

**A G E N D A**  
**JAMES CITY COUNTY BOARD OF SUPERVISORS**  
**READING FILE**  
**County Government Center Board Room**  
**101 Mounts Bay Road, Williamsburg, VA 23185**  
**December 13, 2022**  
**5:00 PM**

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**A. FOR YOUR INFORMATION**

1. Floodplain Management Plan Annual Report

## ITEM SUMMARY

DATE: 12/13/2022

TO: The Board of Supervisors

FROM: Michael Woolson, Section Chief, Resource Protection, Stormwater and Resource Protection Division

SUBJECT: Floodplain Management Plan Annual Report

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### ATTACHMENTS:

	Description	Type
☐	Memorandum	Cover Memo
☐	Annual Report	Exhibit

### REVIEWERS:

Department	Reviewer	Action	Date
Engineering & Resource Protection	Small, Toni	Approved	12/5/2022 - 9:48 AM
Development Management	Holt, Paul	Approved	12/5/2022 - 10:42 AM
Publication Management	Daniel, Martha	Approved	12/5/2022 - 10:44 AM
Legal Review	Kinsman, Adam	Approved	12/5/2022 - 2:46 PM
Board Secretary	Saeed, Teresa	Approved	12/6/2022 - 3:06 PM
Board Secretary	Purse, Jason	Approved	12/6/2022 - 3:10 PM
Board Secretary	Saeed, Teresa	Approved	12/6/2022 - 3:35 PM

## MEMORANDUM

DATE: December 13, 2022

TO: The Board of Supervisors

FROM: Michael D. Woolson, Section Chief, Resource Protection, Stormwater and Resource Protection Division

SUBJECT: Reading File - Floodplain Management Plan Annual Report

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James City County participates in the National Flood Insurance Program (NFIP) which is administered by FEMA. The County's participation allows citizens to obtain flood insurance coverage through the NFIP. FEMA also administers a program called the Community Rating System (CRS) which provides incentives for communities to go beyond the minimum requirements of the NFIP. These incentives are in the form of premium discounts for insurance policy holders.

The County participates in the CRS program and effective October 1, 2020, the County was upgraded to a Class 5 community, providing a 25% premium discount to flood insurance policy holders. On August 17, 2022, the County passed the annual recertification process with a construction certification correctness rate of 100%. One of the activities that the County receives credit for is the preparation of a Floodplain Management Plan. This plan is contained in the Hampton Roads Hazard Mitigation Plan, which was adopted by the Board on June 28, 2022. One of the requirements of the activity is to prepare an annual report regarding the plan's implementation and submit it to the governing body and the media. A press release has been prepared regarding the annual report and the submission of the report to the Board as a reading file item fulfills the other notification requirement.

MDW/ap  
FMPAnnualRpt22-mem

Attachment



## **FLOODPLAIN MANAGEMENT PLAN – FY 2022 ANNUAL REPORT**

### **Background**

Activity 510 of the National Flood Insurance Program’s (NFIP) Community Rating System (CRS) requires the development of a Floodplain Management Plan and an annual report on the progress made in implementing the Plan. James City County’s Floodplain Management Plan is contained within the ***Hampton Roads Hazard Mitigation Plan 2022 Update***. This updated Plan, which is a revision of the 2017 plan, was adopted by the James City County Board of Supervisors on June 28, 2022, making it a governing document for the topic. The Plan identifies the potential hazards facing the region and the County including hazards such as flooding, tropical/coastal storms, sea level rise and land subsidence, tornados, wildfires, winter storms, earthquakes, and hazard material incidents. The Plan includes an assessment of the risks involved with these hazards and potential mitigation efforts that can be undertaken to minimize the losses associated with these hazards. In the Plan, flooding was identified as the hazard with the highest hazard level affecting the region.

The updated plan includes some Mitigation Action Items specifically developed to improve the floodplain management activities in the County. This report will present overall Goals related to hazard mitigation and Objectives related to floodplain management as well as Mitigation Actions developed specifically for James City County with recent accomplishments related to those Mitigation Actions.

### **Mitigation Plan Goals and Objectives**

Goals, Objectives, and Mitigation Actions were formulated after the risks from and vulnerabilities to natural hazards were identified in the Plan. The updated Goals and Objectives are presented below.

#### **Goal 1 - Increase community resiliency by reducing vulnerability to hazards**

*Objective 1.1: Reduce damage to all repetitively flooded properties, not just NFIP-insured structures*

*Objective 1.2: Protect existing and future development*

*Objective 1.3: Protect critical facilities/infrastructure, including High Hazard Potential Dams*

*Objective 1.4: Maintain diverse, equitable and inclusive government functions and services throughout the duration of hazard events*

*Objective 1.5: Reduce hazard-related impacts on daily routines*

*Objective 1.6: Preserve and enhance benefits of natural areas*

#### **Goal 2 - Educate the public about hazard vulnerabilities and ways to reduce risk**

*Objective 2.1: Encourage citizens and businesses to assume responsibility for reducing vulnerability*

*Objective 2.2: Ensure that information and hazard education opportunities are available to all elements of the community*

*Objective 2.3: Pursue public/private partnerships that help facilitate access to hazard-related educational opportunities and gather feedback from citizens*

### **Goal 3 - Strengthen and develop partnerships for mitigating hazard impacts**

*Objective 3.1: Integrate mitigation concepts into the local and regional government plans, policies, and actions*

*Objective 3.2: Improve and standardize hazard data collection and mapping*

*Objective 3.3: Leverage shared resources in pursuit of funding for hazard mitigation projects*

*Objective 3.4: Develop partnerships among private, local, regional, national, and international organizations*

### **Mitigation Actions for James City County**

There were nine Mitigation Actions identified for implementation in James City County to increase community resiliency. Not all of the Action Items are directly related to increasing resiliency related to flooding. Recent accomplishments related to Mitigation Actions directed at improving flooding resiliency are presented below.

#### ***Action 1 - Protect critical facilities, including refuges, while increasing potential refuge capacity and/or protected areas. Protection measures may include emergency generator or other power sources, wind or flood retrofits, elevation, relocation, or reconstruction.***

A study was completed in 2017 that reviewed County facilities to study existing and potential shelter areas within those facilities. Actions that could be taken to strengthen any of those shelter areas were identified in the study. In addition, the James City Service Authority floodproofed the sewage lift station at 7213 Merrimac Trail by adding a second floor and elevating all the controls and the generator above flood levels. (*Schedule – completed 2019*)

#### ***Action 2 - Mitigate flooding problems identified in the flood studies performed for Powhatan Creek watershed. Measures may include but are not limited to improvements to road crossings by increasing flow capacity or installing over-topping protection, and stream restoration.***

Work has not begun on implementation of study recommendations to date. (*Schedule – the News Road Armoring Flood Mitigation Project and the Powhatan Creek Flood Study are programmed in the draft FY24-28 Capital Improvement Plan Budget Stormwater Project List for FY27 and FY25 respectively*)

#### ***Action 3 - Conduct annual meeting with the Virginia Department of Transportation (VDOT) and utilities to identify hazard areas and potential projects to mitigate those areas.***

Communication is maintained with VDOT and various utilities throughout the year as needed to discuss any hazards identified and ways to address those hazards. An annual meeting was not considered necessary in 2022.

***Action 4 - Elevate, acquire, relocate, retrofit, or floodproof structures in flood-prone areas. Flood protection may include minor localized flood reduction projects as well. Wind retrofit measures are also included and may be appropriate for some structures, especially publicly-owned structures. This action includes Mitigation Reconstruction projects.***

The County developed a Flood Mitigation Grant program for implementation of small-scale flood mitigation projects. Property owners are able to apply for funds to implement eligible flood mitigation measures such as installation of flood vents, protection of service and mechanical equipment by elevating or relocating the equipment, or for funds to analyze their property to identify cost effective mitigation measures. A pilot program was developed in 2019 and the full program became operational during 2020. Priority will be given to repetitively flooded properties. *(Schedule - ongoing)*

***Action 5 - Continue strengthening the County's Floodplain Management Program with the following actions:***

***1) Review Floodplain Ordinance regularly for appropriateness of higher standards and necessary updates;***

The Ordinance was last updated on January 9, 2018, to bring it into compliance with state requirements.

***2) Provide specialized training and support for Certified Floodplain Manager (CFM) certification for floodplain plan reviews, inspectors, and permit processors;***

Training is provided for CFM staff members through professional, regional, and state training opportunities.

***3) Continue to assess repetitive loss data annually for loss accuracy, geographic accuracy, and determination whether structure(s) on property have been mitigated and if so, by what means. Provide corrections as necessary using FEMA AW-501;***

Assessment was completed for 2019. No update for 2020, 2021, or 2022.

***4) Maintain current CRS Class 5 rating or better; and***

The County has received annual compliance for the CRS program in 2020 and 2021.

***5) Building Safety and Permits plans examiners to provide information and resources to help builders evaluate hydrostatic (flood) vent options. Material to be available on Department's website. Request FEMA QuickGuide for Virginia from DCR.***

Information on code compliant flood vents is available on the Building Safety and Permits website. Questions about flood vents may be emailed to the division at:  
[buildingsafetyandpermits@jamescitycountyva.gov](mailto:buildingsafetyandpermits@jamescitycountyva.gov).

***6) Continue outreach efforts through "Flood Fluent" web site, hurricane and winter weather preparedness activities through FEMA and NOAA, and the social media outreach activities of Emergency Management.***

The County continues to participate in outreach efforts when the needs arise.

***7) Conduct annual Hazard Mitigation Workshop to update and share hazard mitigation information, discuss potential projects. Invite County departments, non-profit agencies, and other stakeholders. Develop annual Hazard Mitigation Potential Project List with ready packages for submittal as funding becomes available.***

A Continuity of Operations Plan and an updated Point of Distribution plan were created in 2019.

***8) Implement regulations and procedures to ensure that site development projects, including those initiated by the County, are consistent with the protection of environmentally sensitive areas and the maintenance of the County's overall environmental quality so that development projects do not exacerbate current or future flooding in flood prone areas.***

Updates to the Powhatan Creek Watershed Management Plan and Yarmouth Creek Watershed Management Plan have been started in 2022. These plans will look at flooding as one of the components of the overall watershed management plan.

***9) Finalize, fund, and implement the County's Flood Resiliency Plan and associated projects, which are adopted herein by reference. Projects are expected to include shoreline erosion and stream restoration projects among others. Three watershed management plans are also expected to begin in the near future, which will prioritize stream restoration needs and outline priorities for CIP funding.***

The County is considering the possibility of using the Community Flood Preparedness Fund as one potential funding source. Work has begun on all three of the watershed management plans including updates to the Powhatan Creek and Yarmouth Creek Watershed Management Plans and a new Watershed Management Plan for Diascund Creek.

## **Other County Actions in Support of Floodplain Management**

1. A flood study of the Route 5 (John Tyler Highway) culvert located near Jamestown High School and the Fieldcrest subdivision was completed in December 2008 to identify improvements that could lessen flooding in this area.
2. A flood study in the Chisel Run area of the Powhatan Creek watershed was completed in November 2009 to better identify flood risks and drainage improvements that may be necessary in that area.
3. A study has been completed in March 2011 that identifies and evaluates flood mitigation alternatives in the lower Powhatan Creek watershed.
4. Watershed management plans have previously been completed for the Powhatan, Yarmouth, Mill, Gordon, Skimino, and Ware Creek watersheds. Work has begun on updating the Powhatan Creek and Yarmouth Creek Watershed Management Plans and a new Watershed Management Plan for Diascund Creek with the completion dates in FY23, FY24 and FY25 respectively.
5. The Stormwater Division has spent approximately \$14,334,090 on construction projects to mitigate flood, drainage, and erosion problems throughout the County since 2007.
6. The Flood Insurance Rate Maps for the County were updated and adopted by the Board of Supervisors on December 16, 2015.