, flyers to the SFHA, and letter to the RLA.	The COS continues to promote and provide progress report updates of the new FIRM through the website and local TV interviews. COS conducted several training sessions to include the Home Builders Association (HBA) of Savannah and Savannah Area Board of Realtors (SABOR). Additional strategy includes adding the promotional information in the newspaper outreach to the community, flyers to the SFHA, and letter to the RLA.	The COS continues to promote and provide progress report updates of the new FIRM through the website and local TV interviews. COS conducted several training sessions to include the Savannah and Savannah Area Board of Realtors (SABOR), Structural Engineers Association of Georgia (SEAOG), Builder Owners and Managers Association (BOMA), Surveying and Mapping Society of Georgia (SAMSOG) and "Low country Improvement Home and Garden Show." Additional strategy includes adding the promotional information in the newspaper outreach to the community, flyers to the SFHA, and letter to the RLA. The Preliminary FIRMS will go into effect August 16, 2018.
3	Modify Flood Damage Prevention Ordinance (FDPO) to include LiMWA criteria.	4		✓	✓	Prevention, Property Protection		In Fall of 2017 the COS will adoption Preliminary FIRM that are now undergoing the 90 day appeal process phase (July 19 - Oct 16, 2016). At that time the COS will review the change.	In Spring of 2018 the COS will adoption Preliminary FIRM. FEMA has completed the 90 days public appeal process phase (September 18, 2017). During the 180 adoption period the COS will review the change.	As part of the Preliminary FIRM adoption on August 16, 2018 the COS is updating the FDPO the includes the LiMWA language that meets the GA DNR State model ordinance and ASCE 24-15 requirements. The FDPO in under staff review.
4	Prioritize CIP projects to address flooding in the following areas: Victory Drive, Skidaway & 41 st , 37 th MLK, Montgomery & 52 nd , Abercorn & 65 th , Springfield Canal, Cloverdale, Detention Pond @ 52 nd Derange, Bilbo basin and Placentia basin.	2, 4				Structural Projects		The majority of the projects named deal with street or nuisance flooding. Over \$300 M of improvements focused upon structural flooding remain unfunded. However, the COS will continue to be aware that these locations need to be monitored and eventually eliminate to prevent the potential of emergency vehicles being delayed during a storm event or a citizen's car damaged due to flooding.	Funding shortfalls continue to plague the program.	Funding shortfalls continue to plague the program.

ID	2014 Action	Related to Goal	Address Current Development	Address Future Development	Continue Compliance with NFIP	Mitigation Category		2016 Comments	2017 Comments	2018 Comments
5	Complete a study to evaluate the effectiveness of a stormwater utility based on impervious area and its impact on the typical homeowner.	4	✓	✓		Structural Projects		A concept study created in 2008-10 could be updated for this purpose for approximately \$50K	Consultant has been awarded a contract to perform a study of the Stormwater Unity Program	Consultant has been awarded a contract to perform a study of the Stormwater Unity Program. After Fire Fee concern, Untilty Fee is not a option.
6	Chatham County Emergency Management (CEMA) will provide a prioritized list of critical facilities.	3	✓			Property Protection, Emergency Services		We should consider removing 500 year protection for ingress/egress for critical facilities due to low topography within the City. This should be weighed against CRS points in play.	CEMA's December 2015: Chatham County Multi-Jurisdiction Pre-Disaster Hazard Mitigation Plan that includes discussions of Critical facility buildings.	Completed
7	The City of Savannah will adopt the CEMA Post-Disaster Mitigation Plan and Pre-Disaster Mitigation Plan.	4	✓			Emergency Services		From: Tom McDonald To: Kate Busbee; Dustin Hetzel Subject: Savannah Dates. Good morning, I was wondering if you have the dates the City adopted your two plans. As part of the City's CRS 510 Plan update, I need to provide the dates. The City of Savannah will adopt the CEMA Post-Disaster Mitigation Plan and Pre-Disaster Mitigation Plan." Thank you for your help. Tom McDonald,	On December 22, 2015 the City of Savannah adopted the "RESOLUTION OF THE CITY OF SAVANNAH AUTHORIZING ADOPTION OF THE CHATHAM COUNTY MULTI-JURISDICTION HAZARD MITIGATION PLAN." This is the only "plan" that CEMA has. Signature page available upon request.	Completed
8	Consider expanding riparian impervious surface setbacks including a 25' setback on coastal marshland and wetlands.	4		✓		Prevention, Natural Resource Protection		** Completed ** The State of Georgia requires a 25 foot setback to coastal marshland and all streams.	** Completed ** The State of Georgia requires a 25 foot setback to coastal marshland and all streams.	** Completed ** The State of Georgia requires a 25 foot setback to coastal marshland and all streams.
9	Support the Chatham County Savannah MPC Greenway Plan and coordinate with the MPC on the Plan as needed.	4		✓		Prevention, Natural Resource Protection		We are working with Chatham County to achieve flood protection mitigation for the Truman Linear Trail Project. Several COS staff are on the Greenway Steering Committee	We are working with Chatham County to achieve flood protection mitigation for the Truman Linear Trail Project. Several COS staff are on the Greenway Steering Committee	Nick Deffley has submitted RFP for Engineers to start design of the City's portion of the project from DeRenne to Henry Street. Project time 3 years. We are working with Chatham County to achieve flood protection mitigation for the Truman Linear Trail Project. Several COS staff continue to participate on the Greenway Steering Committee

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10	Consider participation in FEMA's high water mark initiative.	1			✓	Public Information and Outreach		The COS and UCC organized for Ms. Lynn Keating of FEMA Region IV to provide a webinar about FEMA' Highwater Mark at the Local Coastal CRS user Group meeting. I forward the information to the City's Emergency Manager for his input.	Working with the COS Emergency Manager to implement FEMA's high water mark initiative.	At this time concentrating on a Sea Level Rise Study and GA Tech's Tide Sensor project. See activity #14 above for more details.
11	Coordinate with the Chatham County Resource Protection Land to acquire lands vulnerable to flooding through SPLOST funds.	4		✓		Prevention, Natural Resource Protection		With over \$300 M in unfunded drainage projects, resources other than SPLOST may have to be leveraged.	Coordinate with the Chatham County Resource Protection Land to acquire lands vulnerable to flooding through SPLOST funds.	Coordinate with the Chatham County Resource Protection Land to acquire lands vulnerable to flooding through SPLOST funds.
12	Create a Natural Floodplain Functions Plan and a Repetitive Loss Area Analysis	2, 4	✓	✓	✓	Property Protection, Natural Resource Protection		** Completed** The Natural Floodplain Functions Plan was completed in July 2015. The Repetitive Loss Area Analysis was completed and adopted by COS on August 6, 2015. Both Plans are on the City's Flood Protection Information Web page, savannahga.gov.	** Completed** The Natural Floodplain Functions Plan was completed in July 2015. The Repetitive Loss Area Analysis was completed and adopted by COS on August 6, 2015. Both Plans are on the City's Flood Protection Information Web page, savannahga.gov.	Completed

ID	2014 Action	Related to Goal	Address Current Development	Address Future Development	Continue Compliance with NFIP	Mitigation Category		2016 Comments	2017 Comments	2018 Comments
13	Develop a Watershed Master Plan for the City	2, 3, 4	✓	✓		Prevention, Property Protection, Natural Resource Protection		We have watershed plans for both the Savannah and Vernon Rivers. The first step to a masterplan is to study the individual basins. The basin studies remain unfunded.	The watershed plans for the Savannah and Vernon Rivers will begin revisions and updates at the end of 2017 beginning of 2018. The COS was instrumental in starting a new nonprofit called the Savannah River Clean Water Fund. The Funds purpose is to protect the water quality of the Savannah River by targeting land for conservation. A consultant has approached the COS to sign a MOA to apply for a grant for a Sea Level Rise Plan. The City is reviewing the proposal.	In February 2018, as part of GA DNR grant program, COS submitted a Letter of Support with Chatham County for Chatham County's Coastal Incentive Grant (CIG) Application to analyze "Sea Level Rise Impacts on Stormwater Systems in Chatham County." We are currently waiting if we are awarded the grant. Additionally, Tom McDonald is working with Jill M Gambill, of University of Georgia Marine Extension and Georgia Sea Grant and Professor Brian Bledsoe concerning the possibility of UGA hosting SWMM modeling software/server so that the City could access it. The purpose is for COS to have access to an upgraded modeling software and larger server memory to support more modeling nodes. If approved, the COS would upload current and future local City basin studies. The loaded studies will allow City personnel and engineers to run modeling of proposed development and maintain completed development to ensure proposed project do not adversely affect up and down stream properties