# 2622 - MPPDC_DCR1_Multi_CFPF Portadam System

## Application Details

| | |
|---|---|
| **Funding Opportunity:** | 2336-Virginia Community Flood Preparedness Fund - Project Grants - CY24 Round 5 |
| **Funding Opportunity Due Date:** | Jan 24, 2025 11:59 PM |
| **Program Area:** | Virginia Community Flood Preparedness Fund |
| **Status:** | Under Review |
| **Stage:** | Final Application |
| **Initial Submit Date:** | Jan 21, 2025 8:45 PM |
| **Initially Submitted By:** | Jackie Rickards |
| **Last Submit Date:** | |
| **Last Submitted By:** | |

## Contact Information

### Primary Contact Information

| | |
|---|---|
| **Active User*:** | Yes |
| **Type:** | External User |
| **Name*:** | Ms. (Salutation) Jackie (First Name) Middle Name Rickards (Last Name) |
| **Title:** | Senior Planning Project Manager |
| **Email*:** | jrickards@mppdc.com |
| **Address*:** | PO Box 399<br>4521 Lewis B. Puller Memorial Highway<br>Shacklefords (City) Virginia (State/Province) 23156 (Postal 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/ |

**Address*:** PO Box 286

Saluda Virginia 23149
City State/Province Postal Code/Zip

**Phone*:** (804) 758-2311 Ext.
###-###-####

**Fax:** ###-###-####

**Benefactor:**

**Vendor ID:**

**Comments:**

## VCFPF Applicant Information

***Project Description***

**Name of Local Government*:** Gloucester County

Your locality's CID number can be found at the following link: Community Status Book Report

**NFIP/DCR Community Identification Number (CID)*:** 510071

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

Shacklefords Virginia 23156
City State Zip 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

Shacklefords Virginia 23156
City State Zip 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 needed funding to purchase and implement 260 ft of a 6ft tall Port-a-dam flood wall system for the flood protection and

mitigation of future flood damage to a publicly owned commercial/residential structure, known as the Pool House at the Captain Sinclair Recreational Area in Gloucester County (9530 Whittaker Dr. Gloucester, Va 23061).

**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*:** 1004

**Is Project Located in an NFIP Participating Community?*:** Yes

**Is Project Located in a Special Flood Hazard Area?*:** Yes

**Flood Zone(s) (if applicable):** AE

**Flood Insurance Rate Map Number(s) (if applicable):** 51073C0210F

## Eligibility CFPF - Round 4 - Projects

***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

Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?

**Resilience Plan*:** Yes

Yes - Eligible for consideration under all categories
No - Eligible for consideration for studies, capacity building, and planning only

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
N/A - Not applicable

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 Flood Prevention and Protection Projects - Round 4

***Scoring***

**Category Scoring:**

Hold CTRL to select multiple options

**Project Category*:** All other projects

**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)
Very Low Social Vulnerability (Less than -1.0)

**Socially Vulnerable*:** Low Social Vulnerability (-1.0 to 0.0)

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

**NFIP*:** No

**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*:** Yes

**Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and the Chesapeake Bay and assist the Commonwealth in achieving local and/or Chesapeake Bay TMDLs. Does the proposed project include implementation of one or more best management practices with a nitrogen, phosphorus, or sediment reduction efficiency established by the Virginia Department of Environmental Quality or the Chesapeake Bay Program Partnership in support of the Chesapeake Bay TMDL Phase III Watershed Implementation Plan?**

**Reduction of Nutrient and Sediment Pollution*:** No

**Does this project provide ?community scale? benefits?**

**Community Scale Benefits*:** Less than 25% of census block

**Expected Lifespan of Project**

**Expected Lifespan of Project*:** Over 20 Years

**Comments:**

## Scope of Work - Projects - Round 4

***Scope of Work***

**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*:** PortaDam at Pool house_SCOPE OF WORK 3.pdf

**Comments:**

Scope of work for the purchase of a port-a-dam system.

***Budget Narrative***

**Budget Narrative Attachment*:** Portadam_BUDGET NARRATIVE.pdf

**Comments:**

Budget narrative and estimate from the Portadam

## Scope of Work Supporting Information - Projects

***Supporting Information - Projects***

**Provide population data for the local government in which the project is taking place**

**Population*:** 38711.00

**Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained**

**Historic Flooding data and Hydrologic Studies*:** Historic flooding data_Portadam.pdf

**Include studies, data, reports that demonstrate the proposed project minimizes flood vulnerabilities and does not create flooding or increased flooding (adverse impact) to other properties**

**No Adverse Impact*:** No adverse impact.pdf

**Include supporting documents demonstrating the local government's ability to provide its share of the project costs. This must include an estimate of the total**

project cost, a description of the source of the funds being used, evidence of the local government's ability to pay for the project in full or quarterly prior to reimbursement, and a signed pledge agreement from each contributing organization

**Ability to Provide Share of Cost*:** Match Committment from MPPDC 1.pdf

A benefit-cost analysis must be submitted with the project application

**Benefit-Cost Analysis*:** BenefitCost Analysis.pdf

Provide a list of repetitive loss and/or severe repetitive loss properties. Do not provide the addresses for the properties, but include an exact number of repetitive loss and/or severe repetitive loss structures within the project area

**Repetitive Loss and/or Severe Repetitive Loss Properties*:** RL and SRL properties.pdf

Describe the residential and commercial structures impacted by this project, including how they contribute to the community such as historic, economic, or social value. Provide an exact number of residential structures and commercial structures in the project area

**Residential and/or Commercial Structures*:**

MPPDC staff is proposing to a flood mitigation project for the Pool House on the Captain Sinclair Recreational Area, which is publicly owned by the Middle Peninsula Chesapeake Bay Public Access Authority (PAA). The PAA is investing close to $500,000 in the Pool House's structural rehabilitation by adding a second story to the house for veteran living quarters as Captain Sinclair's park managers. These units are being added as a second floor to reduce loss of residential property. The first floor of the Pool House is to become public space with public restrooms and bait shop for providing drinks and bait for the public fishing pier and storage of public equipment. The first floor requires flood protection as a public facility in a high hazard area. In 2018, 2019, and 2023 MPPDC staff applied to FEMA Hazard Mitigation Assistance Programs to elevate the structure out of the floodplain; however all three applications were denied.

If there are critical facilities/infrastructure within the project area, describe each facility

**Critical Facilities/Infrastructure*:**

There are no critical facilities/infrastructure in the project area. However, the project will protect a public asset for veterans and for the general public utilizing the Captain Sinclair Recreational Area for recreation. Investing in this site and mitigating for flooding is a priority for protecting this asset and ensuring it can provide direct, indirect, and induced benefits to the county, region, and beyond.

Explain the local government's financial and staff resources. How many relevant staff members does the local government have? To what relevant software does the local government have access? What are the local government's capabilities?

**Financial and Staff Resources*:**

The PDC is a 52-year-old political subdivision of Virginia formed by the Middle Peninsula localities under VA Code §15.2-4203 to provide solutions to problems of greater than local significance. The PDC have worked on topics associated with the land water interface, including coastal use conflicts and policies, flooding, and resiliency. In 2020, the PDC launched the Fight the Flood (FTF) Program to connect property owners to contractors who can help them protect their property from flood waters. FTF offers a variety of financial tools to fund resiliency projects including but limited to the Septic Repair revolving loan fund program (RLFP), Living Shoreline RLFP, and plant insurance for living shorelines. Since the beginning of the program FTF has invested $44,506,804 in flood protection in the region. The proposed project within relates to Middle Peninsula regional resilience efforts.

Currently PDC staff manages 49 projects funded by a variety of funding state and federal agencies. The PDC adopted an $10,082,854 agency budget for FY25 (7/24 to 6/25). Several projects involve multiple projects, and some involve dozens of individual projects, most of which are located on private properties.
To ensure that projects are complete according to the scope of work, project timeline and budget, MPPDC staff work together. Staff includes:

- Lewis Lawrence, Executive Director, coordinates project partners, assists project execution, and provides updates to the MPPDC Board.
- Curt Smith, Deputy Director, assists project partner coordination, advises project execution & provides updates to the MPPDC Board.
- Rachael Peabody, Deputy Director, will administer and manage CFPF funded projects.
- Julie Kaylor, Chief Financial Officer, oversees all financial activities including preparation of financial reports & budget management. She also administraters the MPPDC Living Shoreline Incentives Revolving Loan and Grant Program
- Taylor Ovide, Coastal Planner, assist in managing partners, activities & information from the proposed project and project reports.
-Jackie Rickards, Senior Planning Project Manager, oversees reporting for CFPF funded projects.
- Jennifer Farmer, Hybrid Financial Clerk, Clerk to the Board, & Regional Planner, assists the CFO with administrative, fiscal, & clerical tasks and provide assistance to planning staff as needed.

Staff has access to Microsoft Suite for daily work tasks and uses ArcGIS to hold all data associated with the FTF Program.

Identify and describe the goals and objectives of the project. Include a description of the expected results of the completed project and explain the expected benefits of the project. This may include financial benefits, increased awareness, decreased risk, etc.

**Goals and Objectives*:**

Goals listed as an outcome that solves the problem identified.

Goal 1: Protect the public structure and asset at the Captain Sinclair Recreational Area from flood waters.

Goal 2: Offer another mitigation solution example at the Captain Sinclair Recreational Area for the public and mitigation professionals to view.

Objectives are specific, measurable and timebound.

Objectives are achievable within the agreement period.

Objective 1: Consult with Gloucester County Planning Department about permitting the temporary deployment of Port-a-dam with a Chesapeake Bay Preservation Area

Objective 2: Purchase 260 linear feet of six-foot-high barrier Port-a-dam equipment, with four corner sections to protect the structure.

Objective 3: Schedule and host a training with Port-a-dam to teach the veteran group, Knott Along Hold Fast, about how to deploy the port-a-dam on site. Port-a-dam will provide a one-day training session to the veteran?s group on-site within 45 days of receipt of the equipment.

Objective 4: Plan and conduct for 1 practice Port-a-dam deployment.

All objectives and goals will be achieved within the grant contract period.

**Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress. Explain what deliverables can be expected at each milestone, and what the final project deliverables will be. Identify other project partners**

**Approach, Milestones, and Deliverables*:** Portadam - Approach Milestones Deliverables.pdf

**Where applicable, briefly describe the relationship between this project and other past, current, or future resilience projects. If the applicant has received or applied for any other grants or loans, please identify those projects, and, if applicable, describe any problems that arose with meeting the obligations of the grant and how the obligations of this project will be met**

**Relationship to Other Projects*:**

See Supporting Document titled, "Relationship to Other Projects"

**For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided**

**Maintenance Plan*:** Portadam_Maintenance Plan.pdf

**Describe how the project meets each of the applicable scoring criteria contained in Appendix B. Documentation can be incorporated into the Scope of Work Narrative**

**Criteria*:**

Eligible Projects - 10 pts
Social Vulnerability Index Score - 0 pts
Community scale of benefits - 0 pts
Expected lifespan of project - 10 pts
Remedy for NFIP probation or suspension - 0 pts
Proposed project part of a low-income geographic area - 10 pts
Proposed project implements a Chesapeake Bay TMDL BMP - 0 pts
TOTAL - 30 pts

## Budget

***Budget Summary***

**Grant Matching Requirement*:** LOW INCOME - All other Projects Fund 85%/Match 15%

Is a match waiver being requested?

**Match Waiver Request** No

Note: only low-income communities are eligible for a match waiver.

***:**

**I certify that my project is in a low-income geographic area:** Yes

**Total Project Amount (Request + Match)*:** $132,680.00

**This amount should equal the sum of your request and match figures

**REQUIRED Match Percentage Amount:** $19,902.00

## BUDGET TOTALS

**Before submitting your application be sure that you meet the match requirements for your project type.**

| | |
|---|---|
| **Match Percentage:** | 15.00%<br>Verify that your match percentage matches your required match percentage amount above. |
| **Total Requested Fund Amount:** | $112,778.00 |
| **Total Match Amount:** | $19,902.00 |
| **TOTAL:** | $132,680.00 |

***Personnel***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Fringe Benefits***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Travel***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Equipment***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| 260' Port-a-dam Flood Wall | $112,778.00 | $0.00 | Cash |
| | **$112,778.00** | **$0.00** | |

***Supplies***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Construction***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Contracts***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Maintenance Costs***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***PreAward and Startup Costs***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| No Data for Table | | | |

***Other Direct Costs***

| Description | Requested Fund Amount | Match Amount | Match Source |
|---|---|---|---|
| MPPDC - Virginia Housing Development Authority Housing project | $0.00 | $19,902.00 | Cash |
| | **$0.00** | **$19,902.00** | |

## Long and Short Term Loan Budget - Projects - VCFPF

***Budget Summary***

**Are you applying for a short term, long term, or no loan as part of your application?**

If you are not applying for a loan, select "not applying for loan" and leave all other fields on this screen blank

| | |
|---|---|
| **Long or Short Term*:** | Not Applying for Loan |
| **Total Project Amount:** | $0.00 |
| **Total Requested Fund Amount:** | $0.00 |
| **TOTAL:** | $0.00 |

***Salaries***

| Description | Requested Fund Amount |
|---|---|
| No Data for Table | |

***Fringe Benefits***

| Description | Requested Fund Amount |
|---|---|
| No Data for Table | |

***Travel***

| Description | Requested Fund Amount |
|---|---|
| No Data for Table | |

***Equipment***

| Description | Requested Fund Amount |
|---|---|
| No Data for Table | |

***Supplies***

| Description | Requested Fund Amount |
|---|---|
| No Data for Table | |

***Construction***

| Description | Requested Fund Amount |
|---|---|

No Data for Table

***Contracts***

| Description | Requested Fund Amount |
|---|---|

No Data for Table

***Other Direct Costs***

| Description | Requested Fund Amount |
|---|---|

No Data for Table

## Supporting Documentation

***Supporting Documentation***

| Named Attachment | Required | Description | File Name | Type | Size | Upload Date |
|---|---|---|---|---|---|---|
| Detailed map of the project area(s) (Projects/Studies) | | Detailed maps of the project location in Gloucester County on the Severn River | Detailed Project Maps.pdf | pdf | 2 MB | 10/30/2024 11:10 AM |
| FIRMette of the project area(s) (Projects/Studies) | | National Flood Hazard Layer FIRMette for the project location. | FIRMETTE_7e6129af-80f7-44d4-a655-5cb487ce3dc0.pdf | pdf | 701 KB | 10/30/2024 11:11 AM |
| Historic flood damage data and/or images (Projects/Studies) | | Historic Flooding data in Gloucester County. | Historic flooding data_Portadam.pdf | pdf | 70 KB | 10/30/2024 09:50 PM |
| A link to or a copy of the current floodplain ordinance | | Gloucester County, VA floodplain ordinance | Gloucester County VA Code of Ordinances.pdf | pdf | 337 KB | 10/30/2024 11:13 AM |
| Maintenance and management plan for project | | Maintenance plan for this project. | Portadam_Maintenance Plan.pdf | pdf | 100 KB | 01/17/2025 11:49 AM |
| A link to or a copy of the current hazard mitigation plan | | Link to the Middle Peninsula Regional All Hazards Mitigation Plan (2021) | Link to the Middle Peninsula Regional All Hazards Mitigation .pdf | pdf | 52 KB | 10/30/2024 11:14 AM |
| A link to or a copy of the current comprehensive plan | | Link to the 2016 Gloucester County Comprehensive Plan. | Gloucester County Comprehensive Plan Link.pdf | pdf | 31 KB | 10/30/2024 11:17 AM |
| Social vulnerability index score(s) for the project area | | Social Vulnerability Index Scores from the CDC and the Virginia Flood Risk Information System | Social Vulnerability Index Scores.pdf | pdf | 254 KB | 10/30/2024 11:45 AM |
| Authorization to request funding from the Fund from governing body or chief executive of the local government | | Authorization to request funding and match commitment letter | Match Committment from MPPDC.pdf | pdf | 1 MB | 01/17/2025 12:59 PM |
| Signed pledge agreement from each contributing organization | | Authorization to request funding and match commitment letter | Match Committment from MPPDC.pdf | pdf | 1 MB | 01/17/2025 12:58 PM |
| Maintenance Plan | | Maintenance Plan | Portadam_Maintenance Plan.pdf | pdf | 100 KB | 01/17/2025 12:59 PM |
| *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 | | Benefit Cost Analysis statement. | BenefitCost Analysis.pdf | pdf | 67 KB | 10/30/2024 11:17 AM |
| Other Relevant Attachments | | Relationship to Other Projects at the Captain Sinclair Recreational Area and the within the MPPDC. | Relationship to Other Projects_Parametric Insurance.pdf | pdf | 201 KB | 11/01/2024 03:09 PM |

***Letters of Support***

| Description | File Name | Type | Size | Upload Date |
|---|---|---|---|---|
| Support letter from Essex County | Essex County_Letter of Support to MPPDC_10082024.pdf | pdf | 46 KB | 01/17/2025 12:38 PM |
| Support letter from Gloucester County | Gloucester County_Letter of Support to DCR for Flood Fund Applications.pdf | pdf | 168 KB | 01/17/2025 12:11 PM |
| Support letter from King & Queen County | King Queen County_Support Letter for Fight the Flood - Round 5.pdf | pdf | 145 KB | 01/17/2025 12:38 PM |
| Support letter from King William | King WilliamCounty_Letter of Support to MPPDC_10082024.pdf | pdf | 1 MB | 01/17/2025 12:07 PM |
| Support letter from Mathews County | Mathews_CFPF Application Support Letter.pdf | pdf | 355 KB | 01/17/2025 12:07 PM |
| Support letter from Middlesex County | Middlesex County_Support letter for MPPDC_FTF_flood.pdf | pdf | 322 KB | 01/17/2025 12:06 PM |
| Support letter from the Town of Tappahannock | Town of Tappahanock_Letter Supporting - Round 5.pdf | pdf | 100 KB | 01/17/2025 12:06 PM |
| Support letter from the Town of Urbanna | Town of Urbanna Letter of Support Rnd 5.pdf | pdf | 153 KB | 01/17/2025 12:04 PM |
| Support letter from the Town of West Point | West Point_CFPF Application Support Letter Round 5.pdf | pdf | 189 KB | 01/17/2025 12:04 PM |
| Support letter from Three River Health District | Three River Health District_LetterofSupportFloodPreparedness.pdf | pdf | 154 KB | 01/17/2025 12:39 PM |

## Resilience Plan

***Resilience Plan***

| Description | File Name | Type | Size | Upload Date |
|---|---|---|---|---|
| Endorsement of this project from Denise Nelson, a certified floodplain manager. | Endorsements from CFM.pdf | pdf | 82 KB | 01/17/2025 01:57 PM |
| MPPDC Resilience Plan approved on 8/19/21. | Resilience Plan_Approved-8_19_DCR-packet_letterandplan.pdf | pdf | 850 KB | 10/21/2024 10:23 AM |

# Application Form for Grant and Loan Requests for All Categories

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

## A. ORGANIZATIONAL INFORMATION

**Name of Local Government:** Middle Peninsula Planning District Commission

**Category Being Applied for (check one):**

☐ Capacity Building/Planning
x Project: Portadam System Protecting Captain Sinclair's Pool House
☐ Study

**NFIP/DCR Community Identification Number (CID)**___ 510071_____

**Name of Authorized Official and Title: __Lewis Lawrence_____**

**Signature of Authorized Official: _____**
**Mailing Address (1): _PO Box 286_____**
**Mailing Address (2): __125 Bowden Street_____**
**City: __Saluda_____ State: __VA_____ Zip: _23149_____**
**Telephone Number: (804) 758-2311_____ Cell Phone Number: (____) _____**
**Email Address: _llawrence@mppdc.com_____**

**Contact and Title (If different from authorized official): _Jackie Rickards_____**
**Mailing Address (1): __PO Box 286_____**
**Mailing Address (2): __125 Bowden Street_____**
**City: _Saluda_____ State: __VA_____ Zip: __23149_____**
**Telephone Number: (804) 758-2311_____ Cell Phone Number: (____) _____**
**Email Address: _jrickards@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 Project Grants and Loans (Check All that Apply – Hybrid Solutions will include items from both the "Nature-Based" and "Other" categories)**

**Nature-based solutions**

☐ Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development, and where the flood mitigation benefits will be achieved as a part of the same project as the property acquisition.
☐ Wetland restoration.
☐ Floodplain restoration.

- ☐ Construction of swales and settling ponds.
- ☐ Living shorelines and vegetated buffers.
- ☐ Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool, or the acquisition of developed land for future conservation.
- ☐ Dam removal.
- ☐ Stream bank restoration or stabilization.
- ☐ Restoration of floodplains to natural and beneficial function.

**Other Projects**

- ☐ Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.
- ☐ Dam restoration.
- ☐ Beneficial reuse of dredge materials for flood mitigation purposes
- ☐ Removal or relocation of structures from flood-prone areas where the land will not be returned to open space.
- ☒ Structural floodwalls, levees, berms, flood gates, structural conveyances.
- ☐ Storm water system upgrades.
- ☐ Medium and large-scale Low Impact Development (LID) in urban areas.
- ☐ Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development, and where the flood mitigation benefits will **not be** achieved as a part of the same project as the property acquisition.
- ☐ Other project identified in a DCR-approved Resilience Plan

**Location of Project or Activity (Include Maps):** Abingdon, VA Gloucester County (Please see the attached corresponding maps for this application)

**NFIP Community Identification Number (CID#) :** 510071

**Is Project Located in an NFIP Participating Community?** ☒Yes □ No

**Is Project Located in a Special Flood Hazard Area?** ☒Yes □ No

**Flood Zone(s) (If Applicable): AE**

**Flood Insurance Rate Map Number(s) (If Applicable): 51073C0210F**

**Total Cost of Project: $132,680**

**Total Amount Requested: $112,778**

**Amount Requested as Grant: $112,778**

**For projects, planning, capacity building, and studies in low-income geographic areas: Are you requesting that match be waived?** ☐ Yes ☒No

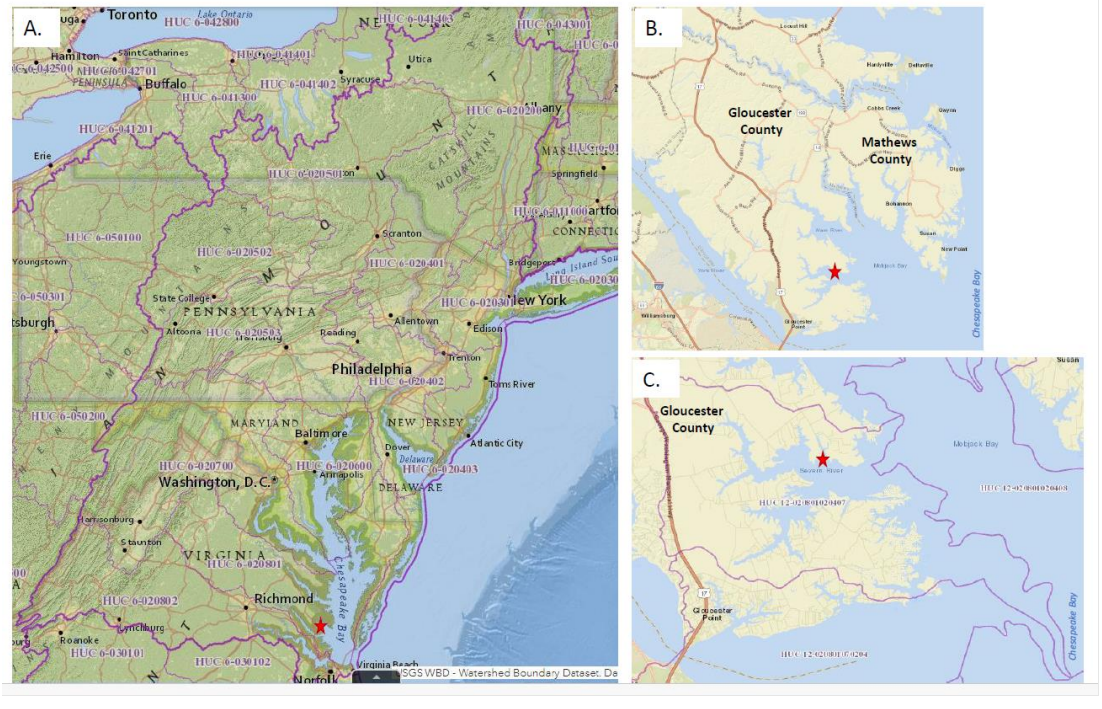
## B. SCOPE OF WORK NARRATIVE

# General Requirements

1. Needs and problems:
    a. Specific problem being solved (not just that flooding exists or may occur in the future).

This proposal requests needed funding to purchase and implement 260 ft of a 6ft tall Port-a-dam flood wall system for the flood protection and mitigation of future flood damage to a publicly owned commercial/residential structure, known as the "Pool House" at the Captain Sinclair Recreational Area in Gloucester County (9530 Whittaker Dr. Gloucester, Va 23061). The Middle Peninsula Planning District Commission (MPPDC) will partner with the Middle Peninsula Chesapeake Bay Public Access Authority (PAA), the owner of the property, to advance its multi-phase resiliency plan for the Captain Sinclair Recreational Area, one of the few publicly owned waterfront properties in Gloucester County and Middle Peninsula region (Figure 1). This is an effort to build on continuous efforts at the Captain Sinclair property to protect a government asset that is at risk of flooding.

**Figure 1.** (A) Location of project within the watershed; (B) Location of project within Gloucester County; and (C) Location of project on the Severn River.



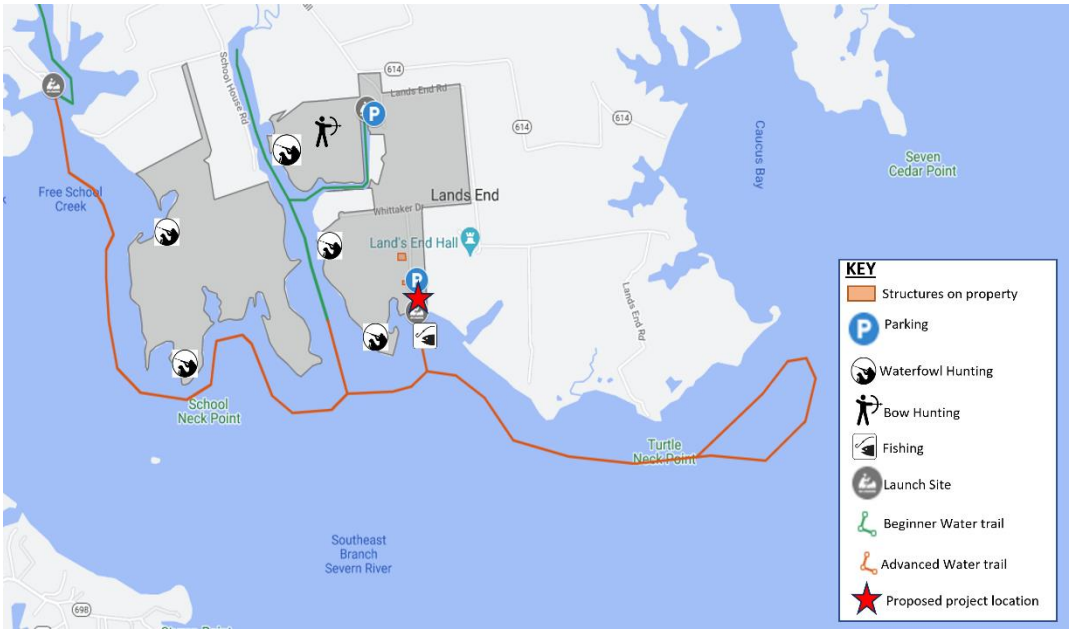

Port-a-dam is a temporary proprietary cofferdam system that is deployed as a free-standing structure without penetrating the ground. At the heart of the system are fully engineered modular steel frames complemented by a nylon-reinforced impervious PVC fabric liner, protecting the work area from the water —and the water from the area of interest. The engineered structure can retain up to 6 feet of water, separating the loading and unobstructed work area from the water body (**Figure 2**). Once the Port-a-dam is shipped to the Pool House, MPPDC/PAA will partner with the Knott Alone, Hold Fast, a veteran support group to schedule an in-person training within 45 days of purchasing the flood wall system. A representative from Port-a-dam will come to the Pool House and teach the veteran group how to deploy the Port-a-dam system when needed. Knott Alone, Hold Fast is a non-profit that provides veterans opportunities to connect with nature & other veterans while harvesting & growing seafood, creating & restoring oyster reefs & cleaning up & protecting shorelines. The program provides veterans with

opportunities to work on themselves & their families to obtain deserved veterans benefits, participate in an array of integrative therapy options, and/or enter a career path of working on the water. In 2024, the PAA and Knot Alone Hold Fast executed a MOU to establish a framework for a sustainable partnership between the Organizations in order for mutual support to continue and prosper. In part, Knot Alone, Hold Fast is working at the Captain Sinclair property to implement its mission and to develop an eco-resilience and restoration workforce to implement mitigation and resilience projects at the project site.

**Figure 2:** Photos of the Port-a-dam system.

In 2013, the Captain Sinclair Recreational Area was donated to the PAA. Since that time this property has become a hub for public access and resiliency efforts and the region's water economy **COASTAL RESILIENCY AND FLOOD PROTECTION AT THE CAPTAIN SINCLAIR RECREATIONAL AREA** is recognized as a local, regional and national model for resiliency and offers multiple examples of flood mitigation solutions in action including living shorelines, berm development, and wastewater treatment. The property supports research and development for numerous innovative solutions and provides a unique opportunity and setting for businesses and local, state, and federal regulatory agencies and academic research institutions to collaborate in a way that allows for solutions to advance so that they may be brought to market and put into practice in real-world settings. **RECREATION AT THE CAPTAIN SINCLAIR RECREATIONAL AREA** is top-notch! Recreational Assets, include a fishing pier, hiking trails, water trail access, waterfowl hunting and bow hunting. Please review the attached titled, "Connection to Other Projects" for more details about resiliency and recreation occurring at the Captain Sinclair Recreational Area.

**Figure 3:** Map of Captain Sinclair Recreational Area.

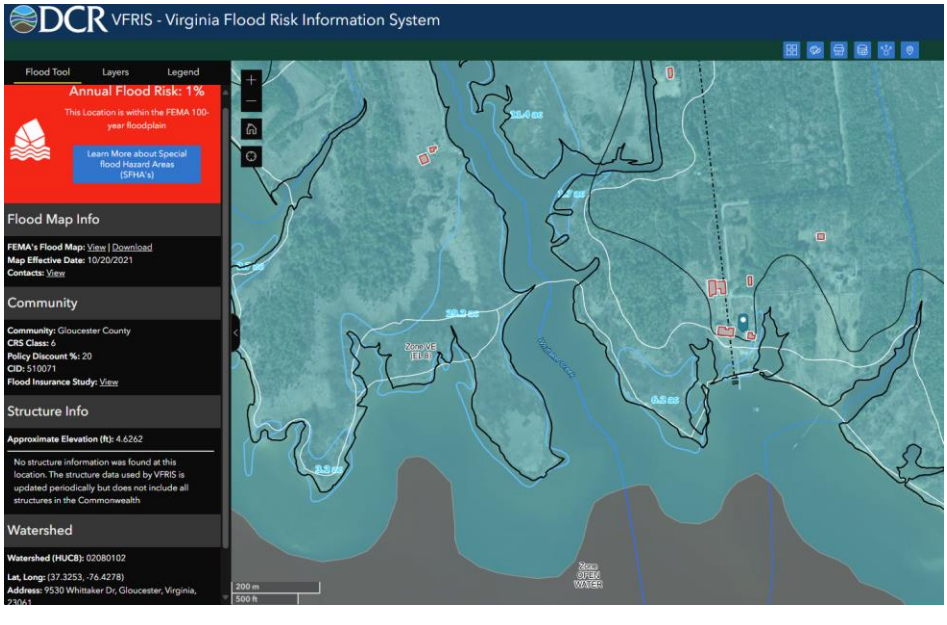



The PAA is investing close to $500,000 in structural rehabilitation investment by adding a second story to the house for veteran living quarters as Captain Sinclair's Recreational Area Park managers. These units are being added as a second floor to reduce loss of residential property as FEMA has denied funding requests to elevate the structure in 2018, 2019, and 2023. The first floor is to become public space with public restrooms and bait shop for providing drinks and bait for the public fishing pier and storage of public equipment. The first floor requires flood protection as a public facility in a high hazard area.

b. Factors which contribute to the identified problem.

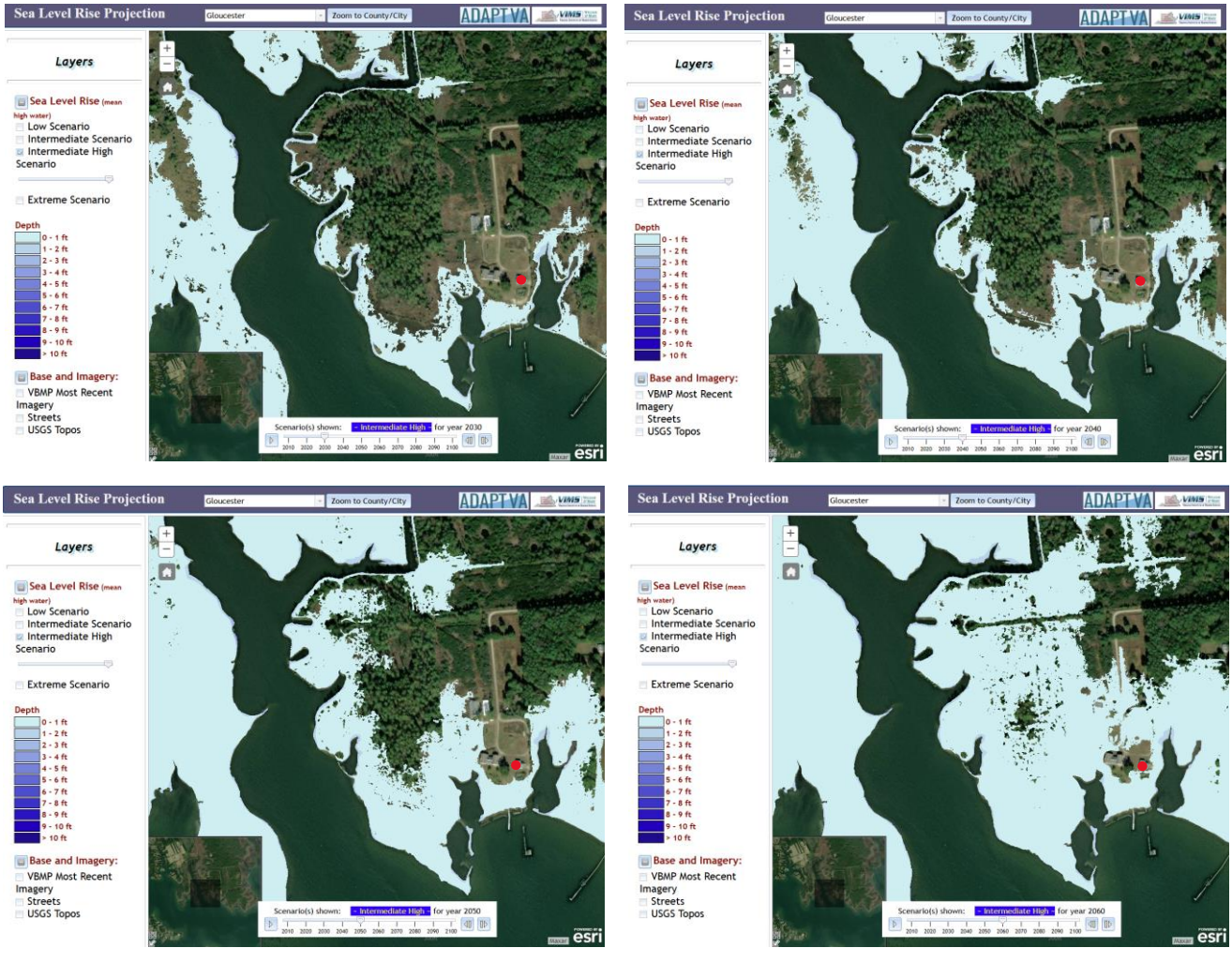
The Pool House is situated 95ft from the Severn River shoreline and has flooded in the past when waters have reached 4.71 ft. It is located within the 100-year flood plan (**Figure 4**).

**Figure 4:** Map of project location withing the floodplain (DCR, 2025).



According to AdaptVA the sea level is expected to rise 0-1 ft through 2080 which will impact the use of this publica asset. **Figure 5** shows the project location as sea level rise occurs.

**Figure 5:** Sea level rise maps of the project location. The red dot shows the project location.




Situated in Gloucester County there are multiple factors that contribute to the Pool House's flood risk, including tidal rivers, coupled with the area's low elevation, create an area at high risk of coastal flooding, sea-level rise, and storm surge. Based on tidal gauge data from the Virginia Institute of Marine Science, relative sea level rise rates ranging from 0.11-0.23 in/yr (2.9-5.8 mm/yr; period: 1976-2007; 10 stations) within the Chesapeake Bay region, which are the highest rates reported along the U.S. Atlantic coast (Boon et al., 2010). In addition to sea-level rise, Gloucester County has a history of being impacted by hurricanes and tropical storms. As storms pass over or near the coast the atmospheric pressure drops, causing a large volume of sea water to build up, eventually being pushed ashore by the storm's winds causing a storm surge. In Gloucester County, strong East and Northeastern winds can push water from the Chesapeake Bay into the mouth of the York and Rappahannock Rivers and Mobjack Bay, flooding much of the county's low-lying areas (Middle Peninsula Planning District Commission, 2005). Additionally, when a storm makes landfall at high tide, the storm surge and the added water from the tidal fluctuation combine to create a "storm tide". In Gloucester County, tidal waters normally fluctuate twice daily from 1.2 ft above mean sea level to 1.2 ft below mean sea level (FEMA 1987, 6). If a severe hurricane were to make landfall during high tide, an additional 1.2 ft of water would be added to the

highest storm surge possible, which could create a storm tide of 16.2 ft (Rygel, 2005). Nor'easters, like hurricanes and tropical storms, can dump heavy amounts of rain and produce hurricane-force winds that push large amounts of sea water inland.

Finally, according to a study conducted by the Virginia Center for Coastal Resources Management, a 1.5 ft rise in sea level coupled with a 3 ft storm surge, similar to what would be experienced in a strong tropical storm, would lead to 13% of Gloucester County's land mass being flooded – including 118 miles of roads. Only 3% of the projected flood area is currently developed. A strong indicator that Gloucester County is experiencing the impact of coastal hazards (i.e., Flooding, sea-level rise, and storm surge) is the list of repetitive loss and severe repetitive loss claims submitted by residents and businesses to FEMA. According to 2021 data, Gloucester County has 146 repetitive loss properties with an average claim value of $21,642.21 and 8 severe repetitive loss properties.

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

This project will further advance the PAA's multi-phase resiliency plan for the Captain Sinclair Recreational Area, one of the few publicly owned waterfront properties in Gloucester County and Middle Peninsula region. This property offers mitigation solutions in action. Through the purchase of the Port-a-dam, this will offer the region and mitigation professionals another example of a mitigation solution. As the Pool House will soon be transforming into a multi-use structure, including public restrooms and housing for veterans associated with the Knott Alone, Hold Fast program, Port-a-dam will provide needed protection. Please see Appendix A with new designs for this site.

In 2024, the PAA and Knot Alone Hold Fast executed a MOU to establish a framework for a sustainable partnership between the Organizations for mutual support to continue and prosper. In part, Knot Along, Hold Fast would develop an eco-resilience and restoration workforce including direct and indirect employment opportunities for Military Veterans by leveraging PAA land holding and facilities. This veteran group offers invaluable labor to implement mitigation solutions on PAA land. Therefore, as the PAA owns more than 1,000 acres of coastal lands throughout the Middle Peninsula, this is the only property within the PAA portfolio that will house veteran residents who can offer their labor to rapidly deploy the Port-a-dam system when needed.

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

This activity with reduce the direct impact of flooding to the Pool House, including public restrooms and residential housing for veterans. Port-a-dam will also decrease risk to the veterans that will eventually live at this location.

e. How the project protects or conserves natural resources.

Portadam's temporary proprietary cofferdam system, the Portadam®, is one of the world's most advanced portable water diversion solutions. Since it is deployed as a free-standing structure without penetrating the ground, it does not cause environmental harm.

**Figures 6** and **7** from ConserveVirginia 3.0: Virginia's Land Conservation Strategy (2024) show wetlands that will be protected and there is moderate development vulnerability at this project location.

**Figure 6.** National Wetlands Inventory

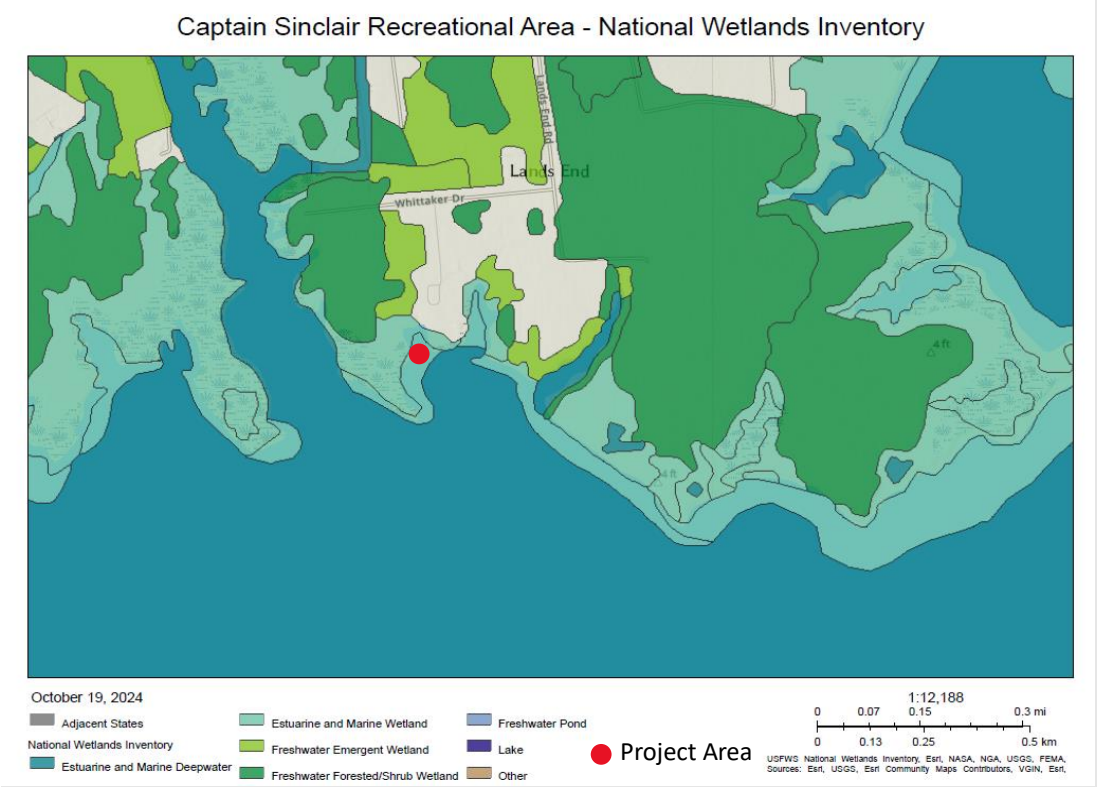
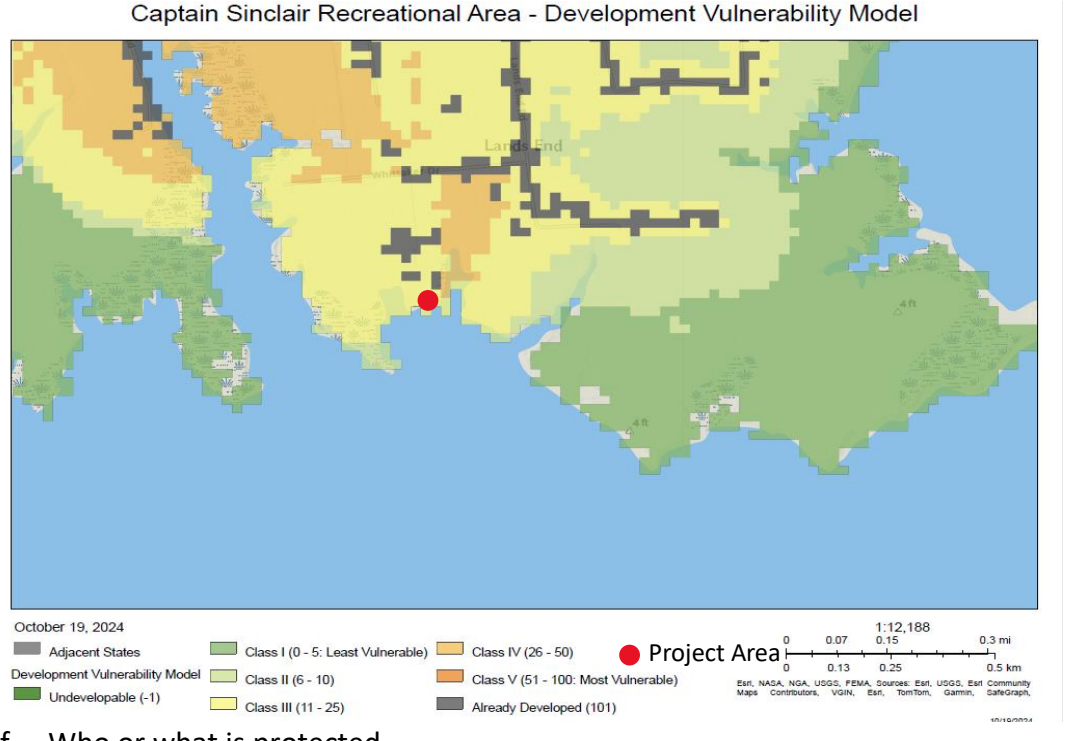



**Figure 7.** Development Vulnerability Model.




f. Who or what is protected.

This project will protect multiple assets at the Captain Sinclair Recreational Area, including:

1. The Pool House structure will be directly protected by Port-a-dam as 260 ft is long enough to

surround the entire structure.

2. A public asset for the community's long-term use.
3. Veteran residents of the Pool House.
4. The public using the facility will be protected. The facility is used under all weather conditions by local public-school students and the general public for passive and active recreation. If these users and visitors become trapped within the Captain Sinclair's area during flood events (sunny day flooding and/or storm), the Pool House provides emergency shelter for those who may be caught in these situations.
5. The Natural Environment: Since the Port-a-dam is a temporary structure, this structure will protect the surrounding natural environment from damage at the time of than event and in the long-term from a permeant mitigation structure.
6. Cultural Resources: Since the Port-a-dam is a temporary structure, this structure will protect the surrounding cultural resources.

The following figures from ConserveVirginia 3.0: Virginia's Land Conservation Strategy (2024) show the areas of cultural and historic preservation (**Figure 8**), the cultural resource preservation index (**Figure 9**), and the watershed impact model (**Figure 10**).

**Figure 8.** Cultural and Historic Preservation Area

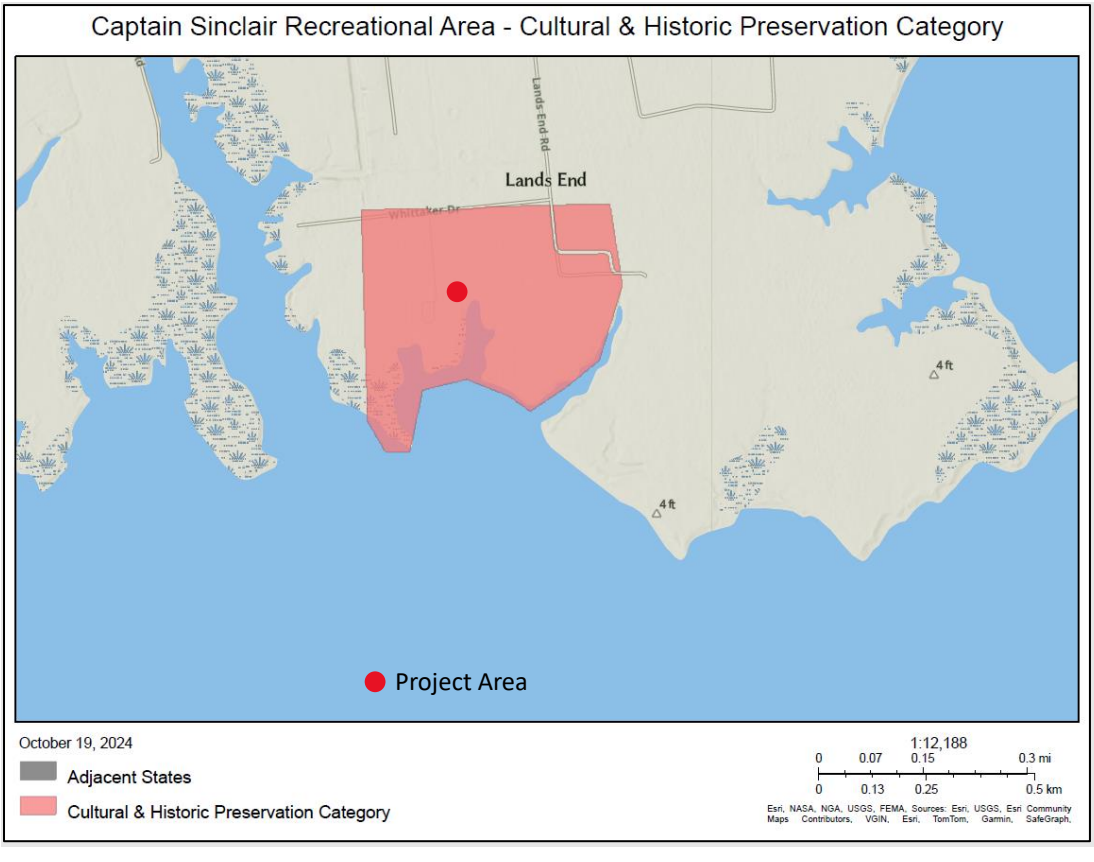



**Figure 9.** Moderate Cultural Resource Preservation Index

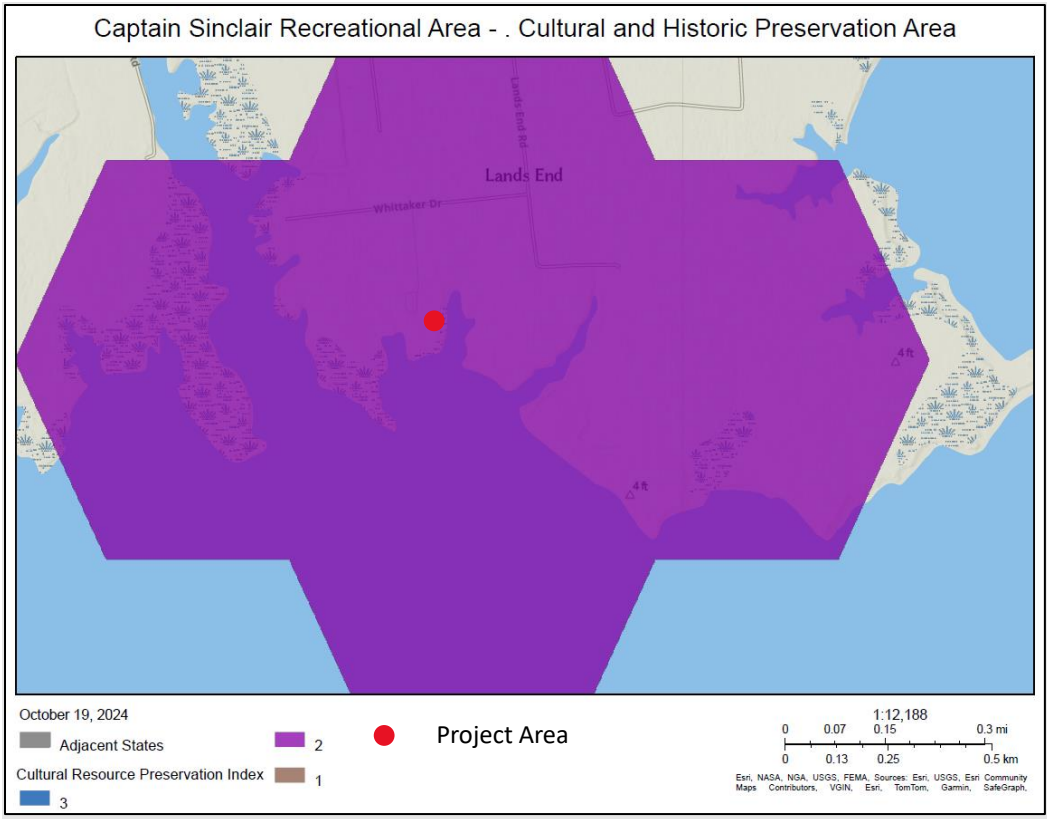
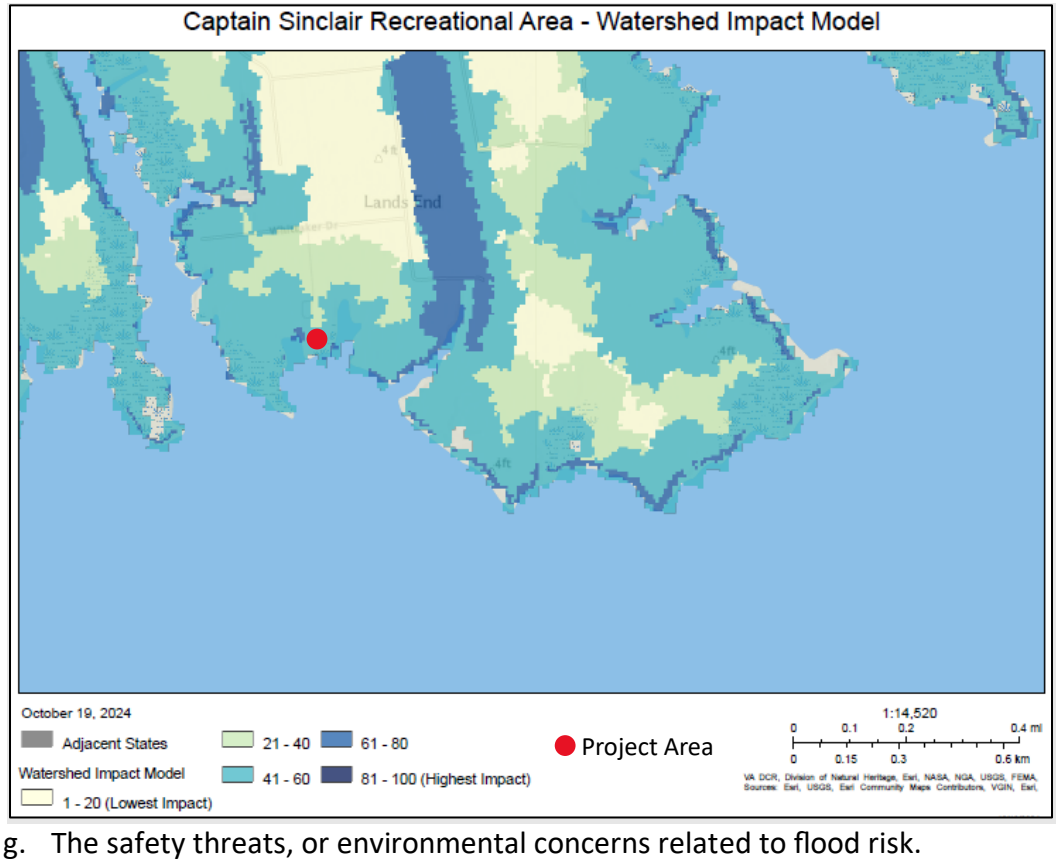



**Figure 10.** The Watershed Impact Model




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

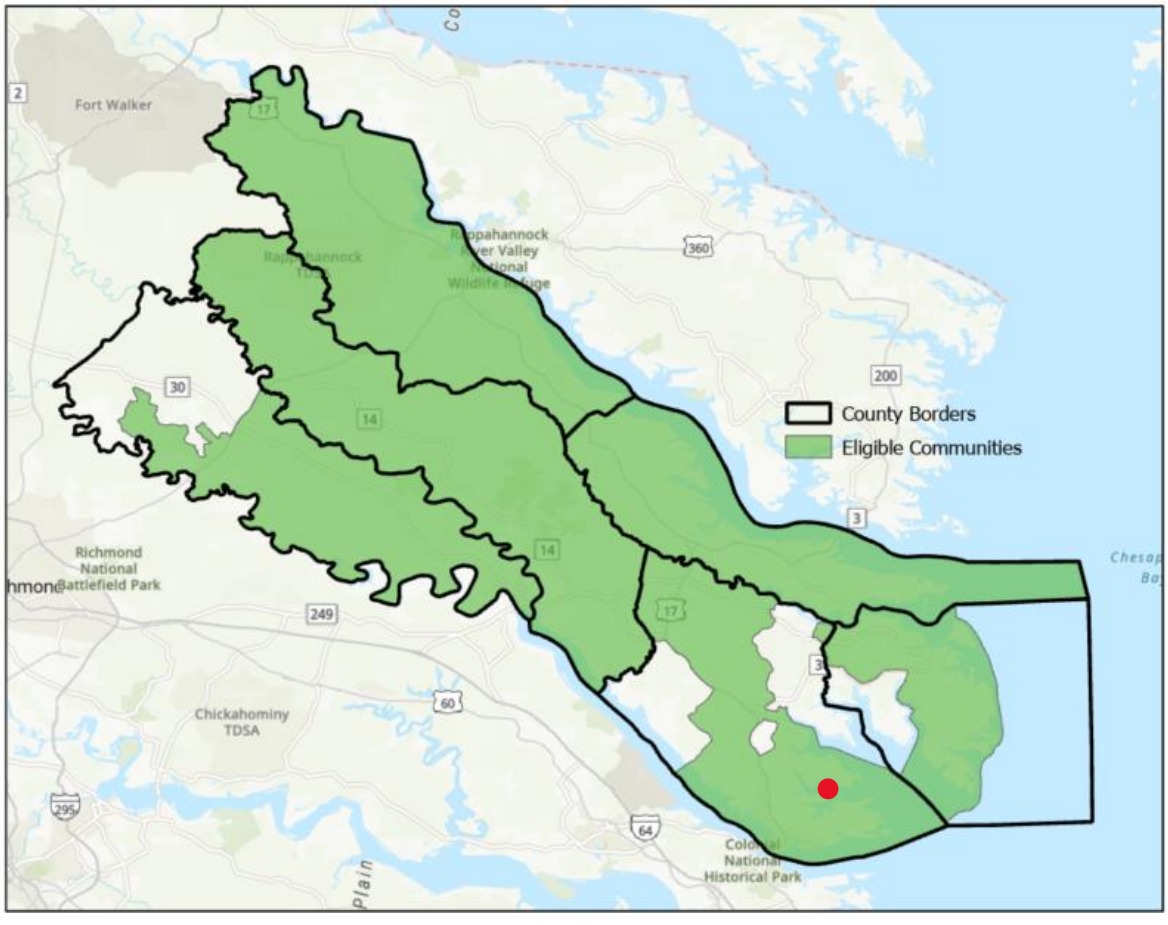
Given the unique geographical characteristics of the affected area, the residents and the general public's use of this property are susceptible to significant roadblocks during sunny day flooding events and other major events. Without proper flood mitigation measures in place, impacts to lives, infrastructure, and the environment are further exacerbated.

Gloucester County's population totals 38,711 (Census 2020), which makes it the largest of the nine Middle Peninsula localities. According to DCR guidelines, specific areas of the Middle Peninsula region are considered a "low-income geographic area" per the DCR definition included in the 2024 Funding Manual for the Virginia Community Flood Preparedness Fund. Each county had its 'Eligible Household Income' identified by using US Census data, and then calculated by multiplying the County's median household income by .8. Any census geography (Block Group, Census Tract, or Zip Code Tabulation Area) identified under the .8 eligibility threshold has been identified as low income. This resulted in the following numbers:

| | Virginia | Essex | Middlesex | Mathews | King William | King & Queen | Gloucester |
|---|---|---|---|---|---|---|---|
| Median household income (in 2021 dollars), 2021 | $80,615 | $54,375 | $63,782 | $73,229 | $74,592 | $61,672 | $77,733 |
| Eligible Household income | $64,492 | $43,500 | $51,025 | $58,583 | $59,673 | $49,337 | $62,186 |

The eligibility map for Middle Peninsula is below (**Figure 11**) and includes a red dot indicating the proposed project's location.

**Figure 11:** Eligible low-income geographic areas for the entire Middle Peninsula Region.




Social vulnerability is the ability of individuals or groups to prepare for and recover from hazards, like flooding. The Virginia Social Vulnerability Index (SVI) Viewer indicates Captain Sinclair Recreational Area has a 'Low Social Vulnerability' score (**Figure 12**).

**Figure 12:** Social Vulnerability Index for the project location.

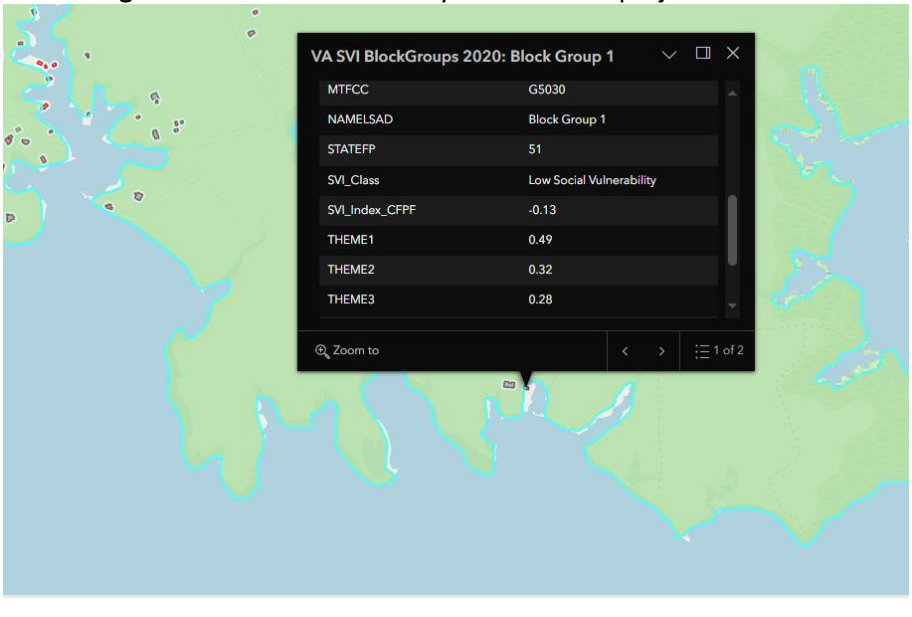
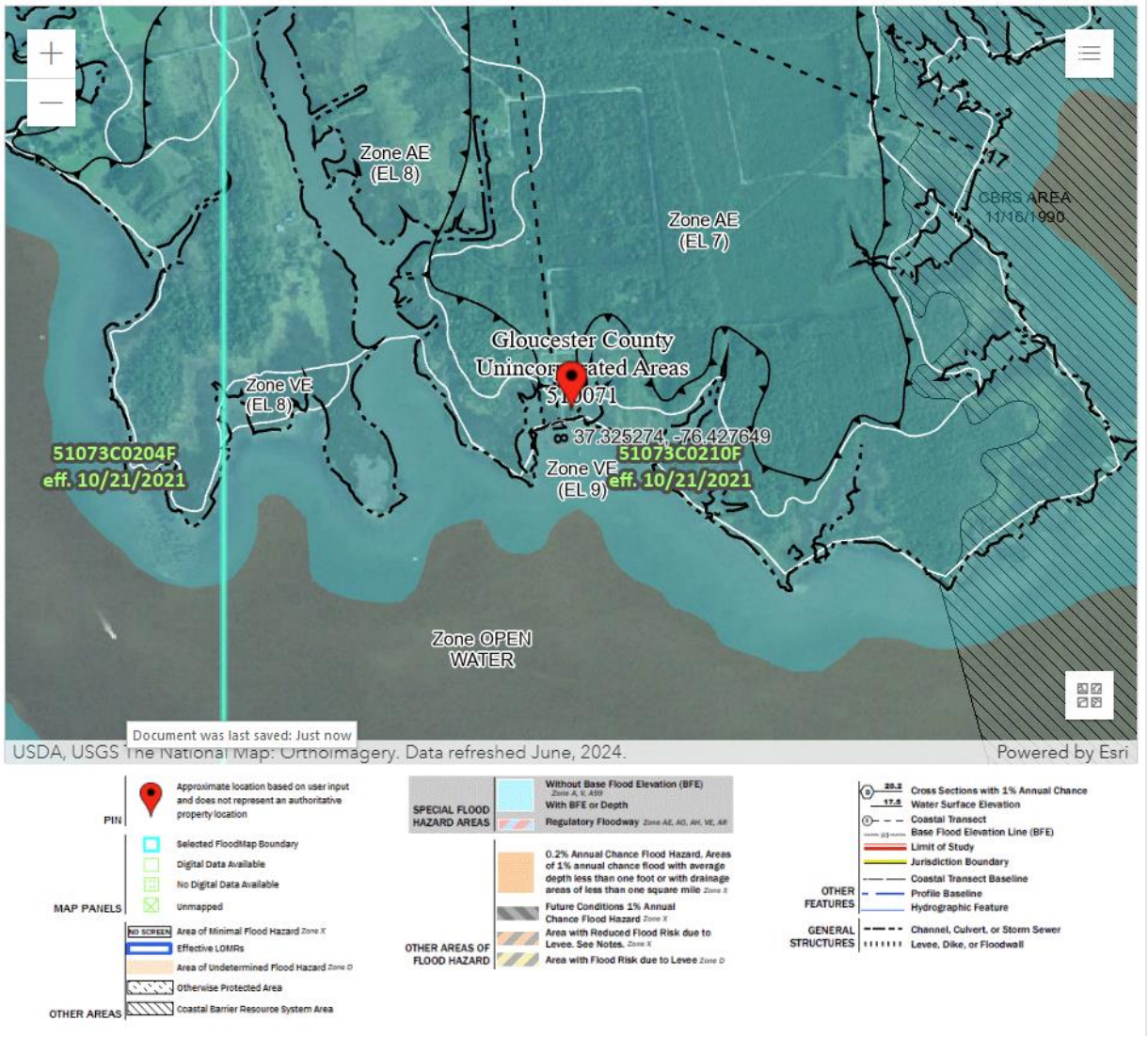


**Figure 13** is the Flood Insurance Rate Map (FIRMette) highlighting the specific flood zone (AE) within the project area, underscoring the critical nature of the location.

**Figure 13.** Captain Sinclair Recreational Area Flood Insurance Rate Map




Compounding these pressing concerns, the persistent issues of sea level rise pose a persistent long-term threat to Gloucester County. **Figure 14** illustrates the “intermediate high scenario” for sea level rise at the Captain Sinclair Recreational Area, based on data obtained from the AdaptVA online mapping tools for the year 2030. This tool employs a range of sea level rise scenarios categorized from “low” to “extreme” with the “intermediate high” scenario being the most probable.

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

**Figure 14.** Intermediate High Scenario for sea level rise at the Captain Sinclair Recreational Area.


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

By reducing the risk of flooding with a Port-a-dam system there will be many groups that will directly benefit:

- Enhanced Community Safety: As the pool house is emergency shelter for the public using the Captain Sinclair Recreational Area, the purchase and deployment of a Port-a-dam will reduce the impacts of flooding and ensure the safety and security of the public to the Captain Sinclair Recreational Area, including residing veterans and other veterans associated with Knott-Along Hold Fast volunteering time, the Gloucester County High School Rowing club and all others recreating on the property.
- Sustained (or Increased) Tourism to the site: The deployment of Port-a-dam will protect a public structure that is used regularly by recreator, rowers, hunters and hikers and will soon be the residents for three veterans. Protecting this structure will help ensure the uninterrupted flow of visitors to the Captain Sinclair Recreational Area.

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

If funding is not received for this project than the Port-a-dam system will not be purchase and would leave the Pool House susceptible to all flooding events. Ultimately this would cause damage to the structure and limit or halt use of the structure by the public and its residents.

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.

Under the "do nothing" alternative, the site and public infrastructure will be compromised, resulting in degradation of the site and loss of a public assets.

In 2023, MPPDC staff considered the elevation of the Pool House out of the flood plain. The cost estimate was double price of purchasing a Port-a-dam. Therefore, the Port-a-dam system is a more cost-effective mitigation solution for the Pool House. The proposed purchase and training will offer a mitigation structure that would temporarily be deployed by the workforce of veterans located at the Captain Sinclair Recreational Area.

2. Goals and Objectives:
   a. Goals should be listed as an outcome that solves the problem identified.

   ***Goal 1:*** Protect the public structure and asset at the Captain Sinclair Recreational Area from flood waters.

   ***Goal 2:*** Offer another mitigation solution example at the Captain Sinclair Recreational Area for the public and mitigation professionals to view.

   Objectives must be specific, measurable and timebound.
   b. Objectives are achievable within the agreement period.

   *Objective 1*: Consult with Gloucester County Planning Department about permitting the temporary deployment of Port-a-dam with a Chesapeake Bay Preservation Area

   *Objective 2*: Purchase 260 linear feet of six-foot-high barrier Port-a-dam equipment, with four corner sections to protect the structure.

   *Objective 3*: Schedule and host a training with Port-a-dam to teach the veteran group, Knott Along Hold Fast, about how to deploy the port-a-dam on site. Port-a-dam will provide a one-day training session to the veteran's group on-site within 45 days of receipt of the equipment.

   *Objective 4*: Plan and conduct for 1 practice Port-a-dam deployment.

All objectives and goals will be achieved within the grant contract period.

3. Work Plan:
   a. What are the major activities and tasks.

Task 1: Research permitting needs for the temporary deployment of Port-a-dam with a Chesapeake Bay Preservation Area.

Task 2: Purchase Port-a-dam flood wall system.

Task 3: Schedule and host an in-person training between the Port-a-dam and Knott Alone, Hold Fast within 45-days of purchase.

Task 4: Plan and conduct for 1 practice Port-a-dam deployment.

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

Middle Peninsula Planning District Commission (MPPDC) staff will manage and administer this project. MPPDC staff will also coordinate with Port-a-dam and Knott Along, Hold Fast staff throughout this project.

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

The project will be completed in 12 months. We understand that activities must commence within 12 months of the agreement date and must be completed within 36 months.

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

The required partners include:

- MPPDC staff will manage the grant contract and procurement and management of a consultant.
- Knott Along, Hold Fast veterans will attend the Port-a-dam training to deploy the Port-a-dam flood walls around the Pool House.
- Port-a-dam will send the flood-walls and train veterans.

e. Deliverables

The main deliverables of this project include the following:

- Research and obtain permits, if needed.
- Purchase 260 ft of 6ft Port-a-dam flood walls.
- Schedule and host in-person training between Port-a-dam and Knott Alone, Hold Fast.

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).

According to Port-a-dam leadership there are no working parts and so regular maintenance is not required; however, Port-a-dam recommends that after every use to hose off the nylon-reinforced impervious PVC fabric liner that will reduce mold and other growths. Port-a-dam also recommends practice runs every 6 months especially if there is a turn-over in the deployment crew (ie. Knott Along, Hold Fast veterans).

4. Evaluation

a. Indicators of success.

The following items are indicators of success:

- Meet permit requirements, if needed
- Purchase of the Port-a-dam.

- Training of the Knott Alone, Hold Fast Veterans
- A successful practice run deploying Port-a-dam

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

Metrics for success are provided and described in the previous sections.

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

In 2023, MPPDC staff considered the elevation of the Pool House out of the flood plain; however the cost estimate was double price of purchasing a Port-a-dam. MPPDC staff also considered the use of an earthen berm but this would permanently impact the coastal natural resources and had a higher construction cost than the purchase of the Port-a-dam. Therefore, the Port-a-dam system is more cost effective.

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

MPPDC will utilize the Fight the Flood Program's outreach and education media channels to feature and promote the project to the public. Success will be measure in the number of visitors to the site and their satisfaction with the natural environment.

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 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 must 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 data 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.

Appendix A: Design of Pool House

## 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. If multiple project types are selected, a detailed breakdown of how the funding is proposed to be allocated must be included for each selected project type.

Based upon the identified scope of work the total estimated project cost is $132,680. The Middle Peninsula Planning District Commission (MPPDC) is committed to match this project with the value of Virginia Department of Housing Development Authority housing project in the amount of $19,902. The VHDA project involves the rehabilitation of the structure at the Captain Sinclairs Recreational Area owned by the Middle Peninsula Chesapeake Bay Public Access Authority in Gloucester County where the proposed Flood Fund flood protection project is proposed. The total request includes the following estimated costs:

Purchase of 260ft of 6ft Port-a-dam equipment for the Pool House: $107,578 for 1 year project (including $100,638 Port-a-dam equipment and $6,940 taxes; $3,000 in-person training; $2,200 shipping).

*Description – MPPDC staff will purchase 260ft of 6ft Port-a-dam equipment for the Pool House at the Captain Sinclair Recreational Area to mitigate flooding at the site. Once purchased, MPPDC staff will work with Port-a-dam to schedule an in-person training for the veterans associated with Knott Alone Hold Fast. This training will occur within 45 days of the purchase of the equipment.*

***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 requested grant assistance is $112,778 as the project is being conducted and is intended to purchase the Port-a-dam equipment (including tax), in-person training for the veterans at the property, and shipping of the equipment.

***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.

No indirect expenses have been requested.

***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.

$112,778 of DCR grant funds are being requested for this project. MPPDC is offering an additional $19,902 of value in a MPPDC Virginia Housing Development Authority project taking place on the Captain Sinclair Recreational Area Property. The total estimated project cost is $132,680. The MPPDC match commitment and authorization letter has been uploaded to the grants portal.

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

Th authorization to request funding has been uploaded to the grants portal.

Applicant Name: Middle Peninsula Planning District Commission
Community Flood Preparedness Fund &
Resilient Virginia Revolving Loan Fund
Detailed Budget Narrative
Period of Performance: July 1, 2025 (or upon receipt of award contract) through June 30, 2026 (or three years from date of award contract execution)
Submission Date: November 9, 2024

| | |
|---|---|
| Grand Total State Funding Request | $112,778 |
| Grand Total Local Share of Project | $19,902 |
| Federal Funding (if applicable) | $0 |
| Project Grand Total | $132,680 |
| Locality Cost Match | 15% |
| ***Match Waiver Requested | |

| Breakout By Cost Type | Personnel | Fringe | Travel | Equipment | Supplies | Contracts | Indirect Costs | Other Costs | Total |
|---|---|---|---|---|---|---|---|---|---|
| Federal Share (if applicable) | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Local Share | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $19,902 | $19,902 |
| State Share | $0 | $0 | $0 | $0 | $0 | $112,778 | | $0 | $112,778 |
| Pre-Award/Startup | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Maintenance | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Total | $0 | $0 | $0 | $0 | $0 | $112,778 | $0 | $19,902 | $132,680 |

Portadam, Inc.
3082 South Black Horse Pike
Williamstown, NJ 08094
856-740-0606 | www.portadam.com

**Flood Mitigation Budgetary Proposal - CONFIDENTIAL**
**Site: Two Sites in Gloucester, VA**
November 20, 2023

**From:** **Rich Kenny**
**Chief Commercial Officer**
**Portadam, Inc.**
**rkenny@portadam.com**

**Submitted to:** **Curtis Smith**
**Deputy Director**
**Middle Peninsula Planning District Commission**
**125 Bowden Street**
**Saluda, VA 23149**
**csmith@mppdc.com**

Dear Curt,

Thank you for the opportunity to provide you budgetary input for the two locations identified by the Middle Peninsula Planning District Commission. We will be glad to continue working with you to review pictures/other site information as well as your requirements at each site in order to determine final pricing when needed.

~~**Site 1: Brick Ranch**~~

~~**Flood Elevation information:**~~

~~4' high protection quoted to meet flood protection needs in order to exceed BFE at locations.~~

~~**Proposed Mitigation Solution**~~

~~290 linear feet of four foot high barrier equipment, with four corner sections to protect the structure.~~


**~~Quote Summary:~~**

**~~Portadam® FloodDefender® 48" barrier, 290' length, 4 corners ……$ 75,431~~**

**Site 2: Pool House**

**Flood Elevation information:**

4' high protection quoted to meet flood protection needs in order to exceed BFE at locations.

**Proposed Mitigation Solution**

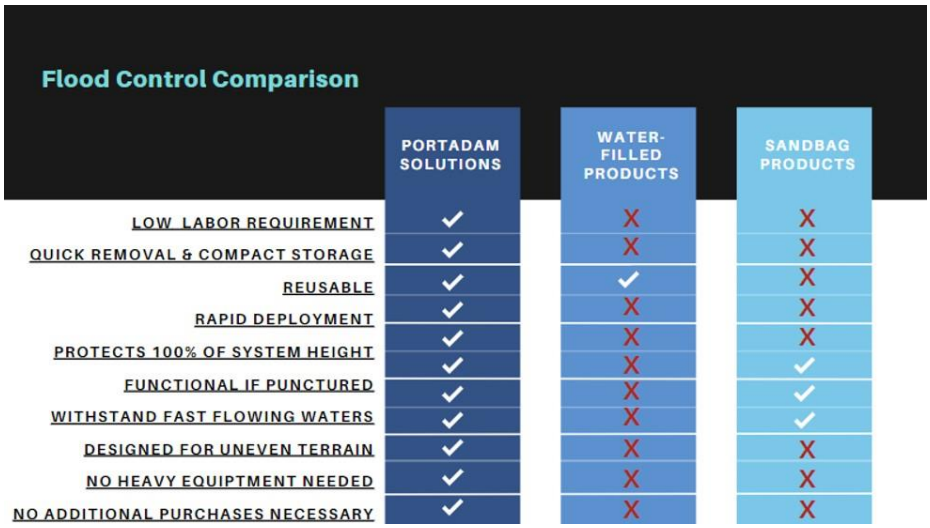
260 linear feet of four foot high barrier equipment, with four corner sections to protect the structure.


**Quote Summary:**

**Portadam® FloodDefender® 48" barrier, 290' length, 4 corners ……$ 68,438**

Our experience in flood, beginning in 2005 with the US Army Corps, leads us to work closely with customers to understand their full needs prior to finalizing a solution for their campus/facility. The full-service approach we take ensures that the final solution provided meets all needs - operational needs, site topography, and site relevant flood risks will dictate what the optimal solution is for the site.

The product solution quoted, our modular, rapid deployment model, FloodDefender® is a patented, fully engineered, US-made product designed to meet ANSI 2510 Standards. We note that as a full solution provider our pricing includes implementation plan development assistance, in coordination with your team.




**General Notes/Clarifications/Exclusions**

1. Lead times for specific solutions vary and will be dependent on supply chain status at time of order.

2. All pricing is not inclusive of applicable taxes.

3. Pricing does not include shipping charges to your location. Portadam will coordinate shipping with customer. Customer will offload equipment at the designated site specified. Portadam will arrange shipping, for an additional charge, if requested by the Customer.

4. Pricing not inclusive of permits/permitting fees (permits not usually needed), PE stamped calculations or PE stamped shop drawings (not usually required unless requested by customer).

5. Pricing not inclusive of structural analysis of existing structures/walls used as connecting points for flood solutions, installation of connecting batten boards to building walls, any on-site work required, nor any work required to prep those structures.

6. Pricing includes deployment plan development assistance/consultation.

7. Pricing includes one-day training session conducted by Portadam (mix of classroom and hand-on deployment) at each site - customer agrees to hold a training session within 45 days of receipt of equipment.

8. It is up to the Customer to ensure that a proper maintenance pumping system is implemented alongside the flood protection system to ensure full flood mitigation – NOTE: All flood perimeter barrier systems will need a maintenance pumping plan – this is often not identified by product suppliers. Deployment plans need to account for any drains/manholes etc inside the flood protection barrier system.

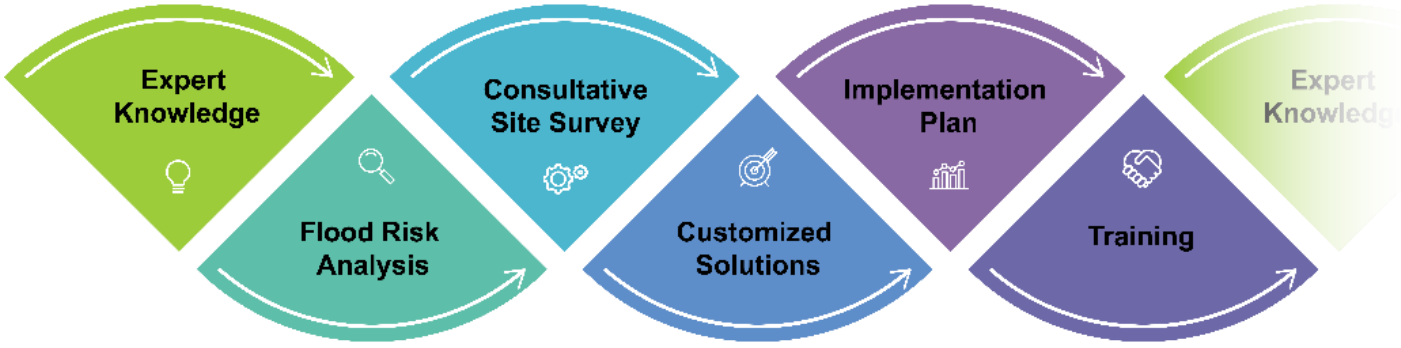
9. All intellectual property, designs either previously done or executed for the project shall remain the property of Portadam. Technical data shall be provided under a confidentiality agreement executed by all relevant parties.

10. Full Terms & Conditions: Portadam Standard Terms and Conditions shall be provided.

Portadam, Inc.
3082 South Black Horse Pike
Williamstown, NJ 08094
856-740-0606 | www.portadam.com

**Portadam History & Capabilities**

Portadam has been providing temporary water diversion solutions for nearly four decades. The knowledge and expertise gained by protecting critical infrastructure, as well as commercial and industrial property is unparalleled. Our full product lineup and service-oriented approach ensures that your needs will be met. In addition to our own flood protections sytem we offer products from well-established European firms that have decades of expertise and extensive product line-ups.



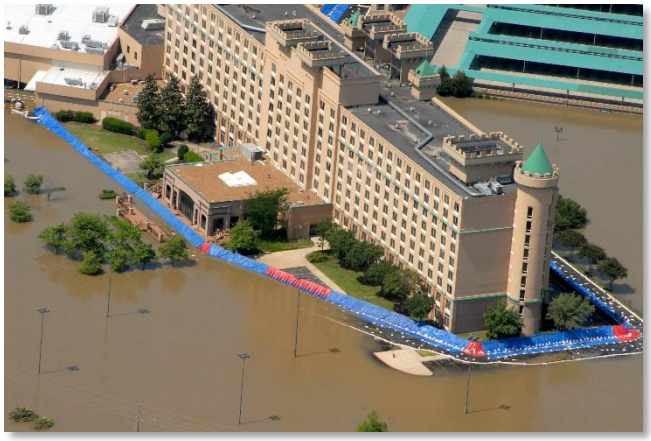

Working with site owners, our team of exceptional, safety-minded professionals draws on that extensive experience to identify the unique, site-specific requirements of your location. This in-depth understanding enables Portadam to create the most innovative, robust and cost-effective flood mitigation solutions for your properties.

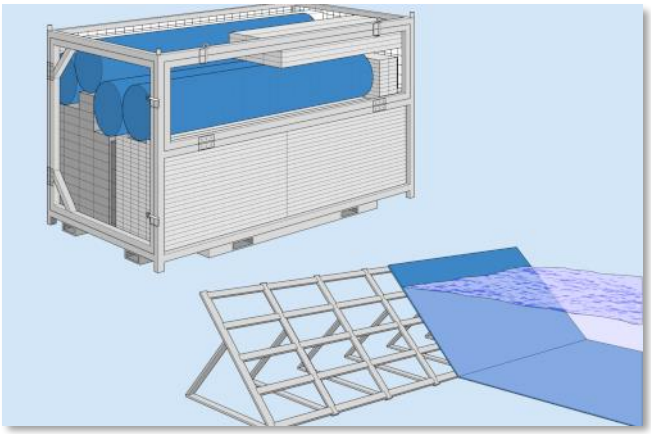
We will work hand-in-hand with your team to develop the best cost-effective solutions for each site. If a multi-site/central depot strategy is required, we will help you develop that plan. You have the flexibility to select the best combination of our full-service offerings to meet your exact requirements.

**Portadam Installation Training**

Our flood protection solutions are engineered for ease of installation. Our customers prefer to self-deploy due to ease of installation and operational control. As part of our service, we provide expert training to local teams whether they are in-house staff or third-party contractors (e.g., your preferred service providers – if needed we can help you identify other local service providers for deployment). The comprehensive training includes general system setup techniques as well as site-specific installation guidance documentation including storage, staging and resource requirements. Training manuals including site-specific implementation plans are included as part of our full-service approach.

Portadam, Inc.
3082 South Black Horse Pike
Williamstown, NJ 08094
856-740-0606 | www.portadam.com





**Summary**

Portadam has an extensive history of implementing temporary water control solutions in the world. Decades of expertise providing water control solutions and excellence in customer service enable us to provide solutions on projects of any scope and size. Ease of use and rapid deployment of our solutions combined with the ability to store locally mean that they are the clear choice for customers with critical infrastructure protection requirements.

**From:** Rich Kenny
**To:** Jackie Rickards
**Subject:** Re: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA
**Date:** Tuesday, October 22, 2024 1:49:08 PM
**Attachments:** image001.png
image002.png
image003.png

---

Jackie - If shipping took place today, it would cost $2,000.

---

**From:** Jackie Rickards <jrickards@mppdc.com>
**Sent:** Monday, October 21, 2024 1:47 PM
**To:** Rich Kenny <rkenny@portadam.com>
**Subject:** RE: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Hi Rich,
The address is 9524 Whittaker Drive Ware, VA 23061.
Thanks,
Jackie

---

**From:** Rich Kenny <rkenny@portadam.com>
**Sent:** Monday, October 21, 2024 12:48 PM
**To:** Jackie Rickards <jrickards@mppdc.com>
**Subject:** Re: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Sure - can you verify the address it would be shipped to is 9534 Whittaker Drive, Ware, VA.

---

**From:** Jackie Rickards <jrickards@mppdc.com>
**Sent:** Monday, October 21, 2024 12:23 PM
**To:** Rich Kenny <rkenny@portadam.com>
**Subject:** RE: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Hi again,
I just chatted with Curt about the estimate, and he was wondering if you can add in shipping costs to the estimate. If not the shipping costs, then can would provide a weight of the shipment? We prefer the funding agency pay for this.
Thanks for your help,
Jackie

**From:** Rich Kenny <rkenny@portadam.com>
**Sent:** Monday, October 21, 2024 11:49 AM
**To:** Jackie Rickards <jrickards@mppdc.com>
**Cc:** Rich Kenny <rfkennyjr@comcast.net>
**Subject:** Re: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Jackie -

Looking at the quote again, I should qualify that it is for 260' length and 4' corners - the 290' was a typo. 290' was the size of the system for the brick rancher.

The only change in the price is an uptick of $1,500 for virtual training on deployment of the system or an uptick of $3,000 for in-person training. If the MPPDC is happy working with the manual that comes with the system, then the price would remain the same.

Let me know if you need a revised proposal written up.

Regards,
Rich Kenny
908-635-6969

Going forward it is better to use rfkennyjr@comcast.net for my email address. The Portadam email address will be phasing out.

---

**From:** Jackie Rickards <jrickards@mppdc.com>
**Sent:** Saturday, October 19, 2024 9:39 AM
**To:** Rich Kenny <rkenny@portadam.com>
**Subject:** FW: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Good Afternoon Rich,
The MPPDC is applying for funds to purchase a Port-a-dam system for the pool house at the Captain Sinclair Recretaional Area. You provided us (Curt) with an estimate in 2023 (see attached) for the pool house and I'm reaching out to see if this estimate still stands or if prices have changed. Please note that we will only be applying to fund a Port-a-dam system at the Pool house, so we do not need updates for the Brick Racher.
If prices have changed, please update the estimate, and send it to me. I will need to add this to the application.
Thanks for your help,
Jackie

MIDDLE PENINSULA
PLANNING DISTRICT COMMISSION
*Jackie Rickards*
*Senior Planning Project Manager*

*Middle Peninsula Planning District Commission*
*P.O.Box 286*
*Saluda,Va 23149*
*215-264-6451*
*www.mppdc.com*

---

**From:** Rich Kenny <rkenny@portadam.com>
**Sent:** Thursday, December 7, 2023 3:17 PM
**To:** Curt Smith <csmith@mppdc.com>
**Cc:** Jyothish Daniel <jdaniel@portadam.com>; Luke Tiller <ltiller@portadam.com>
**Subject:** RE: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Thanks for the note, Curt.

We hope you will be able to get a system in place as well.

We will periodically check in through the year.

Regards,
Rich

---

**From:** Curt Smith <csmith@mppdc.com>
**Sent:** Thursday, December 7, 2023 1:37 PM
**To:** Rich Kenny <rkenny@portadam.com>
**Cc:** Jyothish Daniel <jdaniel@portadam.com>
**Subject:** Re: Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Hi Rich -

Thank you for sending over the proposal. We do not have the funding available now to purchase these but we will file it away for when the right grant opportunity arises. Unfortunately, the best grant prospect that I'm aware of, the VDCR Flood Fund, just closed its 2023 application cycle earlier in November and we'll have to wait another year until the next cycle comes back around.

If/when we are able to apply, we will check back in with you to see if and how this estimate may have changed.

Really appreciate your assistance and we are hopeful that we will be able to get a system in place sooner than later!

Best,

Curt

**Curtis Smith**
*Deputy Director*
Middle Peninsula Planning District Commission
Cell: 804-384-7509
125 Bowden Street, Saluda, VA 23149
Web: https://link.edgepilot.com/s/0019dbb9/CoLpDFAmoEq2deJrJ_VaMA?u=http://www.mppdc.com/
Email: csmith@mppdc.com

---

**From:** Rich Kenny <rkenny@portadam.com>
**Sent:** Tuesday, November 21, 2023 9:27 AM
**To:** Curt Smith <csmith@mppdc.com>
**Cc:** Jyothish Daniel <jdaniel@portadam.com>
**Subject:** Flood Mitigation proposal for MPPDC - two sites in Gloucester, VA

Curt - I hope this note finds you well.

Thank you for your interest in Portadam's portfolio of Flood Protection Solutions for resolving your flooding issues at the two Gloucester, VA sites. Portadam has been controlling water for 40 + years with more than 6,000 projects completed successfully. As a full-service solutions provider, we draw from our decades of experience and expertise to solve your water control / flooding problems.

Attached is a proposal for flood protection at the two sites for the MPPDC.

We look forward to working with you in the coming days. After you have had a chance to digest the proposal, let us know when you wish to discuss it in more detail. At that time we can also discuss the email I sent regarding the CRS.

Regards,
**Rich Kenny**
Chief Commercial Officer

**Portadam, Inc.**
3082 South Black Horse Pike | Williamstown | NJ | 08094
CELL 908**.635.6969** | https://link.edgepilot.com/s/a945a3c7/HZOiZ0dw0E2n3K0KAP8p9g?u=http://www.portadam.com/

## Historic flooding data and hydrologic studies projecting flood frequency

This project is located with the AE flood zone. The Pool House at the Captain Sinclair Recreational Area is situated 95 feet from tidal waters from the Severn River and is susceptible to coastal flooding, storm surge, and sea level rise. The garage flooded repeatedly at 4.71 ft in the past, making a portion of public space unavailable for public use. Also, since the structure has a Base Flood Elevation (BFE) is 6.9 ft and the top of the next floor is 7.02 ft, this means that the public structure is at BFE.

The Captain Sinclairs Recreational Area was donated for public use to the Middle Peninsula Chesapeake Bay Public Access Authority in 2013. Prior to this donation the Pool House and other structures on this property were privately owned and self-insured so there is no record of claims as a result of flood damage. Yet due to the location of the Pool House, it has been impacted by a list of coastal hazard events, including:

- **Hurricane Floyd was a Category 1 hurricane** on 09/15/1999 that impacted coastal areas of Gloucester County. The tidal departure at Sewells Point in Norfolk was 3.9 feet above normal or 6.4 feet above MLLW. This resulted in moderate to locally severe coastal flooding approximately 2 hours before high tide on the 16th. The tide gage in downtown Norfolk recorded a tide of 7.1 feet above MLLW. Flooding was more widespread during Hurricane Floyd due to extremely heavy rainfall before and during the peak storm tide.
- **Hurricane Isabel was a Category 1 hurricane** on 09/18/2003 that was a sustained tropical storm force winds with frequent gusts to hurricane force occurred over Eastern Virginia, along and near the Chesapeake Bay and Atlantic Coastal Waters. At Sewells Point, the maximum water level was 7.9 feet above MLLW. This represented a 5 foot storm surge. At Gloucester Point, the water level reached 8.32 feet, representing a 6.4 foot surge.
- **Nor-easters in 2005, 2010, 2011, 2012, 2015, and 2022** resulting in 1-3 feet of water at the site.
- **Hurricane Irene** in August 2011 that resulted in flooding up to the building foundation.
- **Hurricane Matthew** in 2016 that caused severe flooding from intense rainfall and storm surges, leading to damage to infrastructure and erosion along shorelines.
- **Tropical Storm Isaias** (2020): This storm triggered flooding across eastern Virginia, and Gloucester experienced issues with standing water and road blockages, contributing to erosion of coastal areas.
- **Tropical Cyclone Michael** occurred in 2022. The storm brought showers and scattered thunderstorms associated with the Tropical Cyclone produced heavy rain which caused flooding across Gloucester County.

Beyond the major events, Pool House regularly experienced sunny day flooding, which is also known as “nuisance” flooding or high-tide flooding. This is when tides reach anywhere from 1.75 to 2 feet above the daily average high tide.

In addition to the requested flood protection with Portadam structures, MPPDC staff are currently working with the UVA School of Architecture to design flooding berms to be constructed around the perimeter of the grounds at the Pool House under a separate CFPF award. New DCR Pluvial

Modeling is being used to support the berm designing efforts which are being designed to provide additional protection from nuisance sunny day flooding of the grounds at the site.

## No adverse impact

This flood mitigation project will not create adverse impacts to flooding issues on the site or upland. This project will prevent up to 6 ft of flooding (from coastal storms, sea level rise, tidal flooding) impacting the Pool House.

MIDDLE PENINSULA
PLANNING DISTRICT COMMISSION



October 21, 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: Authorization and Match Commitment

Dear Mr. Jake Shaw,

This letter is authorization for MPPDC staff to request funding through the Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund Round 5.

This letter is also intended to serve as a commitment to match this project (CID510071_Gloucester County_CFPF) with an active Virginia Department of Housing Development Authority (VHDA) grant in the amount of $19,902. The VHDA project involves the rehabilitation of the structure at the Captain Sinclairs Recreational Area owned by the Middle Peninsula Chesapeake Bay Public Access Authority in Gloucester County where the proposed Flood Fund flood protection project is proposed. The rehabilitation of the structure is intended to support future use of the structure for Public Access Authority veteran worker housing and publicly sponsored retail use. The proposed protection project will play a vital role in protecting the rehabilitated structure from flooding which is regularly experienced at the Captain Sinclairs site. These VHDA funds are unencumbered and not committed to another project.

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

Sincerely,

Lewis Lawerence
Executive Director

Saluda Professional Center ♦ 125 Bowden Street ♦ P.O. Box 286 ♦ Saluda, Virginia 23149
(Phone) 804 758-2311 ♦ (Fax) 804 758-3221 ♦ (Email) pdcinfo@mppdc.com
https://www.mppdc.com

## Benefit-cost analysis

Not applicable as the request is below the $2,000,000 threshold.

## Repetitive Loss and/or Severe Repetitive Loss Properties.

There are no repetitive loss and/or severe repetitive loss properties on the Captain Sinclair Recreational Area property. The map below shows 17 repetitive and/or severe repetitive loss properties within 2 miles of the project location.

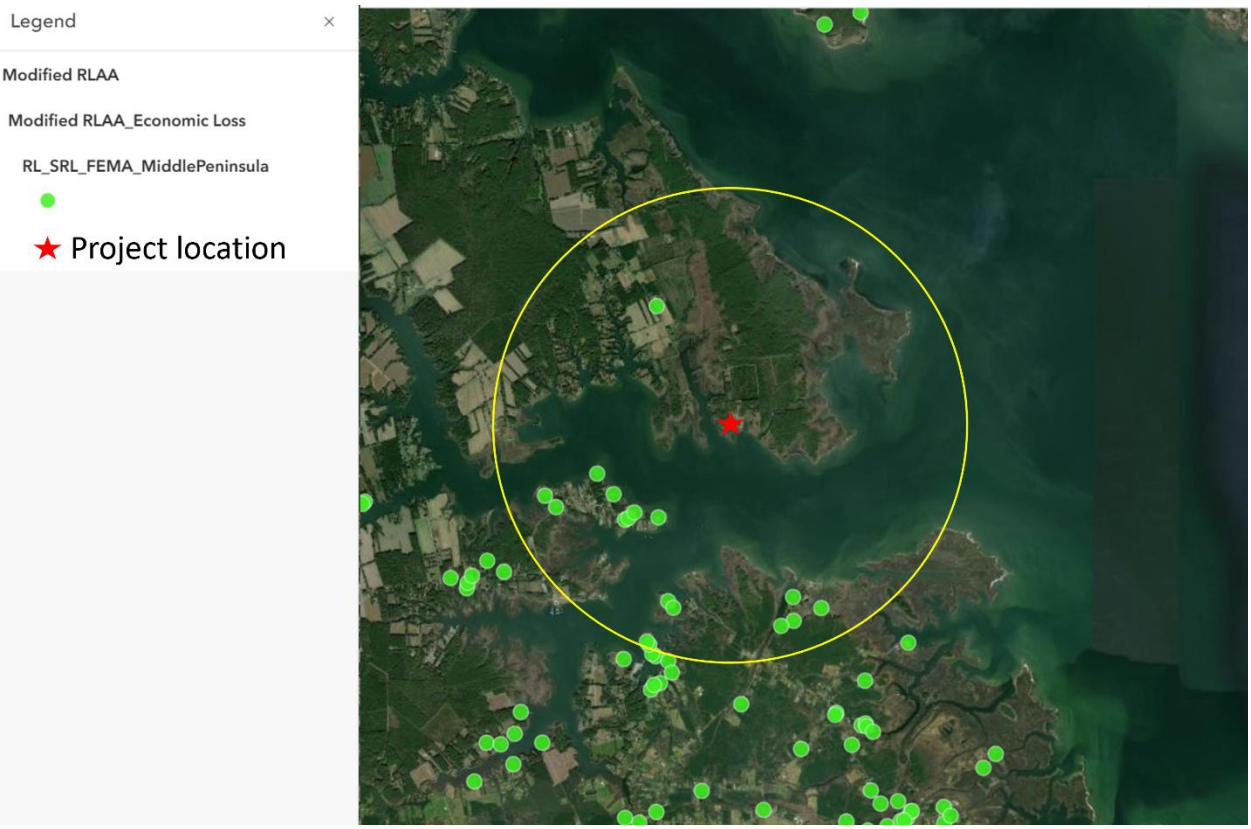



Figure: Repetitive and Severe Repetitive Loss properties (green dots) within 2 miles of the project location (red star).

# Approach, Milestones, and Deliverables

**Approach** –

The MPPDC staff will coordinate with Port-a-dam and Knott Along, Hold Fast staff throughout this project to complete the following:

Task 1: Research permitting needs for the temporary deployment of Port-a-dam with a Chesapeake Bay Preservation Area.

Task 2: Purchase Port-a-dam flood wall system.

Task 3: Schedule and host an in-person training between the Port-a-dam and Knott Alone, Hold Fast within 45-days of purchase.

Task 4: Plan and conduct for 1 practice Port-a-dam deployment.

**Timeline –**

The project will be completed in 12 months. We understand that activities must commence within 12 months of the agreement date and must be completed within 36 months.

**Milestones and Deliverables –**

The main deliverables of this project include the following:

- Research and obtain permits, if needed.
- Purchase 260 ft of 6ft Port-a-dam flood walls.
- Schedule and host in-person training between Port-a-dam and Knott Alone, Hold Fast.

## Maintenance Plan

According to Port-a-dam leadership there are no working parts and so regular maintenance is not required; however, Port-a-dam recommends that after every use to hose off the nylon-reinforced impervious PVC fabric liner that will reduce mold and other growths. Port-a-dam also recommends practice runs every 6 months especially if there is a turn-over in the deployment crew (ie. Knott Along, Hold Fast veterans).

MIDDLE PENINSULA
PLANNING DISTRICT COMMISSION



October 21, 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: Authorization and Match Commitment

Dear Mr. Jake Shaw,

This letter is authorization for MPPDC staff to request funding through the Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund Round 5.

This letter is also intended to serve as a commitment to match this project (CID510071_Gloucester County_CFPF) with an active Virginia Department of Housing Development Authority (VHDA) grant in the amount of $19,902. The VHDA project involves the rehabilitation of the structure at the Captain Sinclairs Recreational Area owned by the Middle Peninsula Chesapeake Bay Public Access Authority in Gloucester County where the proposed Flood Fund flood protection project is proposed. The rehabilitation of the structure is intended to support future use of the structure for Public Access Authority veteran worker housing and publicly sponsored retail use. The proposed protection project will play a vital role in protecting the rehabilitated structure from flooding which is regularly experienced at the Captain Sinclairs site. These VHDA funds are unencumbered and not committed to another project.

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

Sincerely,

Lewis Lawerence
Executive Director

Saluda Professional Center ♦ 125 Bowden Street ♦ P.O. Box 286 ♦ Saluda, Virginia 23149
(Phone) 804 758-2311 ♦ (Fax) 804 758-3221 ♦ (Email) pdcinfo@mppdc.com
https://www.mppdc.com

MIDDLE PENINSULA
PLANNING DISTRICT COMMISSION



October 21, 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: Authorization and Match Commitment

Dear Mr. Jake Shaw,

This letter is authorization for MPPDC staff to request funding through the Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund Round 5.

This letter is also intended to serve as a commitment to match this project (CID510071_Gloucester County_CFPF) with an active Virginia Department of Housing Development Authority (VHDA) grant in the amount of $19,902. The VHDA project involves the rehabilitation of the structure at the Captain Sinclairs Recreational Area owned by the Middle Peninsula Chesapeake Bay Public Access Authority in Gloucester County where the proposed Flood Fund flood protection project is proposed. The rehabilitation of the structure is intended to support future use of the structure for Public Access Authority veteran worker housing and publicly sponsored retail use. The proposed protection project will play a vital role in protecting the rehabilitated structure from flooding which is regularly experienced at the Captain Sinclairs site. These VHDA funds are unencumbered and not committed to another project.

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

Sincerely,

Lewis Lawerence
Executive Director

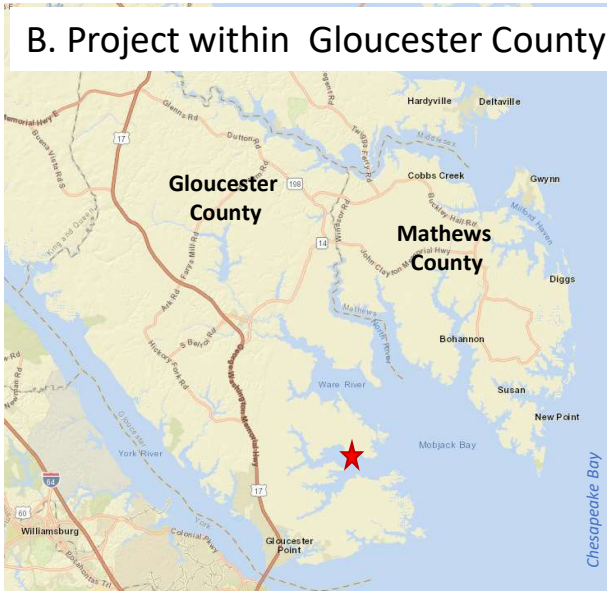
Saluda Professional Center ♦ 125 Bowden Street ♦ P.O. Box 286 ♦ Saluda, Virginia 23149
(Phone) 804 758-2311 ♦ (Fax) 804 758-3221 ♦ (Email) pdcinfo@mppdc.com
https://www.mppdc.com

## Benefit-cost analysis

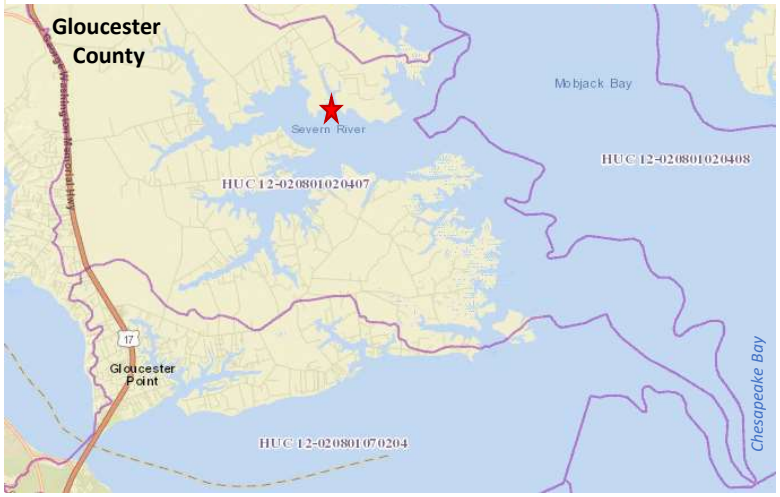
Not applicable as the request is below the $2,000,000 threshold.

A. Project within the Chesapeake Bay Watershed


B. Project within Gloucester County

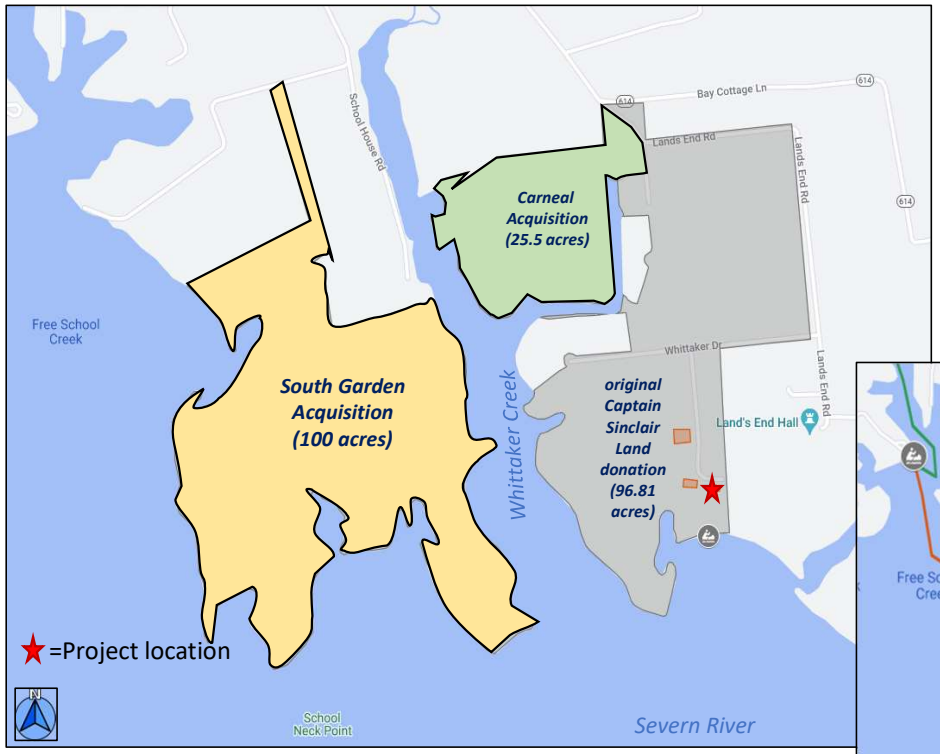



C. Project location on the Severn River

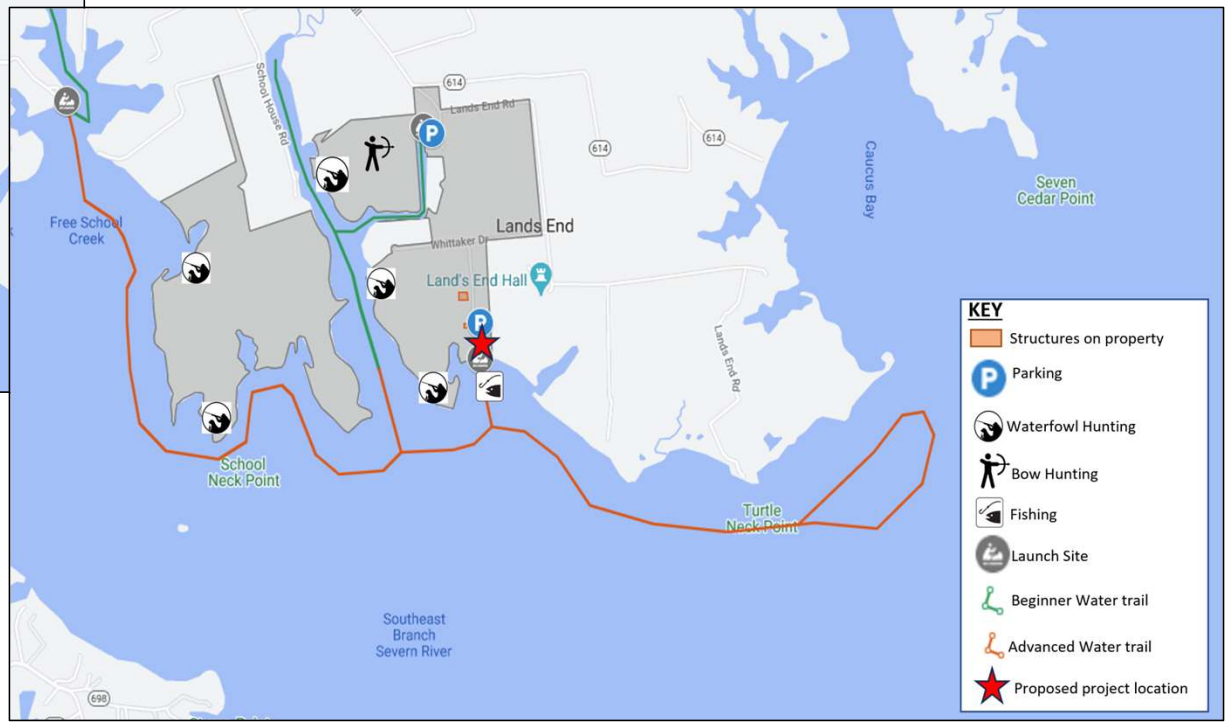



★ =Project location

Map of the Captain Sinclair Recreational Area.




Map of Recreation on the Captain Sinclair Recreational Area.



# Chapter 8.5 - FLOODPLAIN MANAGEMENT

*Footnotes:*
*--- (1) ---*
***Editor's note—*** *An ordinance adopted July 7, 1987, amended the Code by adding provisions designated as ch. 8.5 by the editor. Titles and classification of articles and sections herein have also been designated by the editor, as authorized by the ordinance.*
***Cross reference—*** *Erosion and sediment control, ch. 7.5; drainage and flood control in subdivisions, § 15-13; site plans, ch. 15.5; wetlands zoning, ch. 20; zoning, app. B.*

## ARTICLE I. - IN GENERAL

### Sec. 8.5-1. - Title.

This chapter shall be known and may be cited as the Floodplain Management Ordinance of Gloucester County, Virginia.

(Ord. of 7-7-87, § 1-1; Ord. of 8-3-2010)

### Sec. 8.5-2. - Definitions.

For the purposes of this chapter:

*Accessory structure* means a structure situated on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. Accessory structures are defined as being not larger than 600 square feet in flood zones AE, A and AO. Within Coastal A and V Zones, accessory structures are defined as being not larger than 100 square feet.

*Agricultural structure* means any structure used exclusively for agricultural purposes or in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock.

*Area of special flood hazard* means land in the community floodplain subject to a one (1) percent or greater chance of flooding in any given year. The area may be designated as Zone A, AE, AO, Coastal A, V, or VE on the official Flood Insurance Rate Map (FIRM) for Gloucester County and defined as follows:

1. *A Zone* means those areas subject to inundation by the one percent annual chance flood event which were determined using approximate methodologies and for which no detailed flood profile and no detailed flood elevations exist. For these areas, the base flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific one percent annual chance flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers Floodplain Information Reports, U.S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this base flood elevation.
2. *AE Zone* means areas subject to inundation by the 1 percent annual chance flood event determined by detailed methods. Base Flood Elevations (BFE) are identified on the FIRM.
3. *AO Zone* means an area of shallow flooding with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
4. *Coastal A Zone* means flood hazard areas that have been delineated as subject to wave heights between 1.5 feet and 3 feet, and identified on the FIRM as areas seaward of the Limit of Moderate Wave Action (LiMWA).
5. *V* or *VE Zone* means those areas that are known as Coastal High Hazard areas, extending from offshore to the inland limit of a primary frontal dune along an open coast subject to high velocity wave action 3 feet or greater.

*Base flood* means the flood elevation having a one percent chance of being equaled or exceeded in any given year (formerly known as the one hundred-year flood).

*Base flood elevation (BFE)* means the water surface elevation of the base flood, that is, the flood level that has a one percent chance of occurrence in any given year as specified on the community's Flood Insurance Rate Map.

*Basement* means any area of a building having its floor subgrade (below ground level) on all sides.

*Board of building code appeals* means the board appointed to review appeals made by individuals with regard to decisions of the floodplain administrator in the interpretation of this chapter, as defined by section 5-35, et seq., of this Code.

*Breakaway wall* means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

*Buffer modification* means an approved reduction of the one-hundred-foot resource protection area buffer as defined by section 5.5-3 of this Code.

*Coastal high hazard area* means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.

*Critical facility* means those structures or facilities which produce, use or store highly volatile, flammable, explosive, toxic and/or water-reactive materials; hospitals, nursing homes and housing which are likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood event; police stations, vehicle and equipment storage facilities and emergency operations centers which are needed for flood response activities before, during and after a flood event; and public and private utility facilities which are vital to maintaining or restoring normal services to flooded areas before, during and after a flood event. Structures used solely for private residential purposes are excluded from this definition.

*Development* means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations or storage of equipment or materials.

*Elevated building* means a non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, or columns (posts and piers).

*Elevation certificate (EC)* means a Federal Emergency Management Administration (FEMA) document providing flood related information for regulatory and insurance purposes.

*Encroachment* means the advance or infringement 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.

*Flood* means a temporary inundation of normally dry land areas.

*Flood-related erosion* means the collapse or subsidence of land along the shore of a lake or other body of water as a result of 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 a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

*Flood-related erosion area* or *flood-related erosion prone area* means a land area adjoining the shore of a lake or other body of water, which due to the composition of the shoreline or bank and high water levels or wind-driven currents, is likely to suffer flood-related erosion damage.

*Flood Insurance Rate Map (FIRM)* means the official map of the 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)* means a report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, elevation and determination of mudflow and/or flood-related erosion hazards.

*Floodplain* means (1) a relatively flat or low land area adjoining a river, stream or watercourse which is subject to partial or complete inundation; or (2) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source.

*Floodplain administrator* means an individual who is designated by the County Administrator to administer and implement the regulations herein.

*Floodproofing* means any combination of structural and nonstructural additions, changes or adjustments to properties and structures which reduce or eliminate flood damage to lands, water and sanitary facilities, structures and contents of buildings.

*Floodway* means 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 one foot at any point within the community.

*Floodway fringe* means the area between the floodway and base flood floodplain boundaries. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the base flood by more than one (1.0) foot at any point (shown on FIRM).

*Freeboard* means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management.

*Functionally dependent use* means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

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

*Historic structure* means any structure that is:

(a) Listed individually in the National Register of Historic Places;

(b) 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;

(c) Individually listed on the Virginia inventory of historic places; or

(d) Individually listed on the local inventory of historic places that has been certified by and approved by the state program.

*Hydrologic* and *Hydraulic Engineering Analysis* means an analysis 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.

*Land development* means (i) the improvement of one (1) lot, or two (2) or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two (2) or more buildings, or (b) the division or allocation of land or space between or among two (2) or more existing or prospective occupants by means of, or for the purpose of, streets, common areas, leaseholds, condominiums, building groups or other features; or (ii) a subdivision of land.

*Letters of Map Change (LOMC)* means 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:

1. *Letters 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 parcel of land as defined by metes and bounds or structure is not located in a special flood hazard area.
2. *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.
3.

*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 floor* means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant 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 non-elevation design requirements of 44 CFR 60.3 of the Code of Federal Regulations.

*Manufactured home* means a structure subject to federal regulation, which is transportable in one or more sections; is eight body feet or more in width and forty body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; and is designed to be used as a single-family dwelling, with or without a permanent foundation, when connected to the required utilities.

*Manufactured home park or subdivision (Existing)* means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

*Mean sea level* means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1988 or other datum, to which base flood elevation shown on a community's flood insurance rate map are referenced.

*Nonconforming structure* means a structure or use of a structure or premises which lawfully existed before the enactment of these provisions.

*Principally above ground* means where at least fifty-one (51) percent of the actual cash value of a structure, not including land value, is above ground.

*Recreational vehicle* means a vehicle which is built on a single chassis; contains four hundred feet (400) square feet, or less, when measured at the largest horizontal projection; is designed to be self-propelled or permanently towable by a light duty truck; and is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

*Regulatory floodway* means 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 (one (1) foot).

*Repetitive Loss Structure* means a building covered by a contract for flood insurance that has incurred flood-related damages on at least two occasions during a 10-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each flood event.

*Resource protection area (RPA)* means lands at or near the shoreline that have an intrinsic value to water quality due to the ecological and biological processes they perform, or are sensitive to impacts which may result in significant degradation to the quality of state waters. This definition includes tidal wetlands, tidal shores, non-tidal wetlands adjacent to tidal wetlands, and a one hundred (100) foot buffer area adjacent to and landward of the components listed above, and along both sides of any perennial stream, all as defined in section 5.5-3 of this Code.

*Special flood hazard area* means the land in the floodplain subject to a one percent (1%) or greater chance of being flooded in any given year.

*Start of construction* - For other than new construction and substantial improvement under the Coastal Barriers Resource Act (P.L. - 97-348), means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the 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 substantial improvement, the actual start of the construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

*Structure* means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

*Subdivision* means the division or redivision of lots, tracts, or parcels of land by any means into two (2) or more lots, tracts, parcels, or other divisions of land, including a change in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, or building, or lot development.

*Substantial damage* means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

*Substantial improvement* means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either (a) before the improvement or repair is started, or (b) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or (2) any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

*Variance* means a grant of relief by a community from the terms of a floodplain management regulation.

*Violation* means the failure of a structure or other development to be fully compliant with Gloucester County's floodplain management regulations.

*Water dependent use or facility* means a development of land that cannot exist outside of the resource protection area (RPA) and must be located on the shoreline because of the intrinsic nature of its operation. These facilities include, but are not limited to, ports, the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers, as well as marinas, boat docking structures, beaches and other public water orientated recreation areas, and fisheries and other marine resource facilities.

(Ord. of 7-7-87, Art. II; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Sec. 8.5-3. - Statement of intent.

These regulations shall apply to all property located within an area identified as being subject to inundation by water of the base flood event, and as such shall supplement the regulations of the zoning district within which such property is located. These regulations are intended to ensure the health, safety and general welfare of the public by ensuring that inhabitants and property within a designated floodplain area are safe from damage due to flooding. This chapter complies with the requirements of the National Flood Insurance Program (42 U.S.C. 4001—4128) of the Federal Insurance Administration. These regulations are necessary in order for all property owners within the county to be eligible for the National Flood Insurance Program and thereby purchase such insurance at nominal rates. Where these regulations are at variance with the general regulations of the county, it is intended that these regulations shall apply. Records of actions associated with administering this chapter shall be kept on file and maintained by or under the direction of the floodplain administrator in perpetuity.

(Ord. of 7-7-87, § 1-2; Ord. of 8-3-2010; Ord. of 9-21-2021)

Sec. 8.5-4. - Authority.

This chapter is adopted pursuant to the authority granted by Va. Code Sections 15.2-2280 and 10.1-600 et seq., and all amendments thereto.

(Ord. of 7-7-87, § 1-3; Ord. of 8-3-2010)

Sec. 8.5-5. - Purpose.

The purpose of these provisions is to prevent the loss of property and life, 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, acting 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 locating 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 flood-proofed against flooding and flood damage; and

(4) Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

(Ord. of 7-7-87, § 1-4; Ord. of 8-3-2010; Ord. of 9-2-2014(2))

Sec. 8.5-6. - Applicability.

These provisions shall apply to all lands within the jurisdiction of Gloucester County, Virginia, and identified as areas subject to inundation by water of the base flood event.

(Ord. of 7-7-87, § 1-5; Ord. of 8-3-2010; Ord. of 9-21-2021)

Sec. 8.5-7. - Compliance.

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 chapter and any other applicable ordinances and regulations.

(Ord. of 7-7-87, § 1-6; Ord. of 8-3-2010)

Sec. 8.5-8. - Abrogation and greater restrictions.

This chapter supersedes any less restrictive, conflicting ordinance currently in effect in flood-prone areas. However, any underlying ordinance shall remain in full force and effect to the extent that those provisions are more restrictive.

(Ord. of 7-7-87, § 1-7; Ord. of 8-3-2010; Ord. of 9-2-2014(2))

Sec. 8.5-9. - Existing structures in floodplain district.

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:

The modification, alteration, repair, reconstruction or improvement of any kind to a structure and/or use regardless of its location in a floodplain district to an extent or amount of fifty (50) percent or more of its market value shall be undertaken only in full compliance with the provisions of the Virginia Uniform Statewide Building Code and this chapter.

(Ord. of 7-7-87, Art. VIII; Ord. of 8-3-2010)

Sec. 8.5-10. - Penalties.

Any person who fails to comply with any or all of the requirements or provisions of this chapter or direction of the floodplain administrator or any other authorized employee of the county shall be guilty of an offense and, upon conviction, shall pay a fine to the County of Gloucester, Virginia, of not less than twenty-five dollars ($25.00) nor more than one thousand dollars ($1,000.00). Each day during which any violation of this chapter continues shall constitute a separate offense. In addition to the above penalties, all other actions are hereby reserved including an action for the proper enforcement of this chapter. The imposition of a fine or penalty for any violation of, or noncompliance with, this chapter shall not excuse the violation or noncompliance or 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 chapter may be declared by the board of supervisors to be a public nuisance and abatable as such.

(Ord. of 7-7-87, Art. VII; Ord. of 8-3-2010; Ord. of 9-21-2021)

Sec. 8.5-11. - Warning and disclaimer of liability.

The degree of flood protection required by the floodplain management ordinance of Gloucester County, Virginia, is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter and the districts established hereby shall not create liability on the part of the county or any officer, agency or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision lawfully made hereunder.

(Ord. of 7-7-87, Art. IX; Ord. of 8-3-2010)

Sec. 8.5-12. - Severability.

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

(Ord. of 9-6-94; Ord. of 8-3-2010)

Secs. 8.5-13—8.5-20. - Reserved.

ARTICLE II. - ESTABLISHMENT OF FLOODPLAIN DISTRICTS

Sec. 8.5-21. - Basis of districts.

The various floodplain districts shall include areas subject to inundation by waters of the base flood. The basis for the delineation of these districts shall be the Flood Insurance Study (FIS) and the Flood Insurance Rate Map (FIRM) for Gloucester County prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated November 19, 2014, as amended. Effective October 21, 2021, the FIS and the FIRM shall be the one dated October 21, 2021, and any subsequent revisions or amendments thereto.

(1) The floodway district is delineated, for purposes of this chapter, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the base flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this district are specifically defined in Table 23 of the above-referenced flood insurance study and shown on the accompanying flood insurance rate map.

(2)

The flood-fringe district (AE and AO zones) shall be that area of the base floodplain not included in the floodway district. The basis for the outermost boundary of the district shall be the base flood elevations contained in the flood profiles of the above-referenced flood insurance study and as shown on the accompanying flood insurance rate map.

(3) The approximated floodplain district (A zones) shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a base flood floodplain boundary has been approximated. Such areas are shown as Zone A on the maps accompanying the flood insurance study. For these areas, the base flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific base flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers Floodplain Information Reports, U.S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analysis 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 Gloucester County office of building inspections.

(4) Coastal A zones shall be those areas, as defined by the VA USBC, that are subject to wave heights between 1.5 feet and 3 feet, and identified on the FIRM as areas of Limit of Moderate Wave Action (LiMWA).

(5) Coastal high-hazard areas district (V and VE zones) shall be those portions of land within the coastal floodplain subject to inundation by high velocity waters and wave action.

(Ord. of 7-7-87, § 3-1; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Sec. 8.5-22. - Official floodplain map.

The boundaries of the floodplain districts are established as shown on the flood insurance rate maps which are declared to be a part of this chapter and which shall be kept on file at the county office of building inspections.

(Ord. of 7-7-87, § 3-2; Ord. of 8-3-2010; Ord. of 9-2-2014(2))

Sec. 8.5-23. - District boundary changes.

The delineation of any of the floodplain districts may be revised by the board of supervisors where natural or man-made changes have occurred and/or more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers or other qualified agency or individual documents the need for such change. However, prior to any such change, approval must be obtained from the Federal Insurance Administration.

(Ord. of 7-7-87, § 3-3; Ord. of 8-3-2010)

Sec. 8.5-24. - Interpretation of district boundaries.

Initial interpretation of the boundaries of the floodplain districts shall be made by the agent. Should a dispute arise concerning the boundaries of any of the districts, the board of building code 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 of building code appeals and to submit his own technical evidence if he so desires.

(Ord. of 7-7-87, § 3-4; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2))

Sec. 8.5-25. - Designated official.

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 delegate duties and responsibilities set forth in these regulations to qualified technical personnel.

(Ord. of 7-7-87, § 3-5; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Sec. 8.5-26. - Submitting technical data.

The county's base flood elevations 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, the county shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data. Such 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. of 8-3-2010)

Secs. 8.5-27—8.5-35. - Reserved.

ARTICLE III. - DISTRICT PROVISIONS

Sec. 8.5-36. - General requirements.

(a) All uses, activities and development occurring within any floodplain district shall be undertaken only upon the issuance of a building permit. Such development shall be undertaken only in strict compliance with the provisions of this chapter and with all other applicable codes and ordinances such as the Gloucester County Zoning Ordinance, the Gloucester County Wetlands Zoning Ordinance [Chapter 20], the Gloucester County Soil and Erosion Sedimentation Control Ordinance [Chapter 7.5], the Gloucester County Site Plan Ordinance [Chapter 15.5], the Gloucester County Subdivision Ordinance [Chapter 15], the Gloucester County Chesapeake Bay Preservation Ordinance [Chapter 5.5], and the Virginia Uniform Statewide Building Code [Chapter 5, Article I]. Prior to the issuance of any such permit, the floodplain administrator shall require all applications to include a certification of compliance with all applicable state and federal laws.

(b) Under no circumstances shall any use, activity, and/or development adversely affect the flood carrying capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.

(c) Prior to any proposed alteration or relocation of any channels or of any water course, stream, etc., within this jurisdiction, an approved permit shall be obtained from the U.S. Army Corps of Engineers, the Virginia Department of Environmental Quality (DEQ), and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations or from the office of environmental programs). Furthermore, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Department of Conservation and Recreation (Division of Soil and Water Conservation) and the Federal Insurance Administration.

(d) All proposals for the subdivision of land and/or new development shall include a plan drawing showing the location of all existing and proposed public and private utilities, facilities and drainage structures. If the base flood elevation has been determined by the flood insurance study or other reliable source approved by the County of Gloucester, Virginia, such flood elevation shall be delineated on the proposed plan, provided that the more stringent elevation data shall control. In addition, within the approximated floodplain district, flood and floodway information from federal, state, or other acceptable sources shall be used when available. If the proposal is greater than fifty (50) lots or greater than five (5) acres, whichever is the lesser, and the base flood elevation has not been determined for the land area, the developer shall determine the base flood elevation and delineate such flood elevation on the proposed plan. Until a regulatory floodway is designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zone AE on the FIRM, 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 community. All plans shall be certified by a registered professional engineer and shall be reviewed by the subdivision agent to assure that:

(1)

All such proposals are consistent with the need to minimize flood damage;

(2) All necessary permits have been received from the State of Virginia and appropriate federal agencies;

(3) All public and private utilities and facilities (including sewer, water, telephone, electric, gas, etc.) are located and constructed to minimize or eliminate flood damage. New and replacement sanitary sewage systems are to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters as approved and permitted by the State Health Department for private systems and the Gloucester County department of public utilities for public systems;

(4) Adequate drainage is provided to reduce exposure to flood hazard. Storm drainage facilities shall be designed to convey the flow of stormwater runoff in a safe and efficient manner. The system shall ensure proper drainage along streets, and provide positive drainage away from buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties; and

(5) Adequate measures have been taken to minimize the adverse environmental impacts of the proposed development.

(e) Recreational vehicles placed on sites shall either: (1) be on the site for fewer than one hundred eighty (180) consecutive days and be fully licensed and ready for highway use, or (2) meet the permit requirements for placement and the elevation and anchoring requirements for manufactured homes as contained in the Uniform Statewide Building Code. 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.

(f) All new buildings must be constructed on properly designed and compacted fill (ASTM D-698 or equivalent) that extends beyond the building walls before dropping below the base flood elevation and has appropriate protection from erosion and scour. The design of the fill or the fill standard must be approved by a registered engineer.

(g) Where a nonresidential structure is intended to resist the intrusion of water below the base flood level, (i) a registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of this chapter, and (ii) a record of certificate which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained with the floodplain administrator.

(h) Man-made alterations to sand dunes and mangrove stands that would increase potential flood damage are prohibited.

(Ord. of 7-7-87, § 4-1; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Sec. 8.5-37. - Floodway district.

In the floodway district, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the base flood evaluation.

(Ord. of 7-7-87, § 4-2; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-21-2021)

Sec. 8.5-38. - Flood-fringe and approximated floodplain districts (AE, AO and A zones).

In the flood-fringe and approximated floodplain districts, the development and/or use of land shall be permitted in accordance with the regulations of the underlying area, provided that all such uses, activities, and/or development shall be undertaken in strict compliance with the floodproofing and related provisions contained in the Virginia Uniform Statewide Building Code and all other applicable codes and ordinances.

Within the approximated floodplain district, the applicant shall also delineate a floodway area based on the requirement that all existing and future development not increase the base flood elevation more than one (1) foot at any one (1) point. The engineering principle-equal reduction of conveyance-shall be used to make the determination of increased flood heights.

Within the floodway area, the provisions of section 8.5-37 shall apply.

(Ord. of 7-7-87, § 4-3; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

**Editor's note—** An ordinance adopted Sept. 2, 2014, changed the title of § 8.5-38 from "Flood-fringe and approximated floodplain districts (AE and A zones)" to read as herein set out.

Sec. 8.5-39. - Coastal high hazard district (V, VE and Coastal A zones).

In the coastal high hazard area district (V, VE and Coastal A zones), the following regulations shall apply in addition to the regulations cited in sections 8.5-36 through 8.5-38:

(1) No land below the level of the base flood event may be developed unless the new construction or substantial improvement is located outside the resource protection area (RPA) (measured landward one hundred (100) feet from the mean high tide or associated tidal wetlands) or a buffer modification to the RPA requirement has been granted by the Chesapeake Bay Preservation Ordinance Administrative Board. This one hundred-foot buffer requirement excludes water dependent uses as defined;

(2) All manufactured homes to be placed or substantially improved within V or VE or Coastal A zones shall comply with the same standards as set forth for conventional housing in V or VE or Coastal A zones;

(3) There shall be no fill used as structural support;

(4) Existing nonconforming uses and/or structures located on land below the level of the base flood event shall not be expanded; and

(5) All new construction and substantial improvements in zones V, VE and Coastal A shall be elevated on pilings or columns so that:

a. the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated at least three feet above the base flood level; and

b. 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.

(Ord. of 7-7-87, § 4-4; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

**Editor's note—** An ordinance adopted Sept. 2, 2014, changed the title of § 8.5-39 from "Coastal high hazard district (V and VE zones)" to read as herein set out.

Sec. 8.5-40. - Critical facilities.

The building of critical facilities in the five hundred-year floodplain is prohibited.

(Ord. of 9-6-94; Ord. of 8-3-2010)

Sec. 8.5-41. - Specific standards.

In all special flood hazard areas where base flood elevations have been provided in the Flood Insurance Study or in the case of areas for which no detailed flood profiles or elevations are provided, the base flood elevations and floodway information from federal, state, and other acceptable sources shall be used when available. All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, and be constructed by methods and practices that minimize flood damages using materials that are resistant to flood damage, with the electrical, heating, ventilation, plumbing, and air conditioning equipment and other services so designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Mechanical equipment, ductwork and electrical systems serving the building must be elevated no lower than three feet above the base flood elevation. The following provisions shall apply:

(1)

*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 three feet above the base flood elevation.

(2) *Non-Residential Construction.* New construction or substantial improvement of any commercial, industrial, or non-residential building shall have the lowest floor, including basement, elevated to no lower than three feet above the base flood elevation. Buildings located in all A or AE zones may be flood-proofed in lieu of being elevated, provided that all areas of the building components below the base flood elevation are made to resist the intrusion of water and 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 to which such structures are floodproofed, shall be maintained in the building inspections office.

(3) *Elevated Buildings.* Fully 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.

b. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation.

c. Include in zones A and AE 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 be certified by a professional engineer or architect, or meet the following minimum design criteria:

i. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.

ii. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.

iii. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.

iv. The bottom of all required openings shall be no higher than one (1) foot above the adjacent finished grade.

v. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.

vi. The inside finished grade of each enclosed area must be as high or higher than the outside finished grade.

vii. 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.

d. The AO Zone on the FIRM accompanying the FIS shall be those areas of shallow flooding identified as AO on the FIRM. For these areas, the following provisions shall apply [44 CFR 60.3(c)]:

i. 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 FIRM, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM plus three feet. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than five feet above the highest adjacent grade.

ii. All new construction and substantial improvements of non-residential structures shall:

(1) Have the lowest floor, including basement, elevated to or above the flood depth specified on the FIRM plus three feet. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least five feet above the highest adjacent grade; or,

(2) Together with attendant utility and sanitary facilities, be completely floodproofed to the specified flood level so that any component below that level is made to resist the passage of water and made 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.

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

e. In zones V, VE and Coastal A, a registered design professional engineer or architect shall develop and seal the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction used are in accordance with accepted standards of practice for meeting the provisions of Article III, Sec. 8.5-39.

i. The space below the lowest floor shall be either free of obstruction or constructed with nonsupporting 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;

ii. Breakaway walls shall collapse from water loads that are less than that which would occur during the base flood; and,

iii. The elevated portion of the building and supporting foundation 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. Water loading values used shall be those associated with the base flood. Wind loading shall be those required by the Virginia Uniform Statewide Building Code (USBC). The enclosed space below the lowest floor shall be used solely for parking of vehicles, building access, or storage.

iv. All new construction of structures intended for occupation shall be located landward of the reach of mean high tide.

(4) *Standards for Manufactured Homes.* All new, substantially improved, or relocated manufactured homes must meet all of the elevation requirements for new construction. They shall be placed on reinforced piers or other equivalent foundation elements and 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 appropriate ground anchors. This standard shall be in addition to and consistent with manufacturers' requirements for resisting wind forces.

(5) When development does not meet the criteria for substantial improvement, the lowest floor of a new addition to an existing structure must be elevated no lower than the base flood elevation or the adjoining structure's floor elevation, whichever is higher.

(Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Secs. 8.5-42—8.5-50. - Reserved.

ARTICLE IV. - ADMINISTRATIVE PROVISIONS

Sec. 8.5-51. - Permit requirements.

A permit is required for all development (including, but not limited to, the subdivision of land, construction of buildings and structures, placement of manufactured homes, fill or any combination of these) in the floodplain district and shall be granted only after necessary permits from all applicable local, state and federal agencies have been obtained. The floodplain administrator or his designee shall review all proposed development to assure it is reasonably safe from flooding.

(1) The application for a permit shall contain information including, but not limited to, the following:

a. Name and address of applicant. The applicant must be the owner or any authorized agent of the owner.

b. Name and address of owner of land on which construction is proposed.

c. Name and address of contractor.

d. Site location.

e.

A plan of the site showing the size and location of the proposed construction as well as any existing buildings or structures.

f. Summary description of proposed work and estimated cost.

g. Topographic information showing existing and proposed ground elevations.

h. Depending on the type of structure involved, the following information shall also be included in the application:

For the structures to be elevated above the base flood elevation, the plans shall show:

1. The size of the proposed structure(s) and its relation to the lot where it is to be constructed.
2. The elevations of the proposed final grading and lowest floor, and the existing ground and base flood elevation as certified by a registered professional engineer, surveyor or architect.
3. The method of elevating the proposed structure, including details of proposed fills, pile structures, retaining walls, foundations, erosion protection measures, etc. These plans shall be prepared by a registered professional engineer or architect.

(2) Upon completion of construction and prior to the issuance of the occupancy permit, the elevation certificate shall be completed and submitted to the building official who shall ensure that construction is in accordance with this chapter. If the structure has been floodproofed, the elevation to which the structure has been floodproofed shall also be supplied. Records of actions associated with the administration of this chapter shall be kept on file and maintained by the floodplain administrator.

(3) Elevation certificates are required for new construction and may be required at different phases of construction depending upon the type of development. Elevation certificates must be approved by the floodplain administrator prior to the issuance of an occupancy permit.

(Ord. of 7-7-87, § 5-1; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

Sec. 8.5-52. - Variances.

(a) *Appeal procedure.* Whenever any person is aggrieved by a decision of the floodplain administrator with respect to the provisions of this chapter, it is the right of that person to appeal to the board of building code appeals for a variance. Such appeal must be filed, in writing, within thirty (30) days after the determination by the floodplain administrator. Upon receipt of such an appeal, the board of building code appeals shall set a time and place for the purpose of hearing the appeal, which shall be not less than ten (10) nor more than thirty (30) days from the date of receipt of the appeal. Notice of the time and place of the hearing of the appeal shall be given to all parties at which time they may appear and be heard. The determination by the board of building code appeals shall be final in all cases.

(b) *Consideration and issuance of variances.*

(1) In passing upon applications for variances, the board of building code appeals shall consider the following factors:

a. 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 area that will cause an increase in the base flood elevation.

b. The danger that materials may be swept on to other lands or downstream to the injury of others.

c. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

d. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

e. The importance of the services provided by the proposed facility to the community.

f. The requirements of the facility for a waterfront location.

g. The availability of alternative locations not subject to flooding for the proposed use.

h.

The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

i. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

j. The safety of access to the property in time of flood of ordinary and emergency vehicles.

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

l. The repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude any 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.

m. A showing of good and sufficient cause and such other factors which are relevant to the purposes of this chapter.

(2) The board of building code 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 protection and other related matters.

(3) Variances shall only be issued after the board of building code 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, (d) the creation of nuisances, (e) fraud or victimization of the public, or (f) conflict with local laws or ordinances.

(4) A variance shall only be issued after the board of building code appeals has determined that the variance will be the minimum relief to any hardship.

(5) The board of building code appeals shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the base flood elevation (a) increases risks to life and property, and (b) will result in increased premium rates for flood insurance.

(6) A record of the above notification as well as all variance actions, including justification for their issuance, shall be maintained by the floodplain administrator, and a record of all variances which are issued shall be noted in the annual report submitted to the Federal Insurance Administrator.

(Ord. of 7-7-87, §§ 6-1, 6-2; Ord. of 9-6-94; Ord. of 8-3-2010; Ord. of 9-2-2014(2); Ord. of 9-21-2021)

## Historic flooding data and hydrologic studies projecting flood frequency

This project is located with the AE flood zone. The Pool House at the Captain Sinclair Recreational Area is situated 95 feet from tidal waters from the Severn River and is susceptible to coastal flooding, storm surge, and sea level rise. The garage flooded repeatedly at 4.71 ft in the past, making a portion of public space unavailable for public use. Also, since the structure has a Base Flood Elevation (BFE) is 6.9 ft and the top of the next floor is 7.02 ft, this means that the public structure is at BFE.

The Captain Sinclairs Recreational Area was donated for public use to the Middle Peninsula Chesapeake Bay Public Access Authority in 2013. Prior to this donation the Pool House and other structures on this property were privately owned and self-insured so there is no record of claims as a result of flood damage. Yet due to the location of the Pool House, it has been impacted by a list of coastal hazard events, including:

- **Hurricane Floyd was a Category 1 hurricane** on 09/15/1999 that impacted coastal areas of Gloucester County. The tidal departure at Sewells Point in Norfolk was 3.9 feet above normal or 6.4 feet above MLLW. This resulted in moderate to locally severe coastal flooding approximately 2 hours before high tide on the 16th. The tide gage in downtown Norfolk recorded a tide of 7.1 feet above MLLW. Flooding was more widespread during Hurricane Floyd due to extremely heavy rainfall before and during the peak storm tide.
- **Hurricane Isabel was a Category 1 hurricane** on 09/18/2003 that was a sustained tropical storm force winds with frequent gusts to hurricane force occurred over Eastern Virginia, along and near the Chesapeake Bay and Atlantic Coastal Waters. At Sewells Point, the maximum water level was 7.9 feet above MLLW. This represented a 5 foot storm surge. At Gloucester Point, the water level reached 8.32 feet, representing a 6.4 foot surge.
- **Nor-easters in 2005, 2010, 2011, 2012, 2015, and 2022** resulting in 1-3 feet of water at the site.
- **Hurricane Irene** in August 2011 that resulted in flooding up to the building foundation.
- **Hurricane Matthew** in 2016 that caused severe flooding from intense rainfall and storm surges, leading to damage to infrastructure and erosion along shorelines.
- **Tropical Storm Isaias** (2020): This storm triggered flooding across eastern Virginia, and Gloucester experienced issues with standing water and road blockages, contributing to erosion of coastal areas.
- **Tropical Cyclone Michael** occurred in 2022. The storm brought showers and scattered thunderstorms associated with the Tropical Cyclone produced heavy rain which caused flooding across Gloucester County.

Beyond the major events, Pool House regularly experienced sunny day flooding, which is also known as “nuisance” flooding or high-tide flooding. This is when tides reach anywhere from 1.75 to 2 feet above the daily average high tide.

In addition to the requested flood protection with Portadam structures, MPPDC staff are currently working with the UVA School of Architecture to design flooding berms to be constructed around the perimeter of the grounds at the Pool House under a separate CFPF award. New DCR Pluvial

Modeling is being used to support the berm designing efforts which are being designed to provide additional protection from nuisance sunny day flooding of the grounds at the site.

## Gloucester County Comprehensive Plan

Link: https://pub.gloco-sitedocs.com/PZ/Comp_Plan/2016_Gloucester_County_Comprehensive_Plan_and_Appendix_J.pdf

Link to the Middle Peninsula Regional All Hazards Mitigation Plan:

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

## Maintenance Plan

According to Port-a-dam leadership there are no working parts and so regular maintenance is not required; however, Port-a-dam recommends that after every use to hose off the nylon-reinforced impervious PVC fabric liner that will reduce mold and other growths. Port-a-dam also recommends practice runs every 6 months especially if there is a turn-over in the deployment crew (ie. Knott Along, Hold Fast veterans).

## Maintenance Plan

According to Port-a-dam leadership there are no working parts and so regular maintenance is not required; however, Port-a-dam recommends that after every use to hose off the nylon-reinforced impervious PVC fabric liner that will reduce mold and other growths. Port-a-dam also recommends practice runs every 6 months especially if there is a turn-over in the deployment crew (ie. Knott Along, Hold Fast veterans).

# National Flood Hazard Layer FIRMette

FEMA

76°25'58"W 37°19'45"N


76°25'21"W 37°19'17"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

*Basemap Imagery Source: USGS National Map 2023*

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/30/2024 at 12:47 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# Flood Prevention Projects and its Relevance to Other Projects

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.

**Virginia Stormwater Nuisance Law Guidance (2018):** 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.

**Mathews County Ditch Project - VCPC White Papers (2017):** 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.

**Emergency Management - Hazard Mitigation Planning (2009 to Present):** 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 intermediate-high scenario), *and flooding (coastal and riverine flooding) that estimates losses from each hazard.* The Middle Peninsula All-Hazard Mitigation Plan was updated and approved by FEMA in April 2021.

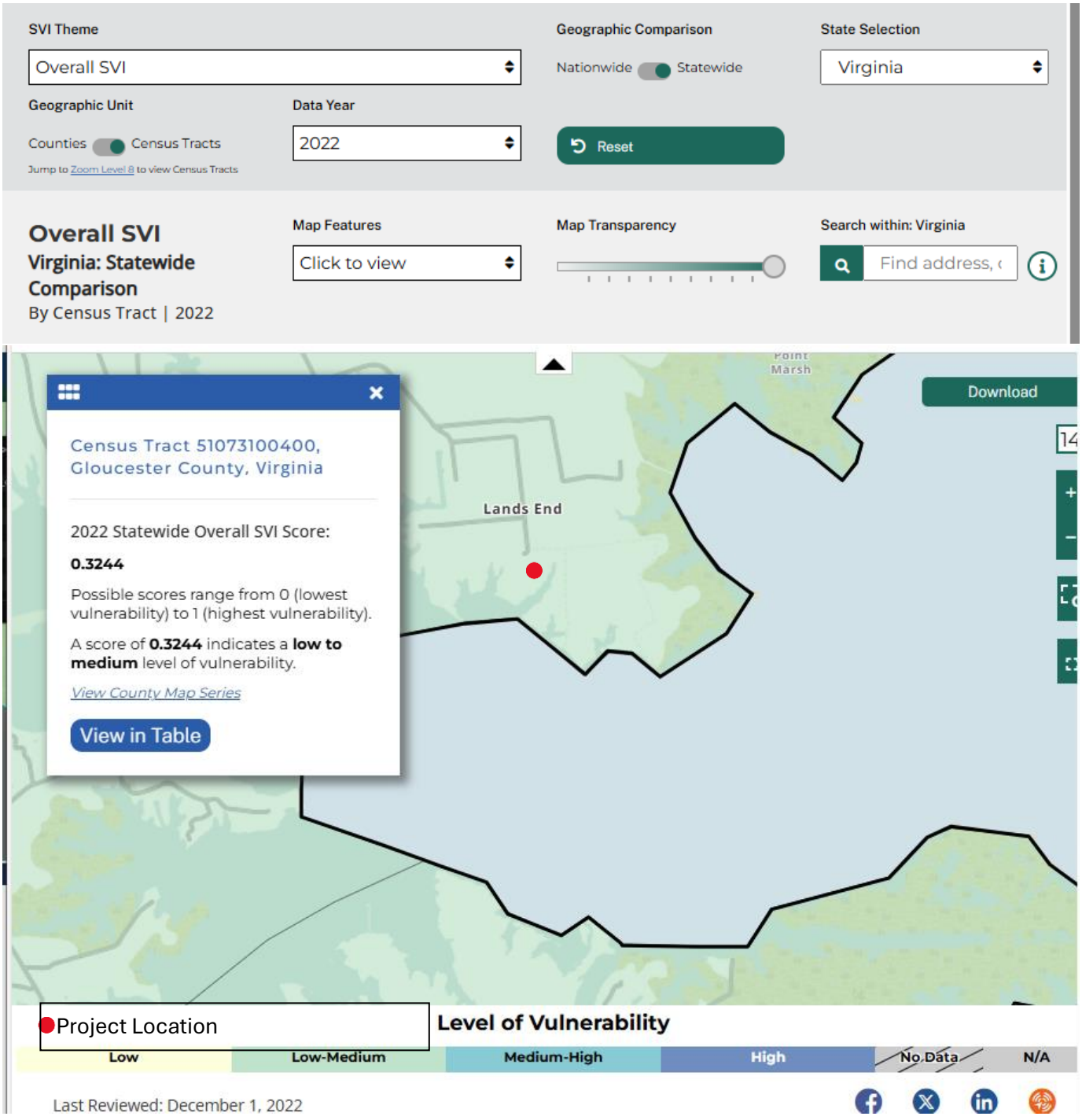
**Climate Change & Sea Level Rise (2009 to 2012)**

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.

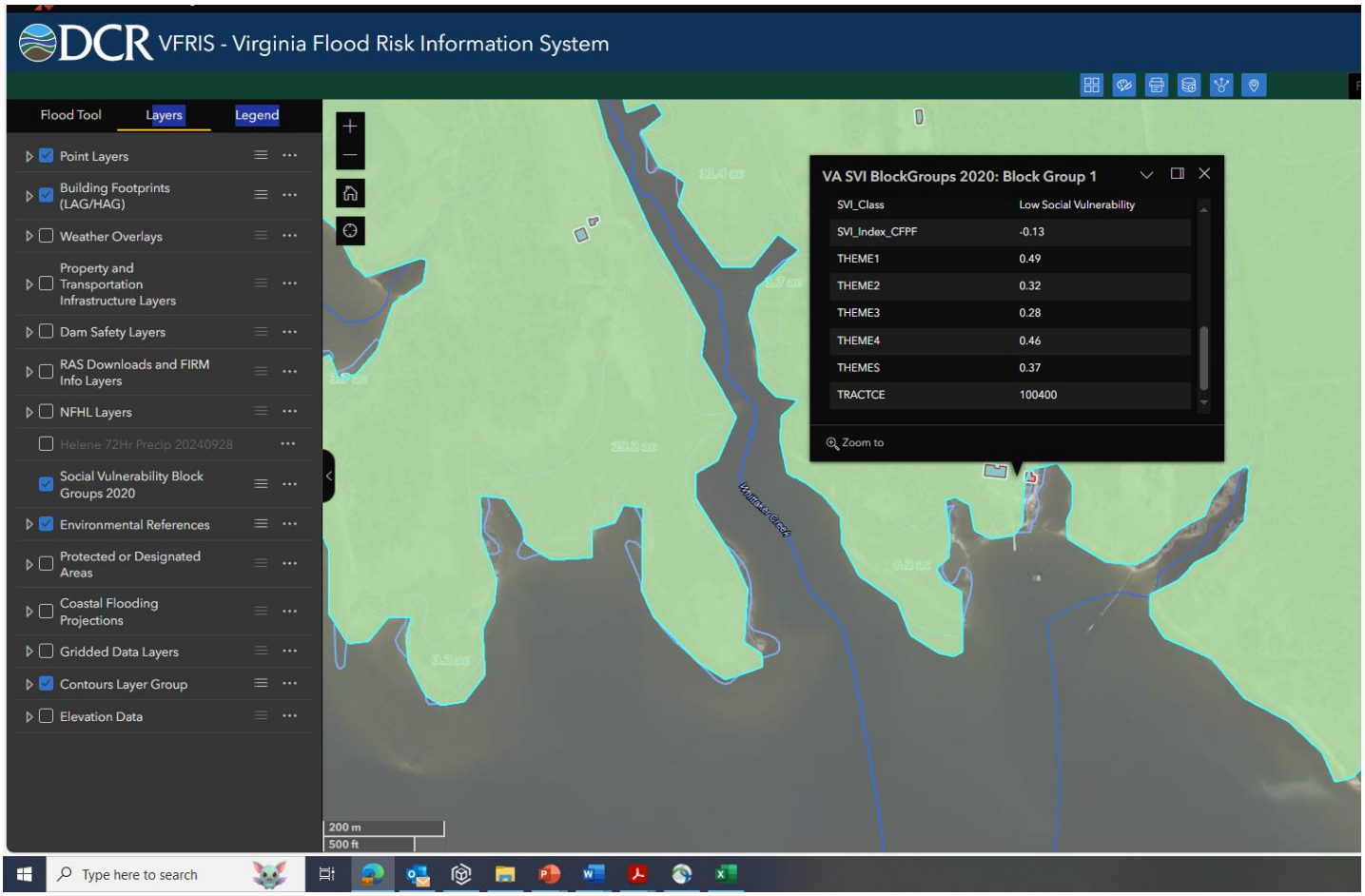
*Phase 1:* Middle Peninsula Climate Change Adaptation: Facilitation of Presentations and Discussions of Climate Change Issues with Local Elected Officials and the General Public
*Phase 2:* Climate Change III: Initiating Adaptation Public Policy Development
*Phase 3:* Phase 3 Climate Change: Initiating Adaptation Public Policy Development

## Social Vulnerability Index Scores

According to the CDC/ATSDR Social Vulnerability Index (SVI) (2022) the project location is within Census Tract 51073100400 with an SVI score of 0.3244 which is considered low to medium level of vulnerability.



According to the Virginia Flood Risk Information System (2020) the project location has an SVI score of -0.13 which is considered low social vulnerability.



**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**



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,

April L. Rounds
Administrator

**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.

Sincerely,

Carol Steele

Carol. E. Steele
County Administrator

# KING AND QUEEN COUNTY VIRGINIA

*Founded 1691*

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

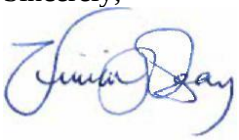
Dear Lewie,

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.

Sincerely,



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<br>image002.png<br>Outlook-jeywl3dq.png |

KW below

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

Sincerely,

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

TOWN OF TAPPAHANNOCK

*P. O. Box 266*

*Tappahannock, Virginia 22560*

*(804) 443-3336 Fax (804) 443-1051*

*www.tappahannock-va.gov*



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,

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.

Sincerely,

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

# TOWN OF WEST POINT

October 7, 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,

The Town of West 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) 843-3330.

Sincerely,

John B. Edwards, Jr.
Town Manager

329 6th Street
P.O. Box 152, West Point, Virginia 23181
(804) 843-3330 / Fax (804) 843-4364
www.west-point.va.us

Three Rivers Health District

# COMMONWEALTH OF VIRGINIA

## VIRGINIA DEPARTMENT OF HEALTH
## THREE RIVERS HEALTH DISTRICT

SERVING ESSEX, GLOUCESTER, KING & QUEEN, KING WILLIAM, LANCASTER, MATHEWS, MIDDLESEX, NORTHUMBERLAND, RICHMOND, & WESTMORELAND COUNTIES

BRENDEN RIVENBARK
DISTRICT HEALTH DIRECTOR

P.O. BOX 415
SALUDA, VIRGINIA 23149
TELEPHONE: (804) 758-2381

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 Three Rivers Health District 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.

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

We feel strongly that this work will further strengthen the drinking and wastewater infrastructure in the Middle Peninsula. Should you have any questions concerning our support for the work of the MPPDC, I can be reached at **Brenden.rivenbark@vdh.virginia.gov and (804) 382-9391.**

Sincerely,

Brenden Rivenbark
District Health Director

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

# Proximity to Floodplain and Potential for Recurrent Flooding

The identified site locations on land are:

- Gloucester Point Beach Park, 1255 Greate Rd, Gloucester Point, VA 23062 (37.24634, -76.50287).
- Haven Beach, State Rte 645, Diggs, VA 23045 (37°26’25”, -76°15’28”).
- Town of West Point, Virginia 23181 (37.53666, -76.79994).
- Captain Sinclair’s Pool House, 9524 Whittaker Drive Ware, VA 23061 (37.32546, -76.427569).
- 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, VA.

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
Denise Nelson Advising, LLC
804-363-7437
DNAdvising@gmail.com

Matthew J. Strickler
*Secretary of Natural and Historic Resources and Chief Resilience Officer*

Clyde E. Cristman
*Director*

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Rochelle Altholz
*Deputy Director of Administration and Finance*

Nathan Burrell
*Deputy Director of Government and Community Relations*

Darryl M. Glover
*Deputy Director of Dam Safety & Floodplain Management and Soil & Water Conservation*

Thomas L. Smith
*Deputy Director of Operations*

August 19, 2021

Mr. Lewis L. Lawrence, Executive Director
Middle Peninsula Planning District Commission
Saluda Professional Center
125 Bowden Street
PO Box 286
Saluda, Virginia 23149

Re: MPPDC Resilience Plan Second Submission - CFPF

Dear Mr. Lawrence:

Thank you for the resubmission of the Middle Peninsula Planning District Commission's (MPPDC) Regional Flood Resiliency Plan. After careful review and consideration, the Virginia Department of Conservation and Recreation has deemed the Plan meets the criteria outlined in the June 2021 Community Flood Preparedness Grant Manual. This approval will remain in effect for a period of three years, ending on August 20, 2024.

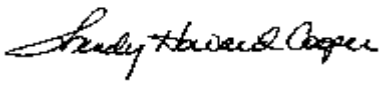
1. **Element 1: It is project-based with projects focused on flood control and resilience. VA-DCR RESPONSE:**
    a. Meets criteria as written.
2. **Element 2: It incorporates nature-based infrastructure to the maximum extent possible. VA-DCR RESPONSE**:
    a. Meets criteria as written.
3. **Element 3: It includes considerations of all parts of the local government regardless of socioeconomics or race. VA-DCR RESPONSE:**
    a. Meets criteria as written.
        i. The provided plan meets the requirements of Element 3 in Appendix G of the Grant Manual. However, flood data referenced in the MPPDC portrays the majority of flooding as coastal. As we discussed during our meeting with you on August 4, 2021, there are additional types of flooding in MPPDC localities. DCR recommends the commission develop a more comprehensive planning document(s) addressing the MPPDC's overarching approach to furthering flood resilience beyond shoreline protection in all nine member localities.

4. **Element 4: It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation. VA-DCR RESPONSE:**
    a. Meets criteria as written.
        i. DCR recognizes that both program designs make participation available to residents of all MPPDC member localities who have the ability to qualify, and that the individual program designs offer detailed breakdowns of the timeline and terms for loans disbursed pursuant to individual projects once accepted. This does not constitute a project-based timeline or phasing plan for addressing flooding resilience at the regional, locality, or community level. DCR recommends additional consideration be given to how all flooding, regardless of ability to pay, will be addressed in the MPPDC.

5. **Element 5: Is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps. VA-DCR RESPONSE:**
    a. Meets criteria as written.

VA DCR looks forward to working with the MPPDC in its efforts to develop a resilience plan that addresses flooding for its nine member communities.

Sincerely,



Wendy Howard Cooper, Director
Dam Safety and Floodplain Management

cc: Darryl M. Glover, DCR

# Middle Peninsula Regional Flood Resiliency Plan

Resubmittal #3 8/6/21

**Approved DCR 8/19/21 until 8/20/24**

The Middle Peninsula is located on the western shore of the Chesapeake Bay, bound to the north by the Rappahannock River and to the south by the York River. As the region is in the Virginia coastal plain, it has a relatively flat topography with approximately 4,000 National Flood Insurance policies, approximately 415 repetitive loss and 30 severe repetitive loss structures, all of which are located along or near 1,000 miles of privately-owned shorelines generating necessary tax revenue to fund essential local governmental services. The southeastern portions of the region are located at or close to sea level, while elevation rises to approximately 200 feet above sea level moving in a northwesterly direction. Flooding is the most frequent and costly natural hazard in the United States as well as the Middle Peninsula. Since 1978 more than $60,000,000 in Federal Flood Insurance losses have been paid due to all forms of flooding in the region.

Flooding impacts all socioeconomic groups (regardless of race, gender, age, ethnicity, diversity, or income). All land uses are subject to the destructive forces of water including, but not limited to residential, commercial, industrial, retail, agricultural, silvicultural, recreational, and publicly owned assets. All of the Middle Peninsula is subject to all types of flooding including but not limited to coastal, riverine, storm surge, inland, stormwater, flash flooding, groundwater, areal, ponding (pluvial), or urban.

The Middle Peninsula Planning District Commission (MPPDC) recognizes the need to better secure the tax base of coastal localities against the risk of flooding and the expectation to deliver essential governmental services, including public safety. All of which are more frequently challenged by coastal storms and recurrent flooding of all types. There is an unfortunate and eroding relationship between at-risk real estate values and funding of essential governmental services. Without proactive flood mitigation for coastal lands and structures, the rural coastal tax base will literally and figuratively erode into the Chesapeake Bay. Revenue will continue to decline with flood insurance claims, agricultural claims and uninsured costs will continuing to increase.

In response to emerging flood challenges, the MPPDC Commission has authorized staff to develop the **Middle Peninsula Fight the Flood (FTF) Program** which leverages state and federal funding to deliver flood mitigation solutions directly to constituents, for both the built environment and the natural environment with an emphasis on nature-based flood mitigation solutions. The Middle Peninsula **Living Shoreline Resiliency Incentive Funding Program** has been the only structured program in the Commonwealth offering loan and grants to all qualified waterfront citizens and waterfront businesses since its establishment in 2015.

The Middle Peninsula **FTF** program helps property owners gain access to programs and services to better manage challenges posed by flood water.

The Middle Peninsula's Regional Flood Resiliency Plan is comprised of two primary approved policy documents which form the implementation and foundation of the Middle Peninsula flood protection approach and are indirectly and directly supported by multiple specific regional planning documents, both approved by various required federal, regional or local partners as required by statute. These documents contain the elements described in the DCR Virginia Community Flood Preparedness Fund to qualify as the region's Resiliency Plan.

**Long Term Planning**

- **Middle Peninsula All Hazard Mitigation Plan, FEMA and Middle Peninsula locality approved 2016 (MPPDC Website)**

- **Middle Peninsula Comprehensive Economic Development Strategy, MPPDC Approved March 2021 (MPPDC Website)**

- **Middle Peninsula VDOT Rural Long Range Transportation Plan - MPPDC Approved ~annually**

**Short Term Implementation**

- **Middle Peninsula Planning District Commission Fight the Flood Program Design MPPDC Commission approved June 2020 (Attached) Chairman approved 8/6/21 update**
- **Middle Peninsula Planning District Commission Living Shoreline Resiliency Incentive Funding Program-Virginia Revolving Loan Fund Program Design and Guidelines approved 2015 (Attached)**

These five documents contain the required elements described in the 2021 Grant manual for the Virginia Community Flood Preparedness Fund.

For applications made under the Virginia Community Flood Preparedness Fund and if grants and loans are made available, it is the policy of the MPPDC to provide such to qualified participants based on the terms and conditions associated with flood risk, as well as providing various grant and loan funds available to support the public purpose(s) for which the funds have been allocated. The program utilizes income guidelines for residential participation based on household income and ability to pay. Businesses will provide documentation such as profit and loss statement and/or other documentation of adequate business equity to collateralize the public investment). Grant/Loan awards, if available will be based on the program requirements of the source of the funds, if any. Unless otherwise dictated by the source of the grant funds, MPPDC will distribute grant funds on a sliding scale according to FEMA Flood insurance zones for any qualified resiliency project that meets the definition of a living shoreline found in § 28.2-104.1 of

the Code of Virginia and is designed to attenuate the impinging wave climate across the sill and marsh system during significant storm events. FEMA flood zone determination is based on the best available science recognized by FEMA. Unless prohibited by the funding source or type of project, at a minimum, project designs shall be designed to and based on site conditions identified within the locality FEMA Flood Insurance Study (FIS) which use statistical water levels, wave heights and fetch exposure.

> **FEMA FIS:** A compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into an FIS. The FIS report contains detailed flood elevation data in flood profiles and data tables.

Projects funded must have a primary purpose of prevention or protection to reduce coastal, riverine or inland flooding and focus on:

> **Nature-based solutions:** including but not limited to: wetland restoration, floodplain restoration, swales and settling ponds, living shorelines and vegetated buffers.
>
> **Additional flood control solutions:** including, but not limited to: floodwalls, levees, berms, flood gates, structural conveyances and storm water systems.
>
> **Preservation and creation of open space:** including property acquisition and relocation and the permanent conservation of lands identified as having flood resilience value by the Conserve Virginia Floodplain and Flooding Resilience layer or a similar data driven analytic tool.

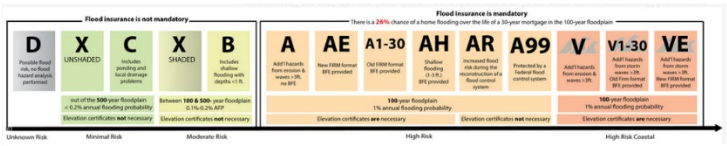
Designs will be recognized and considered that are sourced to other qualified metrics which include:

- Appropriate company certification illustrating and documentation of
    - nature based solution and
    - flood control solutions including documentation of BMP approval for erosion control, water quality or flood protection.
- Designed and certified by a licensed professional who routinely designs projects for the flood mitigation space.

Designs shall take into consideration any additional requirements, such as required sea-level rise rates.

Unless prohibited or directed by the funding program, MPPDC has established grant funding thresholds based on flood risk established by FEMA.

Living Shoreline Resiliency Grant Limits




0% Up to 10% Grant 11% up to 50% Grant 51% up to 80% Grant

The DCR guidelines require that an approved plan shall meet the following criteria:

- It is project-based with projects focused on flood control and resilience. MPPDC YES
- It incorporates nature-based infrastructure in specific projects. MPPDC YES
- It includes considerations of all parts of a locality regardless of socioeconomics or race. MPPDC YES
- It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation. MPPDC YES
- Is based on the best available science, and incorporates climate change, sea-level rise, and storm-surge (where appropriate), and current flood map MPPDC YES

The following MPPDC program designs for the Middle Peninsula Planning District Commission **Fight the Flood Program** and the **Living Shoreline Resiliency Incentive Funding Program** are the implementation structure for administering the expenditure of funding provided by the Virginia Community Flood Preparedness Fund

---

**Middle Peninsula Planning District Commission**
**Fight the Flood Program**
**Program Design**
**MPPDC Commission Approved**
**6/24/20**
**Amended Per PDC Chairman 8/6/21**
**OVERVIEW**

The Program Design for the Middle Peninsula Fight the Flood Program (FTF) outlines marketing strategies, loan application, review process, funds management, administration, and loan agreements with property and business owners. This document can be administratively reviewed with minor programmatic amendments subject to MPPDC Chairman approval. Significant programmatic changes require Commission approval.

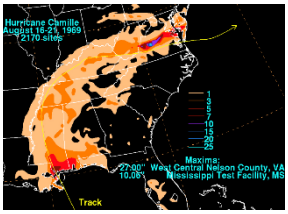
**Fight the Flood: Public Purpose Statement**

*The MPPDC Fight the Flood (FTF) program recognizes the need to better secure the tax base of coastal localities; 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*

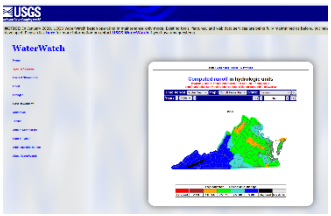
*essential governmental services. The FTF program exists to help flood-prone property owners access programs and services to better manage challenges posed by flood water. When grants and loans are available, it is the policy of the MPPDC to provide such to qualified participants based on the terms and conditions associated with flood risk, as well as providing various grant and loan funds available to support the public purpose(s) for which the funds have been allocated.*

The Fight the Flood program goals are to generate and facilitate community resiliency by addressing all types of flooding which impact all socioeconomic groups (regardless of race, gender, age, ethnicity, diversity, or income). All land uses are subject to the destructive forces of water including, but not limited to residential, commercial, industrial, retail, agricultural, silvicultural, recreational, and publicly owned assets. All of the Middle Peninsula is subject to all types of flooding including but not limited to coastal, riverine, storm surge, inland, stormwater, flash flooding, groundwater, areal, ponding (pluvial), or urban.

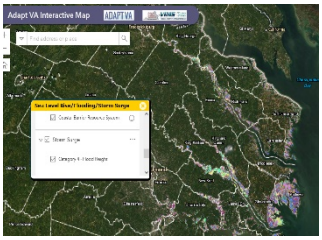
Water impacts the Middle Peninsula from a variety of sources and conditions including velocity, duration, frequency, and volume.



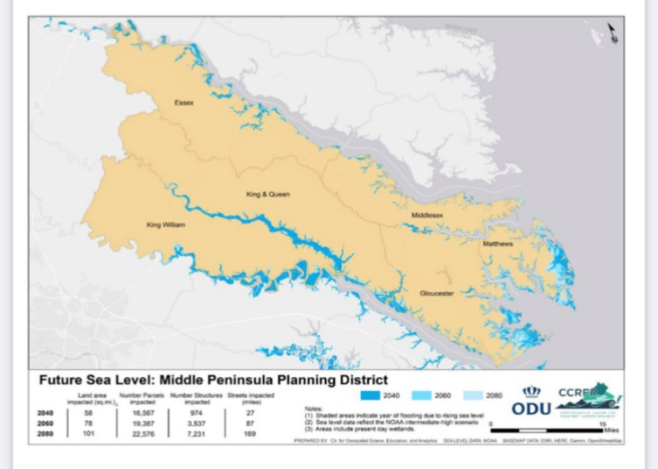

Fast Moving: Hurricane Camille was a fast-moving storm with massive rainfall over a quick time period. This type of event has major and widespread flooding impacts across the entire Middle Peninsula.




Slow Moving: According to the USGS, all of the Middle Peninsula experiences stormwater runoff between the 10-75% range causing water to move over the landscape with the ability to cause erosion.




Storm Surge: Land uses along the riverfront, Chesapeake Bay front and streams subject to tidal influence will experience surge that encompasses all land area, including the built and natural environment for the duration of the surge.




Sea-LevelRise: Land uses along the riverfront, Chesapeake Bay front and streams are subject to increasing sunny day flooding events and more frequent flooding due to sea-level rise and subsidence. By 2040, the estimates 16,567 Middle Peninsula parcels with be impacted by sea level rise [Commonwealth Center for Recurrent Flooding Resiliency]

The Fight the Flood program looks to help mitigate flooding issues which impact all socioeconomic groups while also enhancing water quality, and to encourage economic growth by targeting and attracting businesses to provide flood mitigation products and services for flood-prone properties, including shorelines and buildings. When appropriate, projects should be designed not only for today's flooding challenges, but also designed for future flooding challenges by extrapolating FEMA flood risk using FEMA Insurance Studies or other appropriate methodologies.

To accomplish its stated goal, the Fight the Flood program identified three core **Objectives** that develop the program's policy framework:

**Objectives**

1. Provide financial products to influence consumer behavior for managing and mitigating flood risk
    a. Offer a suite of financial products (i.e. loans, grants, insurance) with a correlation to lower interest rates and grants for shorelines under greater risk; higher rates and less grant funding for lower risk shorelines using FEMA flood zones
    b. **When possible, leverage General Assembly legislation such as § 58.1-3228.1.** *Partial exemption from real property taxes for flood mitigation efforts for grant matching funds.*
2. Provide consumer to professional services connections through the Fight the Flood program
    a. Registered consumers with a flood mitigation issue will have direct access to a pool of established resiliency professionals.
    b. Participating companies are evaluated on a regular basis
    c. Resiliency professional registered under Fight the Flood may provide discounted professional services to consumers in need.

3. Utilize reach-based Shoreline Implementation "Battle Plans" to facilitate multi parcel mitigation projects for economy of scale. These plans will be prepared and or reviewed by qualified professionals in the field of coastal flooding, such as Virginia Institute of Marine Science Shoreline Studies Program or plans funded under the Virginia Coastal Zone Management Program

---

## I. Marketing Strategy

**A.** Geographic Area of Program: The Program shall be available to homeowners located in the Middle Peninsula Planning District Commission ("MMPDC"). The MPPDC comprises of the following member-localities: counties of Essex, Gloucester, King and Queen, King William, Mathews, and Middlesex; and the towns of Tappahannock, Urbanna, and West Point.

**B.** Solicitation of Fight the Flood/Marketing:

1. Referrals from private sector contractors, design professionals, flood mitigations companies and engineers
2. Referrals from local governments, including local wetland boards and/or other State agencies
3. Social Media Channels, Websites, News releases, Public Information Notices, i.e. newspapers, fliers at public locations, educational displays

**C.** Outcomes from FTF Participation:

1. Encourage homeowners to purchase flood insurance;
2. Encourage homeowners with existing flood insurance to evaluate cost effectiveness for premium relief;
3. Encourage homeowners to practice coastal resilience to manage flood risk and reduce damage

**D.** Available FTF financial & insurance products:
*Current existing products are included in the FTF program*

1. MPPDC Revolving Loan Program Funding
   - Living Shorelines Resiliency Incentive Funding Program
     - **a.** Nature-based shoreline BMP construction
     - **b.** Coastal stormwater BMP construction
   - Septic Repair Program
   - Energy Efficiency Revolving Loan Program
   - Small Business Financing, Training, loan and grants
   - Other loans programs as available
2. MPPDC Grants

- Grants shall be leveraged and utilized to provide protection for hazard and flood prone areas with an enhanced focus on socioeconomically vulnerable property owners.
    - **a.** Nature-based shoreline BMP construction
    - **b.** Coastal stormwater BMP construction
    - **c.** Residential infrastructure resiliency improvements (i.e. structures, septic systems, utilities, etc.)
- Loan Forgiveness options when available
- VCAP Grants (offered by the Soil Water and Conservation District) when available
- Other grants and grant programs as available

**3.** MPPDC Insurance

- Parametric insurance for living shorelines and septic systems
- MPPDC Living Shoreline Plant Insurance Program
- Other insurance products as available

**E.** Income Guideline: Residential participation will be based on the household income and ability to pay. Businesses shall provide documentation such as profit-and-loss statements and/or other documentation of adequate business equity to collateralize the public investment. Grant/loan awards, if available will be based on the program requirements of the source of the funds, if any.

**F.** Terms of Loan:
*Homeowners who are eligible to receive a revolving loan from the existing MPPDC Living Shoreline Loan program (see MPPDC program design for specific requirement) shall be subject to the following terms*:

**1.** All loans over $3,000 shall be secured with a Deed of Trust granted to the Middle Peninsula Planning District Commissioner. Businesses may use a deed of trust, security agreement, UCC liens, etc.

**2.** The owner of the property must agree that, if the property is sold, transferred, or otherwise conveyed voluntarily, when the owner is living, or if the real estate ceases for any reason to be the owner's principal place of residence, any outstanding balance must be paid back to the Middle Peninsula Planning District Commission.

**3.** If a business is sold and the Living Shoreline Loan program debt is to be assumed, a business may carry forward the loan debt as part of the business sale, assuming approval is granted by the MPPDC prior to the sale.

- If not, any outstanding principal (and grant) amount must be paid back to the Middle Peninsula Planning District Commission.

**G.** All beneficiaries must make monthly loan payments by automated clearing house debit from a valid checking or savings account.

## II. Vendors: Qualifications & Expectations

**A.** The MPPDC has a fiduciary responsibility to protect the expenditure of loans/grants. Thus, it sets forth the following qualifying criteria and expectations for vendors to comply.

**B.** Qualifying businesses need not be located within the Middle Peninsula region, although we encourage and invite businesses with physical footprints within the Middle Peninsula to join.

**C.** Prospective vendors to be listed on the FTF website must match at least one of the qualifying criteria below to participate in the Fight the Flood business marketplace and have taken and completed appropriate professional training(s), from the Virginia Institute of Marine Science or other universities, colleges, government or other professional programs offering certifications or credentials related to professional trade or profession directly related to the services to be provided.

1. Class A Contractors License
    - Automatically accepted upon proof of successful project completion (project completion statement, closed permit, release of performance bond, etc.)
2. Class B or C licenses
    - Proof of permitted and completed similar jobs, at least 3 jobs within the last 24 months in a Tidewater locality.
3. Other applicable methods presented and accepted by Fight the Flood program manager.

**D.** To be listed on the FTF website, qualifying vendors shall complete the "Fight the Flood Business Survey" as provided by the MPPDC.

1. The MPPDC shall maintain a database of qualifying vendors and made available to FTF registered property owners who request financial assistance. Property owners are not required to use qualified FTF vendors but are encouraged to.
2. It is mutually understood by all parties that the homeowners select the vendor

**E.** Participating FTF qualified vendors are encouraged to:

1. Support the FTF program by offering services on discount (5%–15%+) to only those homeowners who are registered in the FTF program;
2. Carry necessary insurance such commercial general liability. Homeowners using any contractor are encourage to ask for proof of insurance: For example, Class A Contractors $1,000,000 Class B and C $500,000-$250,000.

3. Acknowledgement that all financial payments from the MPPDC are released to the homeowner when approval is granted from the appropriate permitting agency denoting the completion of the work.
    - Loan proceeds can be released upon recordation of loan documents
    - Grant proceeds can be released upon satisfactory completion of the job, with proof of acceptance by the permitting agency
    - Some cost can be pre-paid under the program upon issuance of required permits or cost necessary to apply for permits such as design and engineering, etc.
4. Commit to prompt communication with the homeowners

Continued next page

---

**Middle Peninsula Planning District Commission**
**Living Shoreline Resiliency Incentive Funding Program**

**Virginia Revolving Loan Fund Program Design**
**And Guidelines – December, 2015**
**Amended 6/24/2020**
**OVERVIEW**

The Program Design and Guidelines for the Middle Peninsula Living Shoreline Resiliency Incentive Funding Program (LSIP) will delineate marketing strategies, loan application and review process, environmental review, funds management and administration, and loan agreements with property (residential and business) owners.

This program will provide incentives in the form of funding and insurance for homeowners to install living shorelines in lieu of shore hardening approaches for shoreline stabilization on private property.

## I. Marketing Strategy

- Geographic Area of Program: The Program will be available to homeowners of property located in the Middle Peninsula Planning District of Virginia. The localities of the Middle Peninsula are the counties of Essex, Gloucester, King and

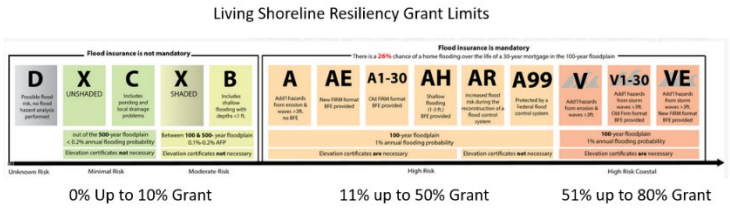
Queen, King William, Mathews, and Middlesex; and the towns of Tappahannock, Urbanna, and West Point.

- Solicitation of Applications: Loan applications will be sought through the following means:

    - Referrals from private sector contractors and engineers.
    - Referrals from Local Governments or other agencies.
    - News releases, Public Information Notices-Newspapers, fliers at public locations, educational displays at Captain Sinclair Landing

- Income Guideline –Residential participation will be based on the household income and ability to pay. Businesses will provide documentation such as profit and loss statement and/or other documentation of adequate business equity to collateralize the public investment). Grant/Loan awards, if available will be based on the program requirements of the source of the funds, if any.

    Unless otherwise dictated by the source of the grant funds, MPPDC will distribute grant funds on a sliding scale according to FEMA Flood insurance zones for any qualified resiliency project that meets the definition of a living shoreline found in § 28.2-104.1 of the Code of Virginia and is designed to attenuate the impinging wave climate across the sill and marsh system during significant storm events. A design will use statistical water levels and wave heights per FEMA flood zones and the fetch exposure referenced in FEMA flood insurance rate study or other qualified study.




- Terms of Loan:

    All loans over $3,000 will be secured with a deed of trust granted to the Middle Peninsula Planning District Commission. Businesses may use a deed of trust, security agreement, UCC Liens etc . The owner of the property must agree that, if the property is sold, transferred, or otherwise conveyed voluntarily, when the owner is living, or if the real estate ceases for any reason to be the owner's principal place of residence, any outstanding principal amount must be paid back to the Middle Peninsula Planning District Commission. If a business is sold and the living shoreline debt is to be assumed, a business may carry forward loan debt as part of the business

sale, assuming approval is granted by the MPPDC prior to sale. If not, any outstanding principal (and grant) amount must be paid back to the Middle Peninsula Planning District Commission

- All beneficiaries must make monthly loan payments by automated clearing house debit from a valid checking or savings account.

-

1. Interest and principal payments will commence as soon as funds are released. Final payment to owner or contractor will not be released until review by VMRC or local wetlands board staff to ensure the project has been completed consistent with the terms and conditions of the VMRC or wetlands permit.
2. Loan interest rates will be at the WSJ Prime Rate as published at http://www.bankrate.com/rates/interest-rates/wall-street-prime-rate.aspx
3. Alternatively, if the applicant has a banking relationship with a lending institution with a physical foot print within the Middle Peninsula, the program will match a verified HELOC rate to a floor of 2% rate. An additional ¼% rate reduction below a verified HELOC rate can be included for any project located in a FEMA A, AE, AH, AR, A99, VorVE flood zone designed to attenuate wave energy and storm surge.
4. In order to close out lending on an existing MPPDC-DEQ-VRA loan, the applicant may negotiate an interest rate to facilitate the closure of any outstanding loan balance to assist the Commission with refunding of the program. A rate floor of 1.5% is established.

5. Low income homeowners may be offered grants and lower interest rates based on household income.

- Loan Process
  - Applicant shall complete application provided by MPPDC
  - MPPDC staff can assist with application as needed
  - Loan terms and payments options will be discussed with client. Loans shall be amortized by monthly installment payments.
  - Completed application will be provided to MPPDC Closing Agent for loan processing and loan closing
  - Applicant and MPPDC will close loan. Loan Closing will take place at the office of the Middle Peninsula Planning District Commission, loan closing agents office or other agreed to location.

- Loan term:

  - Loans of $10,000 or less will be financed for up to 60 months.

- Loans over $10,000 to $35,000 will have the option of financing for up to 120 months.
- Loans over $35,000 will have the option of financing for up to 180 months, with approval from VRA.
- For eligible applicants receiving VRA loan forgiveness, terms of forgiveness will be included within the promissory note. If the applicant pays off the note before maturity, any outstanding loan forgiveness must be repaid and included as part of the payoff calculations. VRA funding for reach based, multi parcel projects will be handled on a case by case basis with terms included in the promissory note(s)

- Property transfer criteria: Balance of the principal of the loan shall be due and payable to The Middle Peninsula Planning District Commission upon sale or transfer of the property.

- Identification of Prior Existing Debt:

  - No subordination of loan shall be done for equity mortgage requests by beneficiary.
  - Applications found to carry a delinquent or defaulted first mortgage shall be ineligible for assistance. Applicants whose property is financed must carry a current first mortgage in good standing. This mortgage must have been current for at least the 12-month period prior to application or since inception of mortgage if in existence less than 12 months.

- Size of Loan: Loans shall not be less than $1,000.

- Fees and Service Charges:

  - Application Fee-$40 required at time of application.

  - Administrative Fee – To be determined based on cost of necessary documentation and closing costs. May be amortized with loan funds.
  - Late Fee-5% charged on unpaid payment due applies when 7 days past due date of payment.

- Security: Individual property owners receiving loans will sign a promissory note for the term of the loan. Loans over $3,000 are to be secured by a Deed of Trust.

- Financing, Permits, Inspections, Contractor Selection and Certification, Disbursement of Funds

  The Middle Peninsula Planning District Commission Living Shoreline Incentive and Funding Program will authorize VRA financing of any project not prohibited by any local ordinance and approved by VMRC or the applicable local wetlands board that satisfies the definition of a living shoreline consistent with § 28.2-104.1 of the Code of Virginia.

  If required by either the permitting agency or terms of a grant award, monitoring of the site, absent other requirements will be required for 3 years after installation following protocol elements outlined in Milligan et al 2019. Monitoring cost can be financed as part of the project.

  Applicants are encouraged to review the MPPDC Fight the Flood Program Design for access to information related to contractor services

  Contractor may request partial reimbursement payment for ordering of materials necessary for the job. Pre-draws will collect interest at the rate agreed to in the promissory note. Accrued interest for pre-draws will be added to the final note payment. Principal and interest payments will commence when the project has been completed.

Final funds will be disbursed to homeowners/contractor only after acknowledgement by local wetlands board and/or VMRC of satisfactory completion of projects.
Homeowner/Contractor shall provide to MPPDC a statement of final project completion

- Insurance Program: Dependent on securing the necessary funding, the Middle Peninsula Planning District Commission Living Shoreline Incentive and Funding Program will "insure" the plants of eligible living shoreline installations for up to two (2) years following initial construction dependent on funds available in the insurance pool program at the time of claim. In the event the plants die, the reason must be explained for the need to be replaced. If applicable, the program will provide grant funds necessary to purchase and replant the same or similar plants in any installation that was previously funded by the program. This insurance can be utilized up to 2 times per project as long as insurance funds remain in the program. All claims must be certified by program partners (VIMS/VMRC)
- Parametric Living Shoreline Insurance policies can be financed as part of the loan package. The applicant may choose how many years of insurance to finance.

## II. Loan Application and Review

- Application Guidelines:

- Income Eligibility: An applicant shall complete an Income Eligibility worksheet to determine income qualification for determination of ability to repay loan.

- Application Fee: A $40 application fee shall be charged at the time of application. The fee shall be nonrefundable.
- Place and Time of Application: Applications are available at the offices of the Middle Peninsula Planning District Commission,

Saluda Professional Center, 125 Bowden Street,
Saluda, Virginia between the hours of 8:30 a.m. to 4:30 p.m.,
Monday through Friday, except holidays, by mail request at PO Box 286, Saluda VA 23149, and by phone at (804) 758-2311. A downloadable application is also available at www.mppdc.com

- Review and Approval of Applications:

1. Staff Review- The staff of the Middle Peninsula Planning District Commission will review each application for Completeness and to verify income eligibility.
2. Project Management Committee- The Middle Peninsula Planning District Commission will designate a committee to review and approve each application. If grant funds are available the Committee will determine eligibility for grant funding following the criteria required by the funder or the program design. The Committee shall consider the following in determining project priorities:
    - Need for shoreline management at the project site (in consultation with VMRC staff)
    - FEMA Flood zone
    - Number of projects funded in a jurisdiction - Localities that have never received funding for a project will be given priority
    - Ability to pay – the ability of the homeowner to repay the loan
3. The MPPDC Board may authorize the Executive Director to complete all loan agreements and notes pursuant to approved loans.

## III. Administration of VRA Financing Funds

- Security: The Living Shoreline Incentive Funding Program will secure the loan with the Virginia Revolving Loan Fund through the revenues generated through loan payments made by individual property owners and through investment of capital funds.

**1.** Interest Security- The Program will offer loans at interest rates of WSJ Prime as published at www.bankrate.com

B. Alternatively, if the applicant has a banking relationship with a lending institution with a physical foot print within the Middle Peninsula, the program will match a verified HELOC rate to a floor of 2% rate. An additional ¼% rate reduction below a verified HELOC rate can be included for any project located in a FEMA A,AE,AH,AR,A99,VorVE flood zone designed to attenuate wave energy and storm surge

C. In order to close out lending on an existing MPPDC-DEQ-VRA loan, the applicant may negotiate an interest rate to facilitate the closure of any outstanding loan balance to assist the Commission with refunding of the program. A rate floor of 1.5% is established.

2. Principal Security- The MPPDC Program will borrow funds from the Virginia Resource Authority under terms and conditions agreeable to each party. Historically, VRA has loaned the Commission $250,000 for a period of 15 years at a 0% interest rate, but terms and conditions will vary as the Commission recapitalizes its program over time.
3. Total Annual Security/Annual Debt Payments- At program start up, annual debt payments will be $16.667, to be paid in semi-annual payments of $8,333. Future annual debt payments will vary based on recapitalization of the fund and terms offered by VRA. MPPDC will manage the loan fund and portfolio to ensure repayment of indebtedness.
4. MPPDC will establish a Loan Loss Reserve in the amount of $16,667 or an amount equal to one (1) year debt service payments. These funds will be designated as "Restricted Cash – MPPDC Series 2017 Reserve Fund"" on the MPPDC balance sheet until such time as the loan is repaid in full.

**B.** Administration:

**1.** The Middle Peninsula Planning District Commission will dedicate staff personnel to administer the Program. The Executive Director will provide supervisory guidance to the program.
**2.** The MPPDC will work closely with the State agencies involved in the protection of water quality. The Department of Environmental Quality and the Virginia Marine Resources Council will provide project guidance and assist through the permitting process.

3. The MPPDC Board will designate a Project Management Committee to provide input into the loan review and financial management aspects of the Program. The Board will also be involved in oversight of the entire program.
4. Fund Administration-The Program will invest any undisbursed portion of the loan proceeds with banks operating in the region or the Commonwealth of Virginia Department of the Treasury Local Government Investment Pool. Revenues from loan payments will be invested in said accounts providing liquidity to coincide with debt payments to the VRLF. Interest earnings from the Program will be available for administration costs and loan security. All revenues available after debt payments and administration costs may be utilized to provide additional assistance through the form of additional loans and/or grants to qualified applicants.

## IV. Notification of Changes to the Local Program

The MPPDC will notify the Department of Environmental Quality and the Virginia Resources Authority of any anticipated changes to the Program Design at least 60 days prior to the effective date of such changes.