

MEMORANDUM

4/9/19

To: Distribution

From: Seminole County Community Rating System Coordinator

Subject: Floodplain Management Plan 2018 Progress Report

Background

The Seminole County Floodplain Management Plan (FMP) states that on an annual basis the Office of Emergency Management will generate a FMP progress report that will evaluate the successes or areas for improvement for the FMP. The FMP was developed to include all municipalities and the unincorporated areas of Seminole County. It is the responsibility of each city to conduct their own annual update. To maintain Seminole County unincorporated area rating of Class 6 in the Community Rating System (CRS), Seminole County was required to prepare and maintain a FMP in accordance with CRS Activity 510. A Class 6 rating affords policy holders in unincorporated Seminole County a 20 percent discount on their flood insurance policies. This program saves unincorporated Seminole County taxpayers \$252,541 annually.

The Floodplain Management Plan Committee (FMPC) met and developed the plan from May 2015 to August 2015. The plan development included identifying the unique flood risks that affect the County, identifying mitigation actions for these risks, and discussing how to involve the public in the development of the plan. After many meetings, the final Floodplain Management Plan was adopted by the Seminole County Board of County Commissioners as an appendix to the Seminole County Local Mitigation Strategy through Resolution A-1343-15 on October 13, 2015.

After the Floodplain Management Plan was adopted, the FMPC was converted to a permanent advisory body and integrated into the Seminole County Local Mitigation Strategy (LMS) Working Group. The LMS Working Group meets quarterly to review and promote mitigation proposals, opportunities and projects.

How Report was Prepared

On February 1, 2019, the Floodplain Management Team performed an evaluation of all Floodplain Management Plan action items. Representatives (Building Division, Emergency Management, Public Works, and Community Information) provided feedback into the action items and the status of their projects. A description of the current status was listed on a Floodplain Management Plan Goals and Action Items Matrix. Using that information, this report was prepared by Kathryn Valentine, the Mitigation and Recovery Coordinator.

Distribution

Copies of this report (as well as the Floodplain Management Plan) are available for viewing

at the Seminole County Building Division located at 1101 E. 1st Street, Sanford, FL and all Seminole County library branches. In addition, it may be viewed online at www.prepareseminole.org under Emergency Management- Mitigation. This report has also been released to the State of Florida National Flood Insurance Program (NFIP) Coordinating Office and the Seminole County Board of County Commissioners.

Action Items

Action Item 1. Special Flood Hazard Ordinance

The County staff should review all development ordinance language pertaining to development in the Special Flood Hazard Area (SFHA) that would require new/improved infrastructure to have hazard mitigation provisions.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefits: This will improve the hazard protection standards for new construction and will ensure less damage to structures in the Special Flood Hazard Area.

This is an ongoing action. There are several ordinances that regulate the development of property within the special flood hazard area. The subdivision development ordinance is continually being evaluated for potential improvements and/or higher standards.

Development activities within the flood prone areas shall be limited in scope. A study shall be provided for any change in the flood prone elevations. This study must be approved by the County Engineer, the Development Review Manager, the Board of County Commissioners and the Federal Emergency Management Agency (FEMA).

Action Item 2. Preserve Open Space

The County should use every opportunity to encourage preservation of floodplain areas as open space or other uses compatible with the flooding hazard to preserve floodplain storage capacity and reduce the potential for damage to structures.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefits: Preservation of floodplain areas as open space will help to maintain floodplain storage capacity and help to reduce potential flood damage to structures. This also meets a goal in the Seminole County Comprehensive Plan.

This is an ongoing process and all applicable Seminole County divisions regularly review and recommend ways and means to improve and implement County land development regulations. A rewrite of the open space ordinance has been completed for adaptation with the Florida Building Code as required. Seminole County also continues to monitor Severe Repetitive Loss Properties and encourages mitigation activities to those homeowners. A specific example is the proposed 2018 project submitted for Flood Mitigation Assistance funding to acquire and demolish a residential repetitive loss property in the county.

Action Item 3. Evaluate Increasing Higher Standards

The County should continue to enforce its existing regulations for development and mobile homes and explore the cost and benefits of other higher standards to further protect the residents of Seminole County, such as a higher freeboard requirements.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefits: Higher flood protection measures can reduce damage to structures and have the potential to reduce the cost of flood insurance premiums.

Seminole County continues to enforce its existing regulations for development and mobile homes. The Floodplain Ordinance was revised, updated, approved and re-codified by the Board of County Commissioners in 2016. Improving standards and requirements, such as higher freeboard requirements, require approval from the BOCC.

Action Item 4. Promote and Distribute Homeowner Property Evaluation Checklist

Promote and distribute the Homeowners Property Evaluation Checklist. Vulnerable Populations, other languages, links of websites, during permit distribution, local media outlets, realtors, insurance agencies, banking institutions.

Responsible Agency: Seminole County Development Services and Office of Emergency Management

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefits: Identifies buildings' vulnerability to flood damage and reviews the flood insurance coverage. It should help identify what property protection measures should be used to protect the building. Finding multiple sources of distributing the checklist, as well as making the checklist more accessible will ensure more people are reached.

The Seminole County Office of Emergency Management gives out current handouts about home protection, flood insurance, and flood protection at all public outreach events including homeowner's associations (HOA) meetings, community groups, annual Touch a Truck event, and business presentations. Flood insurance and home protection information are also available on the Prepare Seminole webpage. A homeowner's property evaluation checklist has not been developed yet.

Action Item 5. Property Owners Checklist

A property owner's checklist should be developed to evaluate a property's exposure to damage from floods. It should include a review of insurance coverage and identify where more information can be found on appropriate property protection measures. The checklist should be provided to each agency participating in this planning process and made available to the public. This checklist should also be applied to Seminole County's own properties. A priority should be placed on those critical facilities in the floodplain and whether public properties are adequately insured. Target audiences: Businesses, Farm Lands, Rural Areas.

Responsible Agency: Seminole County Development Services and Office of Emergency Management

Deadline: June 1, 2020

Cost: Staff Time

Benefits: Identifies buildings' vulnerability to flood damage and reviews the flood insurance coverage. It should help identify what property protection measures should be used to protect the building.

A Property Basics Checklist is currently available for use on the Seminole County Development Services webpage under Forms, Applications, and Resources. The checklist does cover how to check if a property is in a flood zone or the Special Flood Hazard Area, but doesn't specifically talk about flood insurance or measures for property protection. An update to this checklist should be made, or an additional checklist created for distribution. A meeting will be held with Development Services and the Office of Emergency Management to determine the next steps.

Action Item 6. Cost Sharing Programs

Seminole County should evaluate potential cost sharing programs both public and private, such as grants, rebates, tax, insurance credits, to encourage low cost property protection measures on private property. For example:

- Surface and subsurface drainage improvements,
- Berms and regrading for shallow surface flooding,
- Relocating heating and air conditioning units above the base flood elevation, and
- May offer free permit to citizens for flood mitigation measures.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020

Cost: Staff Time

Benefits: A revolving loan or rebate program would allow property owners to fund low cost mitigation to protect their structure from flood damage. This has the potential to reduce repetitive loss flooding.

This is an ongoing task that is always taken into consideration during floodplain management meetings, however it is one that is difficult to develop and implement during difficult economic periods. Drainage improvements are currently underway in the Midway and Grace Lake areas. Lake levels have been evaluated for the lowest structure at each level and are updated monthly for operational planning considerations.

Action Item 7. Funding Options

The County should seek state and federal funding support for higher cost measures, such as elevation, relocation and acquisition of high priority properties. The Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Program, should be investigated for all eligible properties. High priority properties are:

- Those properties in repetitive loss areas.
- Critical facilities in the special flood hazard area or subject to flood depths of more than two feet.

Responsible Agency: Seminole County Office of Emergency Management

Deadline: June 1, 2020

Cost: Staff Time

Benefits: Elevation, relocation and acquisition of repetitive loss properties is effective mitigation.

At the time of consideration for each structure, FEMA Benefit-Cost Software must be used to determine if the project meets eligibility requirements. If so, reducing repetitive damage to a structure will have a positive impact on the Flood Insurance Fund. We have currently secured 3 repetitive loss flood mitigation grants.

Case #08-001 is now 100% completely elevated. The case #08-002 home was purchased and demolished; deeded as open space. An FMA Grant was submitted for elevation of the case #08-003 home, but was later removed from the project list and never completed. An FMA application was submitted for the acquisition and demolition of case #18-008, and has been reviewed by the Florida Division of Emergency Management. Seminole County has also encouraged homeowners in repetitive flood areas to seek assistance for mitigation activities. This is an ongoing project that is on target but will always be in process.

Action Item 8. Enforcement of Surface Water Management Ordinance

Seminole County should continue to enforce the floodplain management, wetland protection, erosion and sediment control and best management practices provisions of all water management ordinances.

Responsible Agency: Seminole County Development Services and Seminole County Public Works

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time and Operating Budget

Benefits: Preserving the natural and beneficial functions of the floodplain provides multiple positive benefits for Seminole County, including recharging the aquifer, maintaining species of flora and fauna, and providing for recreational activities for both residents and visitors to Seminole County.

This is an ongoing action that is always under consideration and review for improvements and implementation of higher standards. All building permit applications submitted for properties located in a Wetland or Floodplain are reviewed carefully for compliance.

Action Item 9. Emergency Operations Plan

The *Seminole County Emergency Operations Plan* should be reviewed in detail on an annual basis to determine where updates and improvements can be made and how to maximize credit under CRS. The *Plan* should then be submitted periodically for credit under CRS, and CRS will provide a critique of the plan to show what further improvements are needed.

Responsible Agency: Seminole County Office of Emergency Management

Deadline: June 1, 2020

Cost: Staff Time and Operating Budget

Benefit: An outdated Emergency Operations Plan will put both people's health and lives at

risk. Making sure that phone numbers, communication, etc. are updated and new facilities and populations are added is crucial to response and recovery in Seminole County.

The Comprehensive Emergency Management Plan was fully updated and revised in 2017, including all annexes and Emergency Support Functions. The Floodplain Management Plan was updated in 2015 by the Floodplain Management Planning Committee and was adopted by the Board of County Commissioners and all seven municipalities. In 2017 the plan was submitted for CRS credit during the 5 year update under CRS Activity 510, Floodplain Management Planning. During years when CRS is not being reviewed, an annual report for the Floodplain Management Plan will be completed.

Action Item 10. Gauge Funding

The County should consider all possible local, state and federal funding options for installation of additional and/ or improved lake, stream, river gauges to provide a higher level of protection to its residents. The investigation of additional gauging stations should be done in cooperation with the National Weather Service, St. Johns River Water Management District, the United States Geological Survey and FEMA.

Responsible Agency: Seminole County Office of Emergency Management

Deadline: June 1, 2020

Cost: Estimated at \$35,000 for one gauging station with annual operating costs of approximately \$18,000.

Benefit: Additional gauging stations will allow for more accurate forecasting of floods and help to provide better warning information to the residents of Seminole County.

One gauge has been upgraded to be forecastable since 2015, and others are being looked at for upgrade in the future. The forecast levels (Action, Minor, Major) were also adjusted in conjunction with the Seminole County Flood Response Plan for the Lake Harney and Sanford gauges. Seminole County Office of Emergency Management monitors the Southeast River gauges daily to provide situational awareness to community partners.

Action Item 11. Review and Update Regional Evacuation Plan

The County should ensure that all steps are being taken to alleviate traffic jams during an evacuation of the County. Hurricane warnings versus toxic fumes may require different routes to be used for evacuation. Based on current and future population projections, the County should ensure that there is adequate roadway to carry residents and evacuees to safety.

Responsible Agency: Seminole County Office of Emergency Management

Deadline: June 1, 2020

Cost: Staff Time and Operating Budget

Benefit: Proper safe evacuation is a benefit to the security of the residents and visitors of Seminole County.

The East Central Florida Planning Council, under the direction of the Office of Emergency Management, developed a regional evacuation model for Central Florida in 2017. The model has been incorporated into the local evacuation plan. In cooperation with the Florida Department of Transportation (FOOT) and Seminole County Roads Division, cameras and

variable message board signs can now be controlled from the EOG during evacuations.

Action Item 12. Review and Update Post-Disaster Emergency Permitting

The County's emergency preparedness, public information, and permits staffs should work together to formalize the post-disaster procedures for public information, reconstruction regulation and mitigation project identification. Those ideas should be expanded, further developed and adopted as a clear set of policies and procedures.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefit: Established formal post-disaster policies and procedures ensure that public information going out to the public is accurate and originates from a single source, that reconstruction regulation occurs systematically with safety in mind, and that a clear set of mitigation projects are defined after damage assessment records have been finalized.

During and after a disaster in Seminole County, public information officers will update the public through the Prepare Seminole website, social media, press releases, and other methods about permitting information, how to file a flood insurance claim, and information about debris pickup. A disaster webpage was developed to be used in the case of an emergency and will be updated based on the incident information.

Action Item 13. Continued On-Site Detention and Retention and Evaluation of County Maintenance of Facilities

The County should continue to require developers to provide on-site detention and retention to lessen the volume and rate of runoff from developed sites. The County should evaluate the inspection and maintenance of these facilities to ensure that the designed storage is maintained and outfalls and piping remain in good condition.

Responsible Agency: Seminole County Development Services and Public Works Departments

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefit: Reduction in the volume and rate of post-development runoff and immediate increases to flow in stream and channels, reducing the potential for building damage and saving lives from faster flowing currents in those systems.

Seminole County Public Works conducts inspections of all structures every 3 years. The St. John's River Water Management District (SJRWMD) also requires all ponds permitted by the Water Management District to be inspected on a 2 year cycle, to ensure the pond is functioning as designed.

Action Item 14. Regional Detention

The County should consider the benefits of upper watershed regional detention as a way to reduce downstream flow. This approach could be combined with the preservation of open space.

Responsible Agency: Seminole County Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefit: Regional detention is a benefit to piecemeal construction of individual on-site detention and retention facilities. By looking at the entire watershed, a holistic approach to watershed management is achieved. An additional benefit could be combining this effort with the preservation of flood-prone land.

The Public Works Department - Engineering Division looks at this goal on a site by site evaluation of County owned parcels, as funding for specific projects becomes available. Public Works is currently evaluating the use of regional ponds.

Action Item 15. Mullet Lake Park Road Stormwater Project

The County should encourage one approach of the Mullet Lake Park Road Stormwater Improvement Project for implementation to avoid future repetitive loss properties. This project is already recognized on the Seminole County Capital Improvement Plan.

Responsible Agency: Seminole County Public Works

Deadline: June 1, 2020

Cost: Estimated \$400,000 to \$900,000

Benefit: Completion of this capital improvement project will benefit many properties in the eastern section of Seminole County through reduced flow and flood conditions. By implementing this project, the County can reduce repetitive flooding and protect residents from future flooding.

Storm water cleanup and maintenance of the storm water system are currently in progress. The contract for the Mullet Lake Hazard Mitigation Grant Program (HMGP) project submitted under Hurricane Matthew was approved through FEMA and a contract executed with the State of Florida. Further progress on this project will be made in 2019.

Action Item 16. Outreach Projects for Natural Areas

The public and decision makers should be informed about the hazard mitigation benefits of restoring rivers, wetlands and other natural areas. Restoration and protection techniques should be explained. This should include publicizing the need to protect lakes, streams, rivers and wetlands from illegal dumping and/ or filling and inappropriate development. This campaign can be conducted through direct mail, website development, and/or neighborhood meetings.

Responsible Agency: Seminole County Public Works

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time and Operating Budget

Benefit: Increasing the public's awareness of the benefits of the natural and beneficial functions of the floodplain will help to reduce actions by the public which degrade the wetlands and water systems in the County.

This is an ongoing action that is on target and continually under review and consideration for additional outreach items to be added to those that are already in place. Outreach is incorporated into day to day activities, including the annual Hurricane Expo. A letter is sent out annually to all properties in designated repetitive loss areas and includes information about natural floodplain functions and protection of natural areas.

Action Item 17. Outreach Projects for Property Protection

Public education materials should be developed to explain property protection measures that can help owners reduce their exposure to damage by floods and the various types of insurance that are available. Because properties in floodplains may be damaged at some point, a special effort should be made to provide information and advice to floodplain property owners. Special attention should be given to repetitive loss and high hazard areas. Explore local incentives for voluntary protection measures. This can be accomplished through the following techniques:

- The County's website should be improved to make navigation to flood hazard and safety information more intuitive.
- The County should increase its presence on social media, such as Facebook and Twitter, to maximize the number of people reached with flood hazard and safety information.
- The County should continue to distribute brochures about hurricanes to those living in the mapped floodplain.
- The County should continue to hold the Hurricane Expo and give away preparedness kits at the event.
- Staff should reach out to homeowners' associations and faith-based organizations to help spread the word about flood hazards and protection and safety measures.
- The County's website should have a dedicated mitigation page.

Responsible Agency: Seminole County Development Services and Office of Emergency Management

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time and Operating Budget

Benefit: A more educated population will enable residents to help protect themselves from flood losses.

The Seminole County Office of Emergency Management continually provides materials including flood safety, flood insurance and home protection to the public through presentations for community groups, businesses, HOAs, and faith-based organizations. The Prepare Seminole website includes information about flood safety and how to obtain flood insurance, and there is a designated mitigation page. Seminole County annually promotes National Flood Awareness Week through messaging to the public about flood safety, flood insurance, and responsible building. Messages are sent out through social media platforms as needed during times of heavy rain, after a storm or hurricane, and during severe weather awareness week. The Office of Emergency Management also hosts the annual Hurricane Expo where flood mitigation and safety handouts are available. Every year, letters are sent to property owners indicated as repetitive loss properties to inform them about possible flood protection, mitigation options, and the importance of flood insurance.

Action Item 18. Public Information Strategy

The County should maintain a public information outreach program strategy for credit under

the CRS and to prepare a program that evaluates the County's current outreach program in terms of what is currently working and what is not working.

Responsible Agency: Seminole County Community Information Division and Office of Emergency Management

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefit: A public information outreach strategy will set forth a well organized and proactive outreach program that provides the residents and businesses in Seminole County with the information they need to protect themselves and will help to reduce the overall damage in future flood disasters.

This is an ongoing action that is on target and continually under review and consideration for additional outreach items to be added to those that are already in place. The LMS Working Group is in the early stages of developing a multi-jurisdictional Program for Public Information (PP/) in order to gain additional CRS credit.

Action Item 19. Critical Facility Protection

Identify critical facilities whose functionality may be impacted by flood hazards and develop mitigation measures for protection.

Responsible Agency: Seminole County Office of Emergency Management and Development Services

Deadline: June 1, 2020/ Ongoing

Cost: Staff Time

Benefit: The protection of critical facilities from the impacts of flooding is important for continuing essential services to the public and county government. Mitigation measures implemented would lessen the impact on these critical facilities.

The Seminole County Office of Emergency Management maintains and updates the critical facilities list, and identifies facilities in or near the floodplain. Members of the public and private sector are on the LMS Working Group, and therefore have the ability to propose mitigation measures for these critical facilities.