MEMORANDUM

10/27/2021

To: Distribution

From: Seminole County Community Rating System Coordinator

Subject: Floodplain Management Plan 2021 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 special flood hazard area (SFHA) policy holders in unincorporated Seminole County a 20 percent discount on their flood insurance policies, and a 10 percent discount for policies outside the SFHA.

The Floodplain Management Plan Committee (FMPC) met and developed the plan from July 2020 to October 2020. 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 several meetings and a review by the Insurance Services Office (ISO), 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 2021-R-78 on June 8, 2021.

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

How Report was Prepared

On October 11, 2021, the Floodplain Management Team performed an evaluation of all Floodplain Management Plan action items. Representatives from the Seminole County Building Division, Development Review Engineering, Emergency Management, Planning and Development, Public Works Engineering, and Watershed Management provided feedback into the action items and the status of their progress. Using that information, this report was prepared by Kathryn Valentine, the Mitigation Coordinator for Seminole County.

Distribution

Copies of this report (as well as the 2020 Floodplain Management Plan) will be 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, instructions are given on www.prepareseminole.org, under Mitigation, on how to request a copy of this report and other mitigation plans. This report will also be 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: October 1, 2025/ 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 an ongoing action item. There are several ordinances that regulate the development of property within the special flood hazard area. The Seminole County Floodplain Ordinance was last updated in 2016. The Development Services Department reviews all new development in accordance with applicable County Codes.

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: October 1, 2025/ 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.

Seminole County continues to monitor Severe Repetitive Loss Properties and encourages mitigation activities to those homeowners. A specific example is the 2018 project submitted and approved by FEMA for Flood Mitigation Assistance funding, which demolished a residential repetitive loss property and designated the area as open space. New planned developments have easements designated for open space in order to maintain preconstruction flood capacity.

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: October 1, 2025/ 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. Although multiple attempts have been made to require higher freeboard requirements, change has not been made likely due to the cost associated with the higher requirements. The Seminole County Building Division continues to recommend higher freeboard for residents seeking building permits.

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: October 1, 2025/ 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 association (HOA) meetings, community groups, Severe Weather Awareness Week's "Touch a Truck" public education event, and business presentations. Flood insurance and home protection information are also available on the Prepare Seminole webpage. A checklist for homeowners in Seminole County to review important measures for protecting their homes from flood damage is available in public areas of the County Services Building.

Action Item 5. 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: October 1, 2025

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.

A basin study was conducted for the Midway Basin in North Central Seminole County, and cost-sharing grants applied for to fund these projects. The waiver of permit fees is possible, but would only occur in a post-disaster scenario. The Seminole County Office of Emergency Management advertises cost-share grant programs to designated repetitive loss areas on an annual basis.

Action Item 6. 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: October 1, 2025

Cost: Staff Time

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

mitigation.

The list of repetitive loss properties is reviewed on an annual basis, and outreach conducted to the surrounding areas informing them of cost-share grant programs. 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 reduce flood insurance claims in the future and help with credit for the Community Rating System.

The County recently demolished a repetitively flooded residential home through the FMA grant and the property is now designated as open space. The County also referred a resident interested in home elevation to City of Sanford based on their jurisdiction. Information was shared about the Hazard Mitigation Grant Program and Flood Mitigation Assistance.

Action Item 7. 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: October 1, 2025/ 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 initiative. All building permit applications submitted for properties located in a Wetland or Floodplain are reviewed carefully for compliance, and are additionally reviewed during the construction phase. A specific project identified is a restoration for sediment control on the Little Wekiva River, which is being funded through a St. Johns River Water Management District (SJRWMD) grant and State appropriated funds.

Action Item 8. 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: October 1, 2025

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 early 2021, including all annexes and Emergency Support Functions. The Floodplain Management Plan was reviewed and updated in 2020, and adopted by the Board of County Commissioners. 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 9. 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: October 1, 2025

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.

Seminole County received additional funding last year for the Lake Jesup gauge, as it was transitioned from the SJRWMD to the County. Seminole County Watershed Management is working on a five year plan to upgrade lake gauges to show real time information, and will present the plan for the next budget year.

Action Item 10. 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: October 1, 2025

Cost. Staff Time and Operating Budget

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

In late 2020, the East Central Florida Planning Council began gathering data for the update of a regional evacuation model for Central Florida. The update of this regional evacuation plan is in progress and will include many factors including population projections and historical social factors.

Action Item 11. 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: October 1, 2025/ 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. Further development of this process is being outlined in the 2021 update of the Post Disaster Recovery Plan, with a section dedicated to Community Planning and Capacity Building.

Action Item 12. 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: October 1, 2025/ 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.

This is an important ongoing initiative. All structures under Seminole County Public Works are on a 3 year rotating inspection schedule. 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. Seminole County Development Services shares information with HOAs to encourage inspection and maintenance of privately owned stormwater areas, on an as needed basis.

Action Item 13. 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: October 1, 2025/ 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.

In recent years, Seminole County has conducted several basin studies which identify areas for improvement in drainage and outfall capacity. Projects identified in these studies are submitted for review and funding under the Seminole County Resiliency Working Group.

Action Item 14. 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: October 1, 2025

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.

The Mullet Lake Hazard Mitigation Grant Program (HMGP) project submitted under Hurricane Matthew has passed FEMA engineering reviews and is under environmental review before construction can begin. All necessary easements for this project have been obtained.

Action Item 15. 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: October 1, 2025/ 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.

Outreach is incorporated into day to day activities, including the annual Hurricane Preparedness Outreach Program. Targeted outreach is done based on information obtained through the Watershed Atlas website, as well as through the Storm Drain Marking Program, and the Door Hanger Program. 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 16. 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: October 1, 2025/ 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 provides materials including flood safety, flood insurance and home protection to the public through presentations for community groups, businesses, HOAs, and faith-based organizations, when possible. The Prepare Seminole website includes information about flood safety and how to obtain flood insurance, and there is a designated mitigation page. 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. Every year, letters are sent to property owners in designated repetitive loss areas to inform them about possible flood protection, mitigation options, and the importance of flood insurance. The county has a dedicated webpage for Mitigation.

Action Item 17. 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: October 1, 2025/ 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.

The Office of Emergency Management continues to promote flood safety through public information projects such as Virtual Hurricane Expo, Severe Weather Awareness Week, National Flood Protection Week, and annual outreach to residents in repetitive loss areas. This action item is intended to create a program for public information (PPI) for additional CRS credit. The development of this plan has not been started at this time, but is a future goal to accomplish.

Action Item 18. 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: October 1, 2025/ 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 on an annual basis, and identifies facilities in or near the floodplain. Members of the public and private sector are on the Seminole County Resiliency Working Group, and therefore have the ability to propose mitigation measures for these critical facilities.