



## COMMISSIONERS

### Essex County

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

### Town of Tappahannock

Hon. Katherine B. Carlton  
Mr. Eric Pollitt

### Gloucester County

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

### King and Queen County

Hon. Mark R. Berry  
Hon. Marie H. Norman  
Ms. Vivian Seay

### King William County

Hon. Benjamin Edwards  
Hon. Justin Catlett  
Mr. Greg Henrich  
Ms. Stacey Davenport

### Town of West Point

Hon. James M. Pruett

### Mathews County

Hon. Tom Bowen  
Hon. David Jones  
Mr. Harry Meeks  
Ms. Ramona Wilson

### Middlesex County

Hon. Wayne H. Jessie, Sr.  
(Treasurer)  
Hon. Reggie Williams, Sr.  
Ms. Kendall Webre  
Mr. Matt Walker

### Town of Urbanna

Hon. Dr. William T. Goldsmith

### Secretary/Director

Mr. Lewis L. Lawrence, III

## MEMORANDUM

**TO:** MPPDC Board of Commissioners  
**FROM:** Lewis Lawrence, Executive Director  
**DATE:** November 14, 2024  
**RE:** November Commission Meeting

The Middle Peninsula Planning District Commission will host its monthly meeting on Wednesday, November 20<sup>th</sup> at 7:00 p.m. in the Regional Board Room at the Middle Peninsula Planning District Commission office in Saluda.

Enclosed are the November meeting agenda and supporting materials for you to review before the meeting.

If you have any questions concerning material in your agenda packet, please give me a call at (804) 758-2311 or email me at [LLawrence@mppdc.com](mailto:LLawrence@mppdc.com)

I look forward to seeing you on **November 20<sup>th</sup>!**

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# ***Middle Peninsula Planning District Commission Meeting***

**7:00 P.M.**

**Wednesday, November 20, 2024**

**125 Bowden Street**

**Saluda VA 23149**

- I. Welcome and Introductions
- II. Approval of October Minutes
- III. Approval of Financial Report (*pending*)
- IV. Executive Director's Report on Staff Activities for November
- V. MPCBPAA Update
- VI. MPA Update
- VII. MPPDC Public Relations/Communications Update
- VIII. Public Comment

## **AGENDA ITEMS FOR DISCUSSION**

- IX. Discussion of Regional Dredging Priorities for 2025 Virginia Waterways Maintenance Fund Grant Round
- X. Municipal Dredging Program Update
- XI. Community Inundation Assessment and Alternatives Analysis
  - Teaser Video – Stephanie Heintz, Consociate Media
- XII. Discussion of General Assembly – Legislative Items
- XIII. DCR Pluvial Model Presentation
- XIV. VDOT Smart Scale Round 6 Application Summary
- XV. Other Business
- XVI. Adjournment

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# **MIDDLE PENINSULA PLANNING DISTRICT COMMISSION**

**October 23, 2024**

**Saluda, Virginia**

## **I. Welcome and Introductions**

The monthly meeting of the Middle Peninsula Planning District Commission was held in the Regional Board Room at the Middle Peninsula Planning District Commission office in Saluda, Virginia on Wednesday, October 23, 2024, at 7:00 p.m. MPPDC Chairman, Chriscoe welcomed everyone in attendance.

### **Commissioners Present**

Essex County: Bud Smith, John Magruder

Gloucester County: Ashley Chriscoe, Dr. Willy Reay, Tony Nicosia

King and Queen County: Mark Berry, Marie Norman, Vivian Seay

King William County: Justin Catlett, Benjamin Edwards, Stacey Davenport

Mathews County: Tom Bowen

Middlesex County: Wayne Jessie, Reggie Williams, Kendall Webre, Matt Walker

Town of Tappahannock: Eric Pollitt

Town of Urbanna: Dr. William Goldsmith

### **Commissioners Absent**

Essex County: Sarah Pope

Gloucester County: Dr. Willy Reay

King William County: Greg Henrich

Mathews County: Dave Jones, Harry Meeks, Ramona Wilson

Town of Tappahannock: Kay Carlton

### **Also in Attendance**

Lewie Lawrence, MPPDC Executive Director

Curt Smith, MPPDC Deputy Director

Dawn Mantell, MPPDC Executive Assistant

Guests

## **II. Approval of September Minutes**

Chairman Chriscoe asked whether there were any corrections or changes to the September Minutes. There being no corrections to the Minutes, Chairman Chriscoe requested a motion to approve the September Minutes. Ms. Norman moved that the September Minutes be approved. Mr. Berry seconded the motion; motion carried.

## **III. Approval of Financial Report**

MPPDC Executive Director, Lewie Lawrence reported a correction has been made of an additional \$612,900.46 to the amount of receivables on the balance sheet of the financial report. Chairman Chriscoe asked whether there were any questions regarding the financial report before being approved subject to audit. There being no questions, Chairman Chriscoe requested a motion to approve the financial report subject to audit. Mr. Walker moved to approve the financial report subject to audit. Ms. Seay seconded the motion; motion carried.

#### **IV. Executive Director's Report on Staff Activities for the Month of October**

MPPDC Chairman Chriscoe requested MPPDC Executive Director, Lewie Lawrence review the Executive Director's Report on Staff Activities for the month of October. The Executive Director's Report on staff activities is developed monthly with input from all MPPDC staff and subcontractors. The report is organized by PDC Service Centers, and the activities are used to report activities to both the Commission and respective grant funding agencies.

Mr. Lawrence directed the Commissioners' attention to a few items:

- Continued to assist with the advancement of legislative priorities for the 2025 VA General Assembly Session. Legislative priorities centered around coastal resilience and flood protection, dredging and beneficial reuse, and incentives for retaining local government staff positions. *Mr. Lawrence reported that Delegate Hodges is limited to 15 bills for the 2025 VA General Assembly Session and will discuss them next month.*
- Participated in a meeting to review the H&H study developed by VDOT consultants for study of potential drainage improvements at Kirby Street in the Town of West Point. Coordinated with Town and VDOT staff regarding potential funding sources for the recommended drainage solution including VDOT Revenue Sharing and the DCR Flood Fund. *Mr. Lawrence stated a possible solution is to use a flapper valve to close off the ditch.*
- Awarded \$250,000 DCR Virginia Land Conservation Fund grant for Middle Peninsula Chesapeake Bay Public Access Authority to acquire 450 acres near Middle Peninsula Regional Airport for conservation and public recreation. Updated REPI grant proposal for Middle Peninsula Chesapeake Bay Public Access Authority to acquire 513 acres near Middle Peninsula Regional Airport for conservation and public recreation, advanced project to NPS merit review. *Mr. Lawrence reported he may be able to obtain \$500,000 in grant funding instead of the \$250,000 to purchase the property from the Town of West Point.*
- Knott Alone Hold Fast has obtained insurance to host a haunted Halloween Trail event at the Captain Sinclair Recreational Area using the newly blazed trails. *Mr. Lawrence reported this event was made possible through award funding obtained a year ago to clear the trails.*
- The Contractor is tentatively scheduled to return during December to dredge the remaining ~13,000 cy of material. The regulatory agencies and grant funding agencies were notified of these updated plans. *Mr. Lawrence reported the Contractor is 80% complete but additional parking is needed.*
- DCR Community Flood Preparedness Fund/VPA Waterway Maintenance Fund – Davis Creek Dredging project is for finalizing dredged material disposal solution and implementing dredging of Davis Creek. *Mr. Lawrence reported 6 privately and publicly owned sites have been identified and are awaiting bids.*

- Received phone calls from 232 homeowners for septic assistance. *Mr. Lawrence drew the Commission's attention to the growing need for septic assistance in the Middle Peninsula.*
- A meeting was held with Consociate to coordinate beginning to advertise the availability of septic grant funds for low-income qualified individuals in King William on September 13<sup>th</sup>. *Mr. Lawrence reported the MPPDC has been awarded \$500,000 to provide low-income homeowners in King William County with septic repair/replacement assistance. Homeowners must have an annual gross income of less than \$96,000 to be eligible. Consociate Media will assist with outreach and geo-fencing. Any remaining funds will be made available to King and Queen County homeowners.*
- Engaged with 7 homeowners and 1 civic association in Most Effective Basins, specifically in portions of Middlesex and Essex Counties. Discussed the reimbursement grant for eligible BMP costs at 8 sites while coordinating with contractors on project funding. Encumbered \$1,065,669 of the total \$1,066,911 across 6 sites. *Mr. Lawrence reported DEQ amended the contract to provide an additional \$44,000.*
- LGA Grants Program. *Mr. Lawrence reported on the success of the LGA Grants Program. \$14M in grant funding has been requested over the last 8 months.*

**V. MPCBPAA Update**

MPCBPAA Secretary, Lewie Lawrence reported Fresh Start LLC has been placed under contract to build 6 apartments at PAA-owned Captain Sinclairs Recreation Area.

**VI. MPA Update**

None.

**VII. MPPDC Public Relations/Communications Update**

Ms. Stephanie Heinatz, Consociate Media, reported new videos funded by CBNERRS have been produced and the Fight-the-Flood website has been updated.

**VIII. Public Comment**

None.

**IX. Discussion of FEMA Floodplain Letter**

MPPDC Executive Director, Lewie Lawrence provided the Commission with a letter received by MPPDC Chairman, Ashley Chriscoe from Heather Lockerman, Attorney, Sands Anderson regarding the importance and urgency of floodplain management in the Commonwealth. This letter addresses the current conflict between the Town of Tappahannock and FEMA after FEMA performed an audit and cited the Town for not having a non-existent floodplain permit for a bridge owned and constructed by VDOT in 2014. DCR has not offered any guidance. Topics addressed in the letter were: NFIP; Healthy Floodplain Deters Flooding; FEMA's NFIP Enforcement; Ignorance of FEMA's Guidance Leads to NFIP Non-Compliance and Flood Damage; State and Federal

Permits for Water Based Activity Do Not Consider Floodplain; Impact to Executive Branch Agencies Participating in Floodplain Development; and Coordinated Guidance Is Required to Increase Compliance and Decrease Inequity. Mr. Lawrence recommended the localities wait for the state's response before taking any further action.

**X. Draft VRA Support Agreement**

MPPDC Executive Director, Lewie Lawrence reviewed the reviewed the draft VRA Support Agreement included in their meeting packet. This Agreement requests a short-term line of credit to cover project costs if needed, until reimbursement is received from the grant funder. The Agreement requires action at the local level before the Commission can move forward. If all 9 Middle Peninsula localities participate, the annual pro-rata share for each County is estimated to be \$71,429.00 and \$23,809.00 for each Town. A motion was made by Mr. Edwards to approve and sign the VRA Support Agreement on the condition that all Member Jurisdictions agree to participate. Ms. Seay seconded the motion; motion carried.

**XI. Middle Peninsula Destination Marketing Organization (DMO) Presentation**

Ms. Stephanie Heinatz, Consociate Media drew the Commission's attention to a draft resolution included in their meeting packet petitioning Virginia Tourism Commission to recognize the Middle Peninsula Planning District Commission as a Designation Marketing Organization. This designation would allow the MPPDC to pursue funding opportunities afforded only to those holding this designation. Chairman Chriscoe requested a motion to petition Virginia Tourism Corporation (VTC) to recognize the MPPDC as a Destination Marketing Organization (DMO) and Lewis L. Lawrence or their designee be authorized and directed to act as chief liaison for the DMO. Ms. Norman moved that the resolution be approved as presented. Ms. Webre seconded the motion; motion carried.

**XII. Virginia Tourism Corporation (VTC) Marketing Grant Update**

Ms. Stephanie Heinatz, Consociate Media gave a PowerPoint Presentation on Tourism on the Middle Peninsula. Topics presented were: Why have a DMA?; Existing DMOs in the Middle Peninsula; State Fast Facts About Tourism; Economic Impact on the Middle Peninsula; and 2023 Visitor Profile. Ms. Heinatz reported \$47,500 has been brought into the Middle Peninsula for marketing tourism.

**XIII. Middle Peninsula Leadership Development Program**

Stephanie Heinatz, Consociate Media reported she has been participating in the Learn, Explore, Absorb, and Disseminate (LEAD) program. The goal is to provide intellectual and personal connectivity experiences with the various aspects of the community. Ms. Heinatz shared her experiences to date and asked if there would be interest in bringing this program to the Middle Peninsula.



**XIV. RAISE Project Conceptual Renderings for Public Working Waterfront Improvements**

MPPDC Deputy Director, Curt Smith gave a PowerPoint Presentation on Designing Multimodal Working Waterfronts to Meet the 21<sup>st</sup> Century Needs of Rural Coastal Seafood and Maritime Industries. The State of Good Repair Condition Assessments of the ~60 publicly owned working waterfronts in the Middle Peninsula have been completed by VHB. Facilities will be designed to address the needs expressed by local watermen and stakeholders. VHB will be meeting with each Local Government Administrator and MPPDC staff will apply for additional Federal funding to build the needed facilities on those sites beginning in early 2025. Topics presented were: Project Overview; Recap of Stakeholder Engagement and Needs; Site Selection Matrix – Overview; Site Selection Matrix – Details; Working Waterfront Network Sites and Potential Sites; Site Programming + Precedent Imagery; Site Concepts; Stakeholder and Public Engagement; and Next Steps. Submission of the RAISE grant application is due January 2025 and will be to fund design/build.

**XV. Other Business**

King & Queen County Administrator/Attorney, Vivian Seay announced the Certificate of Occupancy has been received for the new Telehealth/Telework Center which will also be the new location of the MPPDC office. The grand opening date is to be determined.

**XVI. Adjournment**

Chairman Chriscoe requested a motion to adjourn. Mr. Jessie so moved; Ms. Webre seconded the motion; motion carried.

*\*Note: All handouts distributed at a meeting are filed in the official MPPDC record book of the minutes. Copies of all PowerPoint presentations, if any, are filed with the official minutes.*

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(Secretary)

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## Project Financial Report

**Middle Peninsula Planning District Commission**  
**Period Ending: 11/30/2024**

Run Date: 11/20/2024  
 Run Time: 11:55:08 am  
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-----Expenditures-----								
Code	Description	Budget	Curr Month	Project Total	Un/Over	% Budget	Revenues	Balance
30001	CZM Coastal TA FY24	128,999.00	0.00	0.00	128,999.00	0.00%	0.00	0.00
30002	DEQ WIP TA 2025	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
30005	DCR CFPF Resilience Planning	369,969.00	0.00	0.00	369,969.00	0.00%	0.00	0.00
30006	LRNow Derelict Vessels (NOAA)	10,000.00	0.00	1,337.22	8,662.78	13.37%	0.00	(1,337.22)
30007	NOAA/VCZMP Public Financing	50,000.00	0.00	0.00	50,000.00	0.00%	0.00	0.00
30009	CFPF Sinclair Flood Mitigation (E	102,200.00	0.00	4,143.74	98,056.26	4.05%	0.00	(4,143.74)
30013	Housing Loan Admin (EE&CBG)	0.00	0.00	596.82	(596.82)	0.00%	1,301.89	705.07
30101	Davis Ck Dredg (VPA/DCR CFPF)	1,065,472.00	3,080.00	36,951.02	1,028,520.98	3.47%	0.00	(36,951.02)
30170	Sm Bus Loan Admin (MPBDP Sta	0.00	0.00	(972.70)	972.70	0.00%	7,264.54	8,237.24
30186	Elev Septic Pilot (DHCD) (\$10k N	120,000.00	207.92	93,706.62	26,293.38	78.09%	233,212.15	139,505.53
30187	VHDA Housing Development	1,000,000.01	5,008.36	430,638.18	569,361.83	43.06%	225,814.01	(204,824.17)
30190	Hoskins Creek (DCR/Tapp CFPF)	87,400.00	0.00	12,002.20	75,397.80	13.73%	9,248.99	(2,753.21)
30191	Mill Creek Boat Ramp (DCR/Mse	61,680.00	1,939.03	53,080.83	8,599.17	86.06%	23,260.78	(29,820.05)
30192	FTF GIS Tool (DCR/FEMA)	147,000.00	6,487.81	130,778.88	16,221.12	88.97%	135,246.03	4,467.15
30196	York (CFPF) (Parker Match \$21,4	49,955.00	0.00	0.00	49,955.00	0.00%	0.00	0.00
30197	Mobjack (CFPF)	133,257.00	0.00	0.00	133,257.00	0.00%	0.00	0.00
30198	Gwynns Island Onsite Septic Rej	20,000.00	0.00	10,123.34	9,876.66	50.62%	30,000.00	19,876.66
30201	VA Water Trails Website (MPPD	8,063.00	250.00	5,009.12	3,053.88	62.12%	10,866.20	5,857.08
30220	FY24 CAP Operating Program (D	0.00	0.00	0.00	0.00	0.00%	19,649.25	19,649.25
30221	FY25 CAP Operating (DRPT/TDM	84,680.00	0.00	16,168.25	68,511.75	19.09%	12,934.60	(3,233.65)
30321	FY24 Rural Transportation Planr	0.00	0.00	0.00	0.00	0.00%	23,926.98	23,926.98
30420	Onsite Loan Management	425.00	0.00	14,703.82	(14,278.82)	3,459.72%	37,948.31	23,244.49
31002	General Assembly Lobbyist	71,253.00	3,750.00	60,000.00	11,253.00	84.21%	221,194.00	161,194.00
31005	FY25 RTP (VDOT)	72,500.00	0.00	3,611.40	68,888.60	4.98%	2,889.12	(722.28)
31500	Living Shoreline Incentive Progr	9,635.00	0.00	53,973.47	(44,338.47)	560.18%	21,413.87	(32,559.60)
32021	PAA GOVA Sea Grant Resilience	132,163.50	0.00	138,763.71	(6,600.21)	104.99%	175,087.25	36,323.54
32022	PDC Staff Support for Admin of	4,200.00	0.00	4,223.81	(23.81)	100.57%	11,600.00	7,376.19
32024	PAA VOF Get Outdoors-Trailblaz	5,000.00	0.00	3,780.28	1,219.72	75.61%	5,000.00	1,219.72
32025	PAA Admin - Reimb.	4,200.00	0.00	51.19	4,148.81	1.22%	0.00	(51.19)
32163	DEQ 319(h) BMP Res Septic \$96	232,119.76	37,750.00	192,118.11	40,001.65	82.77%	152,853.01	(39,265.10)
32166	DCR FTF Homeowner Fees	15,500.00	0.00	18,308.56	(2,808.56)	118.12%	36,769.11	18,460.55
32169	US DOT RAISE	2,018,476.00	100,000.00	912,715.95	1,105,760.05	45.22%	687,067.13	(225,648.82)
32171	DEQ CZM Next Gen PLANS - Yr2	0.00	0.00	3,472.06	(3,472.06)	0.00%	18,300.00	14,827.94
32173	VDH Local SWAP	299,980.00	0.00	150,998.17	148,981.83	50.34%	129,761.02	(21,237.15)
32174	NFWF & DEQ CZM Hog Island Re	947,200.15	0.00	909,737.38	37,462.77	96.04%	922,668.99	12,931.61
32176	NFWF Veterans Partnership	75,000.84	0.00	70,037.04	4,963.80	93.38%	71,765.25	1,728.21
32177	EDA TA (\$70k-VPA/MPA/VASG/'	192,800.00	0.00	62,203.25	130,596.75	32.26%	70,000.00	7,796.75
32178	VDH SWAP (BIG)	280,413.00	0.00	157,814.92	122,598.08	56.28%	179,192.91	21,377.99
32179	DEQ ARPA SLPP Septic Repair(Fl	730,196.00	0.00	78,086.58	652,109.42	10.69%	58,408.08	(19,678.50)
32180	FEMA Ware Cove (H.Owner Mai	215,705.00	0.00	27,189.72	188,515.28	12.61%	13,265.77	(13,923.95)
32181	FY23 Coastal TA (DEQ CZM)	129,000.00	3,000.00	87,390.88	41,609.12	67.74%	84,529.68	(2,861.20)
32182	DEQ CZM Working Waterfront /	54,505.00	0.00	12,480.23	42,024.77	22.90%	12,656.93	176.70
32183	SCRC LDD Capacity Building	24,000.00	0.00	19,565.10	4,434.90	81.52%	8,346.52	(11,218.58)
32184	FY24 WIP TA (DEQ)(\$14.5kMatc	58,000.00	0.00	22,501.56	35,498.44	38.80%	52,748.34	30,246.78
32300	FEMA VDEM AHMP Update 202	172,074.00	0.00	0.00	172,074.00	0.00%	0.00	0.00
33001	C-515771 Septic and Living Shor	152.00	20,546.00	55,545.70	(55,393.70)	36,543.22%	62,572.09	7,026.39
35001	CZM Ecotourism Booster	29,836.00	0.00	0.00	29,836.00	0.00%	0.00	0.00
35002	VHDA CIG Housing Planning FY2	54,103.00	1,950.00	1,950.00	52,153.00	3.60%	0.00	(1,950.00)
35003	VTC Micobusiness Marekting - T	14,067.00	0.00	0.00	14,067.00	0.00%	0.00	0.00
38023	FY23 Local Projects	0.00	0.00	0.00	0.00	0.00%	459.58	459.58
38024	FY24 Local Projects	0.00	0.00	7,832.17	(7,832.17)	0.00%	3,004.02	(4,828.15)
38025	FY25 Local Projects	0.00	0.00	7,943.69	(7,943.69)	0.00%	452,299.35	444,355.66

## Project Financial Report

Middle Peninsula Planning District Commission  
Period Ending: 11/30/2024

Run Date: 11/20/2024  
Run Time: 11:55:08 am  
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-----Expenditures-----								
Code	Description	Budget	Curr Month	Project Total	Un/Over	% Budget	Revenues	Balance
38100	LGA Grants Program	134,250.00	0.00	85,316.22	48,933.78	63.55%	360,574.34	275,258.12
38809	Mathews HITW Dredging (VDOT	177,364.00	0.00	173,317.96	4,046.04	97.72%	190,307.57	16,989.61
38810	VPA Aberdeen Dredging	156,364.00	2,080.00	80,335.94	76,028.06	51.38%	82,301.15	1,965.21
38811	DCR CFPF Broad Creek Dredging	475,723.00	4,080.00	44,598.54	431,124.46	9.37%	32,160.92	(12,437.62)
38812	DCR CFPF Whiting Crk Dredging	138,622.00	0.00	5,306.79	133,315.21	3.83%	42,947.63	37,640.84
38813	Broad Crk Spot Dredging (Middl	65,000.00	0.00	28,594.32	36,405.68	43.99%	27,920.95	(673.37)
38814	DEQ/NOAA/VCZMP - NPC Boarc	183,952.00	1,533.00	13,809.79	170,142.21	7.51%	126,521.90	112,712.11
38815	Middlesex Comp Plan Audit - CL	6,423.30	0.00	5,987.42	435.88	93.21%	10,017.02	4,029.60
38816	DEQ IJJA Rapp Shoreline BMP Cc	1,800,170.00	0.00	84,961.38	1,715,208.62	4.72%	90,455.20	5,493.82
39000	General Fund Balance	0.00	0.00	0.00	0.00	0.00%	205,408.77	205,408.77
<b>Totals:</b>		<u>12,419,047.56</u>		<u>4,392,790.63</u>		<u>35.37%</u>		<u>1,000,350.57</u>
			<u>191,662.12</u>		<u>8,026,256.93</u>		<u>5,393,141.20</u>	

## Balance Sheet by Category

Middle Peninsula Planning District Commission  
Period Ending: 11/30/2024  
Format: 1 Board

Run Date: 11/20/24  
Run Time: 11:55:27 am  
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### Assets:

Not Assigned to a Code	16,240.99
Cash in Bank	111,797.78
Cash in Bank, Restricted	605,333.80
Receivables	1,926,522.05
Property & Equipment	6,664.71
Prepaid Pension (Deferred Outflows)	48,680.91

Assets:	<u><u>\$2,715,240.24</u></u>
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### Liabilities:

Accounts Payable	112,213.94
VRA Loan Payables	966,039.53
Payroll Withholdings	10,530.32
Accrued Leave	69,782.80
Deferred Revenue	76,646.09
Deferred Inflows (VRS)	117,112.00
Net Pension Liabilities	(14,365.00)
Cost Allocation Control	(993,658.77)

Liabilities:	<u><u>\$344,300.91</u></u>
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### Equity:

Not Assigned to a Code	(10,100.86)
Local Initiatives/Information Resources	735,597.41
Economic Development	24,680.62
Transportation Programs	312,465.25
Onsite Repair & Pumpout	14,056.11
Housing	1,301.89
Coastal Community & Environmental	316,136.23
Public Access Auth Programs	81,878.25
Temporarily Restricted	177,307.09
General Fund Balance	717,617.34

Equity:	<u><u>\$2,370,939.33</u></u>
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Total Liabilities and Equity	<u><u>\$2,715,240.24</u></u>
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Balance:	<u><u>\$0.00</u></u>
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**Middle Peninsula Planning District Commission  
Executive Director's Report of Regional Progress  
November 20, 2024**

**Note:** On May 23, 2018, the Commission voted to direct staff to email all future documents including the Commission meeting packets to save on postage. As we strive to make this report more informative and user-friendly, some previously contained information may now be accessed by clicking on the following link(s):

- For Demographic Information: [Community Profiles \(viriniaworks.com\)](http://CommunityProfiles(viriniaworks.com))
- For MPPDC Website: <https://www.mppdc.com/>

**MPPDC Staff and Contact Information**

**Executive Director: Lewis Lawrence**

Contact Info: [llawrence@mppdc.com](mailto:llawrence@mppdc.com) (804) 758-2311x24 (804) 832-6747 (cell)

Programs: *Coastal Zone Technical Assistance, Local Initiatives, Public Access Authority*

**Deputy Director: Curt Smith**

Contact Info: [csmith@mppdc.com](mailto:csmith@mppdc.com) (804) 758-2311x28 (804) 384-7509 (cell)

Programs: *Rural Transportation Planning, Dredging Coordination, General Environmental and Community Development Management*

**Chief Financial Officer: Julie A. Kaylor**

Contact Info: [jkaylor@mppdc.com](mailto:jkaylor@mppdc.com) (804) 758-2311x22

Programs: *Commuter/Employer Transportation Services, Septic Repair Assistance, Living Shoreline Incentive Program, Revolving Loan Programs Administration, PDC Finance & Grants Administration, PAA Staff Support, MPA Staff Support*

**Senior Planning Project Manager: Jackie Rickards**

Contact Info: [jrickards@mppdc.com](mailto:jrickards@mppdc.com) (215) 264-6451 (cell)

Programs: *Environmental Programs, Hazard Mitigation Planning, Grant Writing, Graphic Arts*

**Coastal Resilience Planner: Taylor Ovide**

Contact Info: [tovide@mppdc.com](mailto:tovide@mppdc.com) (804) 758-2311x26

Programs: *Fight the Flood Program, Septic and Well Assistance Programs*

**Executive Assistant: Dawn Mantell**

Contact Info: [dmantell@mppdc.com](mailto:dmantell@mppdc.com) (804) 758-2311x21

Programs: *Septic Pumpout, Repair/Replacement Assistance Programs, PDC Staff Support, MPA Staff Support, PAA Staff Support, Facilities Scheduling, Website Management*

## INFORMATION RESOURCES/ASSISTANCE

- Updated [www.mppdc.com](http://www.mppdc.com) website – meeting notices, reports, news releases, GO Va meetings, financial assistance programs, etc.

## COASTAL COMMUNITY DEVELOPMENT/ ENVIRONMENTAL

Funding – VDEQ, VIMS, VDCR, local match from MPPDC General Fund & partners

### **Project 30001 – VCZMP Coastal Technical Assistance FY24**

*This project provides ongoing support to member localities of the Planning District Commission and other stakeholders committed to improving community development and coastal management within the coastal zone.*

- Coastal Management Analysis and Policy Support
  - Continued to assist with the advancement of legislative priorities for the 2025 VA General Assembly Session. Legislative priorities centered around coastal resilience and flood protection, dredging and beneficial reuse, and incentives for retaining local government staff positions.
  - Convened the October and November Local Government Administrators meetings. Agenda items in October included DEQ Water Supply Planning Update, VRA Line of Credit for MPPDC projects local support agreement discussion, continued FEMA Floodplain Permitting discussions, and solar facility planning at landfills with Dominion Energy. November agenda items included 2025 General Assembly discussion, Dominion solar and data center continued discussions, LGA Grants Program report, VA Port Authority Waterway Maintenance Funding project prioritization for 2025 applications, and continued discussions regarding new MPPDC line of credit from VRA.
- Local and State Planning Coordination
  - Continued development of a proposal to the DCR Flood Fund for a shoreline enhancement and flood protection project at the Gloucester Point Beach Park.
  - Continued development of a proposal to the DCR Flood Fund for gap funding to construct two additional breakwaters and dune grasses and fencing at the County owned Haven Beach property.
  - Continued development of a proposal to the DCR Flood Fund focusing on advancing flood insurance education and products including parametric insurance. Reached out to VIMS regarding the maintenance of the StormSense sensors to satisfy feedback from the Round 4 application.
  - Continued development of a proposal to the DCR Flood Fund to purchase a flood protection Portadam system for the PAA Captain Sinclairs pool house property.
  - Continued development of a proposal to the DCR Flood Fund to develop a flood protection master plan for flood prone areas of the Town of West Point including hydraulic studies and modeling, public engagement, and designs for preferred recommended solutions.
  - Continued to work with George Mason University (GMU) regarding hydraulic and hydraulic analyses for road flooding at Lighthouse Road and Haven Beach Road in Mathews County and at the Rt. 17 crossing of Mount Landing Creek in Essex County.
  - Received notice of award for ~\$700,000 for FY25DEQ IJA Living Shoreline BMP Construction funding for living shoreline construction on various private properties registered in Fight the Flood.
  - Submitted a proposal to the National Park Service Chesapeake Gateways Program to transform the Virginia Eco Tour Guide course into an eLearning opportunity.
  - Prepared and submitted a grant application to the National Park Service to plan for and digitize



the Virginia Eco Tour Guide course.

- LGA Grants Program Support

- Submitted Virginia Brownfields Restoration & Economic Redevelopment Assistance Fund proposal for \$110,000 for environmental remediation at West Point Airport Industrial Site, including demolition and disposal of five former classroom & office trailers and two fuel storage tanks.
- Developing NOAA Saltonstall-Kennedy Grant Competition proposal for \$148,500 to promote and market Middle Peninsula blue catfish industry.
  - Met with VIMS; Virginia Restaurants, Lodging, and Travel Association; Virginia Chef's Association; and Consociate Media to develop Scope of Work, Project Budget, and Letters of Collaboration.
- Developing NOAA Climate Ready Coasts Grant Competition proposal for \$4,100,000 for Middlesex County to acquire 118 acres at Bushy Park Farm for conservation and to establish a new public park.
  - Met with CZM to develop Scope of Work and address reviewer comments.
- Met with VDOT Local Assistance Division to discuss Economic Development Access Program grant for road design project at West Point Airport Industrial Site.
- Met with DHCD to review Industrial Revitalization Fund as potential funding for environmental remediation at West Point Airport Industrial Site, including shoot house demolition.
- Funding from Sen. Kaine and Warner's offices for two earmark requests submitted by MPPDC is still pending the federal budget process:
  - Commerce, Justice, Science, and Related Agencies bill for FY25: \$801,585 to purchase, deploy and operate for one-year water level monitoring stations in the Middle Peninsula.
  - Homeland Security bill for FY25: \$942,574 to purchase and install generators providing backup power to emergency operations centers in Gloucester, Mathews, Middlesex, and Essex counties.
  - Updates on full or partial funding of requests will be shared as the appropriations process takes place.
- REPI grant proposal for \$552,000 for Middle Peninsula Chesapeake Bay Public Access Authority to acquire 513 acres near Middle Peninsula Regional Airport for conservation and public recreation continues to advance through federal agency review.

- MP CBPAA Work Plan & Support for Online Facility Reservation System

- None for October.

- Benefits Accrued from Ongoing and Prior CZM Grants - None for October.

- Ensuring Navigational Safety – None for October.

### **Project 30006 – NOAA Marine Debris Removal Pilot**

*Project provides consulting services under a NOAA grant administered by Lynnhaven River NOW (LRNow), including conducting research, and developing recommendations for the removal of abandoned and derelict vessels in Virginia's coastal zone, as well as contributing to the formulation of an abandoned and derelict vessel (ADV) removal and prevention program tailored to Virginia's needs.*

- Worked to verify and complete field investigation sheets and photographing of priority vessels submitted by Lynnhaven River Now (LRN) in its grant from NOAA located in the Middle Peninsula. The investigation sheets along with additional information provided to LRN was well received as the

other partners have been unresponsive.

- MPPDC Staff met with the LRN Project Manager on October 28<sup>th</sup>, providing assistance with challenges being encountered by LRN.
- Per CZM staff's feedback, MPPDC staff continue to identify a list of stakeholders for invitation to a kickoff meeting. Per CZM staff the program administered by Lynnhaven River NOW is currently being worked by region with efforts for vessel removal being currently conducted in the Hampton Roads Region. Several vessels that LRN felt met criteria were not allowed to advance by NOAA for removal.

#### **Project 30007 – VCZMP 309 Dredging Financing**

*Model language will be developed to assist local governments interested in establishing tax revenue financing mechanisms for supporting dredging and flood protection activities. A pilot financing structure will be developed for Middlesex County for dredging and flood protection of Broad Creek.*

- Prepared subcontracts to initiate work.
- Held initial discussions with legal counsel regarding financing options to be considered during the project.

#### **Project 30009 – CFPF Captain Sinclairs Berm/Road Flood Mitigation**

*Project is to design and develop a draft permit application for construction of a flood mitigation berm to address recurrent flooding at the MPCBPAA Captain Sinclairs Recreation Area in Gloucester. The project also involves elevation of the public road at the site for flood mitigation purposes.*

- Finalized contract with UVA School of Architecture for flood mitigation berm design at the PAA Captain Sinclairs and discussed utility of new DCR Pluvial Model products for the berm designs.
- Discussed plan for road elevation at Captain Sinclairs for flood mitigation.
- Submitted the quarterly report to DCR.

#### **Project 30186 – Elevated Septic Pilot FY22**

*Construction of a vertically elevated septic system will occur at the King & Queen Telehealth and Business Development Center as part of a three-year pilot program to analyze an engineered septic unit that houses and treats all sewage effluent in a vertically elevated, self-contained unit suitable for areas with high water tables and flooding in Coastal Virginia.*

- Awaiting VDH permit determination for installation of the commercial unit at the King and Queen Center.
- Prepared final report to the Governor and General Assembly.

#### **Project 30190 – DCR Flood Fund - Hoskins Creek (Tappahannock)**

*Project is to design, obtain permits for, and construct a living shoreline on the Town-owned property adjacent to the Rte. 17 bridge over Hoskins Creek in Tappahannock.*

- Construction continues on the living shoreline at the Hoskins Creek property.
- Extension request approval was approved by DCR which extends the award contract through February 2026. The extension is necessary to accommodate the planting elements of the living shoreline since the planting could not be completed by the end of the warm weather growing season. It is anticipated the project will be completed during the Spring when the plantings are complete.
- Submitted quarterly report to DCR.

#### **Project 30191 – DCR Flood Fund – Mill Creek Boat Ramp (Middlesex)**

*Project is to design and develop a draft Joint Permit Application for the shoreline and structures adjacent to the boat ramp at the Carlton Road (Mill Creek) public wharf in Middlesex. The designed solution will help mitigate the shoaling of the boat ramp and enhance the overall resilience of the public wharf.*

- Held a final meeting with County staff and the Supervisor representing the district where the site is located regarding the final design and discussed implementation strategies to secure funding for the project.
- Submitted the quarterly report to DCR and initiated development of the final report.

#### **Project 30196 – DCR Flood Fund – Round 3 Supplemental (York Private Property Shorelines)**

*VDCR CFPF funding for two shoreline protection construction projects on private properties within the York River watershed.*

- Sarah's Creek Shoreline Project:
  - The homeowner has indicated that they prefer to cash-flow the project with their own funding. MPPDC staff coordinated with the homeowner and contractor on the project.
  - MPPDC Staff drafted amended documents that the homeowner executed this month capturing additional funding sources required documents.
- York River Shoreline Project:
  - Per the contractor, construction is scheduled to begin between 11/18 to 11/22.

#### **Project 30197 – DCR Flood Fund – Round 3 Supplemental (Mobjack Private Property Flood Mitigation)**

*VDCR CFPF funding for three shoreline protection construction projects and one stormwater flood protection project. All are located on private property within the Mobjack Bay watershed.*

- Ware River Phase III Project:
  - The Joint Permit Application (JPA) has been issued by the Corps, enabling further steps. MPPDC staff collaborated with the property owner to utilize MPPDC's Living Shoreline Loan Program to cash flow the project. The loan documents have been executed and MPPDC Staff are awaiting a disbursement to satisfy the contractors draw to purchase materials to begin construction. Subsequently, reimbursement requests will be submitted to grant funders to repay the loan.
- Wilsons Creek Project: Construction is complete.
- Antioch Rosenwald School Project:
  - Continued to coordinate with DCR staff and the property owners of the Rosenwald School regarding the revised scope of work and budget for the project. Will provide the updated scope to DCR staff for review and approval before the project can proceed.
- Submitted the quarterly report to DCR.

#### **Project 320224 – Staff Support to Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA)**

*Middle Peninsula Chesapeake Bay Public Access Authority Special Project – Support of Executive Order 23, Goal 8 Coastal Management Coordination Public Access: Continue implementation of adopted annual work program, including identifying land, either owned by the Commonwealth or private holdings that can be secured for use by the general public as a public access site; researching and determining ownership of all identified sites; determining appropriate public use levels of identified access sites; developing appropriate mechanism for transferring title of Commonwealth or private holdings to the Authority; developing appropriate acquisition and site management plan. This Program allows the Authority to function by supporting the individual projects and operations of the Authority, as well as by responding to daily requests for assistance from local government staff.*

- None for October.

#### **Project 32021 – PAA GO VA Sea Grant Resilience Economy**

*Virginia Sea Grant was awarded a GO Virginia award to assist the Middle Peninsula and other coastal areas with developing a water management economy to combat flooding and sea-level rise. This project will utilize*

land owned by the MPCBPAA as field stations to encourage business innovation in the flood resiliency space.

- Coordination with business award recipients continues.

#### **Project 32024 – MPPDC Virginia Outdoors Foundation (VOF) Get Outdoors**

*This project will provide the Middle Peninsula Chesapeake Bay Public Access Authority with nature trail demarcation and location services on the Captain Sinclair's complex in Gloucester by partnering with Knott Alone Hold Fast, a veteran support program.*

- Reached out to Consociate Media to request coverage of the Halloween Trail event at the Captain Sinclair Recreational Area. The contract terms for this project requires a press release that reviews the VOF project, and the work being completed. Therefore, coverage of this event and a general description of the VOF project will satisfy contract terms.

#### **Project 32174 – NFWF & VCZMP Hog Island Restoration**

*Project is for permitting and constructing a nature-based shoreline protection solution along the perimeter of the MPCBPAA-owned Hog Island property which continues to experience substantial erosion. The project is funded in part with federal funding from NFWF and NOAA via the VA Coastal Zone Management Program.*

- Awaiting final monitoring results from VIMS/CBNERRS staff. Once completed, project closeout will be initiated.
- Submitted final financial reports.

#### **Project 32182 – VCZMP Working Waterfront Resilience Assessments**

*MPPDC staff will be contracting with Accomack-Northampton, Northern Neck, and Hampton Roads PDCs to conduct vulnerability assessments of publicly owned working waterfronts in each region with the intent of identifying and advancing solutions at the properties which are eligible and competitive for various state and federal grant funding opportunities.*

- Having previously entered into MOUs with partner PDCs, MPPDC staff worked with CZM staff to draft the Working Waterfront Assessment Methodology. The draft was completed and shared with partner PDCs, along with submission deadlines.
- Product #3, the assessment of approximately 20 working waterfront sites, experienced delays after staff from two partner PDCs requested an extension for their assessments. This prompted MPPDC staff to request an extension through December 2024, which CZM staff approved. Currently, three partner PDCs have submitted their assessments. One partner PDC has not submitted any assessments, having recently indicated a preference for a different assessment format. MPPDC staff have completed five assessments using the approved methodology. MPPDC sites assessed include Brown's Bay Landing, Davis Creek Landing, Locklies Creek Landing, Perrin Wharf, and Williams Landing.
- Additional coordination is needed with CZM staff to review the submitted assessments and encourage the remaining partner PDC to submit their assessments. Work on Product #4, the methodology for entering data into the resiliency database, will commence once all partner PDCs submit their assessments.

#### **Project 32184 – DEQ Chesapeake Bay WIP Technical Assistance 2024**

*MPPDC will continue to engage localities and regional and state partners regarding Bay WIP III programmatic actions and implementation activities with funding provided by DEQ.*

- Regionally Specific Implementation Activities:
  - Continued development of a proposal to the DCR Flood Fund for a shoreline enhancement and flood protection project at the Gloucester Point Beach Park.
  - Continued development of a proposal to the DCR Flood Fund for gap funding to construct two additional breakwaters and dune grasses and fencing at the County owned Haven Beach property.

- Continued development of a proposal to the DCR Flood Fund focusing on advancing flood insurance education and products including parametric insurance. Reached out to VIMS regarding the maintenance of the StormSense sensors to satisfy feedback from the Round 4 application.
- Continued development of a proposal to the DCR Flood Fund to purchase a flood protection Portadam system for the PAA Captain Sinclairs pool house property.
- Continued development of a proposal to the DCR Flood Fund to develop a flood protection master plan for flood prone areas of the Town of West Point including hydraulic studies and modeling, public engagement, and designs for preferred recommended solutions.
- Continued to work with George Mason University (GMU) regarding hydraulic and hydraulic analyses for road flooding at Lighthouse Road and Haven Beach Road in Mathews County and at the Rt. 17 crossing of Mount Landing Creek in Essex County.
- Received notice of award for ~\$700,000 for FY25DEQ IJA Living Shoreline BMP Construction funding for living shoreline construction on various private properties registered in Fight the Flood.
- Bay Phase III WIP Implementation with Local and Regional Partners:
  - None for October.
- Fight the Flood Program Management:
  - Four new businesses have registered in Fight the Flood, initial vetting has occurred but a meeting hasn't occurred to review the new entries by committee for listing. The businesses include ECOconcrete (California), Universal Laboratories (Hampton), Delta Marine Construction (Deltaville), and Adams Septic Evaluation and Design (Williamsburg).

#### **Project 35001 – VCZMP Ecotourism Booster**

*The project will add the George Washington Regional Commission to the Virginia Water Trails website, hold a planning process to develop a sustainable solution for the Virginia Certified Ecotour Guide Course (VCEG), hire a consultant to lead the 2025 VCEG, and to pilot the development of an experiential water trail video to promote recreation, tourism and history of Urbanna Creek in Middlesex County.*

- Received and executed award contract and prepared for project kickoff.

## **TRANSPORTATION**

Funding – VDRPT, VDOT, local match from MPPDC General Fund

#### **Project 38809 – Mathews Co. Hole-in-the-Wall/Haven Beach Implementation**

*Mathews County was awarded VA Port Authority Waterway Maintenance Funding to dredge the Hole in the Wall channel to -7 feet Mean Low Water depths, place the dredged sand at the county-owned Haven Beach property, and construct new breakwaters adjacent to the renourished beach. MPPDC is administering the grant on behalf of the County with procurement and permitting assistance and project oversight. Mathews County has contracted MPPDC to provide continued oversight of the requisite beach monitoring beyond the closure of the VPA grant.*

- Phase 1 (Dredging):
  - The Contractor is tentatively scheduled to return during December to dredge the remaining ~13,000 cy of material. The regulatory agencies and grant funding agencies were notified of these updated plans.
- Phase 2 (Breakwater Construction):
  - Construction of the breakwaters continues. Developed proposal to VDCR Flood Fund for funding needed to construct the remaining two breakwaters designed for the site.
- Phase 3 (dune grass planting and fencing):

- No activity. Will initiate Phase 3 proposal discussions with the offerors if and when Mathews County directs to do so. Developed proposal to VDCR Flood Fund for funding needed for dune grass and fencing installation.
- Haven Beach Monitoring:
  - Continued to coordinate with Biogenic Solutions regarding the requisite second round of monitoring to occur following completion of construction of the breakwaters.

**Project 30221 – VDRPT Commuter Assistance Program (CAP) Operating FY25**

*This program assists local commuters and employers with transportation issues. The main emphasis is on lowering the number of single occupancy vehicle commutes within and from the Middle Peninsula region through marketing and promotion of the program through local media and provision of ride-matching services to commuters.*

- Monthly meetings with Molin to discuss project and work on strategy.
- Working with Kathy Molin to apply for a grant that will pay for an update to our Strategic Plan.
- Weekly meetings with Consociate Media.
- Attending monthly meetings with stakeholders.

**Project 31005 – VDOT Rural Transportation Planning FY25**

*This program provides rural transportation planning services through the Rural Transportation Planning Work Program which outlines specific tasks and goals to guide the rural planning of transportation services.*

- Project Administration:
  - Reporting - None.
  - Title VI and ADA Compliance – performed required maintenance.
- Long Range Transportation Plan Implementation Activities:
  - LRTP Maintenance and Updates - Awaiting VDOT meetings with localities to review and update local pre-scoping modules for priority needs planned for Fall 2024.
  - LRTP Implementation Strategies
    - Smart Scale – Provided updates regarding Round 5 applications during the October Local Government Planners meeting.
    - VDOT Fredericksburg District Local Pre-scoping Module Coordination –Meetings with localities were discussed during the October Local Government Planners meeting and tentatively planned for later in November or December following the VDOT Locality Day.
    - Flood Resilience –
      - Continued to coordinate with Town and VDOT staff regarding potential funding sources for the recommended drainage solution including VDOT Revenue Sharing and the DCR Flood Fund.
      - Continued development of a proposal to the DCR Flood Fund for a shoreline enhancement and flood protection project at the Gloucester Point Beach Park.
      - Continued development of a proposal to the DCR Flood Fund for gap funding to construct two additional breakwaters and dune grasses and fencing at the County owned Haven Beach property.
      - Continued development of a proposal to the DCR Flood Fund to develop a flood protection master plan for flood prone areas of the Town of West Point including hydraulic studies and modeling, public engagement, and designs for preferred recommended solutions.

- Continued to work with George Mason University (GMU) regarding hydraulic and hydraulic analyses for road flooding at Lighthouse Road and Haven Beach Road in Mathews County and at the Rt. 17 crossing of Mount Landing Creek in Essex County.
- Dredging/Navigation –
  - Discussed the draft Memorandum of Understanding for Middle Peninsula localities to launch a municipal dredging operation for the region under the auspices of the Middle Peninsula Public Access Authority with the VA Port Authority. Prepared to request transfer of funding from VPA to the MP-PAA during the January meeting of the VPA Board.
- Other Activities –
  - LGA Grants Program Support
    - Developing NOAA Climate Ready Coasts Grant Competition proposal for \$4,100,000 for Middlesex County to acquire 118 acres at Bushy Park Farm for conservation and to establish a new public park.
      - Met with CZM to develop Scope of Work and address reviewer comments.
    - Met with VDOT Local Assistance Division to discuss Economic Development Access Program grant for road design project at Tappahannock Airport Redevelopment Site.
    - Met with VDOT Local Assistance Division to discuss Economic Development Access Program grant for road design project at West Point Airport Industrial Site.
    - Met with DHCD to review Industrial Revitalization Fund as potential funding for environmental remediation at West Point Airport Industrial Site, including shoot house demolition.
    - Developing Scope of Work for Spring 2025 Congressionally Directed Spending request to advance phased site development at Tappahannock Airport Redevelopment Site.
    - Developing potential Industrial Revitalization Fund proposal for auto repair shop re-use at West Point Airport Industrial Site, pending end use agreement signed prior to application deadline in Spring 2025.
    - REPI grant proposal for \$552,000 for Middle Peninsula Chesapeake Bay Public Access Authority to acquire 513 acres near Middle Peninsula Regional Airport for conservation and public recreation continues to advance through federal agency review.
- VDOT Infrastructure Erosion Assessment and Inventory – Prepared for kickoff meeting.
- Active Transportation Facilities Tracking – Awaiting instruction from VDOT.
- Technical Assistance to Localities –None for October.
- Local Government Planners Meeting Coordination – Held meeting in October with agenda items including new DCR Pluvial Flooding Modeling, Smart Scale, Floodplain Management, DCR Flood Fund applications and other transportation related topics.
- MPPDC Webpage Maintenance – None for October.
- Public Road Endings and Landings Research – none during October.

- VA Water Trails Website Maintenance – Submitted application to the National Park Service Chesapeake Gateways program for funding to enhance the website and Certified Ecotour Guide Course.
- VDOT Coordination and Support Activities:
  - Requested VDOT Meetings and Data Review - None in October.
  - VTrans and Smart Scale Meetings - None in October.
  - Project Pipeline Studies Assistance
    - Participated in kickoff meeting on October 28 for a new STARS study of Route 30 from Route 33 to Mt. Olive Cohoke Road in West Point and King William County.
  - Additional VDOT Meetings – participated in the VDOT MPO Quarterly Coordination meeting on October 23.

### **Project 32169 – USDOT RAISE Public Working Waterfront Designs**

*Project is to conduct a region-wide planning project that will result in a suite of shovel-ready, high-priority multi-modal transportation infrastructure improvements intended to address critical needs related to the region's publicly owned working waterfronts in order to meet the modern and future needs of the region's growing commercial seafood and maritime industries. The project will involve three distinct tasks: 1) State of Good Repair Condition Assessments, 2) Multimodal Working Waterfront Needs Assessment and Improvement Strategies, and 3) Multimodal Working Waterfront Improvement Plan Development.*

- Administrative and Financial Activities:
  - Submitted quarterly reimbursement request. Still waiting for review and approval.
- Equity Analysis and Inclusion Planning:
  - VHB continued development of MPPDC Maritime Communities and Industries Explorer.
  - VHB's Equity Strategist assisted with the development of the public notice for the Public Engagement Session to be held on December 4, 2024.
- State of Good Repair Condition Assessments:
  - None this period.
- Multimodal Working Waterfront Needs Assessment and Improvement Strategies:
  - VHB presented the concept plans to VMRC Commissioner, Jamie Green and received feedback and the proposed overall direction of the project on October 15, 2024.
  - VHB presented the MPPDC with an updated master schedule and continued discussing the stakeholder and public engagement meetings upcoming in November and December.
  - VHB continued necessary fieldwork (wetland delineation, topographic survey, hydro survey, etc.) internally and with subconsultants to obtain necessary information to begin 30% design plans.
  - VHB began developing the engineering plans and permit documents for the (11) selected sites.
  - VHB continued development of the Needs Assessment document.
  - VHB began developing the virtual meeting room and public online survey for the upcoming Public Engagement Meeting.
- Multimodal Working Waterfront Implementation Plan:
  - VHB continued developing the implementation plan.
  - VHB and its consultant, Shore Consulting Group, began the assessment of the economic impacts associated with the proposed improvements.



## **Project 30101 – DCR Community Flood Preparedness Fund (CFPF)/VPA Waterway Maintenance Fund (WMF)**

### **Davis Creek Dredging**

*Project is for finalizing dredged material disposal solution and implementing dredging of Davis Creek.*

- Pre-dredging Activities (Phase 1):
  - Contacted the property owners of additional upland sites to discuss the project with a view of determining if they desire to proceed with an on-site visualization.
  - Discussed an option with the U.S. Army Corps of Engineers and the Virginia Institute of Marine Science for segregating material by grain size during dredging passes which may serve to reduce the volume of dredged material that may need to go to a confined upland site.
  - Continued discussions with the U.S. Army Corps of Engineers with a summary of data collected to date pertaining to absolute and non-absolute assessment factors in order to assess their ability to financially partner in the cost for acquisition and preparation of upland dredged material placement sites.
  - Provided Mathews County with periodic updates regarding the status of the project.
  - Discussed potential option of thin layer placement of dredged material at The Nature Conservancy's New Point Comfort Natural Area Preserve.
  - Submitted quarterly reports to DCR and VPA.

### **Project 38810 – VPA Aberdeen Dredging**

*Gloucester County was awarded VA Port Authority Waterway Maintenance Funding to dredge the Aberdeen Creek channel to -7 feet Mean Low Water and place the dredged material at an upland disposal site. MPPDC is administering the grant on behalf of the County with procurement and permitting assistance and project oversight.*

- Disposal/Reuse Options Coordination:
  - Continued project management coordination activities with the MPPDC and Gloucester County regarding Project Design and Permitting. Presented dredged material disposal and reuse alternatives to the County Board on November 6.
- Administrative: Submitted quarterly reports to DCR and VPA.

### **Project 38811 – DCR Flood Fund – Broad Creek Dredging and Jetty Design (Middlesex)**

*Project is for designing and dredging Broad Creek while concurrently designing and developing a draft joint permit application for the construction of shoaling protection structures along the mouth of the channel to ensure long-term navigability.*

- Pre-dredging Activities (Phase 1):
  - Continued project management coordination activities for Phase 1 and Phase 2 with the MPPDC and Gloucester County regarding Project Design and Permitting.
  - The U.S. Army Corps of Engineers completed their Section 408 application review on September 27 thus granting permission to alter the USACE project. On October 28 the joint permit application was certified by the Corps as meeting the terms and conditions of Category B 23-SPGP-PASDO.
  - The joint permit application was approved with special conditions by the Virginia Marine Resources Commission on October 28; (1) any conditions of the Section 408 approval letter will also be conditions of the VMRC permit, and (2) to ensure that the project complies with the Endangered Species Act a time of year restriction will be imposed should the Tricolored Bat become a federally listed species prior to completing all work (if the listing occurs all tree clearing activities will cease from May 15 – July 31).
  - Provided Middlesex County with periodic updates regarding the status of the project.

- Presented a draft resolution to the Middlesex Board on November 6. The Board passed a resolution to beneficially reuse the dredged material staged in the disposal area to satisfy the terms and conditions of the DCR grant.
- Dredging Implementation (Phase 2):
  - MPPDC staff continued to coordinate with County staff in preparation for contract discussions for Phase 2 activities.
- Jetty Design:
  - Initiated publication of Request for Proposals for the jetty design work with expected publication date to occur during the beginning of November.
- Administrative:
  - Submitted quarterly report to DCR.

#### **Project 38812 – DCR Flood Fund – Whiting Creek Dredging (Middlesex)**

*Project is for designing and developing draft permit applications for dredging and beneficial reuse or disposal of dredged material at Whiting Creek in Middlesex County.*

- Awaiting final response from DCR staff regarding clarification for contract language before proceeding with subcontract execution with VIMS to conduct surveying, sampling, and project design.
- Submitted quarterly report to DCR.

#### **Project 38813 – Broad Creek Spot Dredging (Middlesex)**

*Project is for designing and developing draft permit applications for dredging (Phase 1) and dredging and material disposal (Phase 2) at Broad Creek in Middlesex County.*

- The County has decided to expend the available grant funding under the DCR Flood Fund grant first before revisiting how to expend any funds for dredging under this initiative.

#### **ONSITE REPAIR & PUMPOUT**

**Funding – Grants, VRA Loan Funds, local match from MPPDC General Fund, cost-sharing**

#### **Project 301981 – FY25 Gwynn’s Island Septic**

*To support the MPPDC Regional On-Site Wastewater Treatment and Disposal Funding Program, this grant from Mathews Community Foundation provides septic repair assistance to LMI homeowners on Gwynn’s Island.*

- As of November 8, MPPDC staff has identified (3) potential homeowners and continues to screen septic assistance inquiries for eligibility to receive financial assistance through this grant program provided by the Mathews Community Foundation. The physical addresses of each of these septic systems were entered into the mapping tool to verify their location is within the program’s target area, Gwynn’s Island.
- Received phone call from a citizen requesting septic repair/replacement assistance information for a friend with a failing septic system. Septic system is located in the program’s target area. Discussed application process, income limits and requested they encourage homeowner to contact our office to be screened and receive an application.

#### **Project 32163 – DEQ 319(h) NPS IP for BMP Residential Septic 2021**

*This project provides cost-share assistance to landowners, homeowners, and agricultural operators as an incentive to voluntarily install nonpoint source (NPS) best management practices (BMPs) in designated watersheds.*

- As of November 8, MPPDC staff has received phone calls from **234** homeowners in Gloucester, Mathews, and Middlesex Counties in response to the press release for available 319(h) funding. The physical addresses of each of these septic systems were entered into the mapping tool to verify their

location is within the program's target areas. (82) homeowners had miscellaneous requests, declined moving forward, requested ineligible practices such as voluntary upgrades and reimbursement for work completed prior to the submission of a complete and qualified 319(h) application; (6) Mathews County homeowners placed their project on hold; and (115) homeowners' septic system isn't located in the program's target area. To-date, (10) Alternative Septic Systems in Mathews County have been installed; (2) Conventional Septic Systems, (1) in Gloucester County and (1) in Mathews County have been repaired; (2) Septic Systems in Middlesex County, (2) in Gloucester County, and (4) in Mathews County have been pumped out. All 20 homeowners were approved and reimbursed 50% of the average practice cost set DEQ. Funding is currently encumbered for the installation of (1) Alternative Septic System in Mathews County.

(9) Homeowners remain on the Septic Pumpout list. (7 Mathews, 2 Middlesex)

(2) Homeowners remain on the Septic Repair/Replacement list. (2 Mathews)

- Continue to receive inquiries from King William, King & Queen, and Essex County residents seeking septic assistance and are not in the designated target area set by DEQ to be eligible for 319(h) septic reimbursement funding. When applicable, these inquiries are screened for interest and eligibility in other MPPDC program funding, referred appropriately to VA DHCD, VHDA, and SERCAP for possible septic repair/replacement assistance and those seeking septic pumpout assistance are placed on the waiting list for when funding becomes available.
- Received executed DEQ NPS BMP Cost-Share Contracts from (3) Mathews County homeowners for their completed septic projects. (2) Alternative septic system installations and (1) Conventional septic system installation/replacement.
- Convened Review Committee to review the (3) 319(h) applications from Mathews County homeowners for reimbursement for the installation of (2) alternative septic systems and (1) conventional septic system. Review Committee approved the 50% cost-share reimbursement of all (3) projects totaling \$37,750.00.

#### **Project 32173 VDH Septic Well Assistance Program (SWAP)**

*This project will provide grant funding to assist VDH approved low-income Middle Peninsula homeowners with costs associated with septic repair/installation, private well installation/abandonment, and connecting to public water and sewer for the purposes of wastewater/water improvements.*

- As of November 8<sup>th</sup>, MPPDC staff have received inquiries from (93) Middle Peninsula homeowners in need of well and/or septic repair/replacement assistance. Homeowners began the intake/application process for SWAP assistance at the MPPDC, staff are no longer accepting applications. Staff have received (22) complete applications. Staff have collected and submitted (20) homeowners' income documents for verification by Local Health Department Staff to verify the applicant's income is at or below 200% FPG. To date (20) applicants have been low-income verified, (1) applicant has not submitted adequate income documentation, and (1) applicant has been found to be over-income and not eligible for SWAP funds and was referred to other resources.
- (6) projects are complete with the contractor having been paid, (1 septic Mathews), (1 well Gloucester), and (3 wells Essex) (3 well abandonments Essex). (1) King William well is pending being given a Notice to Proceed pending an amendment to shift funds to well. (1) King and Queen septic evaluation design received a qualifying bid and was issued a notice to proceed. If the one additional well comes in as bid and the (2) bids for evaluation and design come in as bid, approximately \$121,870 is encumbered. (1) King William well and (1) King William well abandonment is pending a notice to proceed with a delay since October of 2023 from VDH not issuing amendments to shift funding to wells. (1) Mathews septic evaluation design received a bid a notice to proceed is on hold until other projects move forward to verify funding is available.
- Staff have worked with VDH on an amendment to shift funding towards wells to continue working projects in order received since October 2023. VDH has yet to issue an amendment causing significant delay.

- Significant delays in reimbursement are being encountered with VDH. The delay has been brought to the attention of VDH on numerous occasions. The reimbursement delay is on VDH's end. This was brought to the attention of VDH SWAP staff on October 9<sup>th</sup>.
- Management of SWAP LP included performing (16) administrative tasks, (5) phone calls, and (11) correspondences.

#### **Project 32178 VDH Septic Well Assistance Program (SWAP) Direct to Partner Initiative (D2PI)**

*This project will utilize American Rescue Plan Act Funding (ARPA) through the SWAP Program to expedite the installation and completion of ~5 VDH approved Middle Peninsula low-income homeowner's shovel-ready septic, sewer, and well installation projects for the purposes of wastewater/water improvements.*

- As of November 8<sup>th</sup>, (1 well Essex), (1 well King William), (1 well abandonment Mathews), and (1 well King and Queen) (1 Alternative Septic Installation Gloucester) were previously completed.
- This reporting period (1 Alternative Septic Install Mathews) and (1 Essex Evaluate and Design) project have received bids. The Mathews Installation received 2 bids both in excess of \$50,000. The low bid is under review with MPPDC reaching out to VDH Staff for over max cost approval.
- The shoreline solution in Essex is complex and appropriate funding sources have been identified as D2PI can't pay for the shoreline. Significant coordination of programs has occurred to facilitate moving this project forward with an anticipated shoreline construction start of November 18<sup>th</sup>.
- MPPDC staff worked to process the needs of the added 3 D2PI projects that were added in February 2024, all located in Mathews, all at the same property, 1 septic design, 1 septic install, and 1 well abandonment. MPPDC staff received a design that wasn't adequate and worked with the LHD and AOSE to receive a redesigned appropriate system. This was completed and sent for payment of the AOSE on September 11<sup>th</sup>. The design was put out to bid receiving two bids in excess of \$50,000 this month. The well abandonment was completed previously.

#### **Project 32179 DEQ ARPA Septic Local Partner Program**

*This project will utilize American Rescue Plan Act Funding (ARPA) through the Virginia Department of Environmental Quality to utilize a new and more cost-effective septic repair pilot program approach for participating Middle Peninsula homeowners with failing septic systems.*

- One bid for fleet purchase was received on June 18<sup>th</sup> from Soils, Inc. MPPDC staff have resolved the remaining questions around the bid from Soils Inc with input from DEQ.
- MPPDC staff received and approved a marketing plan from Consociate Media to begin advertising the availability of septic grant funds for low-income qualified individuals in King William this November.
- While preparing applications for the program, MPPDC Staff sought additional clarification from DEQ staff on the low-income standard to use. Two different standards are listed in the grant. DEQ staff provided additional clarification on October 10<sup>th</sup>.

### **ECONOMIC DEVELOPMENT**

Funding – EDA, local match from MPPDC General Fund, BDP Loan Program Income

#### **Project 301250 – Staff Support to Middle Peninsula Alliance (MPA) FY25**

*MPPDC staff are providing clerical and fiscal assistance to the Middle Peninsula Alliance.*

- None for October.

#### **Project 38816 – DEQ IJA Living Shoreline BMP Construction**

*MPPDC staff are constructing living shorelines within and outside of defined Most Effective Basin areas and submitting the projects to the DEQ BMP warehouse to help the Commonwealth meet its federally-mandated requirements to reduce nutrients and sediment pollution within the Chesapeake Bay.*

- MPPDC staff focused on implementing approved BMPs, aligning with the scope of services, and

submitted an extension request for project completion that was approved this month. The project installation deadline was extended to June 1, 2025. Major accomplishments include the completion of construction of one of the projects this month

- Cohort 1 Progress: Engaged with 7 homeowners and 1 civic association in Most Effective Basins, specifically in portions of Middlesex and Essex Counties. Discussed the reimbursement grant for eligible BMP costs at 8 sites while coordinating with contractors on project funding. Encumbered \$1,065,669 of the total \$1,066,911 across 6 sites: Site 1 has an existing living shoreline completed one year ago; Site 2 has approximately 895 feet of shoreline in Essex County, with a traditional living shoreline BMP planned, 175 feet designed for installation, and permit approval pending; Site 3 measures 83 feet of shoreline in Middlesex County, with the homeowner self-funding 50% of a Natrx BMP project that was competed this month with submittal for reimbursement pending; Site 4 features 265 feet of shoreline in Middlesex County with a Quickreef BMP, and the contract executed on 10/09; Site 5, with 84 feet of shoreline belonging to a low-income homeowner in Essex County seeking reimbursement for Flexamat costs, with a loan packet being assembled; Site 6 involves a civic association of 12 parcels that is unsuitable for permitted BMPs; Site 7 has a homeowner with 168 feet of shoreline in Middlesex County, that achieved permit approval this month with a contractor estimate of \$105,331; Site 8 encompasses over 6,000 linear feet of shoreline, with construction quotes received for 720 linear feet, ongoing coordination with the property owner.
- Cohort 2 Progress: Collaborated with a consultant on marketing efforts in the MEB area to promote available funds for project generation. Developed materials were approved by DEQ and shared with eligible property owners during initial visits, and outreach for permission to document project phases was conducted.
- Cohort 3 Progress: \$509,784 initially encumbered of \$534,619 across 5 sites. One project completed installation, and MPPDC staff are preparing for reimbursement submission. Significant coordination with property owners and contractors occurred, with two homeowners utilizing MPPDC's Living Shoreline Loan to advance their projects. Loan document execution and send off occurred this month for both projects utilizing the loan fund to cash flow the projects.

#### **Project 301702 – Small Business Revolving Loan Fund**

*MPPDC agreed to service Middle Peninsula Business Development Partnership's (MPBDP) Small Business Loan Portfolio after MPBDP's dissolution November 30, 2011. MPPDC established a revolving loan fund and staff initiate ACH loan payments from clients' bank accounts and manages the accounts. Principal repaid will be held until the Commission determines the best use for these funds as allowed by the USDA (RBEG) original lending restrictions. Interest earned will be used to offset administration costs.*

- **Loan Funds available – \$148,819.08 (asset #10002)**

#### **Project 321772 – DCR Flood Fund - West Point Bridge Study**

*Project is to conduct a Hydrologic and Hydraulic Study and Structural Design and Level of Service Study to address ongoing flooding for a Town owned bridge adjacent to the Middle Peninsula Regional Airport.*

- Submitted the final quarterly progress report to DCR and prepared the final project report. Submittal to DCR will occur during November to initiate project closeout.

#### **LOCAL INITIATIVES**

Funding – local dues, PDC base-funding from VDHCD and/or MPPDC General Fund. Funding for specific projects may come from a locality requesting assistance.

#### **Project 302010 – FY25 VA Water Trails Website Maintenance**

*MPPDC partners with PlanRVA, Accomack-Northampton PDC, and Northern Neck PDC to host and maintain the VA Water Trails website as a recreational, tourism, and public access resource to water trails within the partner regions – [www.VirginiaWaterTrails.org](http://www.VirginiaWaterTrails.org)*

- Provided needed maintenance to the website.

### **Project 38025 – FY25 Local & Regional Technical Assistance**

*This program responds to daily requests for technical assistance which other commission programs are unable to provide.*

- Coordinated with DEQ regarding the forthcoming Water Supply Planning update process.
- Continued to prepare CFPF Round 5 applications to Virginia Department of Conservation and Recreation.

### **Project 38100 – LGA Grants Program**

*Research, write, secure, and monitor federal, state, local, and foundational grants for participating Middle Peninsula local governments based on needs identified by Local Government Administrators.*

- Submitted Virginia Brownfields Restoration & Economic Redevelopment Assistance Fund proposal for \$110,000 for environmental remediation at West Point Airport Industrial Site, including demolition and disposal of five former classroom & office trailers and two fuel storage tanks.
- Developing NOAA Saltonstall-Kennedy Grant Competition proposal for \$148,500 to promote and market Middle Peninsula blue catfish industry.
  - Met with VIMS; Virginia Restaurants, Lodging, and Travel Association; Virginia Chef's Association; and Consociate Media to develop Scope of Work, Project Budget, and Letters of Collaboration.
- Developing NOAA Climate Ready Coasts Grant Competition proposal for \$4,100,000 for Middlesex County to acquire 118 acres at Bushy Park Farm for conservation and to establish a new public park.
  - Met with CZM to develop Scope of Work and address reviewer comments.
- Met with VDOT Local Assistance Division to discuss Economic Development Access Program grant for road design project at Tappahannock Airport Redevelopment Site.
- Met with VDOT Local Assistance Division to discuss Economic Development Access Program grant for road design project at West Point Airport Industrial Site.
- Met with DHCD to review Industrial Revitalization Fund as potential funding for environmental remediation at West Point Airport Industrial Site, including shoot house demolition.
- Met with USDA Rural Development to discuss Rural Business Development Grant to fund Gloucester historic building ROI and long-term planning study.
- Developing Scope of Work for Spring 2025 Congressionally Directed Spending request to advance phased site development at Tappahannock Airport Redevelopment Site.
- Developing potential Industrial Revitalization Fund proposal for auto repair shop re-use at West Point Airport Industrial Site, pending end use agreement signed prior to application deadline in Spring 2025.
- Funding from Sen. Kaine and Warner's offices for two earmark requests submitted by MPPDC is still pending the federal budget process:
  - Commerce, Justice, Science, and Related Agencies bill for FY25: \$801,585 to purchase, deploy and operate for one-year water level monitoring stations in the Middle Peninsula.
  - Homeland Security bill for FY25: \$942,574 to purchase and install generators providing backup power to emergency operations centers in Gloucester, Mathews, Middlesex, and Essex counties.
  - Updates on full or partial funding of requests will be shared as the appropriations process takes place.
- REPI grant proposal for \$552,000 for Middle Peninsula Chesapeake Bay Public Access Authority to acquire 513 acres near Middle Peninsula Regional Airport for conservation and public recreation continues to advance through federal agency review.

### **Project 38814 – NOAA/VCZMP New Point Comfort Observation Deck Rehab**

*Rehabilitation of the observation deck at the New Point Comfort Natural Area Preserve in Mathews County.*

- Issued contract to the successful offeror, Docks of the Bay. Initiated permit development and final design modifications for the rehabilitation.
- Coordinated with project partners regarding construction schedule.

## **HOUSING**

**Funding – Housing Loan Program Income**

### **Project 30187 – VHDA Affordable Workforce Housing Development**

*The three-year project will involve planning, designing, and constructing approximately ten affordable workforce housing units on property owned by the Middle Peninsula Public Access Authority. The project goals involve creating resilient and safe housing for citizens who need to live and work on or near the water. The designs will involve long-range planning for increased flooding and sea-level rise where the units can be readily moved once a site becomes unsafe for continued residential use.*

- Awaiting building and zoning permits from Gloucester County. Rehabilitation of the pool house and big house will commence upon receipt of permit.
- Developed application to the VDCR Community Flood Preparedness Fund to purchase a flood protection system for the pool house by Portadam.

### **Project 30013 – Energy Efficiency and Conservation Block Grant (EECBG) Revolving Loan Fund**

*The program emphasizes a community-based approach to help meet energy and climate protection goals. MPPDC was awarded a contract to provide weatherization renovations to 12 homeowners ineligible for LMI weatherization programs in each of the 6 counties. MPPDC subcontracted the promotion and construction portions of this project to Bay Aging but was tasked with administering the overall project. MPPDC is administering the revolving loan program per DMME.*

- Planning to utilize funds for energy-efficient technology in the new K&Q Telework Center.
- **Funds available – \$46,627.09 (asset #10003)**

## **EMERGENCY SERVICES**

**Funding – VDEM/FEMA/Homeland Security**

### **Project 30192 – DCR/FEMA - Fight the Flood GIS Tool Enhancements**

*Improvements will be made to the FTF online and GIS tools which are intended to enhance the GIS data tool capabilities and the overall management of the program. Improvements will include automated programs to expedite and streamline the grant application process, programs for identifying needs and advancing projects which align with available funding resources, improvements which will help feature products and services for participating FTF businesses, and training for MPPDC staff.*

- Submitted quarterly reports to VDEM and VDCR.
- Completed a low-income area analysis to support Round 5 applications to be submitted to the DCR Community Flood Preparedness Fund.
- Initiated work on public outreach to priority areas within the Middle Peninsula as identified by the modified-repetitive loss area analysis (RLAA).

### **Project 32180 – FEMA Ware Cove**

*This project is for the mitigation reconstruction of a residential structure in Gloucester County. The current structure will be demolished and a smaller, more code-compliant and more hazard-resistant structure on an elevated foundation system will be constructed. The mitigation reconstruction project will mitigate flood risk and the associated costs.*

- A class A contractor was hired to serve as project consultant. They are currently collecting various sole source estimates for different aspects of construction.

## LOAN FUNDS FOR SEPTIC AND LIVING SHORELINES

### Funding – VRA

#### **Project 30420 – On-Site Technical Guidance Assistance and Loan Program**

*The On-Site Technical Guidance Program aids the Middle Peninsula localities and residents in the technical understanding and implementation of approaches to address On-Site Disposal Systems and improve water quality by assisting local homeowners with repairing failing septic systems through low-interest loans and/or grants. In addition, MPPDC received funding under the Water Quality Improvement Fund (WQIF) to provide grants to low-to-moderate income Middle Peninsula and New Kent County homeowners to repair failing septic systems impacting water quality and health in the region. Grants can be paired with loans from the MPPDC Onsite Wastewater Revolving Loan Fund to provide matching funds as required. It is anticipated this funding will be used to provide assistance to 20-27 homeowners.*

- ***Uncommitted septic repair funds remaining: \$23,555.18 in loan funds – \$21,641.00 in grant funds.***

#### **Project 31500 – Living Shoreline Loan Program**

*The MPPDC Living Shoreline Incentive Program Loan Fund provides low-interest loans to local homeowners to implement living shorelines. These funds will be used for erosion prevention and water quality control and to protect and enhance natural shoreline habitats using strategically placed plants, stone, sand fill and other structural and organic materials.*

- Remaining uncommitted living shoreline funds: \$0

#### **Project 33001 – Loan Fund Program for Septic and Living Shoreline**

*During 2022, the MPPDC received a \$3M line of credit for living shoreline and septic repair projects from the VA Resources Authority. The fund provides a single financing program for activities historically covered by the MPPDC's On-Site Technical Guidance and Living Shoreline Incentive Programs.*

- ***Remaining uncommitted funds: \$2,000,921.03 in loan funds - \$184,408 in principle forgiveness (grant funds.)***

## AGENCY ADMINISTRATION

Funding - Indirect cost reimbursements from all PDC projects

#### **MPPDC Administration**

*Administrative services provided to MPPDC programs. Planned FY25 Indirect Cost rate = 16.41%.*

- Processing year-end and fiscal-year beginning processes. This continues. Decision was made to not hire outside audit consultants due to the cost.
- Researched and coordinated with qualified service providers to develop an enhanced project management approach.
  - Staff is evaluating different platforms currently.
- Met with Auditor to begin the FY24 close-out process.
- Addressed multiple IT issues/projects.
- Submitted reimbursement requests for multiple projects.
- Began onboarding process for new staff.
- Began process of moving financial/project system to a cloud environment.



## **Closed Projects**

### **Project 30124 – Staff Support to Middle Peninsula Alliance (MPA) FY24**

*MPPDC staff are providing clerical and fiscal assistance to the Middle Peninsula Alliance.*

### **Project 30195 – Community Flood Preparedness Fund (CFPF) – Round 3 Supplemental (Piankatank)**

*VDCR CFPF funding for one shoreline protection construction project on private property within the Piankatank River watershed.*

### **Project 30198 – Gwynn’s Island Septic**

*To support the MPPDC Regional On-Site Wastewater Treatment and Disposal Funding Program, this grant from Mathews Community Foundation provides septic repair assistance to LMI homeowners on Gwynn’s Island.*

### **Project 30220 – Commuter Assistance Program (CAP) Operating FY24**

*This program assists local commuters and employers with transportation issues. The main emphasis is on lowering the number of single occupancy vehicle commutes within and from the Middle Peninsula region through marketing and promotion of the program through local media and provision of ride-matching services to commuters.*

### **Project 30321 – Rural Transportation Planning FY24**

*This program provides rural transportation planning services through the Rural Transportation Planning Work Program which outlines specific tasks and goals to guide the rural planning of transportation services.*

### **Project 32164 – CZM 306 Next Generation Shoreline Plan (Pilot Project – Yr1)**

*VIMS Shoreline Studies Program will develop a whitepaper to examine the use of technology, modeling, alternative materials, proprietary products, and innovative nature-based mitigation measures in the planning process for “next generation shorelines” which are intended to provide an enhanced level of shoreline resilience and water quality in response to more frequent and severe flooding and accelerated sea-level rise. One design of a next generation shoreline for a publicly owned property in a high energy wave environment will be completed. Year 2 will involve further development of the whitepaper and a next generation shoreline design for a moderate wave energy publicly owned site.*

### **Project 32170 – Virginia Coastal TA FY22**

*This project provides ongoing support to member localities of the Planning District Commission and other stakeholders committed to improving community development and coastal management within the coastal zone.*

### **Project 32171 – CZM 306 Next Generation Shoreline Plan Yr2**

*VIMS Shoreline Studies Program will continue to develop a whitepaper to examine the use of technology, modeling, alternative materials, proprietary products, and innovative nature-based mitigation measures in the planning process for “next generation shorelines” which are intended to provide an enhanced level of shoreline resilience and water quality in response to more frequent and severe flooding and accelerated sea-level rise. One design of a next generation shoreline for a publicly owned property in a moderate energy wave environment publicly owned site will be completed.*

### **Project 32172 – DEQ CZM ANPDC Ecotourism VI FY23**

*This project will build on the efforts completed between 2020-2021. During this project, PDCs will focus on implementing actions identified in the 36-month Marketing Strategy and Action Plan. MPPDC staff will also develop a grant application to seek funds which address resilience needs identified in the 2022 resilience assessment of MPCBPAA properties. PDCs will also collaborate to identify a long-term sustainability plan for maintaining the site for years to come.*

### **Project 32175 – DEQ Chesapeake Bay WIP Technical Assistance 2023**

*MPPDC will continue to engage localities and regional and state partners regarding Bay WIP III programmatic actions and implementation activities with funding provided by DEQ.*

### **Project 32176 – NFWF Veterans Partnership**

*MPPDC will develop and formalize an operating agreement between the MP-PAA and Knott Alone-Hold Fast, Inc, a nonprofit organization providing counseling and coastal eco and restoration workforce development services focusing on leveraging Chesapeake Bay coastal environs for veterans. The project will build capacity to address a known gap in local workforce for resilience and restoration activities.*

**Project 32177 – EDA Technical Assistance Program 2023**

*MPPDC will facilitate the maintenance, update, and implementation of the Middle Peninsula Comprehensive Economic Development Strategy (CEDS) utilizing existing regional partnerships and building upon recent and ongoing regional initiatives focusing on fostering economic growth within the region.*

**Project 32181 – VCZMP Coastal Technical Assistance FY23**

*This project provides ongoing support to member localities of the Planning District Commission and other stakeholders committed to improving community development and coastal management within the coastal zone.*

**Project 32183 – FY2023 SCRC Local Development District Capacity Building**

*MPPDC received funding from the Southeast Crescent Regional Commission to provide technical assistance for economic and community development activities within the region. This year's grant will focus on partnering with the Middle Peninsula Alliance to hire a trainer who can relaunch a business development course which is a requisite for accessing available MPPDC small business loan funding.*

**Project 38024 – FY24 Local & Regional Technical Assistance**

*This program responds to daily requests for technical assistance which other commission programs are unable to provide.*

**Project 38815 – Middlesex County Comp Plan Audit – Feb 2024**

*A diagnostic review and analysis of the Middlesex County Comprehensive Plan will be conducted to identify areas in need of improvement or addition to ensure compliance with state requirements.*

**Project 321771- GO Virginia – West Point Adjacent Land Airport Study**

*Project studies the needs for moving the land adjacent to the airport to the next tier under the VEDP site readiness program.*

## MPPDC: Membership, Appointments, Committee Assignments, and Networks

**Coastal Policy Team (CPT):** The CPT, whose members and alternates represent the Virginia Coastal Zone Management Program's key partners and eight planning district commissions, provides a forum for discussion and resolution of cross-cutting coastal resource management issues. Members serve on the team at the discretion of their agency or planning district commission director. The CPT recommends funding levels to the DEQ Director for coastal zone management projects. (MPPDC Staff 15 years +)

**Virginia Coastal Resilience Master Plan Technical Advisory Committee:** As appointed by the Governor in EO-71, a Technical Advisory Committee (TAC) with representatives of state agencies, coastal planning districts and regional commissions, and academic advisors, among others will facilitate the coordination and the development of the Virginia Coastal Resilience Master Plan. The Commonwealth's Chief Resilience Officer, Special Assistant to the Governor for Coastal Adaptation and Protection, and TAC will work with localities, regional entities, citizens, and stakeholder groups to identify critical infrastructure, at-risk communities, adaptation strategies, and specific resilience projects for inclusion in the Plan.

**Congressman Robert Wittman's Fisheries Advisory Committee and Environmental Advisory Committee:** (MPPDC Staff 8 years +)

**Virginia Sea Grant Program External Advisory Committee (EAC):** The EAC provides stakeholder input on the strategic planning process, the research proposal review process, and on Commonwealth-wide trends and needs. The EAC is a diverse group of end-users including representatives from state agencies, the education community, coastal planning and management, the private sector, and NGOs. (MPPDC Staff 9 years+)

**The Association for Commuter Transportation (ACT) (Telework Council Secretary):** ACT is the premier association for professionals and organizations whose focus is the delivery of commuting options and solutions for an efficient transportation system. The Telework Council is concerned with promoting telework and providing telework information and technical assistance to employers (MPPDC Staff 10 years+)

**The Coastal Society:** The Coastal Society is an organization of private sector, academic, and government professionals and students. The Society is dedicated to actively addressing emerging coastal issues by fostering dialogue, forging partnerships, and promoting communications and education. (MPPDC staff serves as a Director)

**Virginia Shoreline Working Group:** The Virginia Coastal Zone Management Program launched the working group in 2022 to focus in on complex regulatory and legal matters pertaining to shoreline management and to help advance shoreline protection and habitat restoration projects that can compete for federal funding.

**Virginia Bay Enhancement Working Group (BEWG):** The Northam Administration and VMRC launched BEWG in 2020 as result of administration policy of no future overboard discharge of dredged material. The group is tasked with identifying beneficial reuse opportunities for the 1 Million cubic yards of material that is dredged every 3-5 years from the York Spit Navigation Channel which is the primary shipping channel for the Baltimore Harbor in the southern section of the middle of the Chesapeake Bay. MPPDC staff were requested to serve to evaluate alternatives from around the Bay and including the Middle Peninsula.

**Government Finance Officers Association (GFOA):** The Government Finance Officers Association (GFOA), founded in 1906, represents public finance officials throughout the United States and Canada. The association's more than 20,000 members are federal, state/provincial, and local finance officials deeply involved in planning, financing, and implementing thousands of governmental operations in each of their jurisdictions. GFOA's mission is to advance excellence in public finance. (MPPDC Staff 9 years). No longer a member of this organization.

**Virginia Government Finance Officers Association VGFOA:** The Virginia Municipal Finance Officers' Association was organized on January 12, 1968. The name of the organization was changed to The Virginia Government Finance Officers Association on October 5, 1984. The VGFOA provides educational opportunities to members through the VGFOA Certification Program, provides networking and educational opportunities through two annual conferences, provides legislative updates and updates from standard-setting bodies such as GASB, OMB, etc (MPPDC Staff 15+ years and Certified)

**National Grants Management Association (NGMA):** NGMA provides national and international leadership, helping its members achieve success in the grants management community through the advocacy of best practices and the promotion of professional excellence. (MPPDC Staff 3 months)

# Opportunities Identified to Implement Commission Priorities

## *Proposals Status for Grant Applications Submitted*

### **FY2025**

Service Center	Project Title and Description	Date Applied	Funding Requested	Status
Environmental	DCR CFPF Rd. 5 – Captain Sinclairs Portadam Flood Protection	Nov. 2024	\$132,680	Submitted
Environmental	DCR CFPF Rd. 5 – West Point Flood Protection Master Plan	Nov. 2024	\$1,413,304	Submitted
Environmental	DCR CFPF Rd. 5 – Parametric & Flood Insurance Accelerator (Try #2)	Nov. 2024	\$883,167	Submitted
Environmental	DCR CFPF Rd. 5 – Gloucester Point Beach Living Shoreline (Try #2)	Nov. 2024	\$2,565,000	Submitted
Environmental	DCR CFPF Rd. 5 – Haven Beach Living Shoreline Gap Funding (Try #2)	Nov. 2024	\$1,393,557	Submitted
Environmental	DEQ 319h Mattaponi Watershed Septic Repair	Sep. 2024	\$493,668	Submitted
Environmental	DEQ IJJA Shoreline BMP Construction FY25	Sep. 2024	\$699,022	Awarded
Local/Reg	US EDA Technical Assistance 2025	Sep. 2024	\$70,000	Submitted
MPCBPAA	DCR VLCF Robinson-Bakers Creek Acquisition	Aug. 2024	\$303,975	Submitted
Local/Reg	DCHD Regional Coop. Act – Local Tech. Assistance FY25	Aug. 2024	\$114,971	Submitted
Local/Reg	VTC Microbusiness Marketing - Hunters' Lodging Program	Jul. 2024	\$6,500	Awarded
Local/Reg	NOAA Saltonstall-Kennedy Blue Catfish Marketing pre-proposal	Jul. 2024	\$148,500	Submitted
MPCBPAA	NERRS BIL West Point Airport Property Acquisition LOI (Try #2)	Jul. 2024	\$797,000	Not Awarded
MPCBPAA	NOAA BIL West Point Airport Property Acquisition LOI (Try #2)	Jul. 2024	\$797,000	Not Awarded
Local/Reg	NOAA BIL Middlesex Co. Bushy Park Farm Acquisition LOI (Try #2)	Jul. 2024	\$5,971,248	Submitted

**FY 2025 Awarded Total (July – November 2024)**

**\$705,522**  
(2 awards)

**FY 2025 Requested Total (July – November 2024)**

**\$16,889,219**  
(15 proposals submitted)

**FY 2025 Funding Request Remaining Award Potential Total**

**\$13,490,070**  
(11 proposals awaiting award decision)

### ***Status of Pending Applications Submitted during FY2024***

Service Center	Project Title and Description	Date Applied	Funding Requested	Status
Local/Reg	DOD REPI West Point Airport Acquisition	May 2024	\$697,000	Submitted
Local/Reg	Congressionally Directed Spending - Parametric Tide Gauges	Apr. 2024	\$801,585	Submitted
Environmental	DEQ Ches. Bay WIP Technical Assistance FY25	Mar. 2024	\$72,500	Submitted
Transportation	FEMA BRIC– Essex Coleman Island Rd. Flooding Study	Jan. 2024	\$100,000	Submitted
Environmental	DCR Resilient VA Revolving Fund - MPPDC Resilience Loan Funding Program launch	Dec. 2023	\$500,000	Submitted
Environmental	FEMA BRIC - VA low water state project scoping	Nov. 2023	\$150,000	Submitted

**FY 2024 Awarded Total (July 2023 – June 2024)**

**\$17,927,222**  
(22 awards)

**FY 2024 Requested Total (July 2023 – June 2024)**

**\$105,764,809**  
(70 proposals submitted)

**FY 2024 Funding Request Remaining Award Potential Total**

**\$2,321,085**  
(6 proposals awaiting award decision)

**FY 2024 & FY 2025  
Cumulative Funding Request Remaining Award Potential Total**

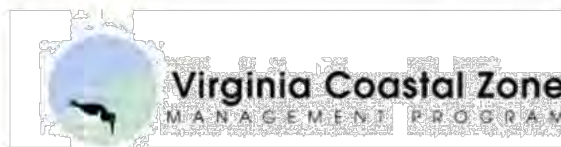
**\$15,811,155**  
(17 proposals awaiting award decision)

## ACRONYMS

ACH	Automated Clearing House	OLGA	Online Grant Administration
AFID	Agricultural and Forestry Industries Development	PAA	Public Access Authority
AHMP	All Hazards Mitigation Plan	RBOG	Rural Business Opportunity Grant
BCC	Building Collaborative Communities Project	RFP	Request for Proposal
BOS	Board of Supervisors	RFQ	Request for Qualifications
CBPA	Chesapeake Bay Preservation Area	RLF	Revolving Loan Fund
CDBG	Community Development Block Grant	RTP	Rural Transportation Planning
CEDS	Comprehensive Economic Development Strategy	SERCAP	Southeast Rural Community Assistance Project
CIP	Capital Improvement Plan	SHSG	State Homeland Security Grant
COI	Conflict of Interest	SWCD	Soil and Water Conservation District
CZMP	Coastal Zone Management Program	SWM	Storm Water Management
DEQ	Department of Environmental Quality	SWRP	State Water Resource Plan
DCR	Department of Conservation & Recreation	THIRA	Threat & Hazard Identification & Risk Assessment
DGIF	Department of Game and Inland Fisheries	TMDL	Total Maximum Daily Loads
DHR	Department of Historic Resources	USACE	U.S. Army Corps of Engineers
DHCD	Department of Housing and Community Development	USDA	U.S. Department of Agriculture
DMME	Department of Mines Minerals and Energy	USFWS	U.S. Fish and Wildlife Service
DOE	Department of Energy	VACORP	Virginia Association of Counties Risk Pool
DRPT	Department of Rail and Public Transportation	VAPA	Virginia Planning Association
EDA	Economic Development Administration	VAPDC	Virginia Association of Planning District Commissions
EDO	Economic Development Organization	VASG	Virginia Sea Grant
EECBG	Energy Efficiency and Conservation Block Grant	VCP	Virginia Coastal Program
EOC	Emergency Operation Center	VCRMP	Virginia Coastal Resilience Master Plan
EPA	Environmental Protection Agency	VCWRLF	Virginia Clean Water Revolving Loan Fund
FEMA	Federal Emergency Management Agency	VCZMP	Virginia Coastal Zone Management Program
Fracking	Hydraulic Fracturing	VDEM	Virginia Department of Emergency Management
GIS	Geographic Information System	VDH	Virginia Department of Health
HRPDC	Hampton Roads Planning District Commission	VDOT	Virginia Department of Transportation
LGA	Local Government Administrators	VEE	Virginia Environmental Endowment
LPT	Local Planning Team	VIMS	Virginia Institute of Marine Science
LSIP	Living Shoreline Incentive Program	VLCF	Virginia Land Conservation Fund
MOU	Memorandum of Understanding	VMRC	Virginia Marine Resource Commission
MPA	Middle Peninsula Alliance	VOAD	Volunteer Organization Active in Disasters
MPBA	Middle Peninsula Broadband Authority	VOP	Virginia Outdoors Plan
MPCBPAA	Middle Peninsula Chesapeake Bay Public Access Authority	VRA	Virginia Resources Authority
MPEDRO	Middle Peninsula Economic Development and Resource Organization	VSMP	Virginia Stormwater Management Program
NIMS	National Incident Management System	VTa	Virginia Tourism Association
NFWF	National Fish and Wildlife Foundation	VTC	Virginia Tourism Corporation
NOAA	National Oceanic and Atmospheric Administration	VWP	Virginia Water Protection
NPS	National Park Services	VWWR	Virginia Water Withdrawal Reporting
OCVA	Oyster Company of Virginia	WIP	Watershed Implementation Plan
OIPI	VA Office of Intermodal Planning and Investment	WQIF	Water Quality Improvement Fund

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# Community Inundation Assessment and Alternatives Analysis



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*The views expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Department of Commerce, NOAA, or any of its subagencies.*



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## Definitions

**Mean High Water** - The average of all the high-water heights observed over the National Tidal Datum Epoch.

**Mean Low Water** - The average of all the low water heights observed over the National Tidal Datum Epoch.

**Mean Higher High Water** - The average of the higher high-water height of each tidal day observed over the National Tidal Datum Epoch.



## Introduction

Coastal communities along the eastern seaboard will experience inundation throughout their communities, including inundation of roads, critical infrastructure, residential structures, and utilities. According to the Virginia Resilience Master Plan:

*Nearly six million people, or 70% of the state's population, call coastal Virginia home. Our coastal regions are thriving economic hubs, hold unique cultural resources, and offer unparalleled natural beauty, which collectively shape diverse landscapes and communities. However, coastal Virginia faces growing threats. Between rising sea levels and changing precipitation patterns, Virginia has already recorded changes to the frequency and intensity of floods that pose increasingly greater risks to our communities.*

*Flooding affects many Virginians but does not do so equally. Each community faces varying levels of flood exposure, vulnerability to harm or damage, and associated risks, tied to its individual socioeconomic, historical, and physical context.*

With funding from the Virginia Coastal Zone Management Program, Middle Peninsula Planning District Commission (MPPDC) staff worked to develop a new methodology for conducting community flood inundation assessments and a strategic alternatives analysis. The methodology takes into consideration that water has been coming and will continue to come and that property owners (private and government) must manage against this slow-moving threat or lose considerable economic and functional value of land and improvements. Such slow-moving factors can contribute to the blight of rural areas.

Consequently, coastal property owners and local governments will experience pain points in an increasing manner that will influence homeowners' decisions to stay within their community or to move out, and government's ability to offer services in areas experiencing inundation.

What pain point will be the property owner's last straw? Will it be:

- ⊕ Losing access to property due to flooded or inundated roads?
- ⊕ Not having the ability to leave the property (i.e., To get to the grocery store, school, doctors appointments) due to flooded roads?
- ⊕ Increased flood insurance premiums?
- ⊕ The need for additional insurance to cover all property assets?
- ⊕ Increased HMO insurance premiums?
- ⊕ Loss of utilities, including power, air conditioning, well, or septic due to saltwater intrusion and/or high ground water?
- ⊕ Salt patches in the yard due to standing sea water?
- ⊕ Standing water within the foundation?
- ⊕ The devaluation of the home?
- ⊕ Not having the ability to sell the home?
- ⊕ Personal safety due to impacts or threats of storm surge?
- ⊕ Psychological or emotional distress associated with the impacts of the issues listed above?

Simultaneously governments experience pain points for inundated areas. To name a few:

- ⊕ When are governmental services no longer provided to areas that may cause safety risk for personnel (i.e.. Inspectors, emergency management, etc.)? When road access inhibits passage? Or when homeowners no longer pay taxes?
- ⊕ Should construction activities (i.e.. Building new homes) be restricted in areas that may become inundated to prevent loss in the future?
- ⊕ Should there be investments in the area to reduce inundation?
- ⊕ What are the tax revenue implications of inundated coastal areas with many of the highest valued homes? How will the tax burden shift and when?

Such pain points will leave property owners and governments with tough decisions on how to manage their properties and way of life.

Considering that responses to inundation will be extremely complex, challenging and involve many parties, this methodology is intended to serve as a clear, non-biased, and organized starting point for the consideration of all impacted parties.

## Methodology

1. **Select a community** that is vulnerable to flooding and sea level rise.
2. Conduct a **community flood inundation assessment**.

### Road Assessment -

- a. First consider a “do nothing” scenario. If the community does not take action to mitigate or stop/reduce inundation, then when will transportation infrastructure be inundated and triggered a modal shift<sup>1</sup>.
  - i) Find or survey the elevation of road that is used to access the community of interest.
  - ii) Find or calculate the water height at Mean High Water (MHW) and Mean Low Water (MLW) that will inundate the road.
  - iii) Once the elevation of the road and the height of the water for inundation is found, then utilize a sea level rise modeling platform to determine the year in which the height of water reaches inundation levels. Below are 2 scenarios to consider in the inundation assessment that will assist in finding the year that modal shifts are expected to occur:

@ MHW -
During what year are access roads inundated twice a day during high tides?
@ MLW
During what year are access roads completely inundated during all tide cycles?

---

<sup>1</sup> Modal Shift - a switch from one form of transportation to another. In the pilot case when a road becomes impassable due to rising water, property owners will need to switch to boat in order to access their property.

- b. Again, consider a “do nothing” scenario. If the community does not take action to mitigate or stop/reduce inundation, then when will properties become inundated with water (i.e.. Flooding during tidal events).
  - i) Below are 2 scenarios to consider in the inundation assessment that will assist in finding the year that properties will become uninhabitable due to inundation in their yards:

@ MHW During what year are yards inundated twice a day during high tides?
@ MLW During what year yards become inundated during all tide cycles?

#### Parcel Inundation Assessment

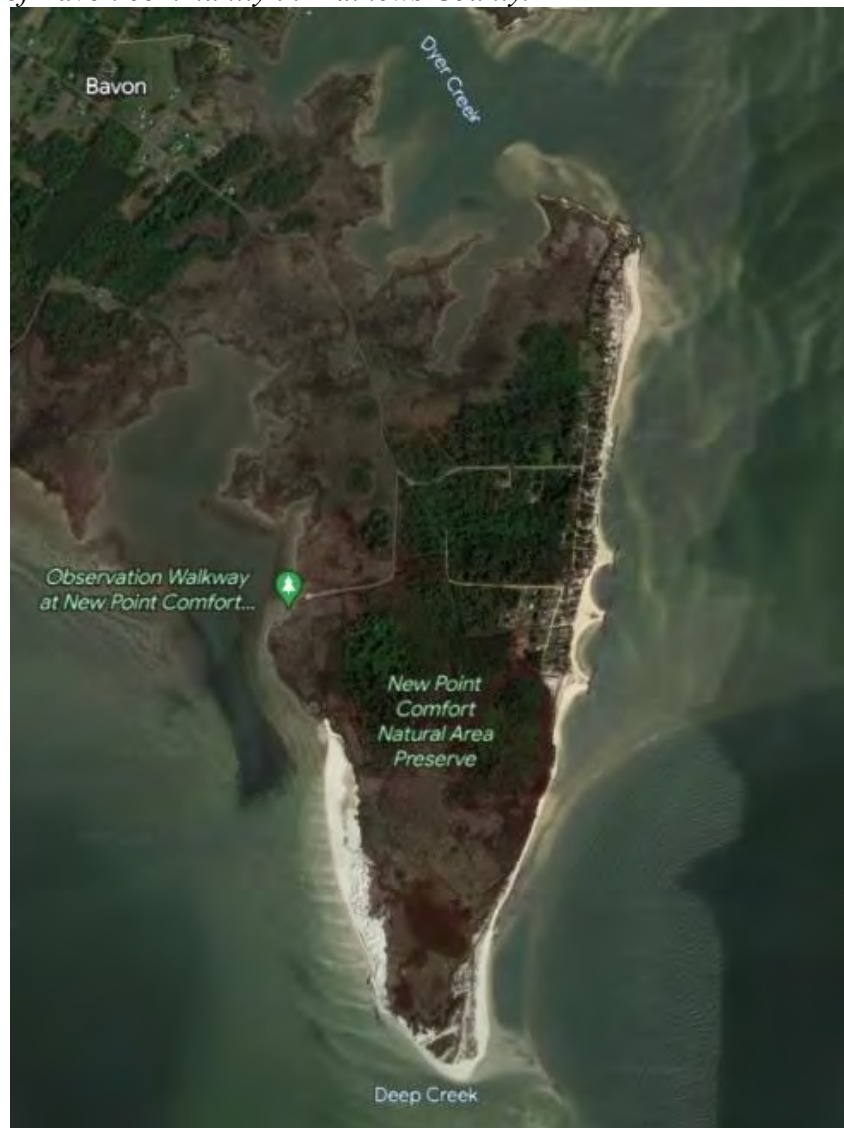
- a. First consider a “do nothing” scenario. If the community does not take action to mitigate or stop/reduce inundation, then when will parcels be inundated and become uninhabitable.
  - i) Use a mapping tool to display parcels of selected area(s) and sea level rise.
  - ii) Select the desired sea level rise scenario.
  - iii) Evaluate the number of properties with no inundation, partial inundation, or complete inundation at various timeframes. MPPDC staff selected 2020, 2040, 2060, and 2080 to compare.
3. Conduct a **Comparative Assessment** –
  - a. Gather total land values for the select community.
  - b. Compare available land values. In this study 2005, 2011, and 2017 land values were assessed. This allowed MPPDC staff to understand land value trends over this course of time.

## **Community Impact Assessment Pilot – Bavon, Mathews County, VA**

New Point Comfort is a beautiful coastal area located directly on the Chesapeake Bay in Mathews County, Virginia. New Point Comfort’s stunning views and white sandy beaches have attracted people to its shores and made it a very sought-after community. The area consists of land elevations at or within a few feet of mean sea level with the highest elevations occurring on a subtle elevated ridge along the eastern side of the community. As the threat of sea level rise, recurrent flooding, storm surge and erosion become more imminent, the community of Bavon, an unincorporated community at New Point Comfort, has slowly begun to see and experience changes first-hand (**Figure 1**).

With the continuous and accelerating rise of sea level, increasing frequency and intensity of coastal storms, eroding shorelines, yard flooding, road flooding, and septic issues have become commonplace throughout the Bavon community. For these reasons, MPPDC staff selected the Bavon community as a pilot project area to apply the new methodology for conducting community flood inundation assessments and a strategic alternatives analysis.

**Figure 1.** Map of Bavon community in Mathews County.



### Access Road Assessment & Modal Shift

The Bavon community is currently facing one of the greatest threats to coastal America, sea level rise. As sea level continues to plague Bavon, property owners, local and state governments, and the entire community will be faced with decisions on the future of the community; however since no legal or formal governmental structure exists for this unincorporated area, decisions are most likely to occur in a disjointed, disorganized and fragmented manner where independent parcel by parcel decisions and/or collective land use and emergency management policy decisions will be warranted. The high energy shorelines of Bavon are directly exposed to the Chesapeake Bay, putting the community at constant risk of flooding and erosion. Today, extreme high tides and storm events flood the state-owned road and right of way leading to Bavon from the west. This road is the sole road access to and from the community. The road functions as a causeway as it crosses low-lying tidal marsh areas before reaching the relatively higher elevations in Bavon. The road currently experiences both tidal flooding stemming from storm surges associated with coastal storms as well as atmospheric driven “sunny day flooding” and stormwater flooding from

precipitation events which flood the road due to the roadside ditches commonly being inundated with tidal waters. While specific data for flooding and inundation along this low-elevation segment of road does not exist, these road flooding events make it difficult for residents to leave their home to get groceries, go to work, or get to appointments an estimated 10 – 25 days on average with the flood frequency predicted to only increase in the future. Therefore, when considering a “do nothing” scenario where the community or individual property owners choose not to take action to mitigate, stop, or reduce inundation, it is critical to understand when the access road will be inundated and subsequently trigger a modal shift.

### Road Elevation

To understand when a modal shift may occur due to inundation of the sole road accessing Bavon, the elevation of the road and the amount of water level rise needed to inundate the access road must be known. To do this, high resolution LiDAR elevation data acquired by VIMS (2019) was used to determine the elevation of Lighthouse Road leading into the Bavon community. In **Figure 2** Lighthouse Road is represented by road Section 3. The minimum, maximum, and average elevations of the road were determined relative to MHHW and MLW. The LiDAR data for Section 3 shows that at MHHW:

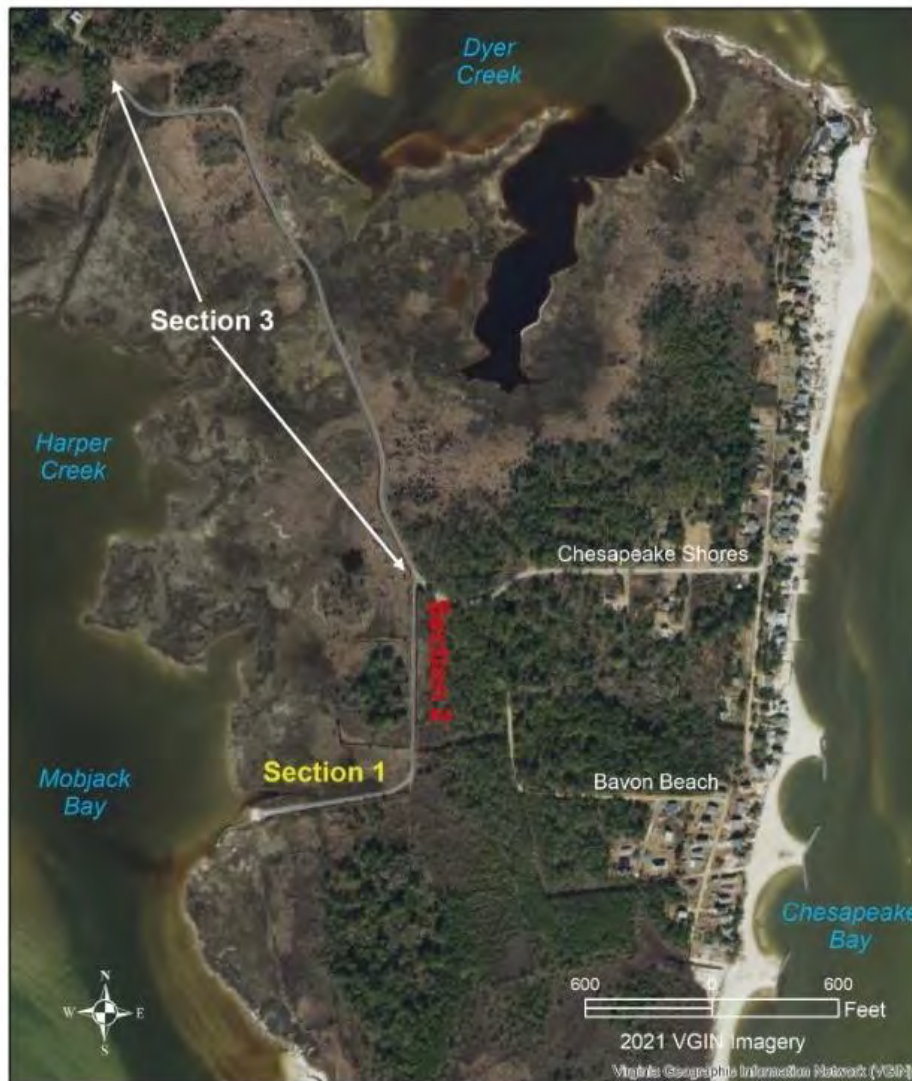
- The tide needs to rise 1.06 ft at the lowest (Min) spots of the road to be inundated;
- The tide needs to rise 1.68 ft at the highest (Max) parts of the road to be inundated;
- The tide needs to rise an average of 1.40 ft to inundate the road.

Using 1.40 ft as the average height that sea level will need to rise to flood Section 3, MPPDC staff will use available sea level rise models to capture a year when the modal shift may begin to occur. This will be triggered due to recurrent flooding that will occur at high tide on a daily basis, meaning that the road will be covered by tidal salt water for relatively short periods (< 1 hour – 3 hours) during the high tidal cycles twice a day.

The modal shift driven by the high tide datum will be largely controlled by the vehicle operator’s tolerance and urgency for driving through salt water. Driving through any body of water is never advisable for obvious safety reasons and corrosion-related damage to vehicles, yet coastal citizens such as those living near sea level such as in Bavon, choose to do so on a regular and increasingly frequent basis due to personal necessities and priorities. The modal shift stemming from sea level flooding and inundation occurring from the mean high-water datum will vary from person to person and situation to situation. Someone needing to drive to the grocery store may choose to postpone their chores for a few hours and wait for the high tide to pass before doing so; whereas someone needing to drive a loved one to the hospital will not hesitate to drive through salt water to get to needed medical care.



**Figure 2.** Aerial imagery showing the New Point Comfort area including the sole access road, Lighthouse Road represented as “Section 3”.



**Table 1** provides a summary of the elevation data for the roads in the New Point Comfort Area and Bavon community. The orange highlighted cells are for the segment of road, Section 3 (Lighthouse Road) which serves as the sole access road for the Bavon community. The final column of data shows how high the water needs to rise to inundate the road at MLW meaning that salt water will be on the road surface 24 hours per day with shallower water occurring during low tide cycles and deepening during high tide cycles. The LiDAR data shows that for Section 3, with an average of 3.70 ft of sea level rise at MLW, the road will be inundated. This means that with 3.70 ft of sea level rise, at any given low tide, there will be water on the road leading into the Bavon community. The number 3.70 ft will be used to determine the MLW inundation date and the date for when standing water will be on Lighthouse Road.

**Table 1.** Lidar data table showing the road sections and height of water when the road becomes inundated.

Road Section	Min (ft MHHW)	Max (ft MHHW)	Avg (ft MHHW)	Avg (ft MLW)
1	0.86	1.77	1.25	3.55
2	0.93	1.73	1.25	3.55
3	1.06	1.68	1.40	3.70

### **The Year of Inundation**

MPPDC staff conducted an analysis using the Virginia Department of Conservation and Recreation (DCR) Virginia (VA) Coastal Resilience Web Explorer and the Virginia Institute of Marine Science (VIMS) VA Adapt Interactive Map to assess four time horizons: 2020, 2040, 2060, and 2080.

First, in the DCR Web Explorer, MPPDC staff analyzed Section 3 of Lighthouse Rd during each time horizon (**Figure 3**). Using a red point as a reference point for the average height of Lighthouse Road, Figure 3 shows that in 2020, there was a 50% annual probability of recurrent flooding. Using the same reference point on Lighthouse Road, in 2040 there is a darkening of the color indicating inundation of the road will occur at MHW, or during, leading up to, and following every high tide cycle. In 2060 and 2080, the area darkens again which indicates that Lighthouse Road will be inundated at MLW, or always. The flood hazard maps for both 2060 and 2080 show no difference between the two-time horizons of Lighthouse Rd.

In conclusion, based on this analysis using the DCR Web Explorer, Lighthouse Road will be inundated at MHW by ~2040 and at MLW by ~2060. This of course assumes that the Virginia Department of Transportation, who is the owner and responsible agency for maintaining the road, does nothing to elevate the road or mitigate the flooding in any way. Also, these are the years where a modal shift will occur. However, as mentioned previously this is largely dependent on the vehicle operator's tolerance and urgency for driving through salt water.

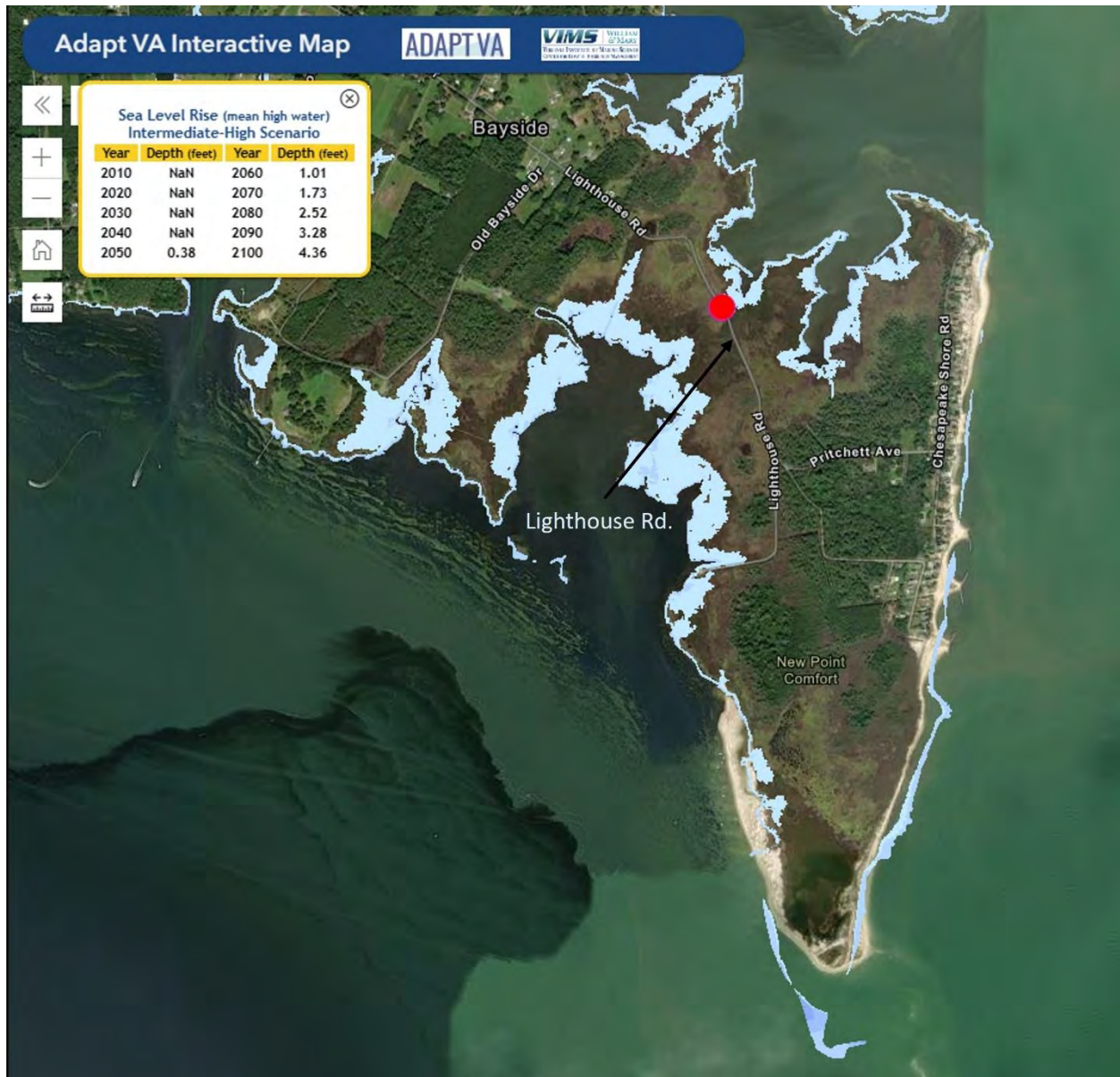
**Figure 3.** Flooding during four horizons (DCR VA Coastal Resilience Web Explorer, 2023).



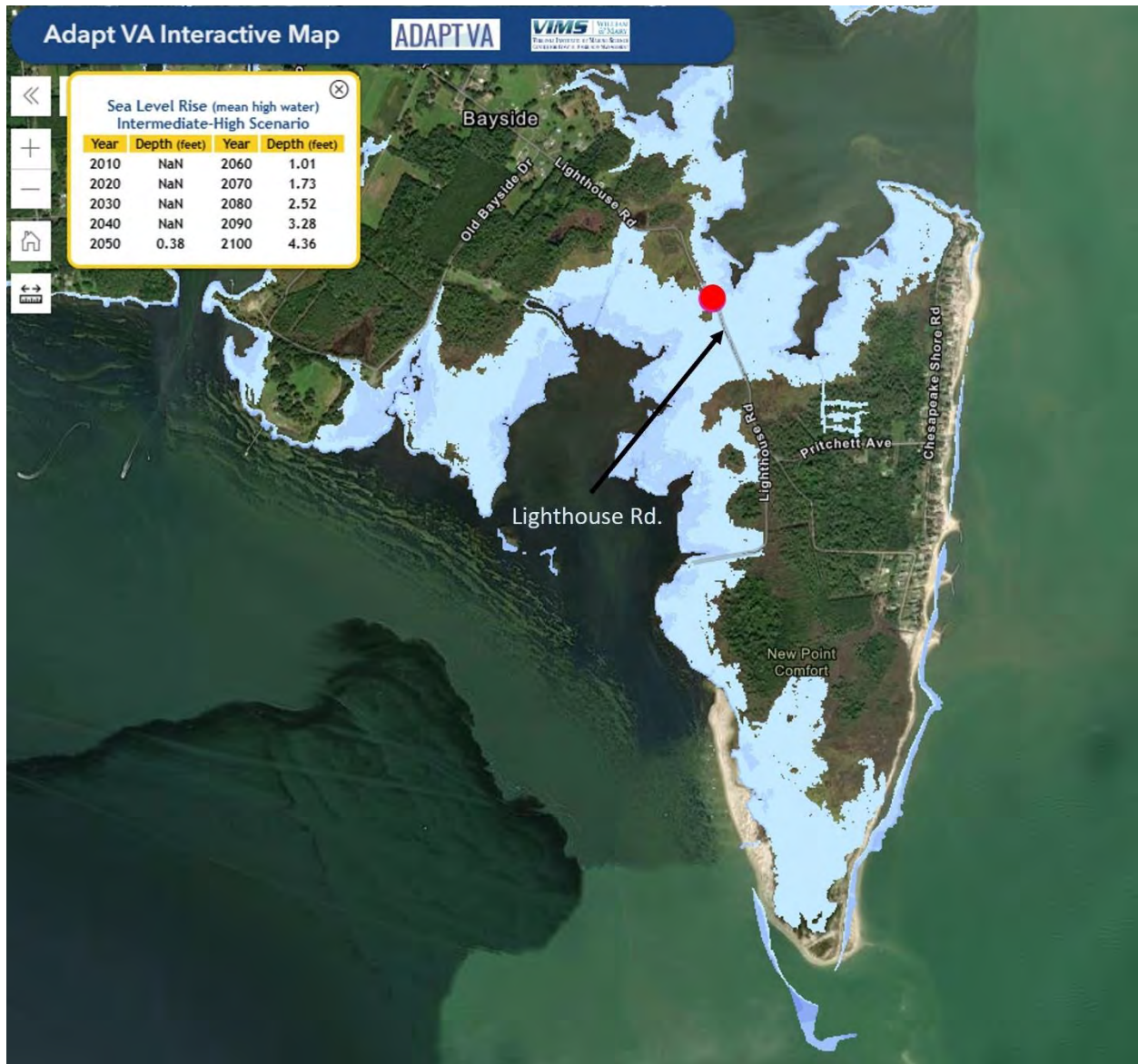
Second, MPPDC staff used the AdaptVA mapping tool to assess the depth of water that will inundate Lighthouse Road when the sea level rise intermediate-high scenario, which is the scenario advised for long-term planning in Virginia, is considered. This scenario is consistent with the Virginia Coastal Resilience Master Plan. Also, to provide consistency between the DCR Web Explorer assessment and this assessment, the same four time horizons were analyzed (see **Figures 4 – 7**).



**Figure 4.** 2020 MHW Water Levels for the Intermediate-High Scenario. Lighthouse Road is labeled. (AdaptVA).

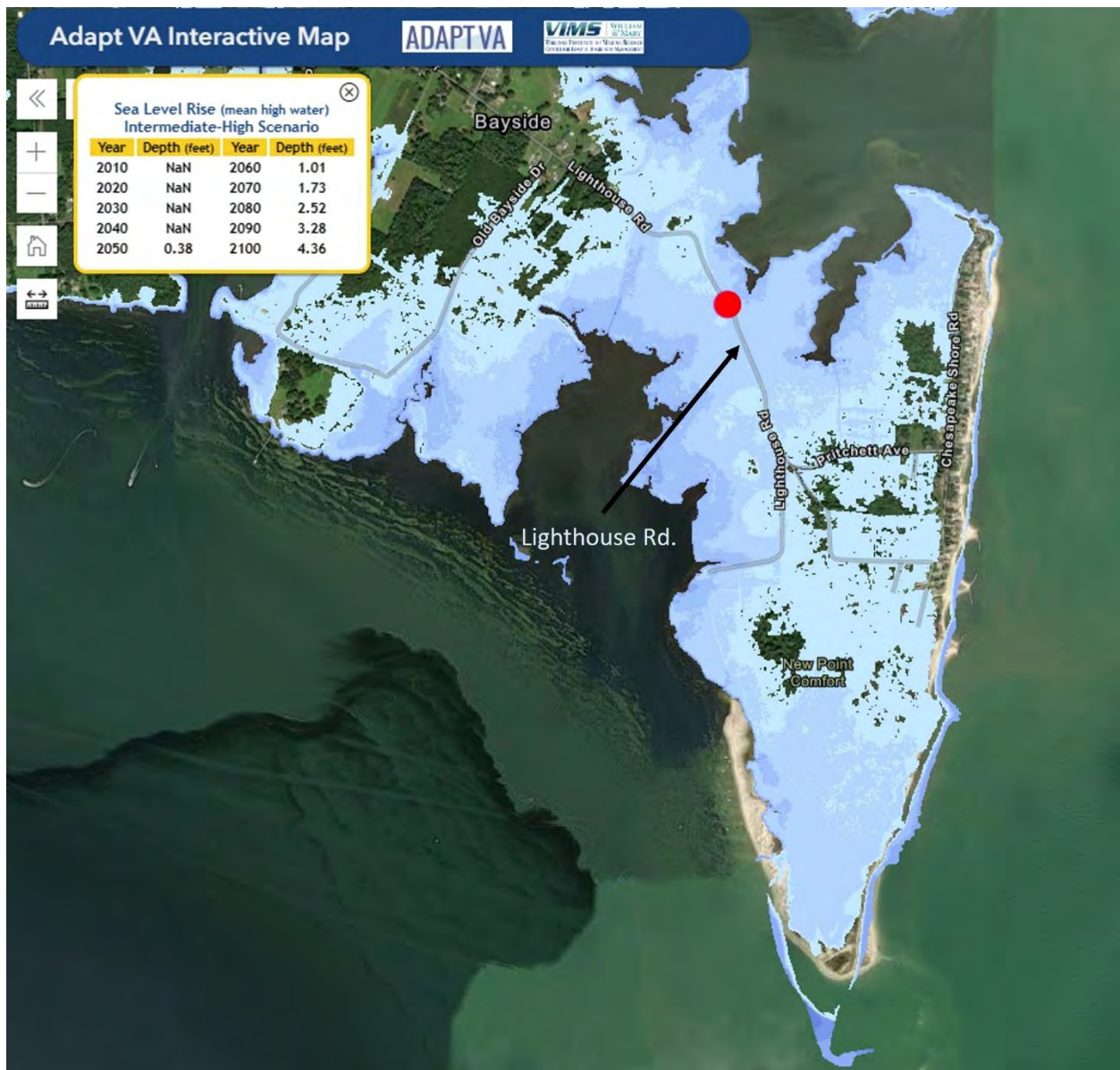


**Figure 5.** 2040 MHW Water Levels for the Intermediate-High Scenario. Lighthouse Road is labeled. (AdaptVA).

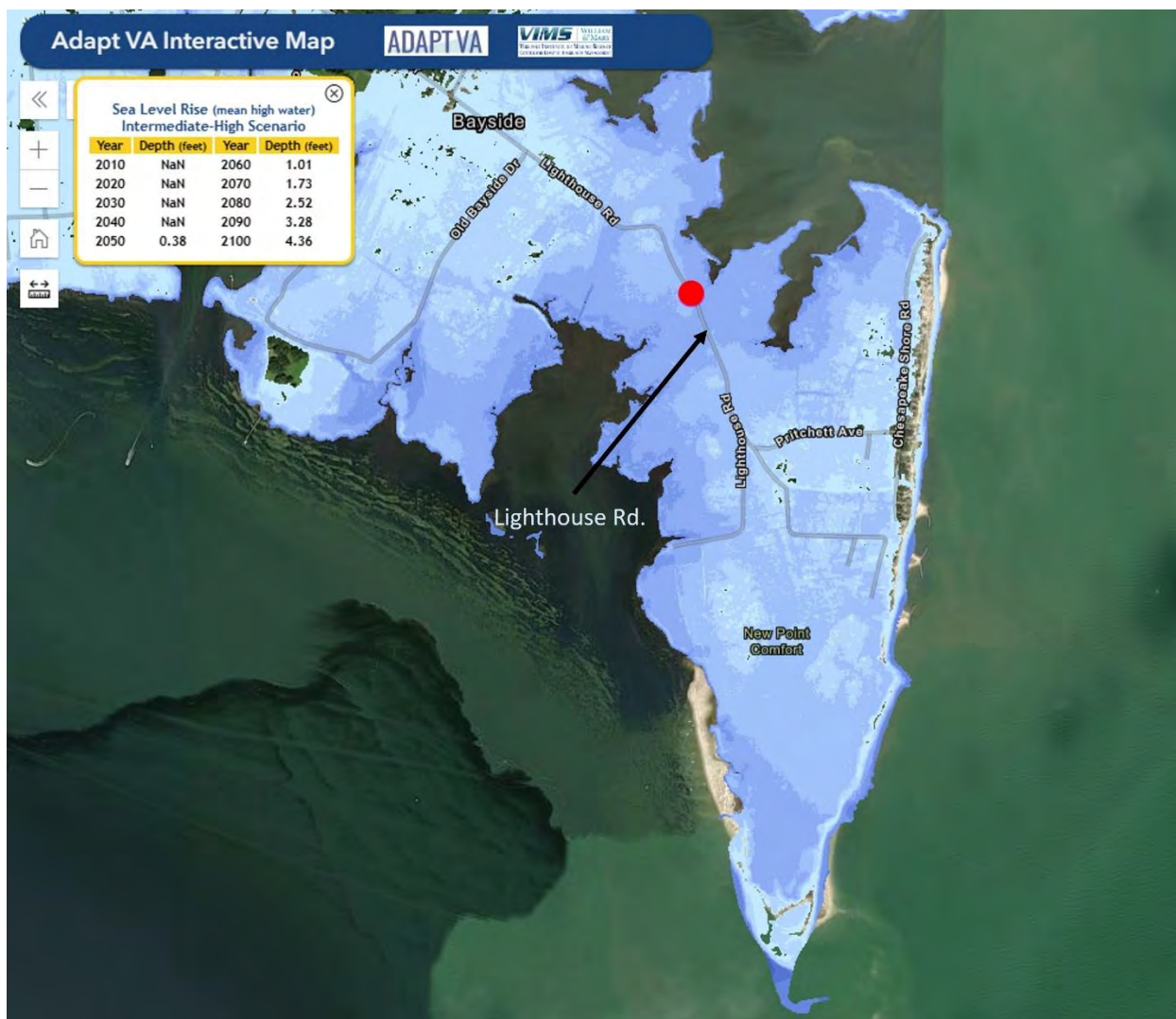




**Figure 6.** 2060 MHW Water Levels for the Intermediate-High Scenario. Lighthouse Road is labeled. (AdaptVA).



**Figure 7.** 2080 MHW Water Levels for the Intermediate-High Scenario. Lighthouse Road is labeled. (AdaptVA).



Using the same location on Lighthouse Road and denoted by the red circle, MPPDC staff analyzed inundation of the road at four time horizons during the intermediate-high sea level rise scenario. In 2020 and 2040, the sea level depth is classified as “NaN” (not a number). By 2060, it is predicted that Lighthouse Rd will be inundated with 1.01 ft of salt water at MHW. Additionally, if 1.01 ft of salt water is present at MHW and considering that the tidal range in the area is 2.1 ft, this means that the road will be within 1.09 ft of flooding at MHW and that this section of road will have standing water for the majority of every day with the exception of the hours where the tide is lowest. Looking forward to 2080, it is predicted that 2.52 ft of sea level rise in the area. This is very close to the 3.70 ft of sea level rise needed to inundate the road at MLW. Given the small percentage difference and variation in calculation, the data suggests that at some time between 2060 and 2080, Lighthouse Road would be fully inundated at MLW and during all tidal cycles.

Using the data provided by the DCR and AdaptVA tools, the most likely two dates for when the model shift will occur during 2040 at MHW and sometime between 2060 and 2080 at MLW. This means at least twice a day, by the year 2040, at least one portion of Lighthouse Road will be under water and residents of the Bavon community will have to wait until low tide to navigate the road, drive through saltwater, or select another form of transportation (i.e., small watercraft) to reach their property or the mainland. This will be the start of the modal shift. Finally, by just after 2060 or sometime before the year 2080, Lighthouse Road will likely become inundated at MLW or at any given low tide meaning that Lighthouse Road will be under water at all tide cycles causing residents of the Bavon community to drive through saltwater or travel by boat.

#### ✦ **Pain Points –**

##### Property Owner Perspective

*With the inundation of Lighthouse Road property owners within Bavon community will gradually lose safe and viable road access to and from their property due to inundation. Common activities such as going to the grocery store, school, doctors' appointments, and friend/family gatherings as well as access for emergency services will become increasingly challenging.*

*While some of these homes are primary properties for families, there is a portion of the homes in this community that are owned and managed as second homes. It can be expected that pain points for second homeowners will be very different than the pain points experienced for primary homeowners within the community since second homeowners may not need to deal with road access issues as frequently.*

*There are also many properties which have no development. The owners of the undeveloped property owners will experience different pain points than what is experienced by the primary and second homeowners. Some undeveloped property owners may only experience pain points related to their ability to develop the property in the future as challenges and costs associated with government regulations for development, taxes, and/or diminished value of the property on the real estate market negatively impacting the owner's ability to sell the property.*

##### Government Perspective

*With the inundation of Lighthouse Road government officials will need to consider investing in the elevation of this road or other mitigation solutions that would mitigate inundation on this road. Most likely, with limited funding available for such projects, local government will need to consider any policy changes that may reduce the risk to personnel if inspectors and/or emergency services need to access this portion of the County. What risks are they willing to take? For instance, driving a county owned car in salt-water if the road is inundated. How many times a month can this happen until it starts impacting the car? Or does the county invest in a boat to access such areas of the county?*

### Parcel Inundation Assessment

MPPDC staff continued the community assessment with focusing on the postage stamp parcels of Bavon community (**Figure 8**) and when, in a “do nothing” scenario, will the community become uninhabitable, meaning that parcels are inundated daily.

In the Bavon community, there are 228 individual parcels and of those 75 have constructed homes. This means that 153 parcels currently do not have homes constructed on them. It is also important to note that these undeveloped parcels may not be completely void of infrastructure especially with regards to septic systems as it is not uncommon for vacant parcels to have septic systems installed at the property. It is unknown exactly how many of the vacant parcels at Bavon have septic systems. Additionally, while actual counts on appurtenant structures and other infrastructure such as septic systems were not conducted for each Bavon parcel, it is important to note that many of the appurtenant structures, septic systems, etc. at the properties are of considerable value to property owners and play an important role in the decision-making process of property owners experiencing increased recurrent flooding and inundation such as those in Bavon. Finally, it is important to note that while the vulnerability of the Bavon community remains very high with regards to flooding, sea-level rise and erosion, the potential for additional development at this location remains high. This is especially true in the post-COVID era where many urban residents have sought to move to rural areas such as Mathews County. Therefore, while the current analysis is assuming a “no development” scenario for the future at Bavon, it is possible additional parcels could be developed despite the known risks, which if it were to occur, would further complicate the challenges described in this report for the Bavon community.



**Figure 8.** Parcel map of the Bavon community. The yellow dots are “address points” within the community which refer to the location of homes.



To begin, MPPDC staff needed an understanding of how the flooding throughout community changed between four flood time horizons, including 2020, 2040, 2060 and 2080. Using the DCR VA Coastal Resilience Web Explorer, **Figures 9-12** depict the sea level rise by each time horizon.

The DCR VA Coastal Resilience web explorer revealed where the Bavon community is currently and will continue to be impacted by sea level rise. The orange boxes on Figures 9-12 serve as a reference point for where there is still land above sea level throughout the community at MHW. The majority of the Bavon community homes on the Chesapeake Bay were built on a ridge which offers elevation; however, there are other homes located further inland on lower elevated land that have a greater potential for flooding and inundation at an earlier date than the homes on the ridge along the eastern side of the community.

In 2020, the further inland properties experienced 50% annual exceedance probability of flooding at MHW which confirms what is currently experienced in those western areas of the community. The year 2040 shows no change compared to 2020, with inland properties continuing to experience 50% annual exceedance probability of flooding at MHW. The homes along the ridge on the eastern side of the community experiencing lesser vulnerability than the western side of the community. By the year 2060, many properties along the eastern side of the

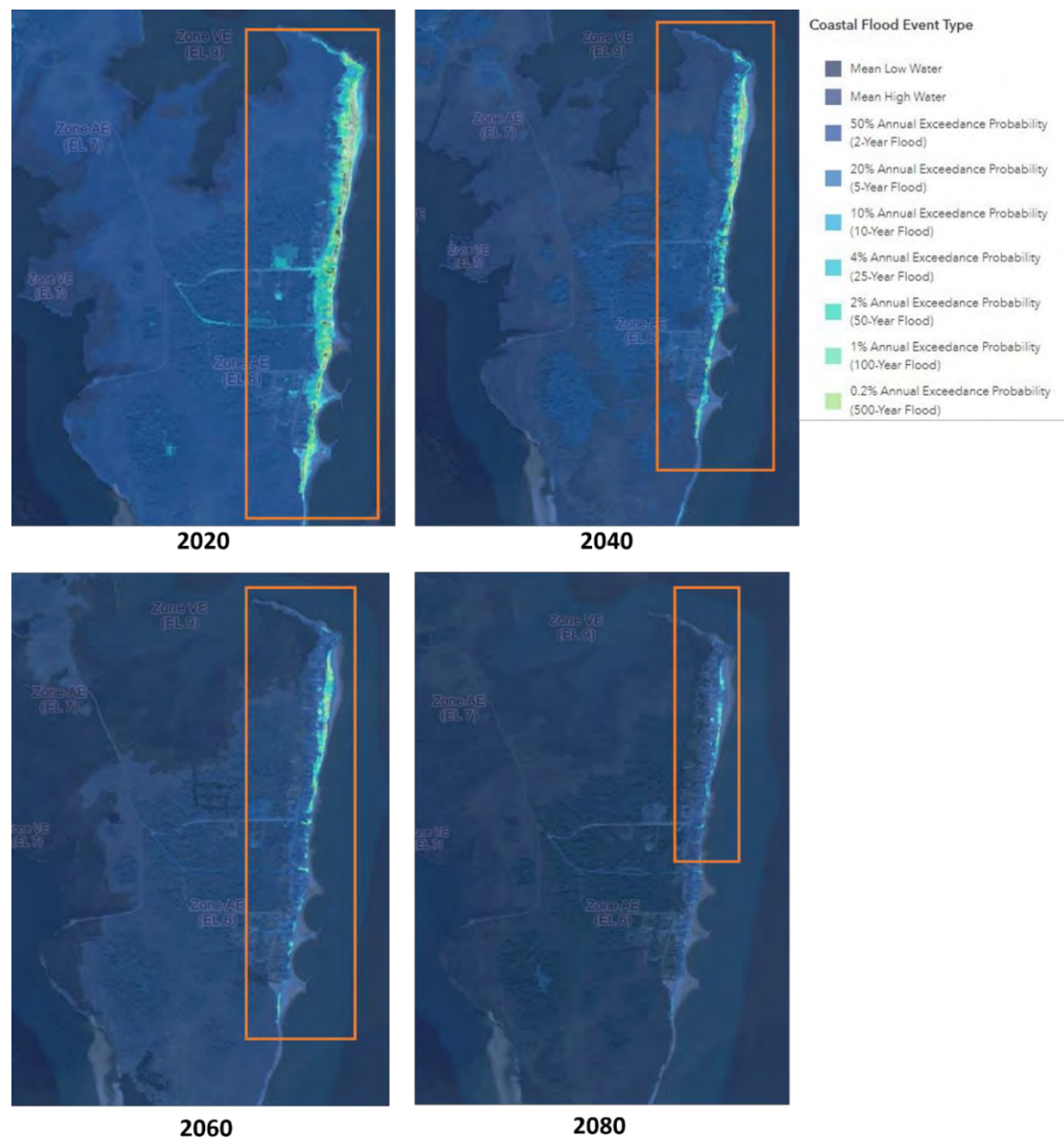
community begin to experience 50% annual exceedance probability, while inland properties on the western side of the community experience partial to complete inundation at MHW. By 2080 virtually all the properties in the Bavon community will be affected by sea level rise. As the highest parts of the ridge will be above water, inland properties on the western side of the community will be fully inundated at MLW and properties on the eastern side of the community will be inundated at MHW.

While this DCR tool does not provide specific impacts on the built environment, it can be inferred that the threat to houses, appurtenances, and septic systems will increase in step with the conditions driven by elevated sea levels and increased flooding in the future.

It is important to note that these models do not factor in wave energy and erosion impacts that will occur with greater frequency and with greater impacts as sea levels rise. This is especially important for the easternmost Chesapeake Bay fronting properties which currently are battling erosion issues. It can be expected that the challenge and the associated costs to protect the high energy and dynamic shorelines along the eastern side of the community will only increase into the future, which will factor directly into the pain points for the eastern most property owners.



**Figure 9.** Flooding of Bavon community dwellings during four flood time horizons (from DCR VA Coastal Resilience Master Plan web explorer).



#### Probability Statistics along the Eastern Ridge area of Bavon

2020 Exposure: 1% Annual Exceedance Probability (100-Year Flood)  
 2040 Exposure: 10% Annual Exceedance Probability (10-Year Flood)  
 2060 Exposure: 50% Annual Exceedance Probability (2-Year Flood)  
 2080 Exposure: 50% Annual Exceedance Probability (2-Year Flood)

#### Probability Statistics on Inland Properties in the Western areas of Bavon

2020 Exposure: 50% Annual Exceedance Probability (2-Year Flood)  
 2040 Exposure: 50% Annual Exceedance Probability (2-Year Flood)  
 2060 Exposure: Mean High Water  
 2080 Exposure: Mean Low Water

Next MPPDC staff used the VIMS AdaptVA Interactive Map to find the height of water that will inundate yards in the Bavon community. MPPDC staff viewed the parcel lines on the map and analyzed the depth of water impacting inland and bayside properties during the same four time horizons for 2020, 2040, 2060, and 2080. **Figures 10 to 13** depict sea level rise maps from Adapt VA for each time horizon for inland properties and **Figures 14 to 17** depict sea level rise maps from Adapt VA for each time horizon for bayside properties.

MPPDC staff selected a sample location for inland properties. This is depicted as a red circle in **Figures 10-13**. In 2020 and 2040, the depth of water is categorized as “not a number.” In 2060, the depth of water is ~0.12 ft and in 2080, the depth of water expected to be ~1.63 ft.

**Figure 10.** Adapt VA Inland properties 2020 with parcel lines.

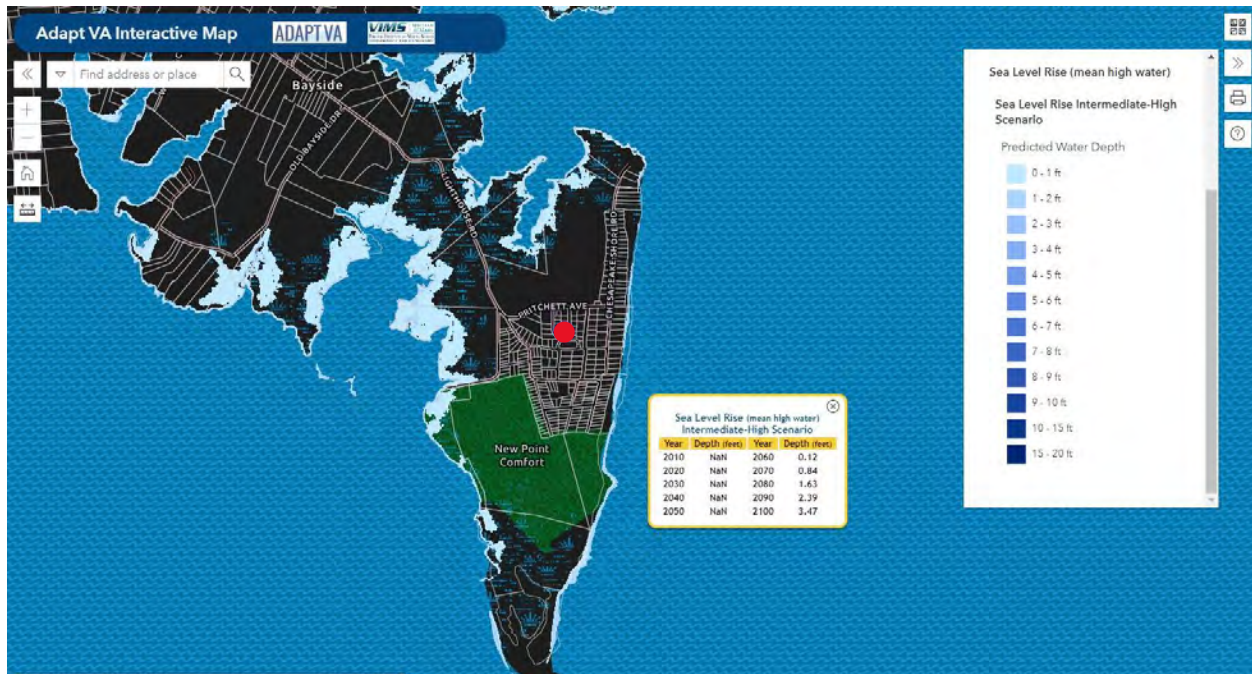




Figure 11. Adapt VA Inland properties 2040 with parcel lines.

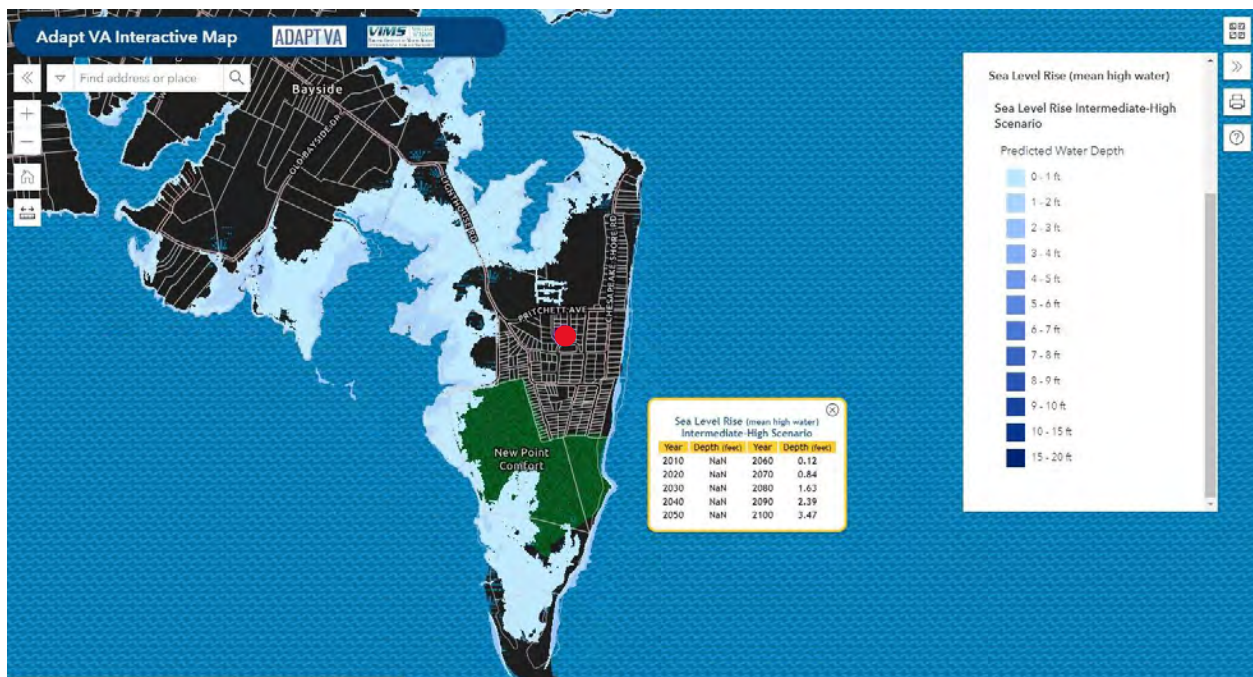
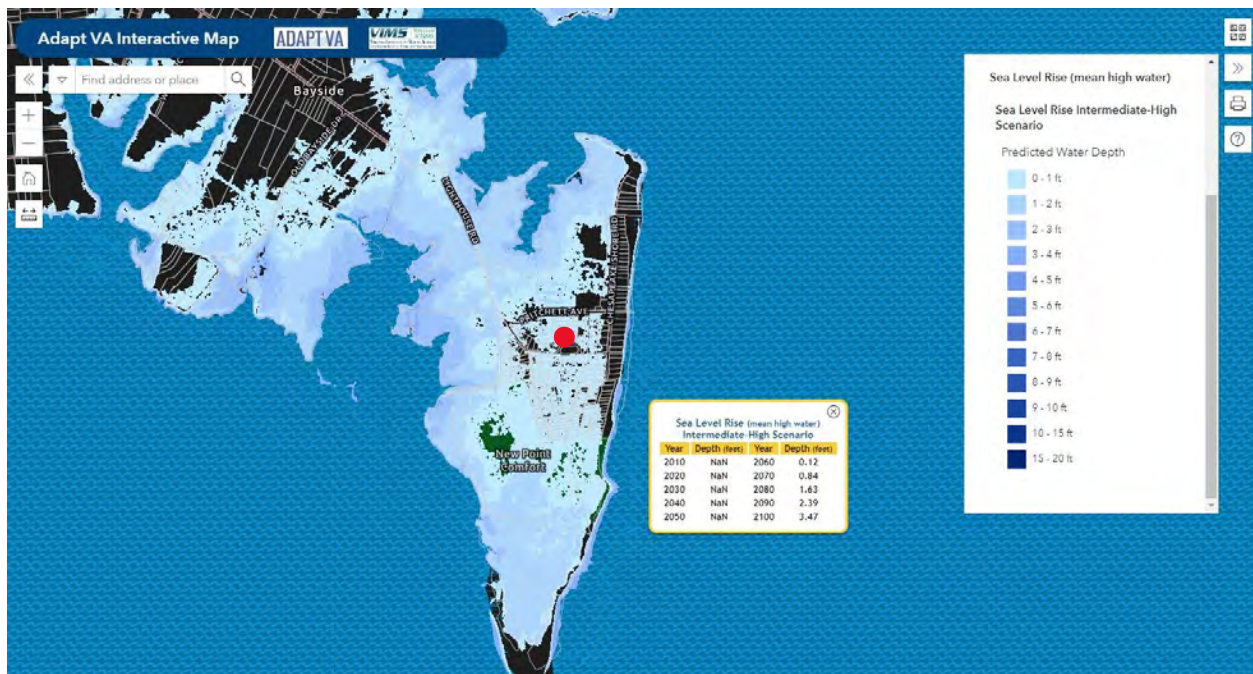
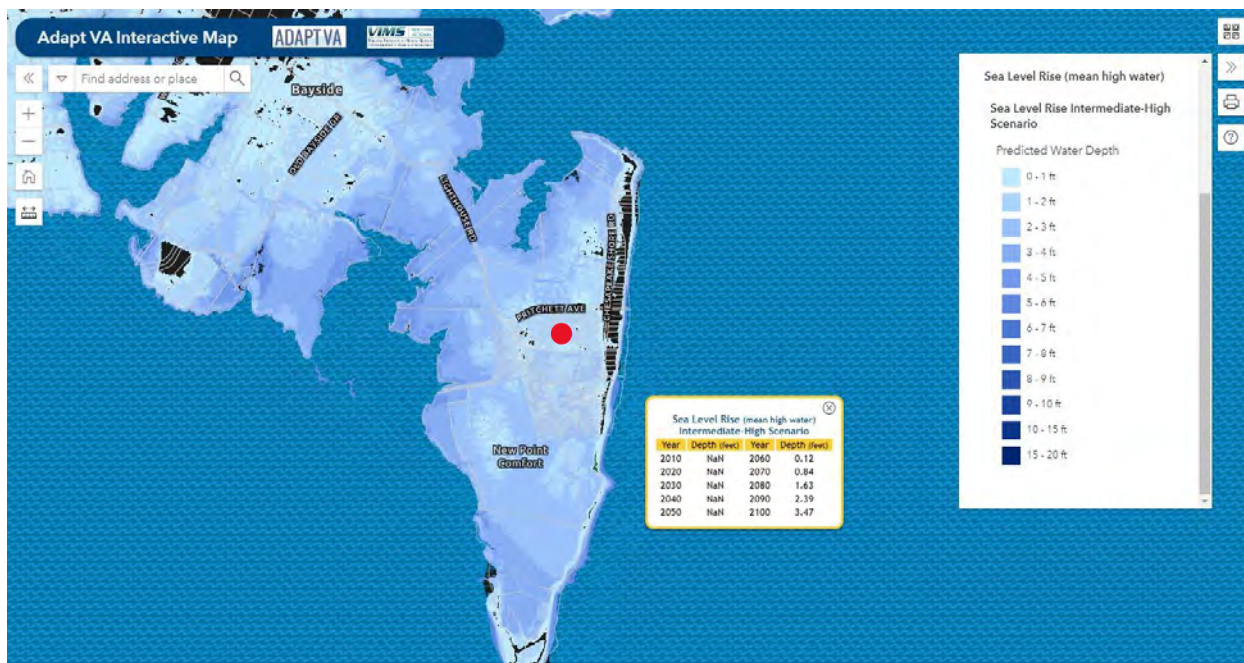


Figure 12. Adapt VA Inland properties 2060 with parcel lines.





**Figure 13.** Adapt VA Inland properties 2080 with parcel lines.



For parcels on the bayside, MPPDC selected a sample location to find the depth of water that would inundate this area within a given year. In 2020, 2040, 2060, and 2080, the depth of water is categorized as “not a number.”

**Figure 14.** Adapt VA Bayside properties 2020 with parcel lines.





Figure 15. Adapt VA Bayside properties 2040 with parcel lines.

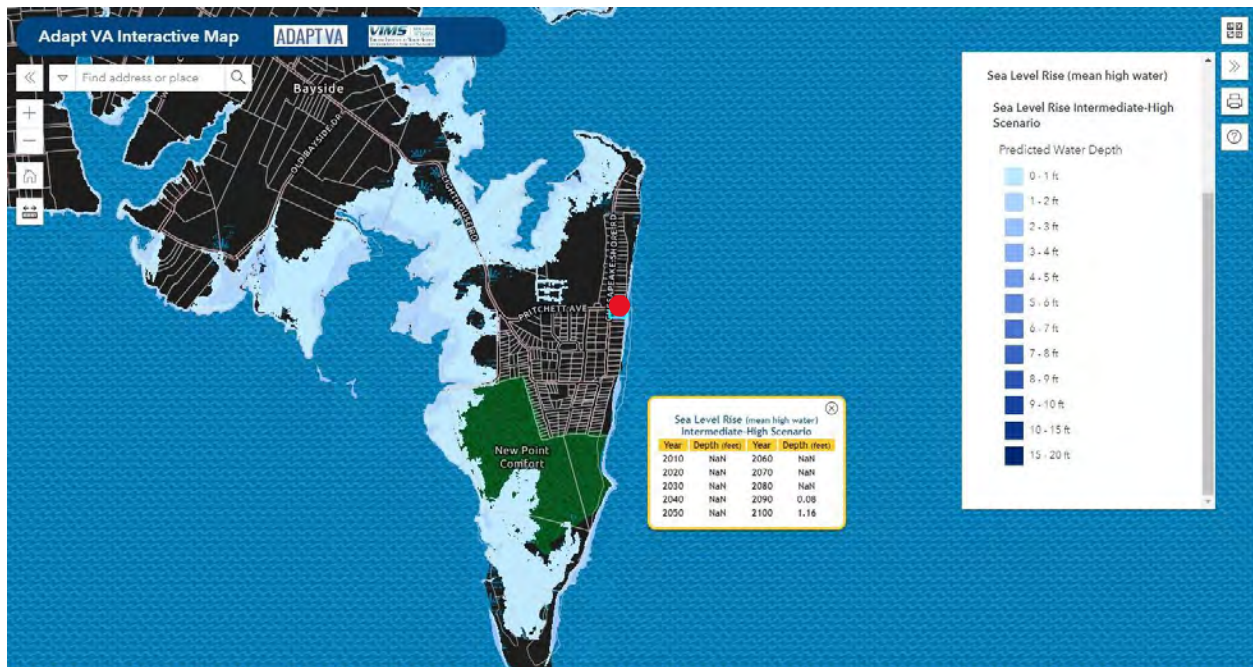


Figure 16. Adapt VA Bayside properties 2060 with parcel lines.



*Figure 17. Adapt VA Bayside properties 2080 with parcel lines.*



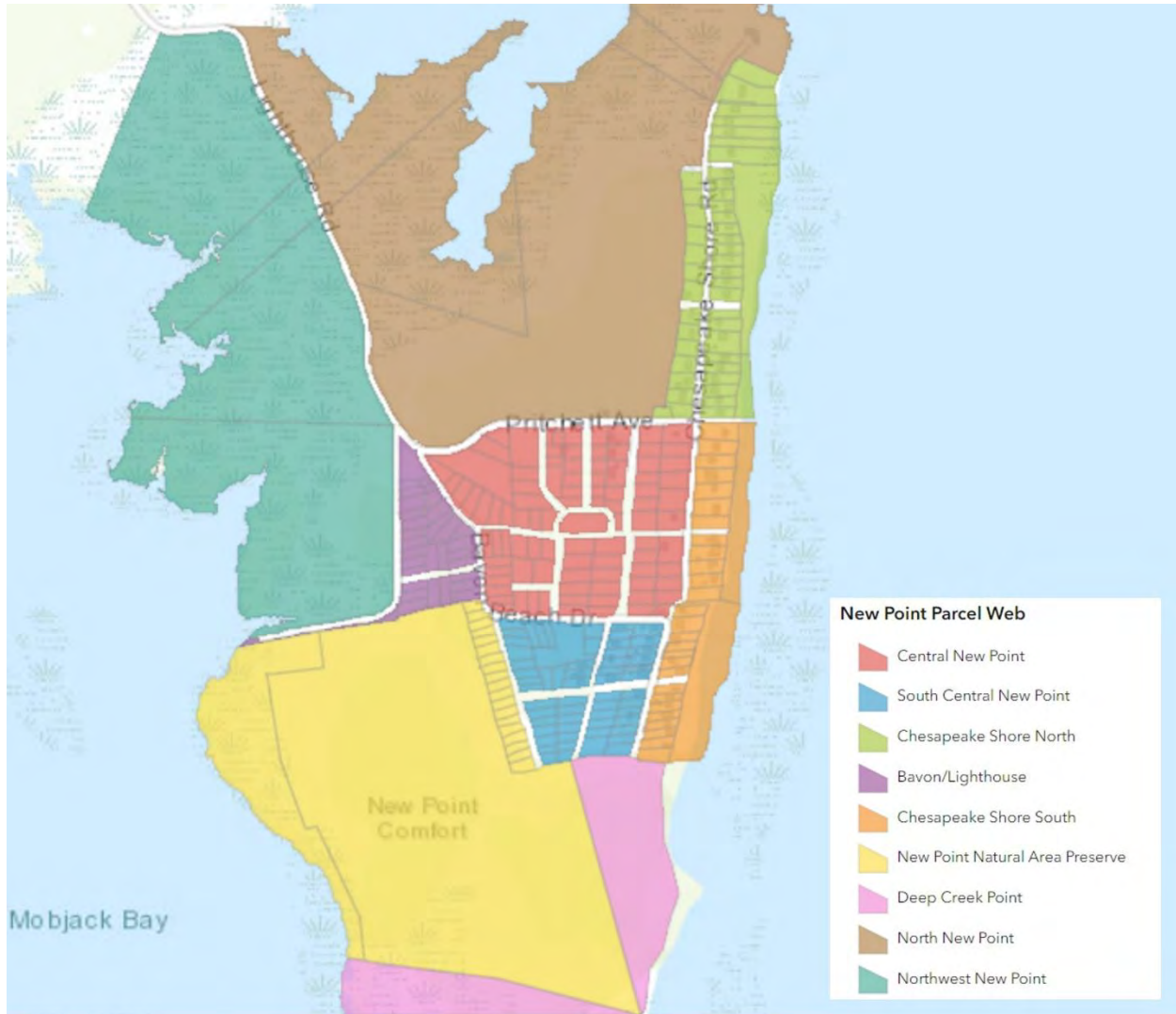
In 2020 and 2040 the model outputs shows no major flooding above MHW for the vast majority of Bavon parcels. By 2060, the western side of the community on undeveloped parcels including the New Point Comfort Natural Area Preserve and other low elevation and fringe marsh areas begin to become inundated at MHW. While the stillwater flooding depicted by this model appears to not flood the bayside properties of the community throughout the 2020-2060 time horizon at MHW, it should be noted that the flood risks related to storm surge and erosion will increase for these properties leading up to 2060. By 2080, the model shows ~1.63 ft of water at MHW will inundate most of the inland properties of the Bavon community at high tide. It can be expected that many of these areas will begin converting to tidal marsh under the “do-nothing” scenario which will all but negate any development potential these properties may have. Further, the roads within the community will begin to experience flooding during high tides which will create challenges for mobility within the community itself. The number of bayside properties experiencing flooding during high tide will also increase with the properties further south experiencing greater impacts than the properties in the central and northern areas along the bayside eastern ridge. Several of the bayside properties along the central and northern portions of the bayside eastern ridge will not experience flooding at high tide under stillwater conditions; however, many of the bayside properties are projected to experience ~0.3-0.5 ft of flooding with every high tide by the year 2080.

To analyze the impact of sea level rise throughout the Bavon community, MPPDC staff developed a map of the sub-categories of the Bavon community. The Bavon community was split up into four sub-categories: Central New Point, South Central New Point, Chesapeake Shore North, and Chesapeake Shore South (**Figure 18**). Central New Point and South-Central New Point consist of inland properties. Chesapeake Shore North and Chesapeake Shore South consist of the bayside properties along the ridge. All four sub-categories include parcels with houses.



MPPDC staff again utilized AdaptVA to collect the number of parcels within each sub-category of the community that experienced no inundation, partial inundation, or complete inundation were counted due to sea level rise (**Table 2**).

**Figure 18.** Map of sub-categories of Bavon Community. The four sub-categories of interest include Central New Point, South Central New Point, Chesapeake Shore North, and Chesapeake Shore South.



**Table 2. Inundation of Bavon community parcels at four time horizons.**

	Key			Number of parcels not inundated			Number of Parcels partially inundated			Number of Parcels completely inundated		
	INTERMEDIATE-HIGH SEA LEVEL RISE SCENARIO YEAR											
	2020			2040			2060			2080		
Chesapeake Bay North	45	0	0	41	4	0	23	16	6	0	35	10
Chesapeake Bay South	27	2	0	27	2	0	4	25	0	0	26	3
Central New Point	94	0	0	94	0	0	0	89	5	0	28	66
South Central New Point	60	0	0	60	0	0	0	60	0	0	0	60
Bavon Community	226	2	0	222	6	0	27	190	11	0	89	139

## ✦ Pain Points

### Property Owner Perspective

*When parcels in the Bavon community gradually become inundated, property owners will have a variety of decisions to make regarding the management and ownership of their property.*

*For homeowners in the Bavon community inundation may result in loss of utilities. First septic tanks and drainfields will be inundated and will fail. Power may be lost and therefore air conditioning will not work. This could even trigger the growth of mold in such moist environments. Loss of power may also impact the functioning of wells. Additionally saltwater intrusion will impact the quality of water coming from wells and could corrode the mechanics of the well. The soil fails first as the soil turns to goo. The tanks and pipes still work as designed, but the soil is no longer dry enough to treat effluent. Additionally saltwater intrusion will impact the quality of water coming from wells, increasing salinity making the water no longer drinkable. Salt water could also corrode the mechanics of the well. With inundation, the house foundations could have standing water against the foundation and in the crawl space, further encouraging mold growth in the house.*

### Government Perspective

*How will inundated lands impact the residents and what is the government's role as water inundates their property and makes these properties inhabitable. What services can the local government continue to offer these residents and which services will need be terminated due to risk and safety concerns?*

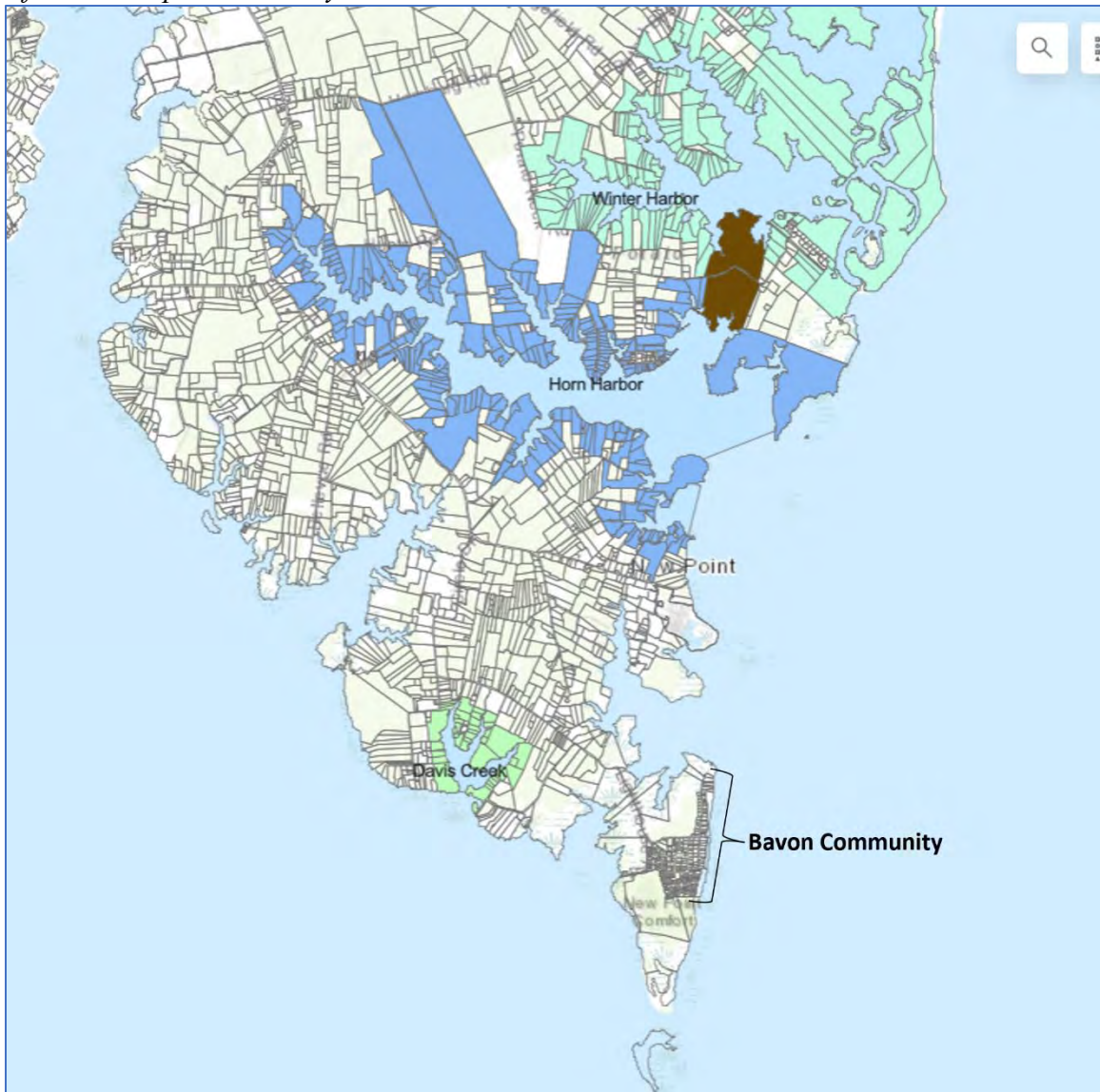
## New Point Comparative Analysis

MPPDC staff conducted a comparative total land value assessment to show how land value is changing. Since there is no data for the New Point Bavon Community, MPPDC staff analyzed



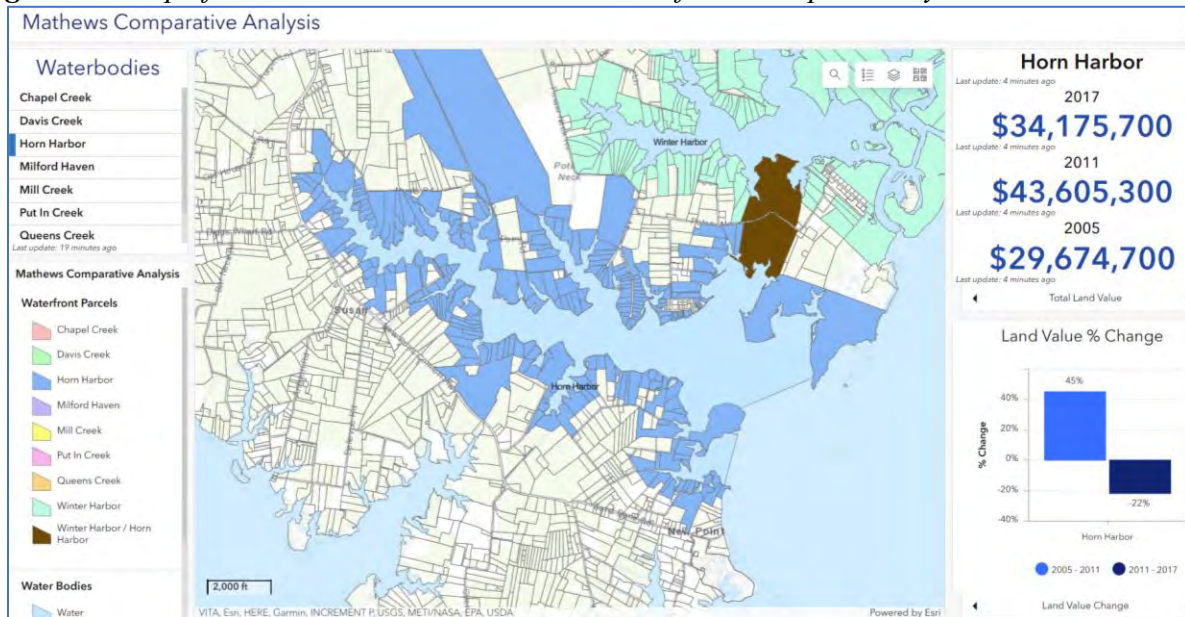
land value data from two communities – the Horn Harbor Community to the north of the Bavon Community and the Davis Creek to the west of Bavon Community (**Figure 19**).

**Figure 19:** Map of communities within Mathews County. Horn Harbor and Davis Creek were used for the comparative analysis.



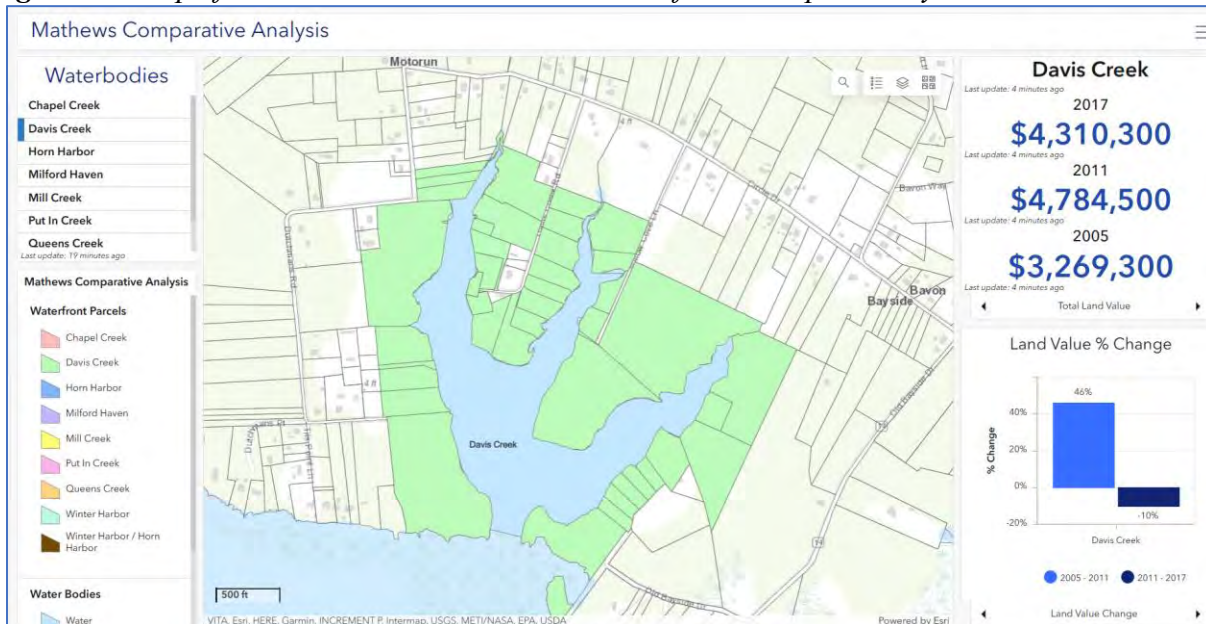
Horn Harbor is a community north of the Bavon Community. Based on the total land value data (**Figure 20**), between 2005 and 2011 there was an increase in total land value, with the land value jumping from \$29,674,700 to \$43,605,300. This was an increase of \$13,930,600. Then between 2011 and 2017 there was a decrease in total land value, with land value decreasing to \$34,175,700 which was a 21.6249% decrease.

**Figure 20.** Map of Horn Harbor and total land values for the respectable years.



Davis Creek is a community west of the Bavon Community. Based on the total land value data (Figure 21), between 2005 and 2011 there was an increase in total land value, with the land value jumping from \$3,269,300 to \$4,784,500. This was an increase of \$1,515,200. Then between 2011 and 2017 there was a decrease in total land value, with land value decreasing to \$4,310,300 which was a 9.91117% decrease.

**Figure 21.** Map of Davis Creek and total land values for the respectable years.



Consequently, there appears to be one trend of increasing land values between 2005 and 2011, and then a decreasing of land value between 2011 and 2017. Since the land value change is

consistent between the Horn Harbor and Davis Creek communities, MPPDC staff assumes that this will be the same for the Bavon Community.

#### ✚ **Pain Points**

##### Property Owner Perspective

*Property owners will need to address and strongly consider the individual economic burdens associated with owning a property in Bavon that will become inundated over time. Property owners will need to secure insurance to cover their assets, if available. If insurance is available, is it affordable? If insurance is not available, is it affordable to stay? Also, property owners will need to consider what it means for the land to be devalued as it becomes inundated. Also, will the ability to sell this property disappear and when?*

##### Government Perspective

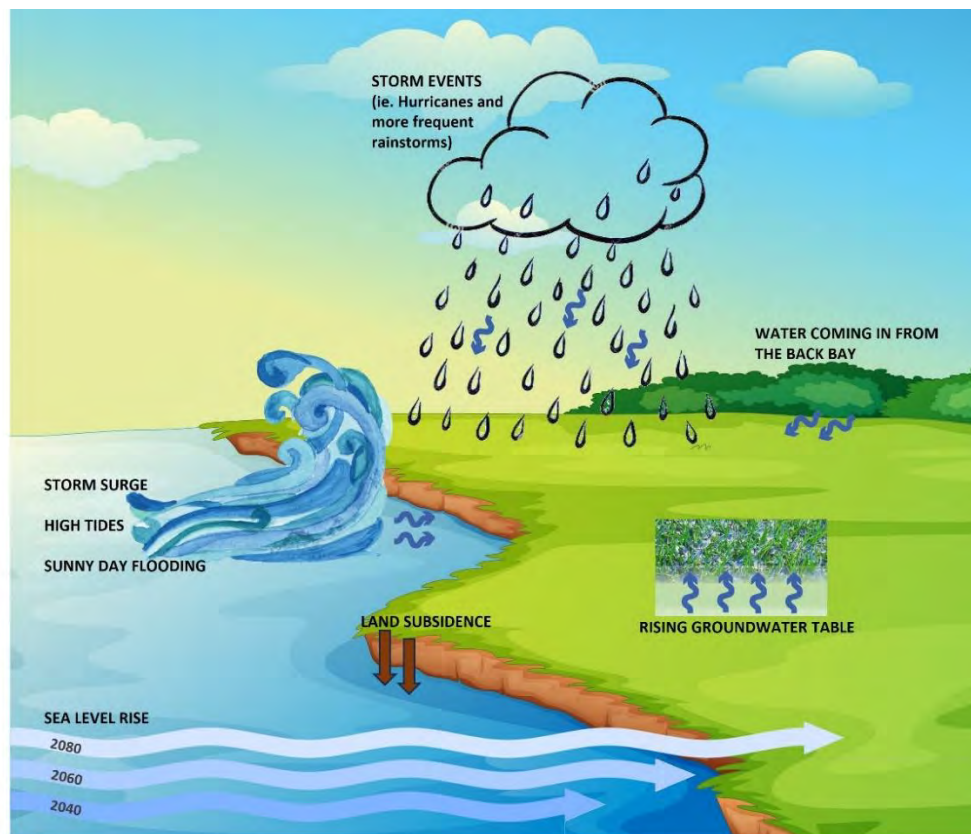
*As inundation of these properties devalues these homes, how will this impact tax revenue generation within the locality? How will the locality be able to recoup revenue losses? If local government does not adjust the levy, inland properties will be forced to cover the difference in lost revenue if waterfront parcels begin to devalue, making flooding a regressive tax structure.*

## **Property Owner Decisions**

Inundation encompasses a variety of factors that impact coastal communities (**Figure 22**). From rising groundwater levels to storms to sea level rise, water is, and will continue, to inundate coastal communities from all directions.



**Figure 22.** *Factors that encompass inundation.*



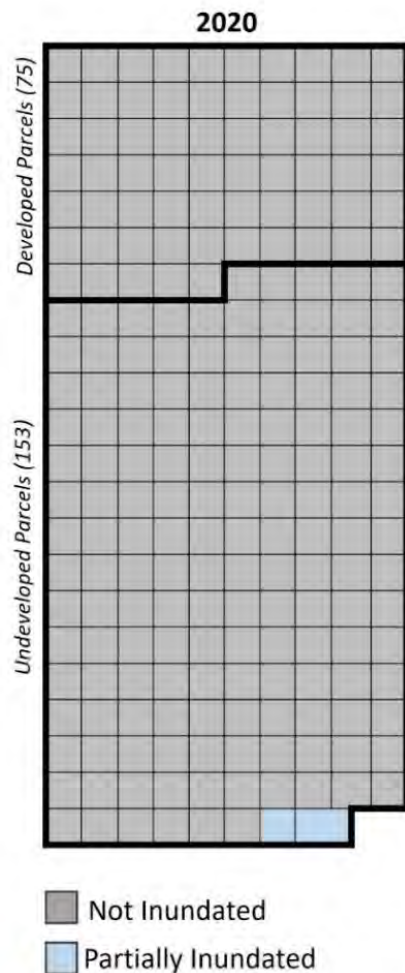
Inundation is a coastal cancer, that slowly eating away at land, and/or create waterlogged communities, which contributes to pain points for property owners, local governments, and local economies. At times many of these inundation factors exist simultaneously, which then exacerbates pain points even further. It's also important to note that property owners experience pain points well before inundation occurs on their property. For instance, the access road to the community may become flooded and impassable before inundation impacts one's property. Also, as the land subsides (at rates of 1.1 to 4.8 millimeters per year) and the groundwater levels rise then utilities such as drain fields and wells may become compromised prior into partial or complete inundation of the property.



**Figure 23.** Map of Bavon Community. The blue arrows show that water is impacting the community from all directions.

As the Bavon Community experiences all the factors that contribute to inundation and from all directions (**Figure 23**), the property owners within the community, have an option to mitigate, or not. This will ultimately be dependent on the amount of inundation present on the given property and the amount of investment that the property owner is willing to make. **Figures 24-27** provide a graphic depiction of all parcels within the Bavon Community. Each block represents one parcel. The gray blocks represent parcels that are not inundated within the given time frame. The light blue blocks represent parcels with partial inundation and the dark blue blocks represent parcels that are completely inundated. To the right, are lists of options for managing property in the face of rising waters on developed and undeveloped parcels. Please note that this analysis assumes the status quo and does not take into consideration policy and regulation changes that may occur to address coastal inundation issues and management of this land and governmental services. For a definition of options please see Appendix A.

**Figure 24: Property owner options by 2020.**



#### Developed Parcels

With no inundation in 2020, the 75 owners of developed parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 75 independent and potentially different decisions within the Bavon Community for developed parcels.

Options for developed parcels with no inundation include:

1. DO NOTHING
2. STRUCTURAL MITIGATION
  - Home elevation
  - Mitigation Reconstruction
  - Floodproofing
3. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND

#### Undeveloped Parcels

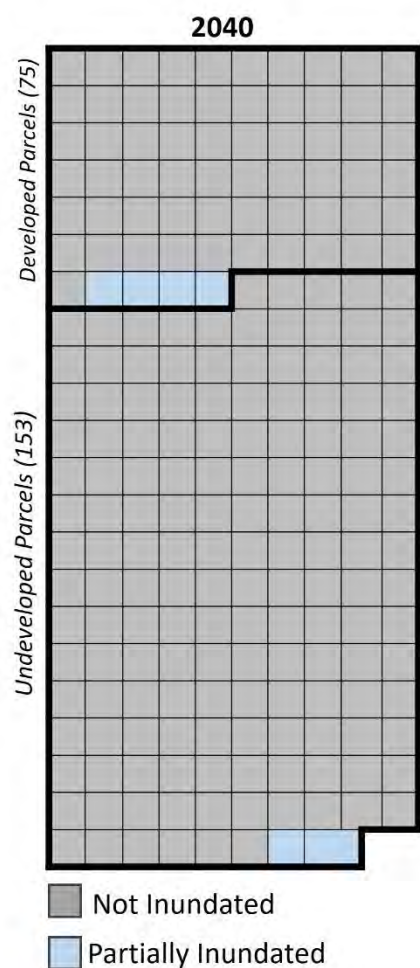
With no inundation or partial inundation in 2020, the 151 owners of undeveloped parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 151 independent and different decisions within the Bavon Community for undeveloped parcels.

Options for undeveloped parcels with no inundation or partial flooding include:

1. DO NOTHING
2. DEVELOP PROPERTY
3. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND



**Figure 25: Property owner options by 2040.**



#### Developed Parcels

With no inundation or partial flooding in 2040, the 75 owners of developed parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 75 independent and potentially different decisions within the Bavon Community for developed parcels.

Options for developed parcels with no and partial inundation include:

1. DO NOTHING
2. STRUCTURAL MITIGATION
  - Home elevation
  - Mitigation Reconstruction
  - Floodproofing
3. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND



Note that while options may be the same for no inundation vs partial inundation the type of implementation of these options will be dependent on the amount of inundation.

#### Undeveloped Parcels

With no inundation or partial inundation in 2040, the 151 owners of undeveloped parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 151 independent and different decisions within the Bavon Community for undeveloped parcels.

Options for undeveloped parcels with no inundation or partial flooding include:

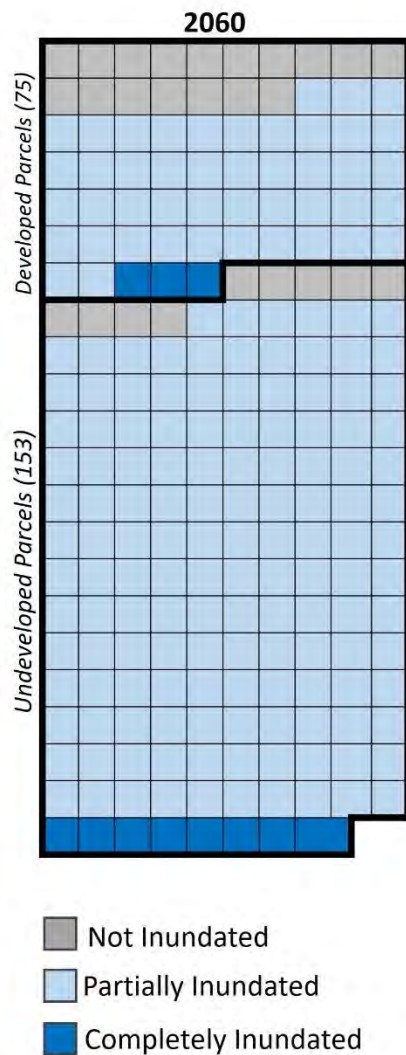
1. DO NOTHING
2. DEVELOP PROPERTY
3. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND



Again, while options may be the same for no inundation vs partial inundation the type of implementation of these options will be dependent on the amount of inundation.



**Figure 26: Property owner options by 2060.**



#### **Developed Parcels**

With parcels that are not inundated, partially inundated, and fully inundated in 2060, the 75 owners of developed parcels have options to mitigate for flooding or not. Depending on the amount of inundation the be mitigation options will vary. Each will make a separate and individual decision – resulting in at least 75 independent and potentially different decisions within the Bavon Community for developed parcels.



Options for developed parcels with no inundation and partial inundation include:

1. DO NOTHING
2. STRUCTURAL MITIGATION
  - Home elevation
  - Mitigation Reconstruction
  - Floodproofing
3. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND

Note that while options may be the same for no inundation vs partial inundation the type of implementation of these options will be dependent on the amount of inundation.

#### **Undeveloped Parcels**

With no inundation or partial inundation in 2020, the 151 owners of undeveloped parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 151 independent and different decisions within the Bavon Community for undeveloped parcels.



Options for undeveloped parcels with no or partial inundation include:

1. DO NOTHING
2. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
3. SELL PROPERTY
4. DONATE LAND

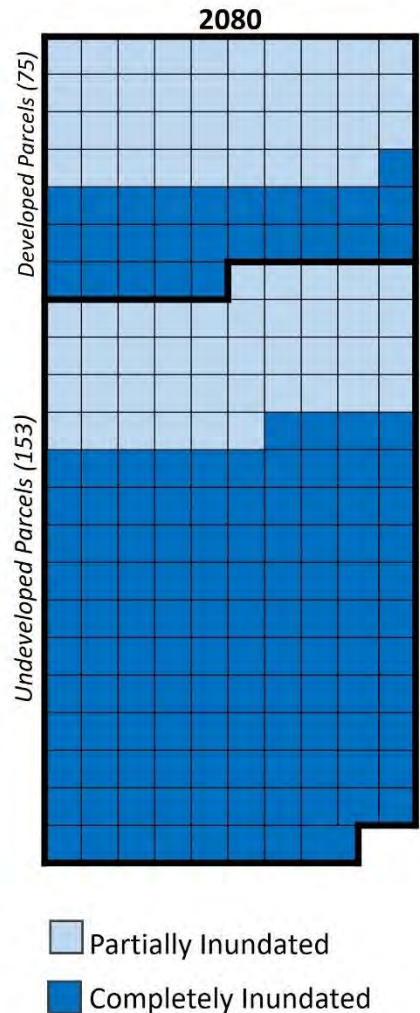
Note that while options may be the same for no inundation vs partial inundation the type of implementation of these options will be dependent on the amount of inundation.

Options for undeveloped parcels with complete inundation include:

1. DO NOTHING
2. SELL PROPERTY
3. DONATE LAND
4. ABANDON PROPERTY



**Figure 27: Property owner options by 2080.**



#### **Developed Parcels**

With partial and complete parcel flooding by 2080, the 75 owners of developed parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 75 independent and potentially different decisions within the Bavon Community for developed parcels.



Options for developed parcels with partial flooding include:

1. DO NOTHING
2. STRUCTURAL MITIGATION
  - Home elevation
  - Mitigation Reconstruction
  - Floodproofing
3. SHORELINE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
4. SELL PROPERTY
5. DONATE LAND

Options for developed parcels with complete flooding include:

1. DO NOTHING
2. STRUCTURAL MITIGATION
  - Home elevation
3. SELL PROPERTY
4. DONATE LAND
5. ABANDON PROPERTY

#### **Undeveloped Parcels**

With no inundation or partial inundation in 2020, the 151 owners of undeveloped parcels have options to mitigate for flooding or not. Each will make a separate and individual decision – resulting in at least 151 independent and different decisions within the Bavon Community for undeveloped parcels.



Options for undeveloped parcels with complete flooding include:

1. DO NOTHING
2. SHORELINE/LANDSCAPE MANAGEMENT
  - Living Shoreline
  - Breakwater
  - Berm
3. SELL PROPERTY
4. DONATE LAND

Options for developed parcels with complete inundation include:

1. DO NOTHING
2. SELL PROPERTY
3. DONATE LAND
4. ABANDON PROPERTY

These diagrams above show potential chaos that may ensue, as there will be at least 228 independent and different decisions by property owners regarding would like to manage/protect their property at any given time to mitigate losses, or not. Additionally, if some of the undeveloped parcels owners decide to build on their properties this new construction could compound issues within the Bavon community. Permitting challenges will also arise as

environmental conditions change, but the reality is that the real estate value of those undeveloped lots will decrease as conditions worsen over coming decades and as the price lowers, it can attract more and more potential buyers looking to live near the beach no matter what the risk is and no matter for how short of a time their investment could last.

## Conclusions

The slow demise is happening on the land in rural coastal Virginia is because of the threat of water. Rising water slowly kills businesses, land, and the way of life in coastal communities.

Responses to pain points due to inundation within coastal communities will be extremely complex, challenging and will involve many parties. MPPDC staff worked to develop methodology that recognizes that water has been coming and will continue to come and that private and government property owners must manage against this slow-motion threat or lose considerable economic and functional value of land and improvements.

MPPDC staff utilized the Bavon Community as a pilot community. Through the implementation of the methodology, it was found that there are critical aspects that may or may not influence property owner decisions:

1. **Access** to the Bavon community via Lighthouse Road -
  - ~2040 – Lighthouse Road will be inundated twice a day at MHHW.
  - ~2060 – Lighthouse Road will be inundated at MHHW and MLW.
2. **Inundated properties** -
  - Between 2020-2040 inland properties will experience 50% annual exceedance probability of flooding at MHW.
  - ~2080 virtually all the properties in the Bavon community will be affected by sea level rise. As the highest parts of the ridge will be above water, inland properties on the western side of the community will be fully inundated at MLW and properties on the eastern side of the community will be inundated at MHW.
3. **Land Value** - There is a drastic decrease in land value between 2011 and 2017.

Finally, dependent on the amount of inundation present on the given property and the amount of investment that the property owner is willing to make, there are a variety of alternatives/mitigation options to implement. Within the Bavon community there will be at least 228 independent and different decisions by property owners regarding would like to manage/protect their property at any given time to mitigate losses, or not.

This offers an overview of how inundation will impact coastal communities and some key aspects that property owners will need to address. Simultaneously, as private landowners are make decisions about their properties, government entities will be making decisions (i.e.. Creating policies, etc.) about their own serves which may also exacerbate the complexity of decisions that property owners need to make.

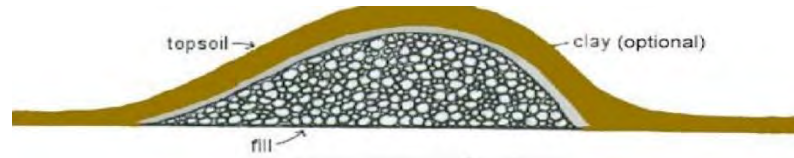
Loss of economic, environmental, and social capital constitutes a form of blight, including the loss of property values, economic stability, and quality of the environment. Drivers of blight can be slow, such as long-term decline in economic activity or depopulation, both of which are common in rural coastal locations. Rapid blight may also occur due to a sudden policy transition, or natural disasters such as flooding, erosion, or landslides. Therefore, communities like that of Bavon need to understand options to mitigate flooding and temporarily curb economic and social capital losses.

## Appendix A: Owner Alternatives

1. **DO NOTHING** - Do not take any actions.
2. **DEVELOP PROPERTY** - New construction on properties that are undeveloped.
3. **STRUCTURAL MITIGATION** –
  - a. **STRUCTURE ELEVATION** - Structure elevation is the physical raising and/or retrofitting of an existing structure. Elevation may be achieved through a variety of methods, including elevating on continuous foundation walls; elevating on open foundations, such as piles, piers, posts or columns; elevating on fill; and second-story conversion.
  - b. **MITIGATION RECONSTRUCTION** - Mitigation reconstruction is the construction of an improved, elevated structure that conforms to the latest building codes on the same site where an existing structure and/or foundation has been partially or completely demolished or destroyed.
  - c. **FLOODPROOFING** - Dry floodproofing techniques are applied to keep structures dry by sealing the structure to keep floodwaters out. Dry floodproofing projects are eligible for non-residential and historic residential structures under all HMA programs. Wet floodproofing consists of the use of flood-damage-resistant materials and construction techniques to minimize flood damage to areas below the flood protection level of a non-residential structure, which is intentionally allowed to flood. Wet floodproofing projects are eligible for non-residential structures under all HMA programs. Floodproofing may also include retrofitting.
4. **SHORELINE/LANDSCAPE MANAGEMENT** – For coastal properties, shoreline management options are available, while inland property owners may opt for landscape improvements to mitigate flooding.
  - a. **LIVING SHORELINES** - are nature-based approaches for shoreline protection. These stabilization techniques not only protect shorelines and infrastructure, they also conserve, create or restore natural shoreline habitats and ecosystem services.
  - b. **BREAKWATERS** - a permanent structure constructed at a coastal area to protect against tides, currents, waves, and storm surges.



- c. **BERMS** – a berm is mound of compacted earth with sloping sides. Berms may service as a barrier to the flow of water, retaining flow and allowing infiltration, and directing the flow of water.



5. **SELL PROPERTY** – Sell property or seek a property buyout by FEMA, or other agencies. Buyout may be an option as the value of properties decrease.
6. **LAND DONATION** - Donating land in the floodplain to a public or non-profit organization can become a community asset. The donated land may provide water supply protection, flood control, fish and wildlife habitat, recreation (hunting, fishing, hiking, wildlife watching, etc.), carbon sequestration, dilution of wastewater, and erosion control. Also, there may be benefits to the land donor. For example, if the land is donated to a public entity there may be deductions in your Federal and Virginia state income taxes.
7. **ABANDON PROPERTY** – Abandonment of properties might occur if no one wants to buy the property and when living conditions diminish due to inundation.

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SMART SCALE FY 2026 Projects - Fredericksburg District

Display ID	Organization	Application Name	Principal Improvement
11661	Caroline County	Turn Lanes at Lake Caroline	Highway
11662	Caroline County	Route 1 Ladysmith Road	Highway
11663	Caroline County	Paige and Marye Route 1 Intersection	Highway
11664	Caroline County	Rte 207 Sidewalk improvements at Rte 1 and Welcome Way	Bike/Pedestrian
11692	Essex County	Brays Fork Continuous Green-T	Highway
11693	Essex County	White Oak Dr. to Teakwood Dr. Sidewalk and Crosswalks	Bike/Pedestrian
11620	Fredericksburg Area MPO	Rt 208 Pipeline Study Corridor Improvements: Leavells Rd	Highway
11626	Fredericksburg Area MPO	Rte 208 Pipeline Study Corridor Improvements - Smith Station	Highway
11633	Fredericksburg Area MPO	Butler Rd Widening from Castle Rock Dr to Carter St	Highway
11634	Fredericksburg Area MPO	I-95 four-Lane Widening SB B/T Exit 130 and Exit 126	Highway
11711	Fredericksburg City	Route 3 Intersection Improvements and VCR Trail Bridge	Bike/Pedestrian
11730	Fredericksburg City	Lafayette Blvd Sidewalks	Bike/Pedestrian
11637	George Washington RC	Enon Road/Centreport Parkway Connector	Highway
11639	George Washington RC	I-95/ Exit 136 Interchange/Centreport Parkway to Rt 1	Highway
11640	George Washington RC	Rt 3 Pipeline Old Plank Road to Salem Church Rd	Highway
11641	George Washington RC	Warrenton Road Widening	Highway
11767	Gloucester County	Providence Rd-Rte 17 (Turn Lane) and Multimodal Improvements	Highway
11769	Gloucester County	Rte. 17 and Belroi Road Intersection	Highway
11780	Gloucester County	Rte 17 Widening - Tidemill to Guinea	Highway
11817	King William County	Venter Road-Rt. 30 Intersection	Highway
11821	King William County	Rt. 30 Bicycle/Pedestrian Improvements	Bike/Pedestrian
11820	Lancaster County	Rt 3 and Rt 794 Intersection Improvement	Highway
11806	Mathews County	Rte. 3 and Rte. 198 Intersection and Road Segment	Highway
11753	Middlesex County	Town Bridge Rd Roadway Improvements (RRR)	Highway
11756	Middlesex County	Rt 17-Rt 616 Town Bridge Road Int. and Segment Improvements	Highway
11623	Spotsylvania County	Harrison Road / Lafayette Blvd Intersection Improvements	Highway
11624	Spotsylvania County	US Rte.1 Southpoint Pkwy Intersection Improvements	Highway
11625	Spotsylvania County	Route 3 (Plank Road) Widening Improvements	Highway
11627	Spotsylvania County	Route 639 STARS Study Improvements	Highway
11552	Stafford County	Route 1 and Foreston Woods Dr / Coal Landing Rd	Highway
11553	Stafford County	Route 1 and Potomac Hills LTL and Route 1 Corridor Safety	Highway
11554	Stafford County	Route 1 and I-95 / Coachman Circle Safety Improvements	Highway
11556	Stafford County	Garrisonville Road Widening Phase 1	Highway
11804	Westmoreland County	Route 205 at Longfield Road Intersection – North	Highway

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