

Richmond-Crater Multi-Region Hazard Mitigation Plan

2024 Annual Review



December 31, 2024

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Introduction

PlanRVA and Crater Planning District Commission (PDC) staff conducted the 2024 Annual Review according to the adopted 2022 Richmond-Crater Multi-Region Hazards Mitigation Plan, which states:

The Richmond-Crater Multi-Region Hazard Mitigation Plan is an update to plans approved in 2006 by the jurisdictions of PlanRVA and Crater Planning District Commission (PDC), and the combined Richmond-Crater 2011 and 2017 Multi-Regional Hazard Mitigation Plans. PlanRVA and Crater PDC convened a joint Hazard Mitigation Steering Committee and Working Group, comprised of representatives from the participating localities.

The area covered by this plan includes the following communities: Town of Ashland, Charles City County, Chesterfield County, City of Colonial Heights, Dinwiddie County, City of Emporia, Goochland County, Greensville County, Hanover County, Henrico County, City of Hopewell, Town of Jarratt, Town of McKenney, New Kent County, City of Petersburg, Powhatan County, Prince George County, City of Richmond, Town of Stony Creek, Town of Surry, Sussex County, Town of Wakefield, Town of Waverly.

The plan outlines a procedure for implementation, maintenance, and plan updates. PlanRVA and Crater PDC will be responsible for monitoring this plan. Annual progress reports from the communities will include corrective action plans if needed. In accordance with Federal Emergency Management Agency (FEMA) regulations, a written update will be submitted to the Commonwealth and FEMA Region III every five years from the original date of the plan, unless circumstances (e.g., Presidential disaster declaration, changing regulations) require a formal update earlier. The public will be continually informed of changes to the plan as they occur.

2024 Annual Review Process

PlanRVA and Crater PDC staff held a virtual meeting to discuss the 2024 annual review with stakeholders on June 28th, 2024. For this review, an excel spreadsheet was created for each locality to provide updates; these were accessed either via SharePoint site or emailed as a local file. Additionally, there was a “Regional” mitigation actions spreadsheet that was filled out collaboratively by the two planning commissions’ staff and other stakeholders.

Locality surveys contained two sections:

Section 1: Survey Questions

- Stakeholders were presented with seven (7) standard questions. Their choices were “yes”, “no”, “unsure”, followed by column to provide further explanation. New this year, staff added a question that asked if localities appointed a specific team for the hazard mitigation update process, and

if so, asked what departments were included. See blank template for full list of questions.

Section 2: Mitigation Action Updates

- Stakeholders were provided their past hazard mitigation action items for them to update. This included their mitigation actions from the 2022 plan, as well as the updates provided from the 2023 annual review, if any. Stakeholders were given the options of “Ongoing”, “On Hold”, “Not Started”, and “Complete” followed by a column to provide written updates. Active tasks, unchanged or not since the last update, were considered “ongoing”.

The purpose of this format was to have localities’ information from the original plan (2022), the 2023 annual review, and the 2024 annual review all in one place. Below are the spreadsheets from the workbook, each are unique and vary in size and brevity. A blank template is included for reference.

The following resources were provided to locality staff and other partners to provide context and assist with the 2024 annual review.

Resources:

Plan Documents	- Richmond-Crater Multi-Region Hazard Mitigation Plan (Full Plan - 2022) - Annual Review 2023
FEMA Guides	- Local Mitigation Planning Policy Guide (2023) - Local Mitigation Planning Handbook (May 2023)
FEMA Region 3	- FEMA Region 3 Coffee Break Webinars - FEMA Region 3 Resilience Report Newsletters & other online resources - FEMA Region 3 mitigation resources, webinar opportunities, etc.
APA	- American Planning Association - Hazard Mitigation & Disaster Recovery Planning Division
Flood Plain Management	- Association of State Floodplain Managers (ASFPM)

Locality Name					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?				
2	Have you collected any new risk information or hazard data since November 2023 ?				
3	Do you require additional training, data, or funding to carry out your mitigation strategies?				
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?				
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?				
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?				
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.				
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				<i>Please select from drop down.</i>	<i>Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.</i>
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1					
2					
3					
4					
5					
6					
7					
8					

Regional					
Survey Questions Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	Yes	Pluvial data from NASA - indicates pluvial blue spots but does not account for stormwater infrastructure. Will need to work with localities on providing more data. PlanRVA developed heat island data for the Richmond region. The data is based on remote sensed surface temperature and compliments previously generated data by the City of Richmond. Localities in the Richmond region are at various points in the process of getting update floodplains from FEMA.		
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	Additional resources, including funding, would be beneficial in moving regional mitigation actions forward.		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Yes	PlanRVA hired a grant specialist in the beginning of 2024 who helps assist with identifying and pursuing grants including those related to hazard mitigation.		
Mitigation Actions Update Please update the yellow columns.					
			Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.	
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/ Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Strengthen regional strategy for incoming evacuees, to include plan development, traffic management, sheltering, and information sharing. Continue to improve the quality, detail and availability of data used to prepare effective hazard assessments and vulnerability analyses. Data may include, but are not limited to, gauging systems, inundation mapping using existing gauges, GIS data, flood insurance coverage and loss data, assessor data and other structure-specific information, landslide- and radon-related geological data, and pandemic-related economic impact data. Local reports that are fed into NCEI are also important for calculating event frequency and total losses. Hazard data are multi-purpose and may be used to support evacuation mapping and planning. The PDCs should consider serving as administrator(s) of a regional hazard data hub.	PDCs with local Emergency Managers	No updates.	Not started	
2		PlanRVA and Crater PDC	PlanRVA has used SHSP funding to initiate a critical infrastructure mapping project. Progress over the past year has included: researching types of infrastructure typically considered critical infrastructure (state and federal agencies, academic research, etc.); coordinating with emergency managers and other stakeholders; developing a list of sectors and specific data categories; looking for existing data layer sources and identifying gaps. Work on this project will continue into the next year to create layers, validate information and coordinate access with stakeholders. PlanRVA worked with a NASA Develop team to map areas prone to pluvial flooding in the region. The data will soon be released for use after quality control review at NASA.	Ongoing	PlanRVA staff completed mapping and methodology development for a regional critical infrastructure data suite. PlanRVA accepted completed pluvial data from NASA. Staff look forward to working with locality to pluvial blue spots to reflect the effectiveness of stormwater infrastructure. PlanRVA staff mapped heat islands across the Richmond region.
3	Integrate mitigation goals and actions into other regional planning mechanisms, for example regional economic development, resiliency, transportation, parks and trail, and watershed plans.	PlanRVA and Crater PDC	PlanRVA staff refined a GIS overlay model that combines various environmental and resilience related data in the region through a weighted overlay analysis. The resulting data layer is called the Regional Ecosystem Framework (REF). PlanRVA staff plan to use the REF in various regional planning processes from transportation project evaluation and scoring to the basis for an anticipated regional green infrastructure plan update. The REF uses ConserveVirginia layers as a base and adds all streams and waterbodies as well as existing conserved lands and easements. After the overlay process, the resulting map indicates geographic features values based on resilience, ecosystem, and conservation goals in the region and the state.	Ongoing	PlanRVA staff considered AHMP goals when developing goals and objectives for a regional Green Infrastructure Plan. The Green Infrastructure Plan will be completed summer 2025.
4	Work with state partners and neighboring localities to monitor and implement Next Generation 911 GIS data standards.	Crater PDC	No updates.	Ongoing	

5	Identify communities that need more current NFIP repetitive flood loss data for CRS and other planning purposes. 1. Request data from FEMA for all NFIP-participating communities on a regular basis, to include repetitive flood loss data and minus-rated policies; 2. Update repetitive flood loss area polygons every 2 years; 3. Rank repetitive flood loss areas by social vulnerability and provide areas and rankings to communities; and 4. Identify areas subject to future flooding due to climate change and sea level rise	PDCs with VaDCR and VDEM	No updates.	Not started	No updates.
6	Provide Community Rating System (CRS) support for interested communities, to include: application assistance, Plans for Public Information (PPI), Substantial Damage Management Plans, Repetitive Flood Loss Area Analyses (RLAAs), web site development, and library resources.	PDCs with VaDCR and Wetlands Watch	No updates.	Not started	No updates from PlanRVA.
7	Address high and significant hazard dam safety in the region. Assist Virginia DCR with investigating significant hazard dams region-wide for possible reclassification as high hazard. Inspect high hazard potential dams for necessary retrofits/repairs. Implement retrofits in partnership with dam owners. This action includes outreach to: 1) private dam owners to either provide or offer to collect data, and to provide additional guidance and resources; and 2) the public, to build awareness through signage installation and other media regarding the dangers associated with low-head dams.	Virginia DCR, Crater PDC, PlanRVA	Petersburg currently has a high hazard potential dam grant for upgrade design work for Wilcox Dam. As of December 2023, the design work is underway and approximately 50% complete.	Ongoing	Crater is working with the City of Emporia to apply for CFPF grant for a stormwater/hydrology study; Crater has begun facilitating discussions regarding options to remove the Emporia Dam.
8	Use commercially available radon test kits to determine radon levels in structures. Evaluate radon data against known geological formations in the region to determine geographic variability in vulnerability. End product will be a refined map of radon zones.	PDCs, College of William & Mary	William & Mary Geology serves as a resource for PDCs and community members for answering questions about radon hazards. Faculty previously involved in plan development are James Kaste and Rick Berquist. William & Mary Geology is beginning a collaboration with Reynolds Community College in Henrico County to get students from their School of Science, Technology, Engineering, and Math involved studying radon hazards in portions of the Richmond-Crater Planning District. Those results will be disseminated to the public. PlanRVA is taking the following steps to raise awareness about radon, as recommended by William & Mary Geology for the Richmond-Crater Hazard Mitigation Plan: 1. PlanRVA is in the process of adding links to their website, such as Virginia Department of Health (VDH) Radon Information and William & Mary's radon page, which provides an overview of the radon hazard including identification, risks, and necessary actions. 2. VDH radon information: (https://www.vdh.virginia.gov/radiological-health/indoor-radon-program/testing/) 3. William & Mary's radon page: https://storymaps.arcgis.com/stories/10f6d3d7c0014a1087fe3ef14f306520 3.1 PlanRVA promotes radon awareness month (January) by posting /advertising information for radon tests that can be obtained through the Virginia Department of Health (see VDH link above).	Ongoing	
9	Provide assistance to communities and residents regarding Risk Rating 2.0, the NFIP's new flood insurance rating policy standards. This action includes assistance with: 1) Evaluation of rating methodology and accuracy; 2) Messaging and outreach to homeowners and renters; 3) Elevation Certificate correction; and 4) Mitigation assistance for property protection, including retrofit guidance and physical alterations to structures or structure components.	VaDCR, PDCs		Ongoing	PlanRVA staff maintain the Flood Risk awareness page and mapping application on PlanRVA's website.

10	Work with private companies to advance continuity of operations, including but not limited to power, gas, and water service restoration. Mitigation actions may include implementation of system redundancies, mutual aid agreements or other partnerships to address critical capability gaps. Physical retrofits may increase resilience of critical infrastructure, such as burying power lines and provision of dependable backup power to water and wastewater treatment facilities.	Dominion Energy, public and private utility providers, PDCs		Ongoing	
11	Partner with VDOF on sharing Wildland Urban Interface data in support of efforts to develop local tools (ordinances, outreach templates, etc.) to determine impacts of fire and climate change as well as potential local projects. Partner with Virginia Department of Wildlife Resources (VDWR) regarding Wildlife Action Plan climate change assessment and development of Wildlife Climate Change Adaptation Committee.	PDCs, VDOF, VDWR		Not started	
12	Convene interested parties to discuss NFIP status of the Town of Waverly, and encourage participation. Notify FEMA that town boundaries are incorrect on the FIRM.	PlanRVA, with assistance from VDCR, Sussex County and Waverly		Ongoing	Crater is in the preliminary stages of building organizational capacity to address issues with the Town of Waverly's NFIP status and incorrect FIRM boundaries.
13	Strengthen community resilience planning and project implementation through: 1) Public Education/Awareness – Create resilience dashboard to share information and data with the general public about resilience issues, including flood risk. Enhance other outreach efforts to educate the public about hazard risk and regional resilience. 2) Engage communities in Resilience Adaptation Feasibility Tool (RAFT) process and support training and implementation. 3) Combine elements of regional resilience efforts into regional plan to satisfy DCR and CFPF requirements. 4) Resilience Program and Project Cobenefit Connector - expand current PDC staff capacity, web presence and guidance documents to better understand and educate localities on fully harnessing existing and future grant programs given the cobenefits of resilience-related projects. 5) Business resiliency training.	PlanRVA & Crater PDC, DCR, UVA, W&M, ODU, Chambers of Commerce, Economic Development departments	Petersburg is actively engaging in the RAFT process and UVA students worked on a series of project proposals for them this past semester. Hopewell is also now engaging in the RAFT process.	Ongoing	Crater received a grant to work on a resilience plan. Petersburg has completed the RAFT process and Hopewell continues to participate. Crater is working with the City of Emporia to apply for CFPF grant for a stormwater/hydrology study. The Emergency Management Alliance of Central Virginia (EMACV) partnered with ChamberRVA to create a business recovery toolkit to better equip the business community to prepare for and recover from disasters. In November 2024, EMACV and ChamberRVA had a cybersecurity and business resiliency virtual panel session for business members.

Ashland					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	Yes	The FEMA maps for flood exposure were updated.		
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	It was added to the comprehensive plan update.		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No	There have been numerous staffing changes and an increased workload due to utilizing ARPA funds, but we have been able to carry out strategies.		
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Public Works and Police.		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Continue to identify areas of existing development where drainage is of significant concern, and implement a drainage improvement program, where feasible. Evaluate and make improvements, as needed, to stormwater system to ensure adequacy to handle major rain events.	Planning & Utilities	No updates for 2023.	Ongoing	We continue to work with stakeholders and citizens in the Town. Projects recently undertaken include swales and BMP's to aid with runoff and also ensuring pollutants are reduced prior to being discharged. We are also undertaking a stream restoration project on Stony Run that will aid with flooding concerns.
2	Continue NFIP Community Rating System activities to reduce flood risk. Consider development of a Plan for Public Involvement per CRS User's Manual that is coordinated with other community outreach programs.	Planning and Community Development		Ongoing	We will continue to participate in the CRS program. We are currently at level 8.
3	Finalize Continuity of Operations plan. New County/Town THIRA, COOP, and EOP are being completed together. Each department will have their own operational plans.	Police		Ongoing	A COOP was put in place in 2023. We performed a tabletop exercise on the COOP in June 2023. The COOP was reviewed in May 2024. We have also participated in several meeting with Hanover officials regarding THIRA.
4	Continue to enhance capabilities to use GIS for emergency management.	Planning and Community Development/Public Works		Ongoing	We continue to use GIS to identify flood prone areas and utilize the technology for zoning decisions for future growth and infrastructure projects.

5	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating flood prone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Planning and Community Development; Department of Public Works		Ongoing	We have a flood resiliency plan that targets flood prone areas to install infrastructure such as swales and BMPs to alleviate flooding issues and to aid property owners. We have used ARPA funding to implement several projects within the town to aid in stormwater management.
6	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Planning and Community Development		Ongoing	We currently have several properties that fall within this definition and structures. We continue to monitor and meet all requirements. This is performed as a standard review in our planning/engineering process. Building inspections fall under the purview of Hanover County.
7	Distribute brochures and use other means (e.g., local media) to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, tornados, wind, and earthquakes.	Police		Ongoing	We share information in conjunction with emergency preparedness month. We use our website and social media to facilitate the sharing of tips to prepare the public in the event of a weather event.
8	Coordinate emergency management plans and practices with Hanover County and Randolph-Macon College, including plans for debris management.	Public Works		Complete	In 2021 we developed a debris management plan. The plan is complete and it will be reviewed in 2026.
9	Integrate mitigation plan goals and actions into other appropriate planning mechanisms for the town and county, such as comprehensive plans and capital improvement plans. Add hazard mitigation discussion to the town's comprehensive plan, and include pertinent mitigation actions.	Planning and Community Development/Police		Ongoing	We incorporate storm water and flood mitigation into our CIP plans. The police department also participates in all hazard training as a part of our policy. These trainings are required for the police department's certification. They are incorporated in our policy and included in the comprehensive plan. These trainings typically entail a response to hurricanes, active shooters, train derailments and tornados. These trainings include our responses and how to mitigate them.
10	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Police, Planning and Community Development		Ongoing	We monitor weather reports out of Wakefield. We also communicate with our partners in Hanover Fire and EMS. We distribute the information internally and share information through social media. We also use NIXLE to share information and closures.
11	Continue coordination between Planning and Community Development and County Building Services to ensure no structures are constructed in the SFHA without proper permitting.	Planning and Community Development, Hanover County		Ongoing	This is a part of our planning process all plans are routed and input sought from all stakeholders to ensure compliance.

Charles City

Survey Questions *Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.*

		Yes/no	If yes or unsure, please describe here.
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No	
2	Have you collected any new risk information or hazard data since November 2023 ?	No	
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No	
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No	
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No	
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Yes	We have added more staff
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No	

Mitigation Actions Update *Please update the yellow columns.*

				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Planning & Utilities	No updates for 2023.	Ongoing	
2	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, and earthquakes.	Planning and Community Development		Ongoing	
3	Work with private utilities to keep right-of-way clear.	Police		Ongoing	
4	Reduce rural wildfire risk by increasing resources used to fight wildfires. Equipment needs may include, but are not limited to: dry hydrants, drafting equipment, personnel and tankers.	Planning and Community Development		Ongoing	

	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire 5 additional resources to supplement these systems, as required.	Planning and Community Development; Department of Public Works		Ongoing	
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Chesterfield					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	Mitigation grant opportunities to complete action item #3		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	2024 local Emergency Operations Plan		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Emergency Management & Environmental Engineering - Floodplain Management		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
			Chesterfield's 2023 updates, including tables, found here.	Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Conduct regular review of repetitive loss and severe repetitive loss NFIP data. Continue to work with VDEM and FEMA to mitigate repetitive and SRL properties as owners demonstrate interest in participation. Projects may include acquisition, relocation, elevation or retrofits.	Environmental Engineering – Floodplain Manager		Ongoing	
2	Enhance and centralize use of GIS to gather damage assessment information by all county agencies including establishing naming conventions and data categories.	GIS, Risk Management, Building Inspections		Ongoing	
3	Protect critical facility infrastructure through quick connects for generator power, wind and snow retrofits, and other protective measures, which may include permanent generators, elevation, or relocation. This action may include minor flood control structures and stormwater system modifications.	Emergency Management		On hold	
4	Provide training opportunities to educate all county staff with a role in disaster recovery regarding mitigation principles and long term recovery best practices, particularly related to housing options.	Emergency Management	Offerings of Intro to EM, Recovery Liaison Training, and Continuity of Operations Plan training are offered at least four times per year for County employees. Starting in 2024, we will also offer a Basic Incident Command Systems Course.	Ongoing	Basic Incident Command Systems course for non-public safety employees implemented

5	Encourage whole community preparedness through education regarding hazards affecting the community and steps to reduce vulnerability.	Emergency Management	We continue to offer our household preparedness, financial emergency preparedness, and business continuity and recovery classes in the community.	Ongoing	
6	Use abandoned mines mapping to guide zoning, development, and building inspection decisions. Work with Virginia Department of Energy to continue to refine the Locations of Abandoned Mines in the Greater Richmond Area maps.	Inspections; Environmental Engineering; Planning		Ongoing	
7	Enhance processes and procedures in building permit application system within Enterprise Land Management System (ELM) to comprehensively capture damage assessment data.	GIS; Inspections		Ongoing	
8	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes. Consider development of a standalone floodplain ordinance.	Inspections, Planning, Environmental Engineering		Ongoing	
9	Maintain StormReady certification (last certification 2020).	Emergency Management		Ongoing	Recertified in 2024
10	Incorporate hazard mitigation potential in decision making for acquiring new park land and open space easements.	Parks and Recreation; FOLAR		Ongoing	
11	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Community Development; Planning; Environmental Engineering		Ongoing	
12	Apply hazard mitigation concepts across development project review, capital improvement planning and all other community planning efforts.	Community Development; Planning		Ongoing	
13	Install new monitoring systems for county-owned dams.	Department of Utilities	The Addison-Evans Water Treatment Plant Floodwall project will include new security cameras which will allow for continued monitoring of the dam spillway and floodplain. The utilities department has a CIP project funding in FY24 to replace the dam gates at the Falling Creek Dam to improve dam operations. As part of this project, we will install new dam level monitoring equipment to monitor reservoir elevations. Construction is scheduled for FY24, and it should be complete in late FY25 or early FY26. As part of a statewide mitigation project, Chesterfield County will receive iFlows water level sensors to be placed across the county on Swift Creek and Falling Creek. This will help proactively monitor water levels that impact high and significant hazard dams.	Ongoing	
14	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in the event of a hazard event. Acquire additional resources to build components of a flood warning system and local evacuation plan.	Emergency Management	Chesterfield awarded water level sensors and rain gauges to be placed along the Swift Creek and Falling Creek waterways to assist in detection and early response to flooding conditions. This award was provided by VDEM as part of a statewide mitigation project.	Ongoing	Sensors and gauges installed. Data analysis and calibration underway.

15	Improve stormwater management system to reduce flooding, particularly in neighborhoods. Projects may include raising roads and regrading to eliminate 100- year flood hazard, redesign and installation of infrastructure to more properly handle current and future flows.	Environmental Engineering	Phases 1 & 2 are complete. Phase 3 is underway.	Ongoing	
16	Develop and expand use of mass notification tool. Final system should have four audiences for messaging: 1) residents; 2) employees; 3) IPAWS all hazard notifications; and 4) a community engagement tool. Include notification system for dam inundation area dwellers, as identified on recorded plats.	Emergency Management	1) Employee notification system transitioned from an opt-in to an opt-out which increased cell phone SMS notification enrollment by over 60%. 2) Targeted outreach and incentive programs have been done to increase resident/community enrollment 3) IPAWS training has been provided to EM staff, and emergency communications staff. IPAWS messaging has been deployed twice since 2022. 4) Dam break inundation zone layers have been added to the notification system for about half of the high hazard dams in the county. 5) the community engagement tool has been implemented and is used for special events emergency notification.	Ongoing	
17	Finalize and implement county COOP. Coordinate implementation across all county departments.	Emergency Management	The COOP program has been implemented and all county departments have submitted their COOP plans. Needs analysis are being conducted.	Complete	Changed responsible department from Environmental Engineering to Emergency Management. The COOP program has been implemented and program is maintaining and enhancing COOP capabilities across all departments.

Colonial Heights					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	Currently, there is no CFM on staff. Training and Funding for certification of staff is required.		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No	Updates were sought by EM from Planning and Public Works.		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				<i>Please select from drop down.</i>	<i>Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.</i>
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Building Inspection Department		Ongoing	

2	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Fire and EMS; Planning and Community Development; Economic Development; PDC	The city put in for and was approved for a Flood Mitigation Assistance (FMA) Grant to purchase and make a greenspace at 610 Lakeview Avenue, which is a repetitive flood loss property. A survey and appraisal of the property has been completed and negotiations are continuing on the possible purchase of the property. (EMP-2020-FM-030-0006) The shelter retrofit project to install a new emergency generator at the city's primary emergency shelter was completed on June 14, 2023. A close-out letter for HMPG-DR-03 VA-SU20 was submitted on July 3, 2023. The city is in the early stages of a BRIC/G-POD project that will provide hook-ups and emergency power to the secondary emergency shelter at the high school and City Hall. This is a project involving local jurisdictions, VDEM, the All Hazards Consortium and Dominion Energy.	Ongoing	610 Lakeview has been purchased by the City through the FMA Grant. Environmental studies have been completed and the city is awaiting both abatement quotes and demolition quotes. VDEM has closed out the Shelter Updgrade Project at the Middle School. The BRIC/G-POD project was approved and 2 sites have been selected within the City; City Hall and the High School, which is the alternate emergency shelter site. Site surveys have been completed. Concept/Scope has been approved. No further information.
3	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, earthquakes, and tornado. Customize messaging to address: repetitive flood loss areas, importance of flood insurance coverage, and the high vulnerability of certain populations.	Emergency Management	Emergency Management has increased the use of social media and attendance at a wide variety of fairs, festivals, meetings and events to increase education to the public in all hazards. EM staff have built a library of all-hazards literature from FEMA, VA Dept of Forestry, EMACV and other sources. Speaking engagements are done at churches, school events, senior citizen events, civic events, etc. Over 20 events and talks were completed in 2023 reaching thousands of residents. EM employs Facebook, Instagram, City website, fire department website, messages on Civic Ready and the water bill, etc. to get messaging out to all citizens.	Ongoing	Social Media is utilized almost daily to put out information both original content and from other sites (VDEM, FEMA, NWS, Ready.Gov, local health district, etc.) Speaking engagements continue as due Public Outreach efforts totaling more than 30 events each year. Other platforms are utilized as well to include city billing, subscription service, message boards, etc.
4	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Fire and EMS, PDC and VDEM		Ongoing	

5	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to build components of a flood warning system and local evacuation plan, including: new IFLAWS gauges (especially, Swift Creek, Swift Creek dam and Old Town Creek), road crossing elevations for county, city and state-owned roads, a flood alert system, and an additional tornado siren for the north end of the City near Tussing Elementary and Conjure's Neck.	Fire and EMS	The jurisdiction has been included in the VDEM Region 1 updated IFLAWS project/funding. This project will place rain gauges and river level gauges on Swift Creek in Colonial Heights as well as upriver in Chesterfield County. This is the area well severe flooding and trouble with multiple high hazard dams occurred in 2020. Tying this watershed together will allow additional early warning for flooding issues for our jurisdiction. Site selection for gauges had been completed, VDEM has received approval for this project and it will be 100% funded via grant monies with no cost to the jurisdiction. EM staff are laying the groundwork for IPAWS to be implemented in the city in 2024 which will significantly increase warning capabilities to all citizens, visitors, and passerbys. Updated quotes were received and submitted to City Council for the 4th emergency alert siren in the North end of the jurisdiction.	Ongoing	The updated IFLAWS project has been completed and stations on Swift Creek and the Appamattox are operational to the jurisdiction (IFLAWs Dashboard) and the public (NWS Pages). The plan to utilize IPAWS is still in the planning stages with hopes for late 2024 or early 2025 launching. The North End Siren Project s progressing. The City has contracted for the components and the installation of the system which will be installed at Tussing Elementary. Work should be starting on an easement from the school system to the City for the project (August). No timeline for delivery of components or completion of the project has been established.
6	Repair flood gates on Lakeview Dam, as identified in after action report from the last flood event that impacted the dam.	Emergency Management, VaDCR	While the previously identified repairs to the flood gates have not been accomplished, other repairs which impact the operation of the dam and flood gates have been undertaken and nearing completion. First, divers inspected the flood gates and silt has been removed from the areas surrounding the flood gates. The Federal Energy Regulatory Commission (FERC) has approved plans for a concrete wing to be added to the dam to help stabilize the main span of the dam. Discussion with FERC also centered around this wing being utilized as an emergency overflow/spillway during the approval process which was approved. Using this method to "drawdown" the dam would be utilized instead of utilizing the gates. This project is well underway and should be completed shortly.	Complete	The FERC approved project to add the wing wall for stability and use as an alternate emergency overflow/spillway has been completed.

7	Include additional reviewers on Design Review Committee for new development, specifically to review projects for hazard-related vulnerabilities. Include staff training for decision making tools, such as those developed by VIMS Center for Coastal Resources Management for shoreline development and the Certified Floodplain Manager program from the Association of State Floodplain Managers.	Planning and Community Development, Emergency Management		Ongoing	Staff has undergone training conducted by DCR on certain topics related to Floodplain Management and Community Rating System (CRS). More training is required to bring staff up to speed. Staff will continue to participate in such training programs.
			ADDITIONAL CONCERNS: The Planning Division of Planning and Community Development Department has been completely restaffed. Training is needed for every staff member in order to bring them up to speed.		

Dinwiddie

Survey Questions *Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.*

		Yes/no	If yes or unsure, please describe here.
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No	
2	Have you collected any new risk information or hazard data since November 2023 ?	No	
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No	
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No	
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No	
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No	
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No	

Mitigation Actions Update *Please update the yellow columns.*

				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning/Zoning	No updates for 2023.	Ongoing	
2	Address road flooding in the county. Appropriate measures may include elevation of bridges, maintenance of roadside ditches, and improvements to BMPs.	Emergency Management, VDOT		Complete	
3	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, tornados and earthquakes.	Emergency Management		Ongoing	
4	Continue to refine and update Continuity of Operations Plan (COOP) with lessons learned from COVID-19 pandemic.	Emergency Services		Complete	

5	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes. Ensure easy access to FEMA floodplain maps by citizens and property owners.	Planning/Zoning		Ongoing	
6	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, and stormwater management system improvements. Conduct countywide facilities assessment, including schools, to determine vulnerability to multiple hazards, continuous power availability and utility redundancies.	Emergency Management		Ongoing	
7	Increase water/wastewater treatment systems resiliency with County, McKenney and two private subdivisions with their own water systems. Measures may include generators and additional wells.	Dinwiddie County Water Authority, wastewater authority		Ongoing	
8	Integrate mitigation plan goals and actions into other appropriate planning mechanisms such as comprehensive plans and capital improvement plans.	Planning; Emergency Management		Ongoing	
9	Integrate Health Department and Emergency Management operations in the event of a health-related event, such as pandemic. Address Incident Command Services at both departments; coordinate with the PDC and other regional entities, and prepare post-incident review of COVID response.	Emergency Management, Health Department, PDC		Ongoing	
10	Fill and train GIS/addressing staff and planner level position. Expand the Planning Department staff to more effectively and efficiently address short-term and long-term planning needs.	Emergency Management, Planning/Zoning		Complete	
11	Design any new county schools to current shelter standards.	Emergency Management, County Administration		Ongoing	
12	Develop methods for encouraging private property owners to properly maintain BMPs.	Environmental		Ongoing	
13	Study capacity of existing stormwater system components, including culverts and other structures, to determine if sizing is sufficient for current and future flooding and precipitation conditions. Identify and replace vulnerable or undersized structures with bridges, larger culverts or other measures to reduce flood hazards. Implement program for regular inspections and maintenance of roadside ditches and stream channels.	Environmental, VDOT		Ongoing	

Emporia					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Investigate all public utility lines to evaluate their resistance to flood, wind, and winter storm hazards.	Public Utilities		Ongoing	
2	Complete replacement of Halifax Street Bridge	Public Works		Complete	
3	Continue to review and make recommendations for improvements to the stormwater system.	Emergency Services, Public Works		Ongoing	
4	Finalize Continuity of Operations Plan.	Administration; Emergency Services	Completed.		
5	Improve gauging and warning system. Install additional flood gauges on the Meherrin River. Integrate data from all new flood gauges into citizen notification system, including a siren system. Use gauging and warning system data and existing flood depth data to begin developing targeted evacuation plan for flood-prone areas.	Emergency Services		Ongoing	
6	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Emergency Services		Ongoing	
7	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Zoning Administrator		Ongoing	
8	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, and earthquakes.	Emergency Services		Not started	

9	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Zoning Administrator		Ongoing	
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Goochland					
Survey Questions Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	Information from the AHMP has been used to support and validate information in Goochland's 2024 SHSP application submission.		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Goochland participants in the review process have included representation from Emergency Management, Community Development, Public Utilities, Building Inspection, and Environmental and Land Development.		
Mitigation Actions Update Please update the yellow columns.					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/ Department Responsible	2023 Annual Update (from Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Continue coordination with VDEM on incoming evacuee issues.	Public Utilities- Emergency Management	Goochland Emergency Management needs to have discussions with VDEM to discuss evacuee issues to understand Goochland's possible role(s) with evacuees. Goochland only has one hotel within its county near I-64. Other than that facility, Goochland hasn't had any other emergency sheltering capabilities along I-64 corridor. Goochland has been working with American Red Cross to increase emergency sheltering capabilities. In August, Emergency Management and American Red Cross assessed two churches along the I-64 corridor. American Red Cross is in the process of establishing facility use agreements with the church to allow utilizing the churches American Red Cross managed emergency shelters. These efforts support Regional Mitigation Action #1.	Complete	VDEM Region 1 will contact Goochland's Emergency Management to coordinate any evacuation needs from other jurisdictions. Goochland has partnered with the American Red Cross (ARC) to establish three locations that could be utilized as ARC Managed Shelter Operations. Formal agreements are in place for these services. It is unlikely with the size of Goochland County's employee base that Goochland would be able to manage a shelter operations for evacuees from another jurisdiction for any extended period of time. Alternatively, the ARC Managed Emergency Shelter Operations could offer options for other jurisdiction's evacuees in Goochland County. One location is at St. Matthews United Methodist Church approximately 3-4 miles south I-64 Rockville Exit. The second location is at Goochland County's Parks & Recreation Sports Complex approximately 10-12 miles south of I-64 Oilville Exit. The third location is at Goochland County's Central High Complex approximately 12-15 miles south of I-64 Gum Spring Exit. ARC partnered with Goochland to successfully practice ARC Managed Shelter Operations at the second location, Sports Complex, on May 8, 2024.
2	Continue to coordinate with City of Richmond and Department of Corrections to address wastewater capacity issues.	Public Utilities	In 2022, the Board of Supervisor's approved a bond to fund sewer improvements for up to \$7 million dollars. It was estimated at the time it would take approximately 2 years to complete a full replacement. Goochland Emergency Management will partner with Public Utilities to get routine updates on the progress of the project.	Ongoing	The county's Eastern Goochland Pump Station force main rehabilitation/replacement project is about 95% complete. The most important part, replacement of the first 2 miles of the 48" force main, is complete and the Eastern Goochland Pump Station is back in service as of July 10, 2024.

3	Continue to provide training opportunities to county staff. Hazard-related topics may include: floodplain management training, conferences and certification through VaDCR and the Association of Floodplain Managers; conferences and training for emergency managers regarding wildfire mitigation and other hazards; conferences and training for county officials regarding mitigation grant availability and processes.	Emergency Management & Community Development	2023 being the first year with a full time Emergency Management Coordinator, county staff training has focused on priority training needs as a result of two county-wide emergencies in 2022 for county staff. Training has included: 1. VDEM provided Damage Assessment and Crisis Track training to Building Inspection staff, Emergency Management staff/volunteers and other county staff on February 22, 2023. 2. Goochland Emergency Management facilitated Emergency Operations Center training for county staff that would work in the EOC on September 20, 2023. Lessons learned from January 2022 Winter Storm were reviewed during that training. 3. Goochland Emergency Management facilitated a Crisis Track refresher and functional exercise on December 7, 2023, for Building Inspections Staff. AAR under development. 4. Department of Social Services is currently taking online Red Cross shelter operations training. Emergency Management is targeting to perform a functional emergency shelter training in Q1-2024. Emergency Management will identify and develop a training plan for 2024 to include more training for county staff. These efforts support Regional Mitigation Action #2.	Ongoing	Hazard-related training is offered throughout the year. Emergency Management continues to forward related training to county staff members whenever known. Community Development continues to attend floodplain management training awareness. Two Community Development Plan Managers have taken and been certified in FEMA floodplain management. One of the Community Development Plan Managers completed floodplain resiliency training in 2024. Lastly, Community Development staff will continue to take advantage of related topics when attending conferences and available webinars. April 2024 - Emergency Management and two of Goochland's PIOs attended FEMA's "When Minutes Matter: Akert and Warning for Wildfires" webinar series. While a lot of the speakers and audience was more the western states, the information was very timely for Goochland as Virginia and many county's near Goochland experienced over 100 fires in March 2024. One outcome from this training, included Emergency Management utilizing Local Emergency Management Planning Grant (LEMPG) funds to acquire 133 weather radios (crank/solar) to distributed to citizens with limited resources to have another method to stay informed during emergencies. June 2024 - Emergency Management, Director of Purchasing, Solid Waste and Recycling Manager, and General Services Manager attended annual Debris Management Training coordinated by CVWMA.
4	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Customize approach to provide outreach to large group of citizens with regard to broad spectrum of hazards, including flood, radon and wildfire. Continue the floodplain map-related outreach to support county's new FEMA FIRMs.	Emergency Management	Emergency Management has performed outreach activities during the course of 2023 to churches, local community clubs, non-profits organizations, National Night Out, county festival, etc. Material provided has included both preparedness and mitigation related to all hazards. Educational information is posted monthly on both Goochland Fire-Rescue and Goochland County Facebook pages. Additionally, Goochland Fire-Rescue and Emergency Services publishes monthly articles in the local Gazette. Goochland County has limited risk from James River flooding as Goochland has an ordinance that prevents structures from being built on the flood plain. The most likely impact from James River flooding is increased water pushed back to creeks feeding into the river and causing flash flooding along some roads crossing those creeks. Before, during and after severe weather, Emergency Management issues notifications and/or preparedness information to those potentially impacted. There is one private education facility, Elk Hill, that is impacted by this flash flooding. Emergency Management met with them in early 2021 to ensure they included this risk in their emergency action plan. Once Emergency Management has completed a review of the updated flood plain maps, any additional educational outreach will be provided to those affected. Lastly, Goochland Fire-Rescue and Emergency Services is in the process of finalizing and new website. The new website will address preparedness and mitigation for all hazards that are at least a high probability of occurring or there has been a history of occurring locally. It's on target for launch in 2024. This supports Regional Mitigation Action #13.	Ongoing	Goochland Emergency Management participates on the average in at least one community speaking engagement a month to continue to promote emergency preparedness education related to all hazards including those that are at higher risk for Goochland's community or in near proximity to the speaking engagement. Handouts include "A Workbook for Preparedness in Central Virginia" created by the Emergency Management Alliance of Central Virginia and PlanRVA and specific preparedness materials relevant to any themed topic at time of the speaking engagement, such as, National Preparedness Month 2023, Virginia's Severe Weather Awareness Week 2024, National Hurricane Preparedness Week 2024, and Winter Storm Preparedness 2023. Both the Goochland County and Goochland Fire-Rescue and Emergency Services promoted 2024 Dam Safety, Flood Prevention and Protection Assistance Fund availability in their Facebook feeds several times leading up to the application deadline in March 2024. Goochland mailed letters in April 2023 to all citizens impacted by the FIRM updates from FEMA to inform them of the changes and where they could go on-line to see the changes. During National Radon Action Month in January 2024, Emergency Management ran a 5-day educational campaign on social media, which included Day 1 Announcing January is National Radon Action Month Day 2 What is radon? Day 3 How does radon enter your home? Day 4 How test your home for radon? Day 5 How do you fix? Whenever there are active threats such as severe weather, Goochland keeps the community informed about the forecasts and also uses those as opportunities remind people to be safe, such as "Turn around, don't drown!" and how low the level of moving water can overtake your vehicle and carry it away.
5	Strengthen system of coordinating, collecting, storing and transmitting damage assessment data for each natural hazard event which causes death, injury, and/or property damage.	Emergency Management/ IT	VDEM provided Damage Assessment and Crisis Track training to Building Inspection Staff and Emergency Management on February 22, 2023. Then on December 7, 2023, Emergency Management provided Crisis Track Refresher Training followed up with a functional exercise in a neighborhood to practice using the tool. This supports Regional Mitigation Action #2.	Ongoing	Emergency Management has partnered with Building Inspections on several initiatives to strengthen Damage Assessment capabilities. First, utilizing FY23 LEMPG grant funds a chain saw was purchased for Building Inspections to have in there tool kit to aid with road debris impacting their ability to do Damage Assessments. Secondly, they have been provided with handheld radios with ECC's main radio channel to allow for quick communications between Fire-Rescue and Emergency Management. Additionally, ten iPads were purchased with FY23 LEMPG funds for use during Damage Assessments. A Damage Assessment class for CERT members is schedule in August 2024 to obtain additional Damage Assessment resources. The class is being taught jointly by Building Inspections and Emergency Management. Goochland's Building Inspector assisted Buchanan County in August 2022 doing flood damage assessments. He routinely leverages pictures and those experiences in the Damage Assessment Training instructed.

6	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Community Development	Goochland County has an ordinance in place preventing structures from being built in flood plains.	Ongoing	Goochland mailed letters to all impacted citizens to advise them of the new FIRM map updates from FEMA in April 2023. Goochland just completed updating ordinances and will be adopting new FEMA FIRM maps in September and be implemented October. Building Inspections continues to ensure that no structures are built in the floodplains.
7	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements.	Emergency Management, Community Development	Goochland Fire-Rescue and Emergency Services has removed an outdated training building and is replacing it with one of two new modular buildings. One is already in place and operational. The other one is currently in implementation phase.	Ongoing	Goochland Fire-Rescue and Emergency Services has completed the installation of two new modular training buildings and a new burn building. As mandated by state regulations, Goochland continues to ensure stormwater management systems are inspected every 5 years. Goochland just completed updating ordinances and will be adopting new FEMA FIRM maps in September and to be implemented October.
8	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to build components of a flood warning system and local evacuation plan, including: new IFLOWS gauges, high hazard water crossing elevations for county and state-owned roads, and a flood alert system.	Emergency Management	Emergency Management will be exploring placing IFLOWS gauges at both Maidens and Cartersville.	Complete	As part of the Community Collaborative Rain, Hail, & Snow Network (CoCoRaHS) Project, Goochland installed a manual rain gauge at Goochland's Central High Complex. After further discussions with VDEM's Flood Intel Unit, it was determined that there would not be enough information if a gauge was installed at Maidens Bridge vs. the one already in place in Cartersville. Therefore, Goochland will not be adding in IFLOW gauges along the James River that borders Goochland. They did state that a new gauge would be coming online in 2024 at Brems Bluff upstream from Goochland that will be helpful. Goochland has participated in two James River flood related exercises involving dams that are upstream from Goochland and would have impacts on Goochland's community if they had a dam emergency. Through both those exercises Goochland validated that they have access to two public alerting systems in the event a mass communication is necessary. The primary approach would be to work with VDEM to send out a WEA broadcast along the James River. The second would be Goochland's CodeRED notification system, which is a free opt in service. Both of these capabilities can be used for all hazards related notifications.
9	Hire full time Environmental Planner to support stormwater management, PlanRVA coordination, environmental planning, conservation easements, community outreach and awareness of various hazards. Add a second Environmental Inspector.	Environmental and Land Development	Goochland is continuing to partner with PlanRVA. No update on staffing plans at this time.	Complete	A full time Environmental Planner was hired.
10	Support Virginia DCR in its efforts to bring all regulated dams into compliance with the Dam Safety Regulations Implement projects and assign responsibility to ensure maintenance/retrofit needs are addressed.	Community Development and Emergency Management Public Safety	Goochland continues to support Virginia DCR of any known dams with safety issues. For example, Lake Killarney Dam has safety issues that DCR made Goochland aware of and Goochland has made efforts with property owners to correct. We will explore what is possible with the Notice of Funding Opportunity for the FY24 High Hazard Potential Dam Grant Program (HHPD). This supports Regional Mitigation Action #7.	Ongoing	Goochland continues to support Virginia DCR in its efforts to bring all regulated dams into compliance with the Dam Safety Regulations. Each year, community awareness promotions are made online and during in person public outreach events to inform the public about the Dam Safety, Flood Prevention and Protection Assistance Fund. Whenever a Virginia DCR engineer informs Emergency Management of local mitigation project or EAP update they are involved with, Goochland Fire-Rescue and Emergency Management gets engaged and provides support. One example is the Lake Killarney Dam, a dam classified as High, where we have participated in site visits and discussions with the property owner(s) over the last several years. The owner is now on target to make an application submission this fall (2024) when the next DCR dam assistance funding is open. Goochland Fire-Rescue and Emergency Services has participated in three dam tabletop exercises and/or EAP reviews (Dover Dam, Timber Ridge, Rivergate, and Wincott Dam) to allow owners to practice EAP procedures. They have also participated in exercises for two dams (Cobbs Creek Reservoir and Gathright Dam) upriver from the James River that borders Goochland.

Greenville					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	Unsure			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	Training for the county employess and what is expected		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Complete development of Continuity of Operations plan.	Public Safety	No updates for 2023.	Ongoing	
2	Complete implementation of citizen notification system.	Public Safety		Ongoing	
3	Consider participating in "Turn Around, Don't Drown" public education campaign.	Public Safety		Not started	
4	Improve GIS layers and track storm damages.	Public Safety		Ongoing	
5	Install high water mark signage along bridges and other structures to indicate dangerous water levels along creeks and rivers in flood-prone areas.	Public Safety, with VDOT		Not started	
6	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes	Planning and Zoning		Ongoing	
7	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, and earthquakes.	Public Safety		Ongoing	
8	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning and Zoning		Not started	
9	Work with state partners and neighboring localities to monitor and implement Next Generation 911 GIS data standards. Explore 911 consolidation with Emporia.	GIS Manager, PDC		Ongoing	

10	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Emergency Services, Planning		Not started	
11	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Emergency Services, Planning		Ongoing	

Hanover					
Survey Questions Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	Yes	New FEMA FIRM Panels and FIS became official on June 20, 2024.		
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	Added new Resiliency section to the Comprehensive Plan (adopted September 2023) (p. 150). Objective EN.5 and Strategy EN.5a relate to the regional hazard mitigation plan (p. 156).		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Department of Public Work, Emergency Management		
Mitigation Actions Update Please update the last column on the right.					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event: • Develop a more advanced flood warning system to increase the ability to locally and specifically forecast flood events and flood depths. Partner with other organizations including the NWS, U.S. Geological Survey (USGS), and local watershed organizations. • Acquire additional resources to build components of a local evacuation plan, including: new IFLOWS gauges, high hazard water crossing elevations for county and state-owned roads, and a flood alert system (using GIS, CodeRed and reverse 911). • Create more targeted flood messages and planning that can be conveyed to citizens. Include dam owners and downstream property owners.	Emergency Management	No updates for 2023.	Ongoing	Due to the Mattawan Dam structure, we have a heightened awareness and our public information messaging was increased during that time. GIS dam location has been added based on USACOE. Participating with FERC and Dominion Energy on potential dam failure and impacts from Lake Anna.
2	Promote the "Turn Around, Don't Drown" public education campaign.	Public Safety and National Weather Service		Ongoing	
3	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes. Develop plan to improve flood insurance coverage in the county, similar to the CRS Plan for Public Involvement. Consider updating flood ordinance from 2008.	Planning and Community Development		Complete	New floodplain ordinance was adopted on 5/22/2024. Updated ordinance was reviewed/approved by DCR and FEMA. Ordinance formally adopts new FIRMs and FIS (effective 6/20/2024) and min. CRS requirements including 1-foot freeboard for residential and non-residential structures in the SFHA.
4	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, tornado, and earthquakes.	Emergency Management		Ongoing	With the use of CERT, we actively participate in community events and distribute preparedness information to citizens. LEPC takes an active role in the general preparedness of citizens.
5	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning and Community Development		Ongoing	Will reach out to DCR/FEMA Region 3 to obtain rep/loss data.

6	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Emergency Management, Public Works, Planning and Community Development		Ongoing	Will continue to assess floodprone properties based on rep/loss data and drainage complaint process. Will continue to maintain public flood control infrastructure including dams, regional stormwater management facilities, public stormwater conveyances. Will continue to provide technical assistance to citizens to implement flood mitigation strategies on floodprone properties.
7	Improve community interoperability when cell services are interrupted. Work with cell service providers and electric utility to ensure power redundancies at cell towers.	Emergency Management		Ongoing	
8	Assemble pre-approved messaging plans for various hazard events. Include focus audience, message, and plan for dissemination. Assemble resources required to execute plans for each hazard.	Emergency Management		Ongoing	

Henrico					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	Emergency Operations Plan and Threat and Hazard Identification and Risk Assessment		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Implement all-inclusive hazard mitigation planning for schools, to include: 1) continue annual site multi-hazard inspections of schools to identify areas for use as tornado safe rooms, assessment of structure vulnerability to earthquake and flood based on floor elevations; 2) prepare Emergency Action Plan for each school; 3) incorporate building plans into GIS to enable first responders entering the schools for any reason; and 4) ensure sheltering sites meet all national shelter standards, have generator power, and are protected from wind and flood. Fund and fulfill required retrofits upon identification.	Emergency Management & Henrico County Public Schools	No updates for 2023.	Ongoing	
2	Continue to implement drainage and stream channel maintenance program.	Public Works		Ongoing	
3	Expand existing comprehensive Public Outreach program through coordination of several ongoing efforts related to hazards: 1) operationalize Community Emergency Resource Team resources to enhance training availability to targeted populations; 2) continue participating in Great Shakeout (workplace safety drills) and other wide-scale disaster drills; 3) continue participation in the StormReady program; 4) continue outreach through brochure distribution and other means (e.g., utility bill messaging, local media, social media) to educate the public regarding preparedness and mitigation; 5) coordinate all messaging with CRS Plan for Public Information (PPI), which focuses on increasing flood insurance countywide; and 6) rebrand Dept. of Public Works outreach for flood and dam safety and tie into other EM initiatives.	Emergency Management, Finance, Public Works, Public Utilities, Public Relations		Ongoing	
4	Upgrade/retrofit existing EOC and identify viable temporary EOCs that would suit the county's purposes. Expand options for public facilities that can receive generator backup and be used as temporary emergency shelters.	Emergency Management		Ongoing	
5	Install electrical hook-ups, wiring, and switches to allow quick connects at county-owned critical facilities, including for example, shelters and pump stations.	Emergency Management		Ongoing	
6	Provide continuous, ongoing training on hazard mitigation and the county's related initiatives to all county staff. Training will enhance ability to integrate mitigation objectives in all county programs.	Public Works, Emergency Management		Ongoing	

7	Expand existing local, regional, and county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, including: 1) build a comprehensive stream gauge network that includes data on water elevation, water quality, precipitation measurement, and dam impoundment levels; 2) updated Emergency Action Plans based on rain gauge data; 3) warning system(s) that alert citizens; and 4) detailed evacuation planning tied to warning system and based on critical road elevations or other road obstructions.	Public Utilities, Public Works, and Emergency Management, USGS		Ongoing	
8	Maintain relationships with Dominion Energy, Comcast, Verizon (and other utility service providers), and VDOT to ensure swift removal of debris and continued maintenance of lines to minimize future debris.	Dominion Energy, DPW, DPU, Fire and Police		Ongoing	
9	Conduct annual review of repetitive loss, severe repetitive loss and all NFIP claims and policy coverage data from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Data analysis will inform other community mitigation efforts.	Public Works, FEMA Region III		Ongoing	
10	Continue participating in the National Flood Insurance Program and Community Rating System, including enforcement of zoning and building codes.	Public Works		Ongoing	
11	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, and stormwater management system improvements.	Emergency Management, Public Utilities, Public Works, Planning, Permit Center, Building Inspections, Police, Schools, Rec & Parks		Ongoing	
12	Prepare countywide hazard-related communications plan. Include general outreach regarding risk, county programs and dam safety. Provide information on regulations and permitting requirements. Tie messaging into the PPI focusing on flood insurance coverage. Prepare an annex to the Emergency Operations Plan that includes prescribed messages for pre- and post-disaster scenarios.	Emergency Management, Public Works, Public Relations		Ongoing	
13	Provide training to realtors, insurance agents, builders, and surveyors, who operate in the county regarding floodplain management policies and procedures. Provide business resilience training to business owners, especially SWaM businesses. Tie messaging into the PPI.	DPW		Ongoing	
14	Provide infrastructure upgrades (roads, water supply, sanitary sewer service) to improve emergency services response times in the county's east end. Ensure water supply is sufficient to meet firefighting needs, and water quality remains safe for residents.	DPW, Public Utilities, Fire		Ongoing	

Hopewell					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	We have experienced staffing changes and policy updated that necessitate training.		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Unsure	Not aware of any integration to other plans.		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Yes	We have experienced staffing changes and policy updated that necessitate training.		
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Integrate mitigation goals into future capital improvement plans to ensure that new city facilities are located out of identified hazard areas. Relocate Fire Station 1/EOC/Headquarters outside of 0.5 mile evacuation zone for industrial plans and as far as possible from train yards/tracks.	Emergency Management	No updates for 2023.	Ongoing	No facilities have been renovated or built.
2	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building ordinances. Update Article XV, Floodplain District, ordinance. Research joining the NFIP Community Rating System.	Development		Ongoing	We are listed as participating on FEMA's website. The Planning & Development Department enforces the zoning and building ordinances. The updated floodplain district went into effect November 14, 2022, and is available in Municode. Planning & Development will participate in the process if Emergency Management is the lead responsible agency.
3	Target FEMA's repetitive loss property, and those in the surrounding repetitive loss area, for specialized outreach and mitigation activities.	Emergency Management		Ongoing	No action at this time.
4	Inspect and clear debris from stormwater drainage system. Increase capacity of Cabin Creek drainage system, including: 1) debris clearing and revetment, and 2) if necessary, re-alignment of channel. Increase capacity of Cattail Creek channel and culverts crossing CSX and Norfolk Southern Railroad to address repeated flooding and damage to infrastructure.	Public Works		Ongoing	Cabin Creek project completed. Cabin creek project under review locally for possible change of scope.
5	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, and an engineering study to identify retrofits to address critical infrastructure vulnerabilities such as the need for generators, and quick-connects at the schools.	Emergency Management, Public Works		Ongoing	No action at this time.
6	Engage owners of the city's industrial businesses to discuss opportunities for retrofitting/hardening their facilities against flooding and severe weather, and developing business resilience plans.	Emergency Management, private owners		Ongoing	No action at this time.
7	Develop a debris removal plan.	DHS; VDEM		Ongoing	No action at this time.

8	Distribute brochures and use other means to educate the public regarding preparedness and mitigation.	Emergency Management		Ongoing	Several preparedness campaigns have occurred in the last year, related to public information and warning, shelter in place procedures, and emergency communications between LEPC members and the community, more are planned.
9	Install NWS-grade tide gauge at confluence of James and Appomattox Rivers. Include acoustic water-level sensor, protective well components, data collection platform, GOES satellite telemetry, enclosure, stand, batteries, antenna, and solar panels. Integrate IPAWS sensors with CodeRed alert system.	Emergency Management		Ongoing	No gauges have been installed. IPAWS is awaiting final approvals from FEMA. We will pursue options in the future to complete this.
10	Implement continuity of operations plan.	Emergency Management		Ongoing	This is to be updated upon the completion of the EOP which is due in Oct 2024. Projected for Dec 2024.
11	Integrate VDEM Crisis Track software (for post-disaster damage assessment) into local GIS platforms for data collection, storage and sharing. Add building plans from critical facilities into GIS to benefit first responders.	Development		Ongoing	CrisisTrack add on package was added this year - training is underway and will be rolled out in Sept to additional staff.
12	Retrofit Hopewell Marina infrastructure to minimize potential impacts from flooding and shoreline erosion, to include: power equipment, pumpout facility, and docks. Develop plan for debris management at the site. Ensure marina rules and regulations require boats to be operational and regularly-maintained, with insurance policies up to date.	Public Works		Ongoing	The City of Hopewell is in the process of revamping the City Marina's process for boat slip rental which will include increased provisions to provide proof of insurance.
13	Formalize process for tax sale properties, with special focus on those in hazardous locations (SFHA, 500-year floodplain, hazardous materials, etc.).	Commissioner of Revenue, Emergency Management, Risk Management		Ongoing	No action at this time.
14	Develop local stormwater management resilience plan and incorporate identified upgrades into the State's Coastal Resilience Plan.	Public Works		Ongoing	
15	Implement State Code requirement to adopt Capital Improvement Budget. As outlined in the Comprehensive Plan, a CIP would identify and prioritize projects for environmental protection, including funding for: critical RPA maintenance, mitigation and remediation; stormwater retrofits on City-owned properties; development of Small Area Plans in key areas of environmental vulnerability, and grant and investment support for high priority pollutant reduction projects.	City Manager, Finance, Public Works		Ongoing	The Capital budget plan was included in the FY2024-2025 budget plan and approved by City Council
16	Enact additional regulations to govern shoreline development, to include: require vegetation as an alternative to manmade structures; require all new shoreline development applications are accompanied by a Shoreline Protective Plan, in accordance with the Virginia Department of Conservation and Recreation Chesapeake Bay Local Assistance Riparian Buffers Modification and Mitigation Guidance Manual; ensure all newly delineated wetlands (resulting from review of development proposals) are added to the city's wetland resource inventory.	Development		Ongoing	No action at this time.
17	Install comprehensive atmospheric monitoring equipment, including but not limited to: air temperature, road temperature, wind speed & direction, rainfall, lightning strike, humidity, road surface and bridge surfaces conditions. This comprehensive weather monitoring system includes remote monitoring of these sensors and conditions, and receives data from all monitors as well as cameras. Remote and automatic activation of automatic early warning system must also be included.	Public Works, Emergency Management		Ongoing	No action at this time.
18	Implement the projects identified in the local stormwater resilience plan. Projects are categorized from short range to long range based on size, cost, complexity and risk area.	Public Works		Ongoing	No action at this time.

Jarratt

Survey Questions *Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.*

	Yes/no	If yes or unsure, please describe here.
1 Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No	
2 Have you collected any new risk information or hazard data since November 2023 ?	No	
3 Do you require additional training, data, or funding to carry out your mitigation strategies?	No	
4 Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No	
5 Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No	
6 Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No	
7 Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No	

Mitigation Actions Update *Please update the yellow columns.*

				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (from Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Zoning and Planning; Fire Department	No updates for 2023.	Ongoing	
2	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Zoning and Planning; Fire Department		Ongoing	

McKenney					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Yes			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA, if any.	Mayor and Administration	No updates for 2023.	Ongoing	
2	Continue to work with VDOT to evaluate and mitigate at-risk roads.	Emergency Management		Ongoing	
3	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, tornado, and earthquakes.	Emergency Management		Ongoing	
4	Increase water/wastewater treatment systems resiliency between Dinwiddie County, the Town of McKenney and two private water systems.	Town officials, Dinwiddie County Water Authority, private system owners		Ongoing	
5	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements.	Town Administration		Ongoing	

6	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Town Administration		Ongoing	
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New Kent					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Yes	Four members of the HMP Work group have recently left the County's employment. Once replaced, they will need to be briefed and incorporated into the process.		
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Due to staff departures and open positions, the HMP Work Group will be reactivated when new staffing positions are filled.		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Emergency Management	No repetitive loss properties to date.	Ongoing	No repetitive loss properties to date.
2	Maintain floodplain protection ordinances and policies that allow the county to fully participate in the National Flood Insurance Program.	Inspections		On hold	
3	Distribute brochures and other literature to educate the public regarding preparedness and mitigation. Use a variety of means to disseminate hazard-related information, including social media and workshops. Prepare transferable lesson plans for delivery in schools and summer camps (Storm Camp). Incorporate the NWS "Turn Around, Don't Drown" campaign.	Emergency Management	NKC maintains public education materials for distribution at main County public interface sites, public events, and outreach opportunities including those of community partners. Social media and the County website convey timely and targeted information.	Ongoing	
4	Encourage new community support facilities, such as banks, gas stations, and pharmacies, to have back-up generators, cell phone charging stations, and electric vehicle charging stations as they are developed.	Emergency Management		Ongoing	
5	Identify and replace vulnerable or undersized structures with bridges, larger culverts or other measures to reduce flood hazards.	Planning, Environmental, General Services		Not started	Primarily a state responsibility.

6	Pursue opportunities and funding to harden local utilities and infrastructure to improve recovery time, including fulfilling any equipment and heavy machinery needs to accomplish this, and retrofitting critical facilities and systems.	Public Utilities, Emergency Management		Ongoing	
7	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects.	Emergency Management		On hold	
8	Identify additional shelter mass care locations.	Emergency Management	NKC continues to assess and project short term shelter needs based on local demand, hazard response guidance, and updates to the state shelter strategy.	Ongoing	
9	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required. Consider countywide flood warning system and evacuation plan.	Emergency Management	On-going public awareness, notification and warning using local, state and federal systems and resources. Currently considering weather monitoring system to provide highly localized County specific weather information.	Ongoing	
10	Create a culture within New Kent County government focused on hazard mitigation objectives: 1) integrate mitigation plan goals and actions into other appropriate planning mechanisms, such as the comprehensive plan and capital improvement plan; 2) review processes and procedures across all functions to ensure objectives are met (Development Review Committee hazard reviews, for example); and 3) regularly brief elected officials on mitigation plan status and priorities. Within Emergency Management, conduct and receive training to stay current on grant opportunities and identify new opportunities for data sharing within the county, region and state. Work to focus on specific structures, neighborhoods and problem areas. Incorporate mitigation objectives into recovery planning and regular exercises.	Emergency Management	The County HMP committee maintains awareness of opportunities to connect HMP to other planning processes.	Ongoing	
11	Periodically inventory existing dams in the county, assess their hazard potential, and seek funding for preparation of dam inundation zone maps. Ensure Emergency Action Plans (EAPs) are up to date, identify necessary maintenance or retrofits, and conduct exercises to reinforce EAP procedures.	Environmental; Emergency Management	Initiated review of dam inventory for accuracy and EAP plans for currency. Conducted one exercise in conjunction with owners of a high-risk dam. Dam Annex to EOP to be revised in 2024.	Ongoing	
12	Promote native and drought-tolerant grass species and landscaping as an alternative to traditional fescue-based lawns.	Emergency Management and County Extension Services		Not started	

Petersburg					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	Yes	Compiling data on flash flood areas in the city and a vulnerability risk analysis.		
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes	Flash flood mitigation and Wilcox Lake Dam stability		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	Yes	Flash Flood Areas		
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Unsure			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Finance/Grants, Public Works, OEM, Public Utilities		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Building Department		Ongoing	
2	Partner with parent-teacher associations and local schools to implement existing curriculum related to natural hazards (e.g., Masters of Disaster, Risk Watch).	Emergency Management		Ongoing	Currently working on providing information and staff training.
3	Complete application for StormReady Program.	Emergency Management		Ongoing	Awaiting NWS
4	Consider participating in FEMA's Community Rating System.	Public Works		Ongoing	Handled by Building officials Office, Economic Development
5	Inspect and clear debris from stormwater drainage system. Partner with VDOT to ensure non-City owned ROWs are also clear.	Public Works		Ongoing	Continuing process quarterly.
6	Finish implementation of Reverse 911 system.	Emergency Management		Complete	
7	Install high water mark signage along bridges and other structures to indicate dangerous water levels along creeks and rivers in flood-prone areas.	Public Works		Ongoing	Installation is on-going, Flood warning gauges installation near completion.

8	Investigate all public utility lines to evaluate their resistance to flood, wind, and winter storm hazards. Retrofit or relocate lines, as necessary, to reduce vulnerabilities.	Public Works		Ongoing	
9	Work with VDOT, private utilities, and/or private homeowners to trim or remove trees that could down power lines.	Public Works		On hold	
10	Distribute brochures and use other means to educate the public regarding preparedness and mitigation.	Emergency Management		Ongoing	
11	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning Department, Tax Assessor	Petersburg is working to compile a list of structures that are designated as repetitive flood losses. There has been limited records of buildings that were significantly damaged due to flooding. The only area that gives concern is E. Bank Street, where flooding is usually caused by the drains not being effectively cleared before a heavy downpour. Also, we have not seen any evidence of sales prices being affected for properties located within flood hazard zones.	Ongoing	This area has been expanded to include Bollingbrook Street, E. Wythe Street, Defense Rd., E. Washington St., and I-85N Exit to Bank St.
12	Install quick connects for generators at critical facilities. Ensure existing generators are working at all times with regular maintenance and inspections. Replace generators, as necessary.	Emergency Management		Ongoing	
13	Work with state partners and neighboring localities to monitor and implement Next Generation 911 GIS data standards.	GIS Manager, Crater PDC		Ongoing	Have completed new installation of CAD System.
14	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Fire-Rescue		Ongoing	Additional properties have been identified as flood prone.
15	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Fire-Rescue	Warning system ("CivicReady") is now in place. Working on public subscribership as well as public notifications. Gauges (being installed statewide) are scheduled to be installed in Spring 2024.	Ongoing	

Powhatan					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	Yes	Flooding of state routes 617 and 313 which cut off access to the state park, corrections facility, and juvenile detention center.		
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Unsure	We are working with VDOT on roadway improvements to prevent future flooding. Funding assistance may be needed.		
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	Unsure	Same incident as above. Could possibly have used some assistance in mitigation options or funding sources.		
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements.	Emergency Management	No updates for 2023.	Ongoing	
2	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes. Continue to require minimum nondisturbance (vegetated) buffers from the edge of all wetlands and streams.	Planning and Community Development		Ongoing	
3	Maximize use of VDEM's Crisis Track system to collect and transmit damage assessment information post-disaster.	Emergency Management		Ongoing	
4	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Increase situational awareness on behalf of citizens and maximize use of social media, Yammer, county employees, CodeRed/R911 to communicate important hazard-related messages.	Emergency Management, County Public Information Officer		Ongoing	
5	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA, if any arise. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning and Community Development		Ongoing	

6	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Emergency Management		Ongoing	
7	Implement measures to reduce wildfire damages, including: 1) mandate Fire Department review for defensible space and wildfire interface in development review process; 2) provide wildfire mitigation training to landowners and other county staff.	Planning and Community Development, VDOF		Ongoing	
8	Finalize Post-Disaster Redevelopment plan that documents plans and procedures for recovery, including development/designation of a Recovery Operations Center.	Emergency Management		Not started	

Prince George					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Continue participating in the National Flood Insurance Program, including enforcement of zoning and building codes.	Building Department	No updates for 2023.	Ongoing	
2	In future updates to the 2018 comprehensive plan, include hazard vulnerability summary and include mitigation actions in the plan.	Planning Department		Ongoing	
3	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Planning and Emergency Management		Ongoing	
4	Develop stormwater master plan to study capacity of existing culverts and other structures to determine if sizing is sufficient for current conditions. Identify and replace vulnerable or undersized culvert stream crossings with bridges or larger culverts to reduce flood hazards, where feasible. Implement program for regular inspections and maintenance of roadside ditches and stream channels.	Public Works		Ongoing	
5	Maximize use of VDEM's Crisis Track system to collect and transmit damage assessment information post-disaster.	Emergency Management		Ongoing	
6	Coordinate drought contingency plans with County Extension Office.	Emergency Management		Ongoing	
7	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Target FEMA's repetitive flood loss properties for specialized outreach and mitigation activities to encourage purchase of flood insurance and flood preparedness measures.	Emergency Management		Ongoing	Prince George has public education event like Survivor day.
8	Hire appropriately-trained personnel for Emergency Management Office, Building Inspections Office, and Zoning Office to ensure adequate levels of staffing to administer county programs.	County Administration and Agency Heads		Ongoing	

9	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Emergency Management		Ongoing	
10	Build new Fire Department burn building.	Emergency Management		Ongoing	Put in for a Grant with Fort Gregg-Adam. For a Full training Facility Classroom and burn building
11	Continue implementation of automatic aid agreement with the City of Hopewell.	Emergency Management		Not started	
12	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Emergency Services, Planning		Ongoing	Implemented new mass Notification system with the police Dpartment (Everbride)

City of Richmond					
Survey Questions Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	Yes	Climate Vulnerability Risk Analysis data - heat, pluvial and fluvial (Office of Sustainability)		
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	RVA Green 2050, Richmond 300, EOP		
5	Since November 2023, has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	Yes			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	Unsure			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	Yes	Budget/Grants, City Administration, DECPR, DPU, DPW, Economic Development, GRTC, OEM, Office of Equitable Transit, PDR, PRCF, RFD/HazMat Coordinator, Sustainability		
Mitigation Actions Update Please update the yellow columns.					
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Re-establish independent Office of Emergency Management.	Emergency Management	Requires city structure change. In November 2022, OEM was reassigned to the Department of Emergency Communications, forming the Department of Emergency Communications, Preparedness and Response (DECPR). OEM staff reports directly to the EM Coordinator/Director of Emergency Communications Preparedness and Response.	Ongoing	In November 2022, OEM was reassigned to the Department of Emergency Communications, forming the Department of Emergency Communications, Preparedness and Response (DECPR). OEM staff reports directly to the EM Coordinator/Director of Emergency Communications Preparedness and Response. The EM Coordinator is now a direct report to the CAO.
2	Establish a dedicated, independent EOC to fully support response and recovery efforts, and new technology for Emergency Management.	City Administration	Discussions continue to develop a Public Safety Campus which will contain a stand alone EOC. Architectural design of the campus as well as identifying space for the Public Safety Departments is in progress. Currently funding is still to be identified. The 16th floor of City Hall, the Office of Emergency Management was reconfigured to support virtual operations and increased readiness activities. The lower level of the Main Library remains the primary EOC and the alternate location is the Richmond Ambulance Authority training facility.	Ongoing	Public Safety Campus development discussions continue. Stand-alone EOC will be an integral part of this facility. Architectural design of the campus as well as identifying space for the Public Safety Departments is in progress. Currently funding is still to be identified. The 16th floor of City Hall, the Office of Emergency Management was reconfigured to support virtual operations and increased readiness activities. The lower level of the Main Library remains the primary EOC and the alternate location is the Richmond Ambulance Authority training facility.

3	Continue to update emergency response plan and educate the public on hazard resiliency and emergency preparedness. Conduct emergency planning, climate, and resiliency engagement and outreach, particularly in communities with high vulnerability to hazards that have been traditionally underrepresented in city planning processes: Black and African American, Hispanic and Latino, lower-income, and those with limited English proficiency.	Office of Sustainability, Emergency Management	OEM conducts a complete comprehensive review of the EOP every 4 years. Current EOP was completed and approved by City Council April 2023. OEM staff continues to provide outreach/educational events citywide at the request of City Council Liaisons, Civic organization and other city departments.	Ongoing	OEM conducts a complete comprehensive review of the EOP every 4 years. Current EOP was completed and approved by City Council April 2023. Edits are made as needed and documented on Record of Changes page. OEM staff continues to provide outreach/educational events citywide at the request of City Council Liaisons, Civic organization and other city departments. We are working with DCR on their Coastal Resilience Master Plan (includes the Piedmont) to bring community meetings to vulnerable areas of the city to gather local data on hazards. New city Hazard Mitigation Working Group was created to facilitate coordination, awareness, and support for hazard mitigation planning/projects across city departments. Office of Sustainability developed a Climate Vulnerability and Risk Assessment tool, including storymap populated with data needed to prioritize historically marginalized communities in mitigation planning/projects.
4	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Public Utilities		Ongoing	City continues to conduct cost analysis of properties damaged by flooding. Updating CRS data to improve CRS rating.
5	Continue participating in the NFIP and identify additional Community Rating System activities to reduce flood risk.	Public Utilities		Ongoing	City continues to conduct cost analysis of properties damaged by flooding. Updating CRS data. Working to improve CRS rating.
6	Improve existing flood warning system to increase the ability to forecast flood events and flood depths. Acquire additional resources to build components of a local evacuation plan, including: improved IFLOWS gauges, high hazard water crossing elevations for city and state-owned roads, and a flood alert system (using GIS and the City's public warning system).	Emergency Management	OEM recently renewed the NWS Storm Ready program through 2027. OEM also recently began participation in the NWS Weather Ready Nation Ambassador program. OEM continues to provide weather radios to city departments as available, however funds to purchase additional radios in the future is reliant on grant fund availability.	Ongoing	Installed an additional iFLOWS gauge (a VDEM-owned gauge with the city having access to the data.) Added a NWS weather station at DEC and two High Water Detection Systems in the City. OEM has renewed its status as a Storm Ready Community and replaced all 16 old Storm Ready signs at city gateways. OEM participates in NWS Weather Ready Nation Ambassador program and continues to provide weather radios to city departments, although ability to restock our inventory is dependent on grant funds.
8	Enhance use of GIS for urgent emergency needs.	Emergency Management, DPW, DIT	DEC is a user of GIS. No GIS personnel incorporated into OEM.	Ongoing	DECPR/OEM has not yet identified or added staffing to manage GIS for urgent emergency needs, however our WebEOC subscription now includes enhanced GIS and our hope is to leverage the GIS capabilities within the emergency communications center to increase use of GIS within the WebEOC platform. The city's Office of Sustainability has developed a Climate Vulnerability and Risk Assessment, including GIS data, to evaluate heat and flooding risks to Richmond communities, built assets, and natural features which will enhance our picture of needs across
9	Expand facility assessment inventory of all City-owned facilities, including primary and secondary schools, to evaluate their resistance to all natural hazards. Identify and implement necessary retrofits or relocations to increase facility hardening, including addressing backup power needs through generators or micro-grids. Invest in data management system to allow local GIS/CAD storage archive of building plans for first responders and emergency planners.	Emergency Management and DPW		Ongoing	The city currently has Emergency Power Generators installed at 55 of the 74 DPW facilities with the majority being whole-house backup-power for 24/7 occupancy facilities and some life-safety only, as well as UPS Emergency Back-up at Mission Critical Facilities, with plans to add whole-facility generators at 9 more city facilities this year. Facilities Management consistently implements protective HVAC methodologies in all facilities - replacing/upgrading RTU's, AHU's and Chillers based on the adopted CIP Budget, and also maintain frequency filtration scheduled PM's. HVAC systems meet CDC & ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers) recommendations based on lessons learned from the COVID-19 pandemic. In addition to the MERV rated filtration we have also installed Plasma Air bi-polar Ionization technology to neutralize indoor air pathogens, pollutants and SARS-CoV-2 viruses in all 74 DPW facilities' air moving systems.

10	Perform hazard prevention activities to increase the protection of public and private structures from natural hazard damage, such as maintenance of floodwall, acquiring, relocating, retrofitting or elevating flood prone property, upgrading public infrastructure near hazard prone areas or other flood control projects.	DPU (floodwall) Emergency Management (other)		Ongoing	Annual USACE Floodwall inspections, including penetration inspections to confirm structural integrity.
11	Provide targeted outreach to business owners (particularly those with hazardous materials stored on site) to discuss hazards and mitigation alternatives.	Richmond Fire and Emergency Services, Economics Portfolio		Ongoing	Richmond Fire and Emergency Services recently named a new HazMat Coordinator who has resumed LEPC activities. We have held 2 quarterly meetings including large business stakeholders, OEM, Fire, state and federal agencies (EPA, DEQ, ODW, et al).
12	Continue to maintain existing Continuity of Operations Plans with emphasis on redundant power needs for specific critical facilities, and mitigation actions to address the water supply system.	Emergency Management; Citywide	Monitoring and training for Continuity of Operations Plans as well a development of a Continuity of Government Plan is ongoing. Earlier during 2023 VDEM hosted several meetings concerning G-Pod Project. A multi-state partnership to manage and provide a proactive and resilient energy infrastructure project intending to reduce or eliminate hardship and suffering following a catastrophic emergency.	Ongoing	Monitoring and training for Continuity of Operations Plans as well a development of a Continuity of Government Plan is ongoing. In 2023 VDEM hosted several meetings concerning the 'G-Pod Project' - a multi-state partnership to manage and provide a proactive and resilient energy infrastructure/equipment to reduce hardship and suffering following a catastrophic emergency.
13	Develop plan for community resilience hubs to serve as "one stop shops" for information on hazard and climate resilience and services before, during, and after hazard-related events. Services provided after hazard-related events may include device charging, shower and clothes washing facilities, and cooling/heating refuge.	Emergency Management; Office of Sustainability	Retained with modifications. Coordination is ongoing.	Ongoing	Retained with modifications. Coordination is ongoing.
14	Integrate equity-centered hazard and climate change planning into all city plans, to include special event planning, operational exercises, and disaster management planning.	Citywide		Ongoing	Coordination is ongoing. RVAGreen 2050 Plan: 15% of plan accomplished, 51% in process.
15	Conduct detailed climate change vulnerability and risk assessments for Richmond's population, natural resources, built assets, and municipal facilities and operations.	Office of Sustainability		Ongoing	The City of Richmond Office of Sustainability worked with Planning Communities LLC to prepare a Climate Vulnerability and Risk Assessment to evaluate heat and flooding risks to Richmond communities, built assets, and natural features. The Assessment report documents the data-driven, science based, and collaborative process used to assess climate vulnerability and risk; explains the processes and data used to assess social and physical vulnerabilities and risks; summarizes and prioritizes the risk and vulnerabilities to communities, natural, and physical assets; and provides a basis for integrating climate risks and vulnerabilities into the RVAGreen 2050 initiative.
16	Increase staffing levels for hazard mitigation planning and implementation in Emergency Management, Public Utilities, Office of Sustainability, and/or other relevant departments. Establish as part of this a cross-departmental team for coordinating citywide hazard and resilience planning and service delivery.	City Administration	Discussions occurring in regards to staff positions and funding. No staff currently dedicated.	Ongoing	No staff yet added or dedicated solely to Hazard Mitigation. City of Richmond Hazard Mitigation Working Group established.
17	Adopt and implement the RVAGreen 2050 equitable climate action and resilience plan. Implement strategies to reduce vulnerability and increase resilience to the impacts of climate change (extreme heat, extreme precipitation, and flooding).	Office of Sustainability	New. Plan adopted, ongoing implementation.	Ongoing	RVAGreen 2050 adopted. 15% of plan accomplished, 51% in process.(OOS) Coordination is ongoing.
18	Upon completion, implement the RVAH2O Green Infrastructure Master Plan to expand green infrastructure on public lands and rights-of-way to improve stormwater quality and reduce runoff through City projects and community partnerships, including public engagement and education programs.	Public Utilities		Ongoing	ARPA grant funds secured (by 2027) Continued implementation of RVAH2O and RVA Clean Water Plan. More information here: https://rvah2o.org/

19	Develop, fund, and implement an urban heat island reduction plan and program with a focus on vulnerable populations and ecosystems as part of implementation of the RVAgreen 2050 equity-centered climate action and resilience plan. Include depaving initiatives and other actions to reduce impervious surface.	Office of Sustainability		Ongoing	Climate Vulnerability and Risk Assessment, including GIS data, to evaluate heat and flooding risks to Richmond communities, built assets, and natural features which will enhance our picture of needs across the city. Storymap available here: https://storymaps.arcgis.com/stories/45436cdbacab48cd8cde46512210620c Urban Heat Island Reduction Plan in development with goal of April 2025 availability for public review.
20	Expand the Community Emergency Response Team (CERT). Hire a full-time coordinator for the CERT program.	Emergency Management	Processing paperwork to complete the hiring of the part time CERT Coordinator with supporting funds from SHSP grant. Discussion to identify a full time position and appropriate funds continues.	Ongoing	Part time CERT Coordinator (FFY22 SHSP grant) has been devoting 20 +/- hours per week to building up CERT program. Funds will be exhausted September/October 2024. Have again applied for SHSP funding. Discussion to identify a full time position and appropriate funds continues.
21	Increase the proportion of Richmonders within a 10-minute walk of a public green space with amenities such as shade structures and tree canopy, public water fountains, and community garden space.	Parks, Recreation, and Community Facilities		Ongoing	Added 4.5 acre Dock Street Park as part of the James River Park System (through conservation easement in partnership with the James River Association and the Capital Region Land Conservancy.) continuing to work to achieve higher levels of service.
22	Increase and enhance the resilience and health of Richmond's urban forest. Increase tree canopy.	Public Works		Ongoing	Richmond was awarded \$6 million USFS grant funds to increase tree canopy (Will add 1800 trees over 5 years.) In process of developing Richmond Tree Plan
23	Adopt an ordinance to require the city to use the Institute for Sustainable Infrastructure Envision framework to assess sustainability, resiliency, and equity in all new infrastructure projects.	Office of Sustainability; Public Works	New, ordinance not adopted.	Ongoing	Ordinance written and submitted. To be adopted by City Council in October 2024
24	Develop Resilient Design Guidelines and require builders to incorporate design measures to reflect a changing climate, increased precipitation and flooding in concert with a public education campaign to convey the benefits of adaptive and resilient buildings.	Office of Sustainability; Planning and Development Review	New, draft plan developed.	Ongoing	Ordinance written and submitted. To be adopted by City Council in October 2024
25	Increase resilience of transit systems as part of implementation of the RVAgreen 2050 equity-centered climate action and resilience plan. Integrate and connect street trees with public transit and biking infrastructure.	Public Works, Office of Sustainability, GRTC, Office of Equitable Transit and Mobility		Ongoing	Fall Line Trail under construction. GRTC Essential Transit Infrastructure Plan now underway to increase amenities to 50-75% of bus stops by 2027
26	Continue to manage industrial processes and waste streams to protect the community and natural resources from hazardous and other materials.	DPW, DPU, Fire and Emergency Services		Ongoing	OOS working with East Richmond Landfill to improve management of debris in part by reducing tree waste by 90% through biochar (a beneficial soil amendment.) Working on Innovation Hub to support circular economic start ups that explore hazmat reuse & critical mineral supplies.
27	Establish a community response fund for direct and immediate assistance to community organizations that provide services to residents to enhance resilience to climate change hazards as part of implementation of the RVAgreen 2050 equity-centered climate action and resilience plan.	Office of Sustainability	New, no fund created.	Complete	Fund established - Neighborhood Climate Resilience Grant Program - \$250,000/year

Stony Creek					
Survey Questions Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update Please update the yellow columns.					
					Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Mayor, with assistance from Crater PDC	No updates for 2023.	Ongoing	
2	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Mayor & Town Clerk		Ongoing	
3	Advocate for a Federal/state project to elevate I-95 bridge and widen channel at Stony Creek.	Mayor		Ongoing	
4	Install high water signage to warn drivers and pedestrians of dangerous crossing during flooding. Use Turn Around, Don't Drown campaign materials to further warn drivers of hazards.	Mayor		Ongoing	

Surry					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements.	Emergency Services/Safety, Utilities	No updates for 2023.	Ongoing	
2	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event.	Emergency Services/Safety, Utilities		Ongoing	

Sussex					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	Yes			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	Yes			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Add trained staff to Emergency Management, Building Inspections, and Planning and Zoning, to include a Certified Floodplain Manager in Planning & Zoning.	Public Safety	No updates for 2023.	Ongoing	Working towards accomplishing goals in 2024. - no updates at this time.
2	Continue participating in the National Flood Insurance Program through: 1) enforce of zoning and building codes; 2) pursue memorandum of agreement between towns and the county to provide flood ordinance administration, as necessary; and, 3) review and update 2009 flood ordinance.	Planning and Zoning, Building Inspections, USACE, Va DCR, Wakefield and Waverly Administration		Ongoing	
3	Develop stormwater master plan to study capacity of existing culverts and other structures to determine if sizing is sufficient for future conditions. Identify and replace vulnerable or undersized culvert stream crossings with bridges or larger culverts to reduce flood hazards, where feasible. Implement program for regular inspections and maintenance of roadside ditches and stream channels.	Public Safety, VDOT		Ongoing	
4	Advocate for a Federal/state project to elevate I-95 bridge and widen channel at Stony Creek.	Public Safety, County Administration		Ongoing	
5	Expand GIS capabilities. Acquisition of detailed floodplain BFEs and roadway crossing elevations are particular areas of interest for evacuation and emergency access planning.	Public Safety, VDOT, USACE, VaDCR		Ongoing	
6	Increase capacity of stormwater system in conjunction with towns of Wakefield and Waverly.	Public Safety		Ongoing	

7	Increase outreach to citizens regarding preparation and response to hazard events, to include: promote the “Turn Around, Don’t Drown” public education campaign; install high water marks at key crossings; social media information ahead of rain/wind/winter storms; temporary digital signage on critical roadways; and other permanent signage to warn of known driving hazards.	Emergency Management, NWS		Ongoing	
8	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements. Target repetitive flood loss areas identified in Section 5, two of which have high risk and social vulnerability.	Public Safety		Ongoing	
9	Distribute brochures and use other means to educate the public regarding preparedness and mitigation. Conduct annual preparedness days for hazards to include floods, wind, tornado, and earthquakes.	Public Safety		Ongoing	
10	Conduct regular review of repetitive loss and severe repetitive flood loss properties from FEMA. Review will include verification of the geographic location of each property and determination if mitigated and by what means. Corrections can be made to FEMA by filing form FEMA AW-501.	Planning and Zoning		Ongoing	
11	Develop and implement detailed tornado response and recovery plan, to include safe rooms for manufactured home parks, and post-event housing considerations for impacted residents (with HUD).	Sussex County/Towns		Ongoing	
12	Develop/update county capital improvements plan to include timelines and appropriations for projects identified under this hazard mitigation planning effort.	Unknown, no response		Ongoing	
13	Reduce physical vulnerability of County staff with offices currently in temporary modular units from wind, snow and rain. Provide freestanding building with structural protections that meet or exceed current building code standards.	County Administration		Ongoing	
14	Establish development criteria and requirements to include density and intensity criteria, cluster subdivision design, stream buffers, impervious surface limits and innovative stormwater management alternatives.	Planning and Zoning		Ongoing	
15	Provide improved healthcare facilities for county residents, to include services before during and after all types of hazard events, to ensure continuity of operations. Options may include coordination and consolidation of existing health facilities and other county functions.	Health Department, Public Safety		Ongoing	

Wakefield					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	No			
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No			
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				Please select from drop down.	Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities, mapping to determine detailed flood hazards, and stormwater management system improvements.	Emergency Services/Safety, Utilities	No updates for 2023.	Complete	
2	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event.	Emergency Services/Safety, Utilities		Complete	We also have an all-call system that we can notify our residents. The only caveat is we need current phone numbers.

Waverly					
Survey Questions <i>Please answer the following questions. Afterward, continue to the "Mitigation Actions Update" section.</i>					
		Yes/no	If yes or unsure, please describe here.		
1	Have any hazard events occurred between November 2023 and May 2024 that need to be added to the AHMP?	No			
2	Have you collected any new risk information or hazard data since November 2023 ?	No			
3	Do you require additional training, data, or funding to carry out your mitigation strategies?	No			
4	Has your locality integrated data and actions from the AHMP into other local plans and/or programs?	Yes	Work closely with the County's Chief of Emergency Services		
5	Since November 2023 , has your locality experienced any challenges where technical assistance from the State or FEMA Region 3 would be helpful?	No			
6	Have there been any major changes in staffing or funding in your locality that impact your ability to carry out your mitigation strategies since November 2023 ?	No			
7	Did you appoint a specific team for this hazard mitigation update process? If yes, please describe what departments were included in this team.	No	Town of Waverly Public Works		
Mitigation Actions Update <i>Please update the yellow columns.</i>					
				<i>Please select from drop down.</i>	<i>Please add any updated or additional mitigation actions in this column. If there are no updates, you may leave this section blank.</i>
#	Mitigation Action Description (original from 2022 HMP)	Lead Agency/Department Responsible	2023 Annual Update (Nov 2023)	Current Status	2024 Update (Nov 2023 - May 2024)
1	Protect public and private structures from natural hazard damage, including acquiring, relocating, retrofitting or elevating floodprone property. This action may include minor structural flood control projects, retrofits to address critical infrastructure and facilities and stormwater management system improvements.	Mayor and Town Administration	No updates for 2023.	Ongoing	
2	Use available statewide, regional, or county advanced warning systems, weather gauging systems, evacuation planning tools, and public information resources to prepare community officials and residents in case of a hazard event. Acquire additional resources to supplement these systems, as required.	Mayor and Town Administration		Ongoing	

Conclusion

Since the adoption of the 2022 update, no amendments have been made to the Richmond-Crater Multi-Hazard Mitigation Plan. The 2022 Plan is due for full evaluation, update, and submission to the Virginia Department of Emergency Management and the Federal Emergency Management Agency in 2027. In the fall of 2024, PlanRVA and Crater PDC began planning the process of updating the 2022 Plan.

In 2025, PlanRVA will continue to collaborate with Crater PDC and study area localities to discuss and coordinate mitigation action implementation, hazard and vulnerability data, and funding opportunities.