2639 - CID510083_Town of West Point_CFPF

Application Details

Funding Opportunity:	2335-Virginia Community Flood Preparedness Fund - Capacity Building/Planning Grants - CY24 Round 5			
Funding Opportunity Due Date:	Mar 28, 2025 11:59 PM			
Program Area:	Virginia Community Flood Preparedness Fund			
Status:	Under Review			
Stage:	Final Application			
Initial Submit Date:	Jan 23, 2025 9:22 PM			
Initially Submitted By:	Jackie Rickards			
Last Submit Date:				
Last Submitted By:				

Contact Information

Primary Contact Information

Active User*:	Yes		
Туре:	External User		
Name*:	Ms.JackieMiddle NameRickardsSalutationFirst NameLast Name		
Title:	Senior Planning Project Manager		
Email*:	jrickards@mppdc.com		
Address*:	PO Box 399		
	4521 Lewis B. Puller Memorial Highway		
	ShacklefordsVirginia23156CityState/ProvincePostal Code/Zip		
Phone*:	(804) 785-8100 Ext. Phone ####-####		
Fax:	#######################################		
Comments:			
Organization Information			
Status*:	Approved		
Name*:	Middle Peninsula Planning District Commission		
Organization Type*:	Local Government - PDC		
Tax ID*:			
Unique Entity Identifier (UEI)*:			
Organization Website:	https://www.mppdc.com/		

	Saluda Virginia City State/Province	23149 e Postal Code/Zip
Phone*:	(804) 758-2311 Ext. ####-#####	
Fax:	####-##########	
Benefactor:		
Vendor ID:		
Comments:		

VCFPF Applicant Information

Project Description

Name of Local Government*:	Middle Peninsula Planning District Commission			
Your locality's CID number can be found at the following link: Community Status Book Report				
NFIP/DCR Community Identification Number (CID)*:	510083			
If a state or federally recognized Indian tribe,				
Name of Tribe:				
Authorized Individual*:	Lewis Lawrence First Name Last Name			
Mailing Address*:	P.O. Box 399 Address Line 1			
	4521 Lewis B. Puller Memorial Highway Address Line 2			
	ShacklefordsVirginia23156CityStateZip Code			
Telephone Number*:	804-785-8100			
Cell Phone Number*:	804-832-6747			
Email*:	llawrence@mppdc.com			
Is the contact person different than the authorized individual?				
Contact Person*:	Yes			
Contact:	Jackie Rickards First Name Last Name			
	P.O. Box 399 Address Line 1			
	4521 Lewis B. Puller Memorial Highway Address Line 2			
	ShacklefordsVirginia23156CityStateZip Code			
Telephone Number:	804-785-8100			
Cell Phone Number:	215-264-6451			
Email Address:	jrickards@mppdc.com			

Enter a description of the project for which you are applying to this funding opportunity

Project Description*:

This proposal requests funding to develop a comprehensive Town of West Point Coastal Resilience Master Plan for the historic district,

surrounding shorelines, and adjacent papermill along the Pamunkey River. The plan will identify a prioritized list of specific flood mitigation measures ranging from policy development, capacity building, preparedness activities, recovery planning, and physical adaptation projects. Low-income geographic area means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Is the proposal in this application intended to benefit a low-income geographic area as defined above?

Benefit a low-income geographic area*:	Yes
Information regarding your census block(s) can be	found at census.gov
Census Block(s) Where Project will Occur*:	9503
Is Project Located in an NFIP Participating Community?*:	Yes
Is Project Located in a Special Flood Hazard Area?*:	Yes
Flood Zone(s) (if applicable):	VE & AE
Flood Insurance Rate Map Number(s) (if applicable):	51101C0293F & 51115C0095E

Eligibility - Round 4

Eligibility

Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?

Local Government*:	Yes	
	Yes - Eligible for consideration	
	No - Not eligible for consideration	
If the applicant is not a town, city, or county	; are letters of support from all affected local governments included in this application?	
Letters of Support*:	Yes	
	Yes - Eligible for consideration	
	No - Not eligible for consideration	
Has this or any portion of this project been	included in any application or program previously funded by the Department?	
Previously Funded*:	No	
	Yes - Not eligible for consideration	
	No - Eligible for consideration	
Has the applicant provided evidence of an	ability to provide the required matching funds?	
Evidence of Match Funds*:	Yes	
	Yes - Eligible for consideration	
	No - Not eligible for consideration	
	N/A - Match not required	

Scoring Criteria for Capacity Building & Planning - Round 4

Scoring

Eligible Capacity Building and Planning Activities (Select all that apply) ? Maximum 100 points. To make multiple selections, Hold CTRL and click the desired items.

Capacity Building and Planning*:

Resilience Plan Development, Resource assessments, planning, strategies, and development - Stakeholder engagement and strategies., Revisions to existing resilience plans and integration of comprehensive and hazard mitigation plans
Is the project area socially vulnerable? (based on ADAPT Virginia?s Social Vulnerability Index Score)
Social Vulnerability Scoring:
Very High Social Vulnerability (More than 1.5)
High Social Vulnerability (1.0 to 1.5)
Moderate Social Vulnerability (0.0 to 1.0)
Low Social Vulnerability (-1.0 to 0.0)

Socially Vulnerable*:

Moderate Social Vulnerability (0.0 to 1.0)

Is the proposed project part of an effort to join or remedy the community?s probation or suspension from the NFP?

No

Yes

NFIP*:

Is the proposed project in a low-income geographic area as defined below?

"Low-income geographic area" means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Low-Income Geographic Area*:

Does this project provide ?community scale? benefits?

Community Scale Benefits*:

More than one census block

Comments:

Scope of Work and Budget Narrative - Capacity Building and Planning - Round 4

Scope of Work - General Information

Upload your Scope of Work Please refer to Part IV, Section B. of the grant manual for guidance on how to create your scope of work

Scope of Work Attachment*:

A and B. West Point SCOPE OF WORK 1.pdf

Comments:

Scope of work for the Town of West Point Resiliency Master Plan

Budget Narrative

Budget Narrative Attachment*:

C. West Point_BUDGET NARRATIVE 4.pdf

Comments:

Budget Narrative for this project.

Scope of Work Supporting Information - Capacity Building and Planning

Scope of Work Supporting Information

Describe identified resource needs including financial, human, technical assistance, and training needs

Resource need identification*:

There is a need for a more coordinated mitigation effort that will comprehensively address the Town of West Points current and future mitigation needs. There have been individual projects with the Town that addresses focused issue, but this will not provide a long-term vision and direction for the Town of West Point to meet the community's mitigation. The development of a resiliency plan will focus on collecting, compiling and sharing data and align project activities. With a comprehensive plan, the Town will be able to move toward implementation in a cost-effective manner. While this Plan will identify the mitigation needs and potential projects within the Town this will simultaneously shine light on the technical needs, including staff and contractors. Finally, this plan will prioritize mitigation projects which is needed to successfully compete for funding opportunities. The Town of West Point and MPPDC staff do not have the current capacity to develop a Coastal Resilience Plan. Financial resources are needed to hire human resources to conduct this work.

Describe the plan for developing, increasing, or strengthening knowledge, skills and abilities of existing or new staff. This may include training of existing staff, hiring personnel, contracting consultants or advisors

Development of Existing or New Staff*:

The MPPDC staff plans to contract with expert consultants to conduct this work. Contracting with a consultant for this work is the most financially responsible method to complete this short-term project and avoid creating unsustainable staff expenses.

The MPPDC staff plans to leverage the investment in this Coastal Resilience Plan to demonstrate due diligence when applying for future state and federal grants or loans to implement the mitigation activities recommended in the plan. Much of the background, vulnerability information, observed impacts, and potential solutions described in the plan can be re-used in grant applications to tell the local story and make the case for implementation funding. Funding requests also tend to be more successful if they are for a project previously identified in a local or regional plan, such as a hazard mitigation plan or flood resilience plan.

Where capacity is limited by funding, what strategies will be developed to increase resources in the local government? (This may include work with nongovernmental organization, or applying for grants, loans, or other funding sources)

Resource Development Strategies*:

The development of this plan will be able to coordinate projects needed within the Town which will create a comprehensive understanding of mitigation needs and associated costs. This also offers a cost-effective approach to implementing a community-wide mitigation efforts. Describe policy management and/or development plans

Policy management and/or development*:

This proposal requests funding to develop a comprehensive Town of West Point Coastal Resilience Master Plan for the historic district, surrounding shorelines, and adjacent papermill along the Pamunkey River. The proposed plan will build upon the MPPDC All Hazard Mitigation Plan (AHMP) and the Virginia Coastal Resilience Master Plan (CRMP) with locally-specific details on assets, threats, vulnerability, and risks. The plan will identify a prioritized list of specific flood mitigation measures ranging from policy development, capacity building, preparedness activities, recovery planning, and physical adaptation projects. Priority will be given for addressing critical assets, utilizing cost-effective nature-based solutions, and implementing community-wide approaches. Solutions may include improved stormwater management, temporary or permanent flood barriers, or the establishment of effective emergency response protocols. Legal analysis of the various solution alternatives will be conducted with outcomes incorporated into the plan?s recommendations. By developing a Town of West Point Coastal Resilience Master Plan, the Town can prepare approaches to solve the problem of persistent and increasing flooding threating buildings, historical assets, mobility, sewage collection, the natural environment, public health and safety, and the economy. This will also become critical when pursing funding for mitigation implementation. **Describe plans for stakeholder identification, outreach, and education strategies**

Stakeholder identification, outreach, and education strategies*:

Local residents, businesses, and other stakeholders that would need to be involved in mitigation activities will be identified. Planning will evaluate mitigation activity viability based on land ownership and other factors. Contracted consultant will be responsible for stakeholder identification, outreach, and education strategies. They will facilitate public outreach workshops. The plan will serve as an educational resource and technical reference for local residents, businesses, community-based organizations, and other stakeholders to increase the general flood resilience knowledge base. It will reference the Virginia Coastal Resilience Master Plan and other plans to help people in this historic district understand their local options in light of the regional and statewide resources.

Budget

Budget Summary

Grant Matching Requirement*:

LOW INCOME - Planning and Capacity Building - Fund 90%/Match 10%

*Match requirements for Planning and Capacity Building in low-income geographic areas will not require match for applications requesting less than \$3,000. Is a match waiver being requested?

Match Waiver Request Note: only low-income communities are eligible for a match waiver. *:	No
I certify that my project is in a low-income geographic area:	Yes
Total Project Amount (Request + Match)*:	\$1,413,304.00 **This amount should equal the sum of your request and match figures
REQUIRED Match Percentage Amount:	\$141.330.40

BUDGET TOTALS

Before submitting your application be sure that you meet the match requirements for your project type.			
Match Percentage:	10.00% Verify that your match percentage matches your required match percentage amount above.		
Total Requested Fund Amount:	\$1,271,974.00		
Total Match Amount:	\$141,330.40		
TOTAL:	\$1,413,304.40		
Personnel			

Description

Requested Fund Amount

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Supplies
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Construction
Description Requested Fund Amount Match Amount Match Source
No Data for Table
Contracts
Description Requested Fund Amount Match Amount Match Source
Legal Services \$20,000.00 \$0.00
Procured Consultant Services for plan development \$1,251,974.00 \$0.00
Vatching Funds - \$0.00 \$141,330.40 WPPDC - VPA VWVF Dredged Waterial Wanagment Waster Plan
\$1,271,974.00 \$141,330.40
Pre-Award and Startup Costs
Description Requested Fund Amount Match Amount Match Source
No Data for Table
Other Direct Costs
Description Requested Fun Amount Match Amount Match Source
No Data for Table
Supporting Documentation - General

					Upload
Named Attachment	Required Description	File Name	Туре	Size	Date
Detailed map of the project area(s) (Projects/Studies)	Map of the project area in the Town of West Point	Town of West Point - Map of Project Area.pdf	pdf	301 KB	01/22/2025 11:34 AM
FIRMette of the project area(s) (Projects/Studies)	Town of West Point FIRMette	Town of West Point - FIRMette.pdf	pdf	369 KB	01/22/2025 11:33 AM
Historic flood damage data and/or images (Projects/Studies)	Historical Flood Damage that impacted the Town of West Point	Town of West Point - Historical Flood Damage.pdf	pdf	489 KB	01/22/2025 11:35 AM
A link to or a copy of the current floodplain ordinance	Town of West Point Floodplain Ordinance	Town of West Point _ Floodplain Ordinance.pdf	pdf	9 MB	01/22/2025 11:41 AM
Maintenance and management plan for project					
A link to or a copy of the current hazard mitigation plan	Link to the Mddle Peninsula Regional Al Hazards Mtigation Plan.	AHMP Link.pdf	pdf	21 KB	01/23/2025 09:18 PM
A link to or a copy of the current comprehensive plan	Link to the Town of West Point's Comprehensive Plan	Link to Comprehensive Plan.pdf	pdf	32 KB	01/22/2025 11:32 AM
Social vulnerability index score(s) for the project area	Social Vulnerability Index Score for the Town of West Point	Town of West Point - Social Vulnerability Index.pdf	pdf	304 KB	01/22/2025 11:50 AM
Authorization to request funding from the Fund from governing body or chief executive of the local government	Letter of Support and Authorization to pursue funding	Town of West Point - Letter of Support_Authorization.pdf	pdf	1 MB	01/21/2025 09:00 PM
Signed pledge agreement from each contributing organization	Match Commitment letter from the MPPDC	MPPDC_Match Committment Letter.pdf	pdf	1 MB	01/22/2025 11:30 AM
Maintenance Plan					

Benefit-cost analysis must be submitted with project applications over \$2,000,000. in lieu of using the FEMA benefit-cost analysis tool, applicants may submit a narrative to describe in detail the cost benefits and value. The narrative must explicitly indicate the risk reduction benefits of a flood mitigation project and compares those benefits to its cost-effectiveness.

Benefit Cost Analysis

Other Relevant Attachments

Connection to other projects at the Attachment 1. Connection to Other MPPDC. Projects_West Point Resiliency Efforts.pdf pdf 613 01/22/2025 KB 02:00 PM

Letters of Support

Description	File Name	Туре	Size	Upload Date
Endorsement from a Certified Floodplain Manager	Attachment 2. Proximity to Floodplain.pdf	pdf	514 KB	01/22/2025 11:36 AM
Letter for Support from Gloucester County	Gloucester County_Letter of Support to DCR for Flood Fund Applications.pdf	pdf	168 KB	01/21/2025 08:52 PM
Letter of Support from Essex County	Essex County_Letter of Support to MPPDC_10082024.pdf	pdf	46 KB	01/21/2025 08:53 PM
Letter of Support from King & Queen County	King Queen County_Support Letter for Fight the Flood - Round 5.pdf	pdf	145 KB	01/21/2025 08:52 PM
Letter of Support from King William County	King WilliamCounty_Letter of Support to MPPDC_10082024.pdf	pdf	1 MB	01/21/2025 08:51 PM
Letter of Support from Mathews County	Mathews_CFPF Application Support Letter.pdf	pdf	355 KB	01/21/2025 08:51 PM
Letter of Support from Mddlesex County	Middlesex County_Support letter for MPPDC_FTF_flood.pdf	pdf	322 KB	01/21/2025 08:50 PM
Letter of Support from the Town of Tappahannock	Town of Tappahanock_Letter Supporting - Round 5.pdf	pdf	100 KB	01/21/2025 08:50 PM
Letter of Support from the Town of Urbanna	Town of Urbanna Letter of Support Rnd 5.pdf	pdf	153 KB	01/21/2025 08:49 PM
Resiliency Plan guidance from DCR that the contractor will follow upon funding.	Attachment 3. DCR CFPF Elements of Resilience Plans.pdf	pdf	210 KB	01/22/2025 02:01 PM



A. Application Form for Grant and Loan Requests for All Categories

Virginia Department of Conservation and Recreation Virginia Community Flood Preparedness Fund Grant Program

Title: Town of West Point Coastal Resilience Master Plan

Name of Local Government: Middle Peninsula Planning District Commission

Category Being Applied for (check one):

☑ Capacity Building/Planning

□ Project

□ Study

NFIP/DCR Community Identification Number (CID): <u>510083</u>

Name of Authorized Official and Title: ___Lewis Lawrence, Executive Director ___

Signature of Authoriz	ed Official:	14 - Z - Z		
Mailing Address (1):	<u>PO Box 399</u>			
Mailing Address (2):	<u>4521 Lewis B. P</u>	uller Memorial	Highway	
City: Shacklefords	State: <u>VA</u>	Zip: <u>23156</u>		
Telephone Number:	<u>(804) 785-8100</u>	Cell Pl	hone Number: ()	_
Email Address: Ilawre	ence@mppdc.com	<u>1</u>		
Contact and Title (If o	lifferent from aut	horized official	I)· Jackie Rickards Planner	

contact and this (if t		
Mailing Address (1):	<u>PO Box 399</u>	
Mailing Address (2):	<u>4521 Lewis B. Pu</u>	uller Memorial Highway
City: Shacklefords	State: VA	Zip: <u>23156</u>
Telephone Number:	<u>(804) 785-8100</u>	Cell Phone Number: ()
Email Address: _jrick	ards@mppdc.com	

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes X NO _____

Categories (select applicable activities that will be included in the project and used for scoring criterion):

Capacity Building and Planning Grants

- □ Floodplain Staff Capacity.
- 🗵 Resilience Plan Development
 - □ Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.
 - Resource assessments, planning, strategies, and development.
 - o Policy management and/or development.
 - o Stakeholder engagement and strategies.
- □ Other: _____

Location of Project or Activity (Include Maps): <u>Town of West Point</u>, VA (Please see the attached corresponding maps for this application)

CID510083_Town_of_West_Point_CFPF MPPDC - Town of West Point Coastal Resilience Master Plan			
NFIP Community Identification Number (CID#): <u>510083</u>			
Is Project Located in an NFIP Participating Community?		<u>X</u> Yes	□ No
Is Project Located in a Special Flood Hazard Area?	<u>X</u> Yes	□ No	D
Flood Zone(s) (If Applicable): <u>AE</u>			
Flood Insurance Rate Map Number(s) (If Applicable): <u>51101C0291F</u> a	ind 51	<u>101C02</u>	<u>93F</u>
Total Cost of Project: <u>\$1,413,304</u>			
Total Amount Requested: <u>\$1,271,974</u>			
Amount Requested as Grant: <u>\$1,271,974</u>			
For projects, planning, capacity building, and studies in low-income g requesting that match be waived? Yes X No 	geogra	phic are	eas: Are you
A. SCOPE OF WORK NARRATIVE			

General Requirements

1. Needs:

a. Specific problem being solved (not just that flooding exists or may occur in the future).

This proposal requests funding to develop a comprehensive Town of West Point Coastal Resilience Master Plan for the historic district, surrounding shorelines, and adjacent papermill along the Pamunkey River. The proposed plan will build upon the MPPDC All Hazard Mitigation Plan (AHMP) and the Virginia Coastal Resilience Master Plan (CRMP) with locally-specific details on assets, threats, vulnerability, and risks. The plan will identify a prioritized list of specific flood mitigation measures ranging from policy development, capacity building, preparedness activities, recovery planning, and physical adaptation projects. Priority will be given for addressing critical assets, utilizing cost-effective nature-based solutions, and implementing community-wide approaches. Solutions may include improved stormwater management, temporary or permanent flood barriers, or the establishment of effective emergency response protocols. Legal analysis of the various solution alternatives will be conducted with outcomes incorporated into the plan's recommendations.

By developing a Town of West Point Coastal Resilience Master Plan, the Town can prepare approaches to solve the problem of persistent and increasing flooding threating buildings, historical assets, mobility, sewage collection, the natural environment, public health and safety, and the economy. This will also become critical when pursing funding for mitigation implementation.

The Town of West Point is subject to flash flooding, one of the highest rates of sea-level rise on the Atlantic seaboard, and increasing tidal flooding and storm surge due to climate change. This threatens:

• Buildings. There are 81 buildings in the Town with flood insurance policies, and nine are repetitive loss properties (eight single family homes and one non-residential building). Since 1978, there

MPPDC - Town of West Point Coastal Resilience Master Plan

have been 78 claims totaling over \$2 million.

- Historical assets. The West Point Historic District was listed on the National Register of Historic Places in 1996. The Town is home to four pre-Civil War homes that survived attack by the Union forces. It is also home to 75 historic buildings noted for their variety of late-19th- and early-20th-century styles and building types.
- Mobility. The flooding closes roads and prevents people from getting to jobs or school. In addition, there are limited evacuation routes to support sudden emergencies like flooding within the area.
- Sewage collection. During storms a Hampton Roads Sanitation District (HRSD)-owned pumping station floods, making it difficult to contain, convey, and treat sewage.
- The natural environment. Coastal erosion is erasing habitats. Saltwater intrusion into coastal freshwater/low salinity water bodies also represents a significant threat to habitats.
- Public health and safety. Saltwater intrusion into groundwater aquifers represents a significant threat to the people and property.
- Economy. The Middle Peninsula Planning District Commission (MPPDC) Comprehensive Economic Development Strategy (CEDS) update in 2023 identified the most significant threat to the regional economy as "climate change and sea-level rise". The economy is dominated by "Blue – Green" industry sectors, meaning many of the region's largest private sector employers are all directly connected to the natural resource base of the region. Specifically, the largest employer in King William County, the Alliance Group Rock Tenn, a pulp-paper manufacturing plant, is in the Town of West Point and relies on river barges for transport. The Town also has a working waterfront and plans for a future marina. Finally, as floods impact the properties within the Town this will also impact the tax-base and revenue generating potential of the Town.

The Town of West Point (**Figure 1**) is located at the southeastern end of King William County (**Figure 2**) in the coastal zone of Virginia. The proposed planning area encompasses the Town peninsula on the southeast side of Rt. 33 (locally known as 14th Street and the W. Lewis B. Puller Memorial Highway) to the Pamunkey and Mattaponi Rivers and the papermill immediately to the northwest of Rt.33 along the Pamunkey River and bound by Main Street and Dupont Street (**Figure 3**).



Figure 1 - Town of West Point



Figure 2 - King William County (outlined in red)



Figure 3 - Town of West Point Coastal Resilience Planning Area (outlined in red)

The West Point Historic District, with 75 historic residential, commercial, and institutional buildings, is entirely located within the proposed study area (**Figure 4**).



Figure 4. West Point Historic District (outlined in brown)

b. Factors which contribute to the identified problem.

Flooding, and its impacts, are exacerbated by the low land elevation, land subsidence, inadequate stormwater drainage infrastructure, sea level rise, rising tides, and storm surges.

The Town of West Point lies at the extreme southern end of King William County where the Mattaponi and Pamunkey Rivers join to form the York River. The Town is relatively flat, with large sections comprised of tidal marshes, particularly along the Mattaponi River. The gently sloping, low elevation uplands and wetlands immediately adjacent to or in close proximity to tidal waters are at risk to increased frequency of high-tide flooding and gradual inundation from rising sea levels.

In addition, the Town of West Point has the highest land subsidence rates in the Middle Peninsula, due to major water withdraws from the WestRock papermill, where subsidence is up to 0.15 in/yr. As such, the Commonwealth designated King William County, including the Town of West Point, as a Groundwater Management Area (GMA) in 1999. King William County is included in the Eastern Virginia GMA, one of two GMAs in the state.

There is limited information available regarding the design, functionality, and condition of the existing stormwater system in the historic district, which makes it difficult for the Town to identify specific sections that require repair or replacement.

The Town of West Point is suffering from one of the highest rates of sea-level rise on the Atlantic seaboard and experiencing increasing effects from coastal and tidal flooding and storm surge. The flooding is projected to increase in the future due to the changing climate.

c. Why the project is needed either locally or regionally.

There are and have been several individual projects in and around the Town related to flood mitigation. These projects are conducted by various state and local entities and typically make use of the limited local data available. A more coordinated effort to collect, compile, and share data and align project activities would be more cost-effective and will have a more beneficial impact on the Town.

For example, in 2022, the MPPDC was funded through the Virginia Department of Conservation of Recreation's Community Flood Preparedness Fund (CFPF) (Project # CFPF-21-02-02) to assist the Town of West Point with a combination Hydrologic and Hydraulic (H&H) Study and Structural Design and Level of Service study to address ongoing flooding issues at a publicly owned bridge that provides access to a 348-acre parcel owned by the Town of West Point. This is the largest tract of land owned by a public entity that is zoned for industrial development and within a federally designated Opportunity Zone in the Middle Peninsula and Northern Neck region of Virginia. The bridge crosses a tidal stream in flood zone AE and is the only public road entry and exit to this public complex. To supplement CFPF efforts, the MPPDC was funded through GO Virginia to assess the site needs to raise the Virginia Economic Development Partnership (VEDP) Business Ready Site from a Tier 2 to a Tier 3. Upon completion of both projects, the Town of West Point was provided a bridge inspection report and the H&H Study of the project location. This offered the Town critical information to mitigate against flood loss. As a result, the Town selected to move forward with the design for box culverts which will provide additional elevation of the bridge structure and allow for plantings to be incorporated along the base of the box culverts.

During 2024, the Town of West Point worked with the Virginia Department of Transportation (VDOT) to study recurrent flooding along Kirby Street (**Figure 5**) in the historic downtown district. This location

experiences very frequent flooding and road closures as result of combined tidal flooding and pluvial flooding. The completed H&H study assessed the drainage characteristics of the roadside ditches, ditch outfalls at the Pamunkey River, and stormwater infrastructure. Problems were identified with the gradient of the ditch network and elevation of the ditch outfalls, and various solutions were analyzed. After considering various alternatives for solutions, the Town and VDOT initiated discussions for strategies to fund the work. It is anticipated that this study will be an extremely useful contribution to the proposed planning project and can serve as template for similar studies at recurrent flooding locations around the Town under the proposed project.



Figure 5 - General Project Limits for the VDOT Hydrologic and Hydraulic Analysis

VDOT has also started a Strategically Targeted Affordable Roadway Solutions (STARS) study on Rt. 30 (West Point Main Street) as the intersection of Rt. 30 and Rt. 33 are projected to be underwater by 2100.

The Hampton Roads Sanitation District (HRSD) owns and operates the Town's sewerage system including pipelines and two sewer pump stations. HRSD has independently conducted improvements to these assets.

The MPPDC Hazard Mitigation Plan (HMP) identifies multiple goals, objectives, and strategies that Town strives to address:

Goal 1: Prevent future losses resulting from natural hazard events.

- *Objective 1.1: Provide protection for future development to the greatest extent possible.*
 - Strategy 1.1.1: Reduce or eliminate flood damage to residential/business structures that are highly vulnerable for continual flood damage.
 - Strategy 1.1.2: Flood proof, to the greatest extent possible, existing water dependent commercial buildings against flooding, including surge velocities (i.e., "wave runup"), to ensure continuity and viability of the seafood industry and other water dependent businesses.
 - Strategy 1.1.3: Protect public buildings and public infrastructure from flood waters

MPPDC - Town of West Point Coastal Resilience Master Plan

resulting from 100-year flood storm events.

- Strategy 1.1.5: Improve/maintain main evacuation routes (Table 101) used by Middle Peninsula residents and Tidewater residents evacuating severe coastal weather events and add evacuation route insignia to public streets that are part of the hurricane evacuation route.
- Strategy 1.1.15: Promote coastal construction techniques that will minimize soil erosion and shoreline damage caused by coastal storm surges.

Several other relevant MPPDC projects are listed in Attachment 1.

In general, the Town of West Point and the larger region would benefit from the development of a comprehensive resilience plan as it will pinpoint specific problem areas and determine appropriate mitigation measures in a coordinated, multi-disciplinary, integrated approach. The resulting measures may be transferable to the many other communities experiencing similar concerns. The mitigation measures recommended in the plan will guide Town staff and other decision makers to determine a path forward in preparing for increased flooding in the area. Without sufficient mitigation efforts, flooding and drainage issues will continue to impact the historic district and businesses and contribute to the degradation of infrastructure, residential homes, the environment, and the local economy.

d. How the project decreases the risk to public safety through flood risk reduction.

The Town contains a wide variety of commercial, residential, faith-based, and recreational spaces within the historic district. Persistent flooding poses significant risks to the residents and businesses of the Town, such as, but not limited to, water damage making buildings unsafe, illness from sewer overflows or salinization of drinking water, and lost productivity due to washed out roads or vehicles. Additionally, there are limited evacuation routes within the area for use in sudden emergencies like flooding.

The development of a comprehensive resilience plan will allow the Town to determine where weaknesses in the stormwater system and drainage exist and where the impacts of tidal flooding will occur. The Town will strategize potential solutions, consider a legal analysis for various solution alternatives, and identify resources for implementing mitigation measures to reduce flooding and protect its citizens, infrastructure, and the local economy.

e. How the project protects or conserves natural resources.

The Town is located where the Mattaponi and Pamunkey Rivers join to form the York River. It is surrounded by tidal shorelines and habitats. Coastal erosion and saltwater intrusion into coastal freshwater/low salinity water bodies are threatening these habitats.

The Town is committed to protecting and conserving these natural resources for the sake of coastal protection, habitats, quality of life, and the economy. The Town has developed a series of kayak and canoe launching facilities, and they are working with the adjacent localities to establish a trail along the York River watershed (Mattaponi, Pamunkey, and York Rivers). The economy is dominated by "Blue – Green" industry sectors, meaning many of the region's largest private sector employers are all directly connected to the natural resource base of the region, from the papermill with river barges to boating and fishing industries.

The plan will prioritize cost-effective nature-based solutions and community-wide approaches. Shoreline improvements to dissipate tidal energy will protect the onshore environment and Town. Nature-based shoreline improvements, such as living shorelines, will help retain, and possibly expand, shoreline habitats.

Wetlands will be protected. **Figures 6 and 7** from ConserveVirginia 3.0: Virginia's Land Conservation Strategy (2023) show the wetlands that will be protected in the plan and their high development vulnerability.



Figure 6 - National Wetlands Inventory (project area in red)



Figure 7 - Coastal Wetlands as Areas of High Development Vulnerability (project area in red)

f. Who or what is protected.

The historic district and surrounding shorelines of the Town of West Point and the adjacent papermill on the Pamunkey River will directly benefit from the development of a resilience plan as it will identify problem areas and appropriate measures to mitigate flooding. The area is impacted by tidal flooding, flash flooding, and a failing stormwater system. Within the area are local businesses, residential homes, nonprofit organizations, and faith-based spaces. By applying mitigation efforts to support flood prevention and effective drainage, those who live, work, and visit the area are protected.

A well-designed flood resilience plan serves to protect the entire community, which includes:

- Residents: By implementing effective flood resilience measures, the plan aims to safeguard residential properties and ensure the safety of the people living within the community.
- Businesses: A flood resilience plan can provide protection to businesses by minimizing the risk of property damage and helping to sustain the local economy.
- Natural Environment: An effective resilience plan incorporates measures to protect the natural environment, including water bodies, wetlands, and wildlife habitats.
- Cultural and Historical Sites: The plan will include emphasis on protecting cultural and historical sites to preserve the community's cultural heritage and identity.
- The Town of West Point's tax base.

The following figures from ConserveVirginia 3.0: Virginia's Land Conservation Strategy (2023) show the areas recommended for cultural and historic preservation (**Figure 8**), the moderate cultural resource preservation index (**Figure 9**), and the significant results of the watershed impact model (**Figure 10**).



Figure 8 - Cultural and Historic Preservation Area (project area in red)



Figure 9 - Moderate Cultural Resource Preservation Index



Figure 10 - The Moderate to High Watershed Impacts

g. The safety threats, or environmental concerns related to flood risk.

As a Town defined by river boundaries in the coastal zone, there is concern for stormwater, ditch, riverine, and tidal flooding. The public, public infrastructure, private residences, and downtown businesses are at risk during severe storms and high tides. Since 2003 there have been several significant coastal events resulting in flooding impacts to the Town:

- Hurricane Isabel in 2003
- A nor-easter in 2005
- A nor'easter in 2010
- A nor'easter in June 2011
- Hurricane Irene in August 2011
- A nor'easter in 2012
- A coastal storm in October 2015
- Hurricane Matthew in 2016
- Tropical Storm Michael in 2018
- A nor'easter in 2022
- Tropical Storm Isaias in 2020

The residents and business owners are susceptible to significant roadblocks during floods, limiting their mobility and ability to evacuate. This is a human safety risk.

Coastal erosion and saltwater intrusion are human health and safety risks as well as a coastal habitat risk.

HRSD owns and operates the Town's sewerage system. A sewer pump station located on 2nd Street near the point has a flooding problem. During Hurricane Isabel, the pump motors in the well house flooded and needed to be dried out. However, the electrical controls were mounted high enough in the pump house so that they did not sustain flood damage. There is another sewer pump station located on 13th street that did not flood during Hurricane Isabel, but the floodwaters did reach within 1-foot of the facility. This is a risk to infrastructure but also to human health, should the pump stations fail or overflow.

There are 81 flood insurance policies in the Town of West Point. Since 1978, there have been 78 claims totaling over \$2 million. The nine repetitive loss properties (eight single family homes and one non-residential building) have filed 21 claims total at an average of just over \$30,000 per claim.

Figure 11 is the Flood Insurance Rate Map (FIRMette) highlighting the specific flood zone (AE) within the project area, underscoring the critical nature of the location. Additional information is provided in **Attachment 2.**



Figure 11 - West Point Flood Insurance Rate Map

Compounding these pressing concerns, the persistent issues of sea level rise pose a persistent long-term threat to the Town. **Figure 12** illustrates the "intermediate high scenario" (the most probable) for sea level rise in the Town will be 1-2ft, based on data obtained from the AdaptVA online mapping tools for the year 2030. The projections show most of the shorelines as flooded.

With the combined impact of ineffective stormwater infrastructure, land subsidence, tidal flooding, and sea level rise, the Town remains vulnerable to recurrent flooding, perpetuating the potential risks faced by residents.



Figure 12 - Intermediate High Scenario for Sea Level Rise in West Point

h. Groups who might directly benefit from this flood risk reduction effort.

The historic district within the Town of West Point plays a pivotal role in bolstering the local and countywide economy. The district serves as a focal point for numerous locally owned businesses and a vibrant downtown sector, which attracts an influx of visitors to the area. Implementing a comprehensive resilience plan would significantly benefit the people living in, working in, and visiting West Point in several ways:

- Enhanced Community Safety: By assessing the existing infrastructure and proposing mitigation efforts, the resilience plan would ensure the safety and security of the Town's residents, especially those most vulnerable to the impacts of flooding.
- Sustainable Economic Stability: A comprehensive resilience plan would help to promote mitigation measures that safeguard the historic district's commercial activities and the broader local economy (including the papermill), which helps to sustain the region's economic vitality. This would also protect the Town's tax base.
- Sustained (or Increased) Tourism: Preserving the historic district through effective flood resilience measures would help to ensure the uninterrupted flow of visitors to the area. This would promote economic sustainability and preserve the charm and vibrancy of the district.

The proposed project focuses on benefits for low-income and moderate social vulnerability communities. According to the US Census, Virginia's median household income (MHI) from 2018 to 2022 was \$87,249 in 2022 dollars. A "low-income geographic area" would have an MHI lower than \$69,799 (80% of the state MHI) or be designated as a qualified opportunity zone. The MHI for King William County is \$79,398 (from 2018 to 2022 in 2022 dollars), so the County as a whole is not a "low-income geographic area." However, there are smaller areas (Census Block Groups, Census Tracts, or Zip Code Tabulation Areas) in the County that meet the definition. Two Census Tracts (**Figure 13**) and three Block Groups (**Figure 14**) have an MHI

lower than \$69,799. The project location (red dot) is in one of the Census Tracts and one of the Block Groups identified as low-income. There are no opportunity zones in the County.



Figure 14 - Low-income Block Groups

The Town of West Point has a moderate socially vulnerability index score, as reported in the Virginia Vulnerability Viewer from the Virginia Institute of Marine Science's Center for Coastal Resources Management and William and Mary (Figure 15).



Figure 15 - Town of West Point Social Vulnerability Index

i. What would happen (or not happen) if the applicant does not receive funding.

Without proper evaluation and research into the extent of the tidal flood and subsequent stormwater backflow, the Town will be unable to determine adequate solutions to mitigate repetitive flooding. This would put the people, buildings, and infrastructure in the Town at risk of harm due to flooding impacts. Recurring losses will drive more requests for support from local, state, and federal government, thus impacting the Town's economy. If this is not funded the Town will continue to piece-meal mitigation efforts which is not the most effective and comprehensive path forward for a Town that is surrounded by water.

j. Alternatives analysis of the viability of the project, how selected project reduces risk to populations at risk of flooding. Provide examples of current or previous related projects, data, outcomes etc. that justify the approach chosen. Include how long and how much protection to be achieved.

his project is a plan; however, under the "do nothing" alternative, the Town of West Point will face substantial loss due to flooding. The other alternative to this proposal is a project-by-project (piece meal) approach to the mitigate for flooding. This may offer a solution to the singular issue or area, but this is not a community approach to mitigate for flooding for the long-term.

2. Goals and Objectives:

a. Goals should be listed as an outcome or result and solve the problem or need identified.

Goal 1: Develop a locally-specific, yet comprehensive, community-wide strategic Coastal Resilience Plan for the Town of West Point to implement prioritized solutions to solve the problem of persistent and increasing flooding.

Goal 2: Provide project transferability to other communities experiencing similar effects from flooding.

b. Objectives must be specific, measurable and timebound.

Objective 1: A resilience assessment for the historic district and papermill will be conducted within the 12-month timeline.

- The resilience assessment will also include review and consideration of existing flooding/SLR models, the VDOT Kirby Street H&H study, and the new DCR stormwater flooding models.
- Existing HRSD information and data.

Objective 2: An implementable Coastal Resilience Plan for the historic district and papermill will be developed within the 12-month timeline.

- The plan will summarize research on relevant, cost-effective flood protection solutions for the Town and localities in similar settings.
- It will provide of menu of potential solutions for the Town, including both small- and large-scale solutions, temporary and long-term solutions, and related costs for implementing and managing each.
- It will include legal analysis of potential solutions to identify potential challenges for solutions identified in other states but not yet completed in Virginia, e.g., installing a flood wall entirely located on state-owned bottomland.

Planning activities will address the "Elements of Resilience Plans" provided by DCR in the Grant Manual under Appendix F (**Attachment 3**). The completed stand-alone plan will be submitted to DCR to certify that it has met the minimum requirements, and that the Town is now eligible to apply to the CFPF fund for grants and/or loans under the project category.

c. Objectives be achievable within the agreement period.

The grant period of performance for projects is 5 years. All objectives and goals will be achieved within the grant contract period. The project will be completed in 12 months.

3. Work Plan:

a. What are the major activities and tasks?

- MPPDC will hire a consultant
- Consultant will:
 - Conduct kickoff meeting to:
 - Introduce project partners and stakeholders
 - Review of project scope and schedule
 - Define the Town's goals, desired outcomes, and critical success factors

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- Understand the Town's long-term visions for the Coastal Resilience Plan and future site improvements
- Determine short-term and long-term objectives
- Review existing information and needs, including relevant Town planning and engineering efforts to date
- Solicit information, hot buttons, and issues important to the Town and its citizens
- Understand interaction and requirements of the federal, state, and the County regarding the future site improvements
- Discuss potential funding opportunities
- Identify stakeholders, landowners, and others (regardless of socioeconomics or race) that would need to be involved in the planning and solutions
- Submit deliverables: meeting agenda, attendance list, discussion materials, and notes
- Perform data gathering, including:
 - Initiating and maintaining contacts with outside sources of information and resources which may aid in project understanding and development
 - Utilizing available existing base mapping (lidar)
 - Incorporating survey data into existing base mapping
 - Reviewing existing flooding/SLR models, the VDOT Kirby St H&H study, and the new DCR stormwater flooding models for current and forecasted impacts of stormwater, tidal flooding, land subsidence, storm surge, and sea level rise based on best available science and regardless of the SFHA
 - Hosting a project team meeting to:
 - Discussing data gathered and GIS-based digital mapping
 - Identifying gaps/needs and how to address them
 - Evaluate the reuse and/or rehabilitation of existing facilities and site improvements
 - Hosting a public outreach workshop to promote public engagement, increase public understanding, support public information sharing and feedback, and empower approval/ownership of the plan
 - Submitting deliverables: meeting agendas, attendance lists, discussion materials, and notes; GIS-based digital mapping
- Conduct a project area site inventory and analysis, including:
 - A site visit to the project area to document existing conditions, such as
 - Critical infrastructure and industry assets
 - Repetitive loss and severe repetitive loss properties
 - Environmental features and conditions
 - Mobility (access, circulation, accessibility, multi-modality)
 - Cultural, historical, and other unique resources
 - Existing infrastructure and utilities
 - Conducting a vulnerability and risk assessment
 - Prioritization of the at-risk assets
 - Hosting a project team meeting / design charette to discuss resilience strategies, such as policies, procedures, and physical projects and set the stage for development of alternatives

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- Hosting a public outreach workshop to continue promoting public engagement, increasing public understanding, supporting public information sharing and feedback, and empowering approval/ownership of the plan
- Submitting deliverables: site analysis report including graphics/images; meeting agendas, attendance lists, discussion materials, and notes; and updated GIS-based digital mapping
- Develop alternatives and lead analysis to determine which are effective, buildable, accessible, and affordable while respecting the history, environment, and cultural integrity of project area, including:
 - Researching on flood mitigation and resilience approaches for localities in similar settings
 - Providing a suite of potential alternatives including both small- and large-scale solutions and temporary and long-term solutions, and related costs for implementing each
 - Proposing flood mitigation options for the at-risk infrastructure, which may include nonstructural, structural, or operational/readiness type strategies
 - Management and/or Maintenance Plans and related costs for selected strategies
 - Preparing up to three (3) community-wide approaches for the entire project area
 - Determining administrative requirements for substantial development / substantial improvement of structures in the SFHA
 - Legal analysis of potential solutions to identify potential challenges for solutions identified in other states but not yet completed in Virginia, e.g., flood wall entirely located on state-owned bottomland
 - Hosting a project team meeting / design charette to evaluate and prioritize alternatives with a focus on cost-effectiveness and nature-based solutions
 - Hosting a public outreach workshop to continue promoting public engagement, increasing public understanding, supporting public information sharing and feedback, and empowering approval/ownership of the final plan
 - Submitting deliverables: alternatives analysis documentation; meeting agendas, attendance lists, discussion materials, and notes
- Prepare the Draft Coastal Resilience Plan, including:
 - Compiling all findings, analysis, and resulting approaches for review
 - Developing a strategic implementation plan (priorities and timeline)
 - Identifying next steps and funding opportunities
 - Planning for integrating Resilience Plan recommendations into other local plans and project lists
 - Planning for updating the Resilience Plan every 5 years
 - Hosting a project team meeting / design charette to discuss the plan
 - Hosting a public outreach workshop to continue promoting public engagement, increasing public understanding, and empowering approval/ownership of the plan
 - Submitting deliverables: Draft Resilience Plan; meeting agendas, attendance lists, discussion materials, and notes
- Provide final Coastal Resilience Plan incorporating all review comments, including:
 - Compiling and addressing on feedback and comments

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- Hosting a project team meeting / design charette to discuss
- Hosting a public outreach workshop to continue promoting public engagement, increasing public understanding, and empowering approval/ownership of the final plan
- Submitting deliverables: Final Coastal Resilience Plan; meeting agendas, attendance lists, discussion materials, and notes

b. Who is responsible for completing the activities and tasks?

MPPDC staff will:

- Manage and administer the funding, if awarded,
- Engage Town of West Point staff, and
- Hire a contractor to conduct Coastal Resilience Plan development activities.

Town of West Point staff will:

- Share information and data in a timely manner and
- Participate in Coastal Resilience Plan development activities.

The contractor will conduct Coastal Resilience Plan development activities.

c. What is the timeframe for accomplishing activities and tasks?

We understand that activities must commence within 12 months of the agreement date and must be completed within 5 years. The project will be completed in 12 months.

d. Identify the required partners and where they are represented in the workplan.

Beyond those responsible for completing the proposed activities and tasks, required partners include:

- VDOT staff, who will conduct the Kirby Street H&H study and share results,
- Town of West Point Council, and
- The public.

Potential partners or stakeholders may include, but not be limited to:

- HRSD,
- Chamber of Commerce, and
- Middle Peninsula Public Access Authority.

e. Deliverables

The main deliverable is the Town of West Point Coastal Resilience Plan, a locally-specific, yet comprehensive, community-wide strategic plan to implement prioritized solutions to solve the problem of persistent and increasing flooding to protect public health and safety, buildings, infrastructure, historical assets, the environment, and the economy in the historic district and papermill property and their importance in the region.

Milestone deliverables in the creation of the Plan include:

- Meeting agendas, attendance lists, discussion materials, and notes
- GIS-based digital mapping

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- Site analysis report including graphics/images
- Alternatives analysis documentation
- Draft Coastal Resilience Plan

The deliverables will be submitted to DCR within 90 days of the completion of awarded activities per the grant contract.

f. Maintenance plan tied to the identified viability of the project. Plan for sustaining the project after the agreement period (if applicable).

N/A; A maintenance plan is not applicable in this application. The proposed Coastal Resilience Plan will include a recommendation for updating the plan in the future.

4. Evaluation

a. Indicators of success.

The following items are indicators of success:

- Completion of a vulnerability assessment
- Understanding of the impacts of flooding (i.e., stormwater, tidal, storm surge, and sea level rise)
- Identification of relevant flood protection solutions
- Development of costs for implementing and managing/maintaining each potential solution
- Legal analysis of potential solutions for meeting state requirements.
- Identification of stakeholders, landowners, and others that would need to be involved in mitigation activities
- Development of a Plan with activities that are effective, buildable, accessible, and affordable while respecting the history, environment, and cultural integrity of project area
- Adoption of the Plan by the Town of West Point
- Endorsement of the Plan by partners, stakeholders, and the public

b. Data that will be collected and how the data will be used to measure success.

The following data points will be collected and used to measure success:

- A record of previous and future flooding incidents in the area will help to evaluate the effectiveness of the potential implemented flood risk reduction measures.
- Data on water levels, flow rates, and precipitation patterns in the area will allow for determining the existing conditions and impact of proposed solutions on flooding levels.
- Information on the topography and elevation of the area will allow for determining how water flows and accumulates during rainfall and tidal flooding events, as well as how changes in the landscape affect flood risk.
- Collecting public feedback, input, and concerns throughout the planning process is important to ensure their needs and priorities are considered and addressed. This data will also help to measure the success of the study.

c. How was cost effectiveness evaluated and measured against the expected outcomes?

Monitoring the timeline and expenses associated with development of the plan will help to ensure the plan stays on schedule and within budget.

d. What products, services, meetings, outreach efforts etc. will be conducted and how will success be measured?

As described in the workplan, a local flooding vulnerability assessment, research on potential mitigation activities, cost estimating, and resilience planning will be conducted. This will include collaboration with Town of West Point staff and coastal flood resilience experts to understand of the likelihood and impacts of stormwater flooding, tidal flooding, storm surge, and sea level rise in the area; identify relevant flood protection solutions; and develop costs for implementing and managing each potential solution. It will also include legal analysis of potential solutions for permitting viability and identification of stakeholders, landowners, and others that would need to be involved in mitigation activities. The project team and partners will be engaged at each step in the process. The public will also be engaged along the way to increase public understanding, support public information sharing and feedback, and empower public approval/ownership of the final plan. The number of meetings and outreach efforts will be recorded.

e. Project progress monitoring plan to ensure project meets the requirements of the agreement and is delivered on time. Outline how delays or other findings may be used to modify or improve outcomes/deliverables.

Progress will be monitored monthly by comparing the actual progress to the anticipated progress in the original project schedule. Progress will be reported quarterly to DCR along with a reimbursement invoice in compliance with the terms of the grant contract. Explanations for discrepancies in anticipated and actual progress will be provided along with corrective action steps and/or a request to revise the project schedule. Project delays may result in a request to extend the deadline. Other findings that may impact outcomes, deliverables, and the schedule will be described. We understand that activities must commence within 12 months of the agreement date and must be completed within 36 months. The final reimbursement request will be submitted to DCR within 90 days of the project completion date in compliance with the grant contract.

Supporting Documents for Capacity Building & Planning Applications

- 1. Assess capacity and planning needs to include financial, human, technical assistance and training.
 - a. Resource development strategies: where capacity is limited by funding this may include working with non-governmental organizations, applying for grants, loans, or other funding sources.

The Town of West Point and MPPDC staff do not have the current capacity to develop a Coastal Resilience Plan. Financial resources are needed to hire human resources to conduct this work.

b. Plan for developing, increasing, or strengthening knowledge, skills, and abilities of existing or new staff. This may include training of existing staff, hiring personnel, contracting with of expert consultants or advisors.

The MPPDC staff plans to contract with expert consultants to conduct this work. Contracting with a consultant for this work is the most financially responsible method to complete this short-term project and avoid creating unsustainable staff expenses.

The MPPDC staff plans to leverage the investment in this Coastal Resilience Plan to demonstrate due diligence when applying for future state and federal grants or loans to implement the mitigation activities recommended in the plan. Much of the background, vulnerability information, observed impacts, and potential solutions described in the plan can be re-used in grant applications to tell the local story and make the case for implementation funding. Funding requests also tend to be more successful if they are for a project previously identified in a local or regional plan, such as a hazard mitigation plan or flood resilience plan.

c. Policy management and/or development.

The Coastal Resilience Plan will be available to inform and guide local policy development and management; however, it is not the intent of this planning effort to generate policies or policy revisions.

d. Stakeholder identification, outreach, and education strategies.

Local residents, businesses, and other stakeholders that would need to be involved in mitigation activities will be identified. Planning will evaluate mitigation activity viability based on land ownership and other factors.

Contracted consultant will be responsible for stakeholder identification, outreach, and education strategies. They will facilitate public outreach workshops.

The plan will serve as an educational resource and technical reference for local residents, businesses, community-based organizations, and other stakeholders to increase the general flood resilience knowledge base. It will reference the Virginia Coastal Resilience Master Plan and other plans to help people in this historic district understand their local options in light of the regional and statewide resources.

C. Budget Narrative- Required for All Categories

Each application must include a detailed Budget Narrative explaining all proposed expenditures. A budget narrative is applicable to requests from any category of grants in this manual. Applicants must submit a budget narrative via the WebGrants Portal. The following items must be included in the Budget Narrative:

Estimated total project cost: This amount must reflect the total cost of bringing the project to completion. Estimates for all work to be completed by third parties (engineers, contractors, etc.) on the specified project should be included.

The estimated total project cost is \$1,413,304. The Middle Peninsula Planning District Commission (MPPDC) commits match to this project with Virginia Port Authority Waterway Maintenance Funding (MOU dated November 14, 2024) for the development and implementation of a Dredged Material Management Master Plan up to \$141,330. The project is anticipated to complement and support planning for flood protection and coastal resilience activities involving the beneficial reuse of dredged material for uses such as living shorelines and flood protection berms involving suitable dredged sediment and concrete materials derived from dredged sediments, among other innovative approaches.

The contractual funding amounts are as follows:

- MPPDC Legal Services for Procurement and Contracting (up to \$20,000); and
- Procured Consultant Services (up to \$1,251,974). Services include a kickoff meeting; data gathering; site inventory and analysis; site programming/public outreach workshops & design charettes; master plan alternatives; master plan workshop; master plan refinement; final master plan and report; and related grant activities.

Amount of funds requested from the Fund: This is the total amount of any grant assistance sought from the Fund. Include a detailed breakdown of how this funding is proposed to be allocated. At a minimum this should include a breakdown of salaries, including any position requested, position title, 100 percent of salary amount and percent directly dedicated to grant activity fringe benefits, travel, equipment, supplies, construction, contracts, and any other direct costs. The budget narrative must include details and costs for each budget category sufficient to determine reasonableness and allowability.

The total amount of funds requested is \$1,271,974 or 90% of total project costs, as the project is located in a low-income geographic area. The grant funding will be used to for the contracted work.

Indirect costs are not eligible for funding. Salaries of existing staff are ineligible; however, salaries of staff who provide direct and documented support to the grant effort may be considered as match. Please refer to the match requirements in Part III of this manual. For local governments designated as low-income geographic areas, 100 percent of the estimated total project costs should be included.

Grant funding will not be used for indirect costs.

Amount of funds available: This amount, when combined with the amount of funding requested from the Fund, must reflect the total estimated project cost to demonstrate that all necessary funding has been secured to complete the project. Include a description of the source of these funds and evidence of the applicant's ability to obtain these funds to complete the project.

CID510083_King William County_CFPF

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Virginia Port Authority Waterway Maintenance Funding (MOU dated November 14, 2024) for the development and implementation of a Dredged Material Management Master Plan will be provided as match up to \$141,330. The project is anticipated to complement and support planning for flood protection and coastal resilience activities involving the beneficial reuse of dredged material for uses such as living shorelines and flood protection berms involving suitable dredged sediment and concrete materials derived from dredged sediments, among other innovative approaches. This match value represents 10% of total project costs as the project is located in a low-income geographic area. The match commitment letter has been uploaded to the grant portal.

RVRF Match loans: The match loan and amount of funding requested for loan.

No loans are requested.

Authorization to request for funding: Local governments seeking funding shall also attach signed documentation authorizing the request for funding.

The authorization to request funding letter has been uploaded to the grant portal.

Applicant Name: Middle Peninsula Planning District Commission						
Community Flood Preparedness Fund &						
Resilient Virginia Revolving Loan Fund						
Detailed Budget Narrative						
Period of Performance: July 2025 (or upon receipt of award contract) through June 2026 (or one year from date of award contract execution)						
Grand Total State Funding Request						
Grand Total Local Share of Project						
Federal Funding (if applicable)						
Project Grand Total						
	, -,					

Breakout By Cost Type	Personnel	Fringe	Travel	Equipment	Supplies	Contracts	Indirect Costs	Other Costs	Total
Federal Share	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(if applicable)									
Local Share	\$0	\$0	\$0	\$0	\$0	S141,330	\$0	\$0	S141,330
State Share	\$0	\$0	\$0	\$0	\$0	\$1,271,974	\$0	\$0	\$1,271,974
Pre-	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Award/Startup									
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$1,413,304	\$0	\$0	\$1,413,304

Other Regional Projects of Relevance

MPPDC staff have worked throughout the years to understand the policy, research and impacts of flooding (i.e., stormwater, coastal, riverine, sea-level rise) and coastal resiliency to the region. Below is a list of projects that have built upon each other over the year that have contributed to our understanding and the region's coastal resilience.

Fight the Flood Program (2020 to present): The Fight the Flood was launched in 2020 to connect property owners to contractors who can help them protect their property from rising flood waters and erosion. FTF also offers a variety of financial tools to fund these projects including but not limited to the Septic Repair revolving loan program, Living Shoreline incentives revolving loan fund program, and plant insurance for living shorelines. Since the beginning of the program FTF has brought \$44,506,804 in flood protection via direct loans and grants to the Middle Peninsula. Currently the program has 200 registrants that have expressed their interest and need in funding to mitigate funds. Additionally, the program partners with 41 business throughout the nation to provide solutions to FTF program registrants. As part of the FTF program, MPPDC staff diligently and consistently apply for grant and/or loan funds to implement resiliency projects within the Middle Peninsula. In 2024 alone, MPPDC staff have submitted 58 applications requesting \$104,378,663. Since the program's inception in 2020, 235 applications have been submitted requesting \$159 Million in funding. To date this level of production has occurred practically in an organic matter via word of mouth. MPPDC has received funding through the Virginia Department of Conservation and Recreation's Community Flood Resiliency Fund (Project # CFPF-24-04-20) to increase the capacity of the FTF Program and begin actively promoting the program and soliciting additional participation. With this funding MPPDC has hired a new Deputy Director of Operations that will administer and manage project funded through Round 5 CFPF. This unique program has brought an unparalleled level of success in implementing coastal resilience solutions and continues to serve as the only municipal coastal resilience and flood protection municipal program of its kind in the nation and Commonwealth.

<u>Virginia Stormwater Nuisance Law Guidance (2018)</u>: This report was developed by the Virginia Coastal Policy Center to understand the ability of a downstream recipient of stormwater flooding to bring a claim under Virginia law against an upstream party, particularly a nuisance claim. The report summarizes how Virginia courts determine stormwater flooding liability between two private parties.

Oyster Bag Sill Construction and Monitoring at Two Sites in Chesapeake Bay (2018): VIMS Shoreline Studies Program worked with the PAA to (1) install oyster bag sills as shore protection at two PAA sites with the goal of determining effective construction techniques and placement guidelines for Chesapeake Bay shorelines and (2) assess the effectiveness for shore protection with oyster bags on private property through time.

<u>Mathews County Ditch Project - VCPC White Papers (2017)</u>: This report investigated the challenges presented by the current issues surrounding the drainage ditch network of Mathews

County. The study summarized research conducted in the field; examined the law and problems surrounding the drainage ditches; and proposed some next steps and possible solutions.

Mathews County Ditch Mapping and Database Final Report (2017): This project investigated roadside ditch issues in Mathews County through mapping and research of property deeds to document ownership of ditches and outfalls. This aided in understanding the needed maintenance of failing ditches and the design of a framework for a database to house information on failing ditches to assist in the prioritization of maintenance needs.

Living Shoreline Incentive Program (2016 to present): In 2011 Virginia legislation was passed designating living shorelines as the preferred alternative for stabilizing Virginia tidal floodplain shorelines. The Virginia Marine Resources Commission, in cooperation with the Virginia Department of Conservation and Recreation and with technical assistance from the Virginia Institute of Marine Science (VIMS), established and implemented a general permit regulation that authorizes and encourages the use of living shorelines however, no financial incentives were put in place to encourage consumers to choose living shorelines over traditional hardening projects in the Commonwealth. To fill this, need the MPPDC developed the MPPDC Living Shoreline Incentives Program to offer loans and/or grants to private property owners interested in installing living shorelines to stabilize their shoreline. Living Shoreline loan funding is available to waterfront homeowners with financing living shorelines, permitted by the Virginis Marine Resources Commission. Loans up to \$10,000 can be financed for up to 5 years (60 months). Loans over \$10,000 can be financed for up to 10 years (120 months). Loans up to \$10,000 can be financed for up to 5 years (60 months). Loans over \$10,000 can be financed for up to 10 years (120 months). Loans over \$35,000 have the option of financing up to 120 months. Interest is at 50% the published Wall Street Journal Prime rate on the date of loan application. Minimum loan amount is \$1,000. Maximum determined by income and ability to repay the loan. Limited loan forgiveness is available for qualified applicants. Since 2016 under the MPPDC Living Shoreline Revolving Loan program, 8 10 living shorelines have been financed and built encumbering over \$800,000 in VRA loan funding and ~400,000 in NFWF grant funding. Living Shoreline construction cost to date range per job \$14,000- \$180,000. MPPDC oversees all aspects (planning, financing, construction, and loan servicing) of these projects from cradle to grave.

Mathews County Rural Ditch Enhancement Study (2015): In contract with Draper Aden Associates, a comprehensive engineering study was developed to provide recommendations and conceptual opinions of probable costs to improve the conveyance of stormwater and water quality through the ditches in Mathews County.

Drainage and Roadside Ditching Authority (2015): This report explored the enabling mechanism in which a Regional Drainage and Roadside Ditching Authority could be developed. An Authority would be responsible for prioritizing ditch improvement needs, partnering with Virginia Department of Transportation (VDOT) to leverage available funding, and ultimately working toward improving the functionality of the region's stormwater conveyance system.

Stormwater Management-Phase II (2014): MPPDC staff and Draper Aden Associates worked with localities (i.e. Middlesex, King William, and Mathews Counties and the Town of West Point) interested in participating in a Regional Stormwater Management Program. While each locality sought different services from the regional program, this project coordinated efforts, developed regional policies and procedures, and the proper tools to implement a regional VSMP.

Department of Conservation and Recreation Stormwater Management (2014): The Virginia General Assembly created a statewide, comprehensive stormwater management program related to construction and post-construction activities (HB1065 - Stormwater Integration). The Virginia Department of Conservation and Recreation requires stormwater management for projects with land disturbances of one acre or more. This new state mandate requires all Virginia communities to adopt and implement stormwater management programs by July 1, 2014, in conjunction with existing erosion and sediment control programs. Additionally, the communities within the MPPDC are required to address stormwater quality as stipulated by the Chesapeake Bay TMDL Phase II Watershed Implementation Plan and the Virginia Stormwater Regulations. The MPPDC Stormwater Program helped localities develop tools specific to the region necessary to respond to the state mandate requirement for the development of successful stormwater programs.

Land and Water Quality Protection (2014): In light of changing Federal and State regulations associated with Bay clean up-nutrient loading, nutrient goals, clean water, OSDS management, storm water management, TMDLs, etc., staff from the Middle Peninsula Planning District Commission (MPPDC) will develop a rural pilot project which aims to identify pressing coastal issue(s) of local concern related to Bay clean up and new federal and state legislation which ultimately will necessitate local action and local policy development. Staff has identified many cumulative and secondary impacts that have not been researched or discussed within a local public policy venue. Year 1-3 will include the identification of key concerns related to coastal land use management/water quality and Onsite Sewage Disposal System (OSDS) and community system deployment. Staff will focus on solution based approaches, such as the establishment of a regional sanitary sewer district to manage the temporal deployment of nutrient replacement technology for installed OSDS systems, assessment of land use classifications and taxation implications associated with new state regulations which make all coastal lands developable regardless of environmental conditions; use of aquaculture and other innovative approaches such as nutrient loading offset strategies and economic development drivers.

<u>Emergency Management - Hazard Mitigation Planning (2009 to Present)</u>: Since 2009, the Middle Peninsula Planning District Commission has assisted regional localities in meeting the federal mandate to have an adopted local hazard plan. The Regional All Hazards Mitigation Plan addresses the natural hazards prone to the region, including hurricanes, winter storms, tornadoes, coastal flooding, coastal/shoreline erosion, sea level rise, winter storms, wildfire, riverine flooding, wind, dam failures, drought, lightning, and earthquakes. This plan also consists of a HAZUS assessment of hurricane wind, sea level rise (i.e., Mean High Higher Water and the NOAA 2060 intermediatehigh scenario), and flooding (coastal and riverine flooding) that estimates losses from each
CID510083_Town_of_West_Point_CFPF MPPDC - Town of West Point Coastal Resilience Master Plan

hazard. The Middle Peninsula All-Hazard Mitigation Plan was updated and approved by FEMA in April 2021.

<u>Climate Change & Sea Level Rise (2009 to 2012)</u>: The MPPDC was funded for a 3 Phase project through the Virginia Coastal Zone Management Program to assess the impacts of climate and sea level rise throughout the region. With over 1,000 miles of linear shoreline, the Middle Peninsula has a substantial amount of coast under direct threat of accelerated climate change and more specifically sea-level. In Phase 1, MPPDC staff assessed the potential anthropogenic and ecological impacts of climate change. Phase 2 focused on the facilitating presentations and develop educational materials about sea level rise and climate change for the public and local elected officials. Finally Phase 3 focused on developing adaptation public policies in response to the assessments.

Phase 1: <u>Middle Peninsula Climate Change Adaptation:</u> <u>Facilitation of Presentations and</u> <u>Discussions of Climate Change Issues with Local Elected Officials and the General Public</u>

Phase 2: Climate Change III: Initiating Adaptation Public Policy Development

Phase 3: Phase 3 Climate Change: Initiating Adaptation Public Policy Development

Historic Flood Damage Data and Images

Since 2003 there have been several significant coastal events resulting in flooding impacts to the Town:

- Hurricane Isabel in 2003
- A nor-easter in 2005
- A nor'easter in 2010
- A nor'easter in June 2011
- Hurricane Irene in August 2011
- A nor'easter in 2012
- A coastal storm in October 2015
- Hurricane Matthew in 2016
- Tropical Storm Michael in 2018
- A nor'easter in 2022
- Tropical Storm Isaias in 2020

Hampton Roads Sanitation District (HRSD) owns and operates the Town's sewerage system. A sewer pump station located on 2nd Street near the point has a flooding problem. During Hurricane Isabel, the pump motors in the well house flooded and needed to be dried out. However, the electrical controls were mounted high enough in the pump house so that they did not sustain flood damage. There is another sewer pump station located on 13th street that did not flood during Hurricane Isabel, but the floodwaters did reach within 1-foot of the facility. This is a risk to infrastructure but also to human health, should the pump stations fail or overflow.

There are 81 flood insurance policies in the Town of West Point. Since 1978, there have been 78 claims totaling over \$2 million. The nine repetitive loss properties (eight single family homes and one non-residential building) have filed 21 claims total at an average of just over \$30,000 per claim.

Council Members: JOSEPH "BART" BARTOS ROBERT J. LAWRENCE JOHNNY NEIN, JR. JAMES "JAMIE" PRUETT JOHN G. RAGSDALE, II CHRISTOPHER P. VINCENT



JOSHUA T. "JACK" LAWSON Mayor DEBORAH T. BALL Vice Mayor JOHN B. EDWARDS, JR. Town Manager

TOWN OF WEST POINT

December 2, 2024

Mr. Jake Shaw Virginia Department of Conservation and Recreation Community Flood Preparedness Fund 600 East Main Street, 24th floor Richmond, VA 23219-2094

RE: Application Authorization and Support: Town of West Point Coastal Resilience Master Plan

Dear Mr. Shaw:

The Town of West Point authorizes and supports Middle Peninsula Planning District Commission staff to request funding through Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund Round 5 for the Town of West Point Coastal Resilience Master Plan (CID510083_King William County_CFPF). This project is necessary to strategize and prioritize cost-effective implementation projects to protect the Downtown West Point community from stormwater flooding, sea level rise, and storm surge.

The Town acknowledges the match will be provided with Virginia Port Authority Waterway Maintenance Funding (MOU dated November 14, 2024) for the development and implementation of a Dredged Material Management Master Plan up to \$141,330. The project is anticipated to complement and support planning for flood protection and coastal resilience activities involving the beneficial reuse of dredged material for uses such as living shorelines and flood protection berms involving suitable dredged sediment and concrete materials derived from dredged sediments, among other innovative approaches. This match value represents 10% of total project costs as the project is located in a designated opportunity and low-income geographic area.

If you have any questions about the proposal application, please feel free to reach out to me by email at jedwards@west-point.va.us or by phone at (804) 843-3330.

Sincerely

John B. Edwards, Jr. Town Manager

> 802 Main Street P.O. Box 152, West Point, Virginia 23181 (804) 843-3330 / Fax (804) 843-4364 www.West-Point.va.us

Link to the Middle Peninsula Regional All Hazards Mitigation Plan -

https://mppdc.com/articles/service_centers/mandates/All%20Hazards%20Mitigation%20Plan%20 Update/Adopted_FINAL_2021_Amended%20MPPDC%20Plan_093122_RED.pdf

Link to Comprehensive Plan:

Town of West Point Comprehensive Plan - <u>https://west-</u> point.va.us/Documents/Government/Boards%20And%20Commissions/Planning%20Commission/ 8657-Comprehensive-Plan-Adopted-11262019.pdf

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Town of West Point Coastal Resilience Planning Area (outlined in red)



COMMISSIONERS

Essex County Hon. Edwin E. Smith, Jr. Hon. John C. Magruder (Vice-Chairman) Ms. Sara Pope

Town of Tappahannock Hon. Katherine B. Carlton Mr. Eric S. Pollitt

Gloucester County Hon. Ashley C. Chriscoe (Chairman) Hon. Tony Nicosia Dr. William G. Reay

King and Queen County Hon. Mark R. Berry Hon. Marie H. Norman Ms. Vivian Seay

King William County Hon. Benjamin J. Edwards III Hon. Justin Catlett Mr. Greg Henrich Mr. Percy C. Ashcraft

> Town of West Point Hon. James M. Pruett

Mathews County Hon. Timothy P. Doss Hon. David Jones Mr. Harry Meeks Ms. Ramona Wilson

Middlesex County Hon. Wayne H. Jessie, Sr. (Treasurer) Hon. Reggie Williams, Sr. Ms. Kendall Webre Mr. Matthew L. Walker

Town of Urbanna Hon. Dr. William T. Goldsmith

> Secretary/Director Mr. Lewis L. Lawrence

Mr. Jake Shaw Virginia Department of Conservation and Recreation Community Flood Preparedness Fund 600 East Main Street, 24th floor Richmond, VA 23219-2094

RE: Support and Match Commitment: Town of West Point Coastal Resilience Master Plan

Dear Mr. Jake Shaw,

January 20, 2025

The Middle Peninsula Planning District Commission staff support the application to request funding through Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund Round 5 for the Town of West Point Coastal Resilience Master Plan (CID510083_King William County_CFPF). This project is necessary to strategize and prioritize cost-effective implementation projects to protect the West Point Historic District community and economy from stormwater flooding, sea level rise, and storm surge.

This is also a commitment to match this project with Virginia Port Authority Waterway Maintenance Funding (MOU dated November 14, 2024) for the development and implementation of a Dredged Material Management Master Plan up to \$141,330. The project is anticipated to complement and support planning for flood protection and coastal resilience activities involving the beneficial reuse of dredged material for uses such as living shorelines and flood protection berms involving suitable dredged sediment and concrete materials derived from dredged sediments, among other innovative approaches. This match value represents 10% of total project costs as the project is located in a low-income geographic area.

If you have any questions about the proposal application, please feel free to reach out to me by email at <u>llawrence@mppdc.com</u> or by phone at (804) 758-2311.

Sincerely,

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Lewis Lawrence Executive Director

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Town of West Point Social Vulnerability Index

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Town of West Point Flood Insurance Rate Map

DIVISION 1. - GENERALLY

Sec. 29-31. - Purpose.

The ordinance codified in this article is adopted pursuant to the authority granted to localities by Code of Virginis, §§ 10.1-600 et seq. The purpose of these provisions is to prevent the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

- (1) Regulating uses activities, and development which, alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies.
- (2) Restricting or prohibiting certain uses, activities, and development from location within areas subject to flooding.
- (3) Requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or floodproofed against flooding and flood damage.
- (4) Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.

(Ord. of 5-29-90, § 1.1; Ord. No. 06-2015, 8-10-15)

Sec. 29-32. - Applicability.

These provisions shall apply to all lands within the jurisdiction of the Town of West Point and identified as areas of special flood hazard according to the flood insurance rate map (FIRM) that is provided to the community by FEMA.

(Ord. of 5-29-90, § 1.2; Ord. No. 06-2015, 8-10-15)

Sec. 29-33. - Compliance and liability.

(a) No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged or structurally altered except in full compliance with the terms and provisions of this article and any other applicable ordinances and regulations which apply to uses with the jurisdiction of this article. The degree of flood protection sought by the provisions of this article is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This article does not imply that areas outside the floodplain area, or that land used permitted within such area will be free from flooding or flood damage.

- (c) This article shall not create liability on the part of the Town of West Point or any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made there under.
- (d) Records of actions associated with administering the ordinance from which this article derives shall be kept on file and maintained by the zoning administrator.

(Ord. of 5-29-90, § 1.3; Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-34. - Abrogation and greater restrictions.

This article supersedes any ordinance currently in effect in flood-prone areas. However, any underlying ordinance shall remain in full force and effect to the extent that its provisions are more restrictive than this article.

(Ord. of 5-29-90, § 1.4; Ord. No. 06-2015, 8-10-15)

Sec. 29-35. - Severability.

If any section, subsection, paragraph, sentence, clause, or phrase of this article shall be declared invalid for any reason whatever, such decision shall not affect remaining portions of this article. The remaining portions shall remain in full force and effect; and for this purpose, the provisions of this article are hereby declared to be severable.

(Ord. of 5-29-90, § 1.5; Ord. No. 06-2015, 8-10-15)

Sec. 29-36. - Penalties.

- (a) Any person who fails to comply with any of the requirements or provisions of this article or directions of the permit officer or any other authorized employee of the Town of West Point shall be guilty of a misdemeanor of the first class and subject to the penalties therefore.
- (b) The VA USBC addresses building code violations and the associated penalties in Section 104 and Section 115. Violations and associated penalties of this article of the Town of West Point are addressed in this section of the ordinance.
- (c) In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this article. The imposition of a fine or penalty for any violation of, or noncompliance with, this article shall not excuse the violation or noncompliance to

permit it to continue; and all such persons shall be required to correct or remedy such violations or noncompliances within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article may be declared by the town council to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this article.

(Ord. of 5-29-90, § 1.6; Ord. No. 06-2015, 8-10-15)

Sec. 29-37. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Appurtenant or accessory structure: Accessory structures not to exceed 200 square feet.

Base flood: The flood having a one percent change of being equaled or exceeded in any given year.

Base flood elevation: The Federal Emergency Management Agency designated 100-year water surface elevation.

Basement: Any area of the building having its floor subgrade (below ground level) on all sides.

Board of appeals: The board appointed to review appeals made by individuals with regard to decisions of the administrator in the interpretation of this article.

Coastal A zone: Flood hazard areas that have been delineated as subject to wave heights between 1.5 feet and three feet.

Development: Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures and other paving, utilities, and filling, grading, excavation, mining, dredging, drilling operations or storage of equipment or materials.

Elevated building: A nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings or columns (posts and piers).

Encroachment: The advance or infringements of uses, plant growth, fill excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing construction: Structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975 for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

Flood or flooding:

(1) A general or temporary condition of partial or complete inundation of normally dry land areas from: (a) the overflow of inland or tidal waters; or (b) the unusual and rapid accumulation or runoff of surface waters from any source; or (c) mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(2) The collapse or subsistence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(a) of this definition.

Flood insurance rate map (FIRM): An official map of a community, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a digital flood insurance rate map (DFIRM).

Flood insurance study (FIS): A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards.

Floodplain or *flood-prone area:* Any land area susceptible to being inundated by water from any source.

Floodproofing: Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Freeboard: A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed.

Highest adjacent grade: The highest natural elevation of the ground surface prior to the construction next to the proposed walls of a structure.

Historic structure: Any structure that is:

 Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved program.

Hydrologic and hydraulic engineering analysis: Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

Letters of map change (LOMC): A letter of map change is an official FEMA determination, by letter, that amends or revises an effective flood insurance rate map or flood insurance study. Letters of map change include:

Letter of map amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective flood insurance rate map and establishes that a land as defined by meets and bounds or structure is not located in a special flood hazard area.

Letter of map revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A letter of map revision based on fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional letter of map revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood insurance rate map or flood insurance study.

Lowest adjacent grade: The lowest natural elevation of the ground surface next to the walls of a structure.

Lowest floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or floodresistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of Federal Code 44 CFR, Section 60.3.

Manufactured home: A structure, transportable in one or more sections, which is built on permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. For floodplain management purposes the term manufactured home also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.

Manufactured home park/subdivision: A parcel (or contiguous parcels) of land divided into two or more lots for rent or sale.

Mean sea level: An elevation point that represents the average height of the ocean's surface (such as the halfway point between the mean high tide and the mean low tide) which is used as a standard in reckoning land elevation.

New construction: For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM of June 18, 1990, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park/subdivision: A manufactured home park, or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

Post-FIRM structures: A structure for which construction or substantial improvement occurred after the initial FIRM date of June 18, 1990.

Pre-FIRM structures: A structure for which construction or substantial improvement occurred on or before the effective date of the initial FIRM date of June 18, 1990.

Primary frontal dune: A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Recreational vehicle: A vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel or seasonal use.

Repetitive loss structure: A building covered by a contract for flood insurance that has incurred floodrelated damages on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Severe repetitive loss structure: A structure that: (a) is covered under a contract for flood insurance made available under the NFIP; and (b) has incurred flood related damage: (i) for which four or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding \$5,000.00, and with the cumulative amount of such claims payments exceeding \$20,000.00; or (ii) for which at least two separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

Shallow flooding area: A special flood hazard area with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Special flood hazard area: The land in the floodplain subject to a one percent or greater chance of being flooded in any given year as determined in article 3<u>, section 3.2</u> of the ordinance from which this article derives [division 3 herein].

Start of construction: The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of permit date. The actual start means either the first site placement of permanent construction of a structure on a site, such as pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration on any wall, ceiling, floor or other structural part of a building, whether or not the alteration affects the external dimensions of the building.

Structure: For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement: Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (2) Any alteration of a "historic structure", provided that the alteration will not preclude the structures continued designation as a "historic structure";
- (3) Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined above, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic Places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

Violation: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse: A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

(Ord. of 5-29-90, art. II; Ord. No. 05-09, 3-30-09; Ord. No. <u>06-2015</u>, 8-10-15)

Sec. 29-38. - Administration.

- (a) Designation of the floodplain administrator.
 - (1)

The floodplain administrator is hereby appointed to administer and implement these regulations and is referred to herein as the floodplain administrator. The floodplain administrator may:

- a. Do the work themselves. In the absence of a designated floodplain administrator, the duties are conducted by the Town Manager of the Town of West Point or his designee.
- b. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
- c. Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.
- (b) *Duties and responsibilities of the floodplain administrator.*
 - The duties and responsibilities of the Floodplain Administrator shall include, but are not limited to:
 - a. Review applications for permits to determine whether proposed activities will be located in special flood hazard areas (SFHA).
 - b. Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
 - c. Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
 - d. Review applications to determine whether all necessary permits have been obtained from the federal, state or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the 100-year frequency floodplain of free-flowing, non-tidal waters of the state.
 - e. Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the department of conservation and recreation (division of dam safety and floodplain management), and other appropriate agencies (VADEQ, USACE) and have submitted copies of such notifications to FEMA.
 - f. Advise applicants for new construction or substantial improvement of structures that are located within an area of the coastal barrier resources system established by the Coastal Barrier Resources Act that federal flood insurance is not available on such structures;

areas subject to this limitation are shown on flood insurance rate maps as coastal barrier resource system areas (CBRS) or otherwise protected areas (OPA).

- g. Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.
- h. Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.
- i. Review elevation certificates and require incomplete or deficient certificates to be corrected.
- j. Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the Town of West Point, within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.
- k. Maintain and permanently keep records that are necessary for the administration of the regulations, including:
 - 1. Flood insurance studies, flood insurance rate maps (including historic studies and maps and current effective studies and maps) and letters of map change; and
 - 2. Documentation supporting insurance and denial of permits, elevation certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been floodproofed, other required design certifications, variances, and records of enforcement actions taken to correct violations of the regulations.
- I. Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- m. Advise the board of zoning appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- n. Administer the requirements related to proposed work on existing buildings:
 - 1. Make determinations as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.
 - 2. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct, and prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a building or structure to prevent additional damage.

Undertake, as determined appropriate by the floodplain administrator due to the circumstances, other actions which may include, but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other federal, state and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for increased cost of compliance coverage under NFIP flood insurance policies.

- p. Notify the Federal Emergency Management Agency when the corporate boundaries of the Town of West Point have been modified and:
 - Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and
 - 2. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to department of conservation and recreation (division of dam safety and floodplain management) and FEMA.
- q. Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.
- r. It is the duty of the community floodplain administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the Community, whether or not those hazards have been specifically delineated geographically (e.g., via mapping or surveying).
- (c) Use and interpretation of FIRMs.
 - (1) The floodplain administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:
 - a. Where field surveyed topography indicates that adjacent ground elevations:
 - Are below the base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations;

- 2. Are above the base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a letter of map change that removes the area from the SFHA.
- b. In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a federal, state, or other source shall be reviewed and reasonably used.
- c. Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
- d. Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
- e. If a preliminary flood insurance rate map and/or a preliminary flood insurance study has been provided by FEMA:
 - Upon the issuance of a letter of final determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
 - 2. Prior to the issuance of a letter of final determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
 - 3. Prior to issuance of a letter of final determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

(Ord. No. <u>06-2015</u>, 8-10-15)

Secs. 29-39—29-50. - Reserved.

DIVISION 2. - ESTABLISHMENT OF FLOODPLAIN AREAS

Sec. 29-51. - Description of areas.

(a) Basis of districts. The various floodplain districts shall include special flood hazard areas. The basis for the delineation of these districts shall be the flood insurance study (FIS) and the flood insurance rate maps for the Town of West Point prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated September 2, 2015, as amended.

The boundaries of the SFHA districts are established as shown on the FIRM which is declared to be a part of this ordinance and which shall be kept on file at the Town of West Point offices.

- (1) The special floodplain district shall be those areas identified as either an AE zone or A1-30 zone on the maps accompanying the flood insurance study for which base flood elevations for the one percent annual chance flood have been provided but for which no floodway has been delineated.
- (2) The approximated floodplain district shall be those areas identified as an A or A99 zone on the maps accompanying the flood insurance study. In these zones, no detailed flood profiles or elevations are provided, but the 100-year floodplain boundary has been approximated.
- (3) The shallow flooding district shall be those areas identified as zone AO or AH on the maps accompanying the flood insurance study.
- (4) The coastal A zone shall be those areas, as defined by the VA USBC, that are subject to wave heights between 1.5 feet and three feet, and identified on the FIRM as areas of limits of moderate wave action (LiMWA). For these areas, the following provisions shall apply: Buildings and structures within this zone shall have the lowest floor elevated to or above the base flood elevation plus one foot of freeboard, and must comply with the provisions in <u>section 29-71A</u> and <u>section 29-71B</u>.
- (5) The VE or V zones on FIRMs accompanying the FIS shall be those areas that are known as coastal high hazard areas, extending from offshore to the inland limit of a primary frontal dune along the open coast. For these areas, the following provisions shall apply:
 - a. All new construction and substantial improvements in zones V and VE (V if base flood elevation is available) shall be elevated on pilings or columns so that:
 - 1. The bottom of the lowest horizontal structural member of the lowest floor, excluding the pilings or columns, is elevated to or above the base flood level (recommended greater than or equal to one foot) if the lowest horizontal structural member is parallel to the direction of the wave approach or elevated at least one foot above the base flood level if the lowest horizontal structural member is perpendicular to the direction of the wave approach; and
 - 2. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent change of being equaled or exceeded in any given year (one percent annual chance).

A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with the accepted standards of practice for meeting the provisions of subsection <u>29-51(a)</u> (5)a.

- c. The floodplain administrator shall obtain the elevation, in relation to the mean sea level, of the bottom of the lowest structural member of the lowest floor, excluding the pilings and columns, of all new and substantially improved structures in zones V and VE. The floodplain management administrator shall maintain a record of all such information.
- d. All new construction shall be located landward of the reach of mean high tide.
- e. All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood-lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of no less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot, either by design or when so required by local codes, may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - 1. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and
 - 2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components, structural and nonstructural. Maximum wind and water loading values to be used in this determination shall each have a one percent change of being equaled or exceeded in any given year.
- f. The enclosed space below the lowest floor shall be used solely for parking of vehicles, building access, or storage. Such space shall not be partitioned into multiple rooms, temperature-controlled, or used for human habitation.
- g. The use of fill for structural support of buildings is prohibited. When nonstructural fill is proposed in a coastal high hazard area, appropriate engineering analyses shall be conducted to evaluate the impacts of the fill prior to issuance of a development permit.
- h. The man-made alteration of sand dunes, which would increase potential flood damage, is prohibited.
- (b) Overlay concept.

- (1) The floodplain districts described above shall be overlays to the existing underlying districts as shown on the official zoning ordinance map, and as such, the provisions for the floodplain districts shall serve as a supplement to the underlying district provisions.
- (2) If there is any conflict between the provisions or requirements of the floodplain districts and those of any underlying district, the more restrictive provisions and/or those pertaining to the floodplain districts shall apply.
- (3) In the event any provision concerning a floodplain district is declared inapplicable as a result of any legislative or administrative actions or judicial decision, the basic underlying provisions shall remain applicable.

(Ord. of 5-29-90, § 3.1; Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-52. - Official floodplain map.

The boundaries of the special flood hazard area and floodplain districts are established as shown on the flood insurance map which is declared to be part of this article and which shall be kept on file at the Town of West Point offices.

(Ord. of 5-29-90, § 3.2; Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-53. - Boundary changes.

- (a) Jurisdictional boundary changes.
 - (1) The town floodplain ordinance in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program. Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption. Such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to the department of conservation and recreation (division of dam safety and floodplain management) and FEMA.
 - (2) In accordance with the Code of Federal Regulations, Title 44 Subpart (B), Section 59.22(a)(9)(v) all NFIP participating communities must notify the Federal Insurance Administration and optionally the state coordinating office in writing whenever the boundaries of the community

have been modified by annexation or the community has otherwise assumed or no longer has the authority to adopt and enforce floodplain management regulations for a particular area.

(b) District boundary changes. The delineation of the floodplain areas may be revised by the town council where natural or manmade changes have occurred and/or where more detailed studies have been conducted or undertaken by the U.S. Army Corps of Engineers or other qualified agency, or any individual documents needed for such change. However, prior to any such change, approval must be obtained from the Federal Insurance Administration.

(Ord. of 5-29-90, § 3.3; Ord. No. 06-2015, 8-10-15)

Sec. 29-54. - Interpretation of area boundaries.

Initial interpretations of the boundaries of the floodplain areas shall be made by the permit officer. Should a dispute arise concerning the boundaries, the board of appeals shall make the necessary determination. The person questioning or contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the board and to submit technical evidence if he so desires.

(Ord. of 5-29-90, § 3.4; Ord. No. 06-2015, 8-10-15)

Sec. 29-55. - Submitting technical data.

A community's base flood elevation may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

(Ord. No. 06-2015, 8-10-15)

Sec. 29-56. - Letters of map revision.

When development in the floodplain will cause or causes a change in the flood base elevation, the applicant, including state agencies, must notify FEMA by applying for a conditional letter of map revision and then a letter of map revision.

Example cases:

- (1) Any development that causes a rise in the base flood elevations within the floodway.
- (2) Any development occurring in zones A1-30 and AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation.

(3)

Alteration or relocation of a stream, including, but not limited to, installing culverts and bridges.

(Ord. No. <u>06-2015</u>, 8-10-15)

Secs. 29-57-29-70. - Reserved.

DIVISION 3. - AREA PROVISIONS

Sec. 29-71. - Permit and application requirements.

- (a) Permit requirement. All uses, activities and development occurring within the floodplain area shall be undertaken only upon the issuance of a permit. Such development shall be undertaken only in strict compliance with the provisions of this article and with all other applicable codes and ordinances, such as the Virginia Uniform State-wide Building Code. Prior to the issuance of any such permit, the permit officer shall require all applications to include compliance with all applicable state and federal laws. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodway of any watercourse, drainage ditch or any other drainage facility or system.
- (b) Alteration or relocation of watercourse. Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within the town, an application must be submitted to the U.S. Corps of Engineers, the Virginia Marine Resources Commission and the Virginia Department of Environmental Quality (a joint permit application is available from any one of these organizations). Further notification of the proposal shall be given to all adjacent jurisdictions, the division of soil and water conservation (department of conservation and recreation) and the Federal Emergency Management Agency.
- (c) *Site plans and permit applications.* All applications for development in the floodplain areas and all building permits issued for the floodplain shall incorporate the following information:
 - (1) The elevation of the lowest floor (including basement) or, in V zones, the lowest horizontal structural member.
 - (2) For structures to be floodproofed (nonresidential only), the elevation to which the structure will be floodproofed.
 - (3) The elevation of the base flood at the site.
 - (4) Topographic information showing existing and proposed ground elevations.

(Ord. of 5-29-90, § 4.1; Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71A. - General standards.

In all special flood hazard areas the following provisions shall apply:

- (1) New construction and substantial improvements shall be done according to the Virginia Uniform State-wide Building Code and anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) Manufactured homes shall be anchored to prevent flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (7) New and replacement sanitary sewages systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of the ordinance from which this article derives, shall meet the requirements of "new construction" as contained in this article.
- (10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this article, shall be undertaken only if said nonconformity is not furthered, extended or replaced.
- (11) Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this jurisdiction a permit shall be obtained from the U.S. Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, in riverine areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the department of conservation and recreation (division of dam safety and floodplain management), other required agencies, and the Federal Emergency Management Agency.
- (12) The flood-carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

- (13) All new or replacement sanitary sewer facilities and private package sewage treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment.
- (14) All new or replacement water facilities shall be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.
- (15) All storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The systems shall ensure drainage away from buildings and on-site waste disposal sites. The town council may require a primarily underground system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.
- (16) All utilities, such as gas lines, electrical and telephone systems being placed in flood-prone areas should be located, elevated (where possible), and constructed to minimize the chance of impairment during a flooding occurrence.
- (17) Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage opening shall be required to sufficiently discharge flood flows without unduly increasing flood heights.

(Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71B. - Specific standards.

In all special flood hazard areas where base flood elevations have been provided in the flood insurance study or generated by a certified professional according to <u>section 29-51</u>, the following provisions shall apply:

- Residential construction. New construction or substantial improvement of any residential structure (including manufactured homes) shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation. See subsections <u>29-51(a)(4)</u> and (a)(5) for coastal A and VE zones.
- (2) Nonresidential construction. New construction or substantial improvement of any commercial, industrial or nonresidential building (or manufactured home) shall have the lowest floor, including basement, elevated to no lower than one foot above the base flood elevation. See subsections <u>29-51(a)(4)</u> and (a)(5) for requirements for coastal A and VE zones. Buildings located in all A1-30, AE, and AH zoned may be floodproofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the

BFE plus one foot are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by the zoning administrator.

- (3) *Elevated buildings.* Enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:
 - a. Not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed areas shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, except to enclose storage areas;
 - b. Be constructed entirely of flood-resistant materials below the regulatory flood protection elevation;
 - c. Include, in zones A, AO, AE and A1-30, measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
 - 1. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
 - 2. The total net area of all openings must be at least one square inch for each square foot of enclosed area subject to flooding.
 - 3. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
 - 4. The bottom of all required openings shall be no higher than one foot above the adjacent grade.
 - 5. Openings may be equipped with screens, louvers or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
 - 6. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.
- (4) Standards for manufactured homes and recreational vehicles.

- a. In all designated special flood hazard areas, all manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for new construction, including the elevation and anchoring requirements.
- c. All recreational vehicles placed on sites must either:
 - 1. Be on the site for fewer than 180 consecutive days; and
 - 2. Be fully licensed and ready for highway use; or
 - 3. Meet the permit requirements for placement and the elevation and anchoring requirements for manufactured homes in subsection (4)a. above.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.

- (5) *Coastal A zones.* Buildings and structures within this zone shall have the lowest floor elevated to or above the base flood elevation plus one foot of freeboard, and must comply with the provisions in <u>section 29-71A</u> and <u>section 29-71B</u>.
- (6) VE or V zones.
 - a. All new construction and substantial improvements in zones V and VE (V if base flood elevation is available) shall be elevated on pilings or columns so that:
 - 1. The bottom of the lowest horizontal structural member of the lowest floor, excluding the pilings or columns, is elevated to or above the base flood level (recommended greater than or equal to one foot) if the lowest horizontal structural member is parallel to the direction of the wave approach or elevated at least one foot above the base flood level if the lowest horizontal structural member is perpendicular to the direction of the wave approach; and
 - 2. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent change of being equaled or exceeded in any given year (one percent annual chance).
 - b. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with the accepted standards of practice for meeting the provisions of subsection <u>29-51(a)(5)a</u>.
 - c. The floodplain administrator shall obtain the elevation, in relation to the mean sea level, of the bottom of the lowest structural member of the lowest floor, excluding the pilings and columns, of all new and substantially improved structures in zones V and VE. The

floodplain management administrator shall maintain a record of all such information.

- d. All new construction shall be located landward of the reach of mean high tide.
- e. All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood-lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of no less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot, either by design or when so required by local codes, may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - 1. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and
 - 2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components, structural and nonstructural. Maximum wind and water loading values to be used in this determination shall each have a one percent change of being equaled or exceeded in any given year.
- f. The enclosed space below the lowest floor shall be used solely for parking of vehicles, building access, or storage. Such space shall not be partitioned into multiple rooms, temperature-controlled, or used for human habitation.
- g. The use of fill for structural support of buildings is prohibited. When nonstructural fill is proposed in a coastal high hazard area, appropriate engineering analyses shall be conducted to evaluate the impacts of the fill prior to issuance of a development permit.
- h. The man-made alteration of sand dunes, which would increase potential flood damage, is prohibited.

(Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71C. - Standards for approximated floodplain.

The following provisions shall apply with the approximate floodplain district:

(1) When base flood elevation data or floodway data have not been provided, the zoning administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or any other source, in order to administer the provisions of <u>section 29-71</u>. When such base flood elevation data is utilized, the zoning administrator shall obtain:

- a. The elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures; and
- b. If the structure has been floodproofed in accordance with the requirements of subsection <u>29-71B(2)</u> of this article, the elevation in relation to the mean sea level to which the structure has been floodproofed.
- (2) When the data is not available from any source as in subsection (1) above, the lowest floor of the structure shall be elevated to no lower than one foot above the highest adjacent grade.

(Ord. No. 05-09, 3-30-09; Ord. No. <u>06-2015</u>, 8-10-15)

Sec. 29-71D. - Standards for the special floodplain district.

The following provisions shall apply within the special floodplain district:

- (1) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill), shall be permitted within the areas of special flood hazard, designated as zones A1-30 and AE on the flood rate insurance map, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the Town of West Point.
- (2) Development activated in zones A1-30, AE and AH, on the town's flood insurance rate map which increases the water surface elevation of the base flood by more than one foot may be allowed, provided that the applicant first applies with the Town of West Point's endorsement for a conditional flood insurance rate map revision, and received the approval of the Federal Emergency Management Agency.

Note: This requirement only applies along rivers, streams, and other watercourses where FEMA has provided base flood elevations. The requirement does not apply along lakes, bays and estuaries, and the ocean coast.

(Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71E. - Standards for the floodway.

The following provisions shall apply within the floodway when it has been identified as in subsection <u>29-</u> <u>71C(1)</u>:

(1) Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard

engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the floodplain administrator.

> Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies with the Town of West Point's endorsement for a conditional letter of map revision (CLOMR) and receives the approval of the Federal Emergency Management Agency.

- (2) If subsection (1) above, is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of <u>section 29-71</u>.
- (3) The placement of manufactured homes is prohibited, except in an existing manufactured homes park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation and encroachment standards are met.

(Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71F. - Standards for the shallow flooding district.

The following provisions shall apply within the shallow flooding district:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the flood depth specified on the flood insurance rate map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than three feet above the highest adjacent grade.
- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor, including basement, elevated to or above the flood depth specified on the flood insurance rate map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade; or
 - b. Together with attendant utility and sanitary facilities be completely floodproofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(3) Adequate drainage paths around structures on slopes shall be provided to guide floodwaters around and away from proposed structures.

(Ord. No. 05-09, 3-30-09; Ord. No. 06-2015, 8-10-15)

Sec. 29-71G. - Standards for subdivision proposals.

- (a) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- (c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (d) Base flood elevation data shall be provided for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed 50 lots or five acres, whichever is the lesser.

(Ord. No. 05-09, 3-30-09; Ord. No. <u>06-2015</u>, 8-10-15)

Sec. 29-72. - Reserved.

Editor's note— Ord. No. <u>06-2015</u>, adopted Aug. 10, 2015, deleted § 29-72, entitled "Design criteria for utilities and facilities," which derived from Ord. of May 29, 1990, § 4.2.

Secs. 29-73—29-80. - Reserved.

DIVISION 4. - VARIANCES; FACTORS TO BE CONSIDERED

Sec. 29-81. - Variances; factors to be considered.

(a) Whenever any person is aggrieved by a decision of the permit officer with respect to the provisions of this article, it is the right of that person to appeal to the board of appeals for a variance. Such appeal must be filed, in writing, within 30 days after the determination by the permit officer. Upon receipt of such an appeal, the board of appeals shall set a time and place for the purpose of hearing the appeal, which shall be not less than ten, nor more than 30 days from the date of the receipt of appeal. Notice of the time and place of the hearing of the appeal shall be given to all parties at the time they may appear and be heard. The determination by the board of appeals shall be final in all cases.

Variances shall be issued only upon: (i) a showing of good and sufficient cause, (ii) after the board of zoning appeals has determined that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) after the board of zoning appeals has determined that the granting of such variance will

not result in: (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the board of zoning appeals for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of this section.

Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of functionally dependent use provided that the criteria of this section are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

- (b) In passing upon applications for variances, the board of appeals shall satisfy all relevant factors and procedures specified in other sections of the management article and consider the following additional factors:
 - (1) The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity within any floodway district that will cause any increase in the one percent chance flood elevation.
 - (2) The danger that materials may be swept on to other lands or downstream to the injury of others.
 - (3) The proposed water supply and sanitation systems and ability of these systems to prevent disease, contamination and unsanitary conditions.
 - (4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
 - (5) The importance of the services provided by the proposed facility to the community.
 - (6) The requirements of the facility for a waterfront location.
 - (7) The availability of alternative locations not subject to flooding for the proposed use.
 - (8) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
 - (9) The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.
 - (10) The safety of access by ordinary and emergency vehicles to the property in time of flood.
 - (11)

The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters expected at the site.

- (12) The repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (13) Such other factors which are relevant to the purposes of this article.
- (c) The board of appeals may refer any application and accompanying documentation pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.
- (d) Variances shall be issued only after the board of appeals has determined that the granting of such will not result in: (a) unacceptable or prohibited increases in flood heights; (b) additional threats to public safety; (c) extraordinary public expense, and will not; (d) create nuisances; (e) cause fraud or victimization of the public; or (f) conflict with local laws or ordinances.
- (e) Variances shall be issued only after the board of appeals has determined that the variance will be the minimum required to provide relief from any hardship to the applicant.
- (f) The board of appeals shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the 100-year flood elevation:
 - (1) Increases the risks to life and property; and
 - (2) Will result in increased premium rates for flood insurance.
- (g) A record shall be maintained of the above notification as well as all variance actions, including justification for the issuance of the variances. Any variances which are issued shall be noted in the annual or biennial report submitted to the Federal Insurance Administrator.

(Ord. of 5-29-90, art. V; Ord. No. <u>06-2015</u>, 8-10-15)

Secs. 29-82-29-90. - Reserved.

DIVISION 5. - EXISTING STRUCTURES IN FLOODPLAIN AREAS

Sec. 29-91. - Existing structures in floodplain areas.

A structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued subject to the following conditions:
Existing structures in the floodway area shall not be expanded or enlarged unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed expansion would not result in any increase in the base flood elevation.

- (2) Any modification, alteration, repair, reconstruction or improvement of any kind to a structure and/or use located in any floodplain areas to an extent or amount of less than 50 percent of its market value shall conform to the Virginia Uniform State-wide Building Code.
- (3) The modification, alteration, repair, reconstruction or improvement of any kind to a structure and/or use, regardless of its location in a floodplain area to an extent or amount of 50 percent or more of its market value shall be undertaken only in full compliance with this article and shall require the entire structure to conform to the Virginia Uniform State-wide Building Code.

(Ord. of 5-29-90, art. VI; Ord. No. 05-09, 3-30-09; Ord. No. <u>06-2015</u>, 8-10-15)

Secs. 29-92—29-115. - Reserved.

Proximity to Floodplain and Potential for Recurrent Flooding -Middle Peninsula PDC Round 5 VA Community Flood Preparedness Fund Proposals

I have reviewed the proposed site locations and materials provided by MPPDC staff for five applications to be submitted under Round 5 of the VDCR CFPF:

- Gloucester Point Beach Park Resilience Site Design and Construction, 1255 Greate Rd, Gloucester Point, VA 23062 (37.24634, -76.50287).
- Mathews County Haven Beach Living Shoreline Construction, State Rte 645, Diggs, VA 23045 (37°26'25", -76°15'28").
- Captain Sinclairs Recreational Area Public Mixed-Use Structure Flood Protection Project, 9524 Whittaker Drive Ware, VA 23061 (37.32546, -76.427569).
- Parametric and Flood Insurance Accelerator, the entire MPPDC region, including the counties of Essex, Gloucester, King and Queen, King William, Mathews, and Middlesex and the towns of Tappahannock, Urbanna, and West Point. This is a project to advance a program. The only construction to occur will involve the deployment of fixed water level gauges within regulatory floodplain and no adverse impacts anticipated.
- Town of West Point Coastal Resilience Master Plan, West Point, Virginia 23181 (37.53666, -76.79994). The study area boundary includes the town's peninsula created by the Pamunkey River and Mattaponi River to Rt. 33 (locally known as 14th Street and the W. Lewis B. Puller Memorial Highway) and the papermill immediately to the northwest of Rt.33 along the Pamunkey River. This is a planning project that does not include construction.

Based on the FEMA FIRMettes provided, all project sites, or portions of sites, are located within a regulatory floodplain and subject to recurrent flooding.

Denise Nelson, PE, CFM, ENV SP, LEED AP Sustainable and Resilient Infrastructure Engineer <u>Denise Nelson Advising, LLC</u> 804-363-7437 <u>DNAdvising@gmail.com</u>



GLOUCESTER COUNTY County Administrator's Office

6489 Main Street Gloucester, VA 23061 (804) 693-4042 www.gloucesterva.gov



Lewis L Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, VA 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie:

Gloucester County supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

As a partnering locality applying for grant funds, we appreciate the ability to work with the MPPDC to preserve the Gloucester Point Beach Park through the construction of a living shoreline. The project will ensure public access to the County's only public beach and the adjacent recreational area. Gloucester County does not have the financial means to implement the project on our own. Utilizing the CFRF for Gloucester's site and similar locations will impact tens of thousands of Virginia residents and visitors.

Should you have any questions concerning our support for the work of the MPPDC, I can be reached by email at csteele@gloucesterva.info or phone at 804-693-4042.

and Steele

Carol. E. Steele County Administrator

April L. Rounds County Administrator 202 South Church Lane Post Office Box 1079 Tappahannock, Virginia 22560 (804) 443-4331 www.essex-virginia.org



Established 1692

Essex County Virginia

Board of Supervisors

Rob Akers, Chairman Greater Tappahannock Election District

> Ronnie Gill, Vice-Chairman South Election District

> > Sidney N. Johnson North Election District

John C. Magruder Central Election District

Edwin E. "Bud" Smith Jr. At Large Election District

October 8, 2024

Lewis L. Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, VA 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie,

Essex County supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should you have any questions concerning Essex County's support for the work of the MPPDC, I can be reached at 804-443-4331.

Respectfully,

inkauds

April L. Rounds Administrator



Vivian R. Seay County Administrator | County Attorney Direct Telephone 434-607-0717 vseay@kingandqueenco.net 242 Allen's Circle, Suite 211 Post Office Box 177 King and Queen Court House, Virginia 23085 Office Telephone 804-785-5975

October 21, 2024

Lewis L. Lawrence, Executive Director Middle Peninsula Planning District Commission Post Office Box 286 Saluda, Virginia 23149

Re: Middle Peninsula Planning District Commission (MPPDC) Application Virginia Community Flood Preparedness Fund - ROUND 5

Dear Lewie,

King and Queen County supports all MPPDC applications requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite critical for resiliency planning, coordination, and implementation. These programs, especially the MPPDC FTF program, recognize the inherent risk coastal flooding poses to the delivery of essential governmental services, like public safety services, the need for which arises due to coastal storms and recurrent flooding of all types; and resiliency services to protect at-risk waterfront real estate values upon which the funding of essential governmental services is based. In basic terms, we must in every way possible counter coastal flooding to ensure the safety of our citizens and the longevity of our boundaries.

Should you have any questions concerning our support for the work of the MPPDC, I can be reached at vseay@kingandqueenco.net.

Vivian R. Seay County Administrator | County Attorney

 From:
 Lewis Lawrence

 To:
 Jackie Rickards

 Subject:
 KW Support of Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

 Date:
 Tuesday, October 22, 2024 11:35:39 AM

 Attachments:
 image001.png image002.png Outlook-jeywl3dg.png

KW below



804-758-2311

www.mppdc.com

From: Stacey Davenport <stacey.davenport@kwc.gov>
Sent: Tuesday, October 22, 2024 11:13 AM
To: Lewis Lawrence <llawrence@mppdc.com>
Subject: Support of Applications Submitted by MPPDC to Virginia Community Flood Preparedness
Fund ROUND 5

Lewis L Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, Va 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie,

King William County supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency

coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should you have any questions concerning our support for the work of the MPPDC, I can be reached at 804-769-4927.

Sincerely,

Stacey Davenport

Stacey T. Davenport

County Administrator King William County 180 Horse Landing Road, #4 King William, VA 23086 (804) 769-4926 stacey.davenport@kwc.gov



County of Mathews Administration Office

mathewscountyva.gov



Lewis Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, VA 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie,

Mathews County supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should you have any questions concerning our support for the work of the MPPDC, I can be reached at (804) 725-7172 or via email rwilson@mathewscountyva.gov.

mma With

Ramona Wilson. P.E., MPA Mathews County Administrator

Matthew L. Walker County Administrator



Ann Marie Ricardi Assistant County Administrator

County of Middlesex Office of the County Administrator

October 9, 2024

Lewis L Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, Va 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie,

Middlesex County supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially the MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should you have any questions concerning our support for the work of the MPPDC, I can be reached at 804-758-4330.

Sincerely, Matt Walker, County Administrator



Lewis L Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, Va 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Lewie,

The Town of Tappahannock supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should you have any questions concerning our support for the work of MPPDC, I can be reached at 804-443-3336.

Sincerely

Eric S. Pollitt Town Manager Town of Tappahannock



TOWN OF URBANNA 390 VIRGINIA ST. SUITE B, PO BOX 179, URBANNA, VA 23175 PHONE: 804-758-2613, FAX: 804-758-0389

October 8, 2024

Lewis L Lawrence, Executive Director Middle Peninsula Planning District Commission P.O. Box 286 Saluda, Va 23149

RE: Applications Submitted by MPPDC to Virginia Community Flood Preparedness Fund ROUND 5

Dear Mr. Lewis:

The Town of Urbanna supports the Middle Peninsula Planning District Commission's (MPPDC) application requesting funding under the Department of Conservation and Recreation (DCR)'s Community Flood Preparedness Fund (CFPF). The proposals submitted by MPPDC staff enhance and build upon regional and local resilience efforts within the Middle Peninsula. We further support project proposals that demonstrate a primary purpose of prevention or protection to reduce coastal, riverine, or inland flooding.

The MPPDC Fight the Flood (FTF) Program serves as the region's flood resiliency coordination program. The MPPDC Living Shoreline Incentive Program design and the MPPDC FTF Program design provide the operational and administrative oversite for resiliency planning, coordination, and implementation. These programs, especially MPPDC FTF program, recognize the inherent risk to the delivery of essential governmental services, including public safety, posed by coastal storms and recurrent flooding of all types and the relationship between at-risk waterfront real estate values and funding of essential governmental services.

Should reviewing entities have any questions concerning our support for the work of the MPPDC, they can reach me at 804-758-2613 or t.costin@urbannava.gov.

P. S. T. (Ted) Costin Town Administrator

Appendix F: Resilience Plan Requirements

A local government must have a Department-approved Resilience Plan to be considered for funding under the Project Category.

A plan can be either one document or a combination of documents that meet the elements described in the definitions section of this manual. In either case, a stand-alone plan, or a document that includes the compiled elements of multiple plans or documents should include an executive summary that specifically identifies and summarizes relevant elements as outlined below. Once the Department certifies a local government has met the minimum requirements that determination will stand for a period of five years.

The resilience plan may be submitted before or concurrently with the submission of a project plan, however it is recommended that the resilience plan be submitted prior to project application. This will allow time for any changes or corrections necessary to meet the requirements of the Fund prior to application deadlines.

Resilience plans should be clearly identified with the name of the local government in the file name (example: CID#.Essex.resilienceplan) and submitted to cfpf@dcr.virginia.gov. The CID# is unique to each county, city, or town in Virginia.

If multiple eligible entities are included in one application, applicants should list all localities with their CID#s, for example: CID510XXX-KellerTown CID510XXX-MelfaTown CID510XXXPainterCFPF-1

The contents of a resilience plan for the purpose of this grant round must include the following elements.

- 1. It is project-based with projects focused on flood control and resilience.
- 2. It incorporates nature-based infrastructure to the maximum extent possible.
- 3. It includes considerations of all parts of a locality regardless of socioeconomics or race, and addresses flood resilience needs of underserved populations within the community.
- 4. It identifies and includes all flooding occurring in all areas of the community, not just within the SFHAs, and provides the number and location of repetitive loss and severe repetitive loss properties. Repetitive loss and/or severe repetitive loss often occurs outside of the SFHA and to properties not captured in NFIP reporting. All flooding should be tracked and addressed by the community.
- 5. If property acquisition and/or relocation guidelines are included, the guidelines include equitable relocation strategies for all affected and where land is acquired. Property acquisitions must remain undeveloped, as permanent open space and under ownership or easement by the locality in perpetuity, except that flood control structures may be built on the property.
- 6. It includes a strategy for debris management.
- 7. It includes administrative procedures for substantial development/substantial improvement of structures within the SFHA.
- 8. It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation.
- 9. Is based on the best available science, and incorporates climate change, sea level rise, and storm surge (where appropriate), and current flood maps.

Plans may refer to a previously adopted "stand alone" plan that meets the resilience plan definition or references the elements of other plans or documents that when compiled address the minimum requirements of a resilience plan. This may include sections cited from a local comprehensive plan, other land use plan, ordinance, local hazard mitigation plan, other plans developed to address flooding and resilience, and plans developed for the local government by a third party. This may also include regional strategies or plans in which a local government is party. In either case, a stand-alone plan, or a document that includes the compiled elements of multiple plans or documents should include an executive summary that specifically identifies the source of information and summarizes relevant the elements as outlined in this Appendix.

The following list of elements, plans and considerations are provided to help guide the development and identification of strategies/documents necessary for a successful resilience plan.

- Strategic polices for local government-wide flood protection and prevention that include considerations of all parts of a locality regardless of socioeconomics or race, and address flood resilience needs of underserved populations within the community.
- Proposed projects that enables communities to adapt to and thrive through natural or human hazards.

Documentation of existing social, economic, natural, and other conditions present in the local government.

□ Review of the vulnerabilities and stressors, both natural and social in the local government.

□ Forward-looking goals, actionable strategies, and priorities that incorporate protections for all impacted parts of a locality.

- □ Strategies that guide growth and development away from high-risk locations that may include strategies in comprehensive plans or other land use plans or ordinances or other studies, plans or strategies adopted by a local government.
- Proposed acquisition of land or conservation easements or identification of areas suitable for conservation particularly areas identified as having high flood attenuation benefit by ConserveVirginia or similar data driven tools. Documentation (proposed easement, maintenance agreement, deed language, etc.) must be provided which ensures the property will be owned and maintained by the locality in perpetuity as an open space or conservation area, except that flood control structures may be built on the property. Additionally, any relocation strategy must be achievable and approved by the Department, address depressed housing values when buy outs are used, and provide a pathway to relocation for all individuals residing in the occupied structures, including tenants.
- Identification of areas suitable for property buyouts in frequently flooded areas. Documentation (proposed easement, maintenance agreement, deed language, etc.) must be provided which ensures the property will be owned and maintained by the locality in perpetuity as an open space or conservation area.

Additionally, any relocation strategy must be achievable and approved by the Department, address depressed housing values when buy outs are used, and provide a pathway to relocation for all individuals residing in the occupied structures, including tenants.

Identification of critical facilities and their vulnerability throughout the local government such as water and sewer or other types identified as "lifelines" by FEMA.

□ Identified ecosystems/wetlands/floodplains suitable for permanent protection.

□ Identified incentives for restoring riparian and wetland vegetation.

□ A framework for implementation, capacity building and community engagement.

- □ Strategies for creating knowledgeable, inclusive community leaders and networks.
- A community dam safety inventory and risk assessment posed by the location and condition of dams. Π
- □ A characterization of the community including:
 - Population, economics, cultural and historic resources,
 - Dependence on the built environment and infrastructure and, the risks posed to such infrastructure, and
 - Characteristics of flooding from climate change, riverine flooding, sea level rise, tidal events or storm surges or other weather.
- Strategies to address other natural hazards, where applicable, that would cause, affect or result from flooding events including:
 - Earthquakes.
 - Storage of hazardous materials
 - Landslides/mud/debris flow/rock falls.
 - Dam failures
 - Prevention of wildfires that would result in denuded lands making flooding, mudslides or similar events more likely.
 - Preparations for severe weather events including tropical storms or other severe storms, including winter storms.