Virginia Coastal Resilience Technical Advisory Committee

Funding Quarterly Subcommittee Meeting

Date: Thursday, November 2nd, 2023 Time: 010:00 am

Location: All Virtual Meeting

Virtual Public Access: Register at

https://vcu.zoom.us/meeting/register/tZYqc-upqj0sEtOf-NcgVPpq7drrFydZOAqJ

Meeting Agenda

- Call to Order, Roll Call, and Introductions
- Adoption of Meeting Agenda
- Adoption of 2023Q3 Subcommittee Meeting Minutes
- Subcommittee Overview
- Presentation
 - Financial Resilience Tools

- Old Business
 - Lines of Effort
 - 1. Building the Financial Baseline
 - 2. Making the Financial Case
 - 3. Document Opportunities for State Support
 - 4. Providing Guidance and Information
- New Business
 - Subcommittee Members Discussion
- Public Comment
- Adjourn

Name	Title	Organization	
Shawn Crumlish (Chair)	Executive Director	Virginia Decourses Authority	
Peter D'Alema (Alternate Chair)	Director of Program Management	Virginia Resources Authority	
William Curtis	Assistant Director	Assistant Director of DHCD	
Whitney Katchmark	Principal Water Resources Engineer	Hampton Roads Planning District Commission	
Ben McFarlane (A)	Chief Resilience Officer	Hampton Roads Planning District Commission	
Lewis L. Lawrence, III	Executive Director	Middle Depingula Depping District Commission	
Curtis Smith (A)	Deputy Director	Middle Peninsula Planning District Commission	
Kristin Burhop	Vice President for Public Policy and Legislative Affairs	Virginia Chamber of Commerce	
Keith Martin	Executive Vice President, Public Policy and Government Relations	Virginia Chamber of Commerce	
Robert Coates	Director, Grant Management and Recovery Division	Virginia Department of Emergency Management	
Debra Messmer (A)	State Hazard Mitigation Officer	Virginia Department of Emergency Management	
Chris Swanson	Environmental Division Director	Virginia Dopartment of Transportation	
Christopher Berg (A)	Assistant Division Director	Virginia Department of Transportation	
Jamie Green	Commissioner		
Rachael Peabody (A)	Director of Coastal Policy, Restoration and Resilience	Virginia Marine Resources Commission	
Randy Owen (A)	Chief of Habitat Management		
Dr. Troy Hartley	Director	Virginia Sea Grant	
11/2/2023	Funding Subcommittee	4	

CRMP Phase II - Overview

The Phase II plan will be delivered by December 2024.

This planning process will result in two major deliverables:

- 1) an updated Coastal Resilience Web Explorer
- 2) a PDF Document Plan

The key components of these two deliverables are:

- 1) Flood Hazard Exposure Model
- 2) Flood Hazard Risk Assessment
- 3) Planned Resilience Actions
- 4) Financial Needs for Flood Resilience
- 5) TAC Subcommittee Recommendations

Outreach and engagement will be utilized throughout the plan's development to collect feedback on the content and direction of these key components.

Funding Subcommittee Objectives

- Inform quantification of financial need for flood resilience.
 - What funding needs should be identified in the CRMP Phase II, including to guide appropriations needs?
- Identify and examine financial tools and processes that are suited and/or needed to implement flood resilience.
- Identify challenges/opportunities to implementing financial tools.
- Develop recommendations for future planning. This includes, but is not limited to:
 - Recommend approach to quantifying and presenting financial need for flood resilience during future planning efforts.

CRMP Phase II - Plan Development Timeline

Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24	Oct 24	Nov 24	Dec 24
Meeti	ngs																
	Sub	TAC		Sub	TAC		Sub	TAC		Sub	TAC		Sub	TAC		Sub	TAC
Sched	ule																
		Dod Hazard Exposure Model Data Display (CRWE Update) Data, and Innovation Research, Data, and Innovation															
			ollectio Prioriti						Flood Hazard Risk Assessment Project Prioritization								
Project and Initiative info Collection Project Prioritization					Analyze Planned Resilience Actions Project Prioritization, Funding												
				Quanti Fundin	-	cial Ne	ed for F	lood Re	esilienco	e					.i		
_	-	e holder Coordin		ch and E	ngagen	ent											•
	op TAC s ocommi	Subcom ttees	nittee	Recomr	nendati	ons											

Subcommittee Schedule

2023Q3	CRMP PII – Identify Financial Needs
2023Q4	CRMP PII – Identify Financial Needs
2024Q1	CRMP PII – Prioritize Financial Needs
2024Q2	CRMP PII – Financial Assessment
2024Q2	Future Plans – Recommendations
2024Q3	CRMP PII – Financial Assessment Review
2024Q3	Future Plans – Recommendations
2024Q4	
202424	Future Plans – Final Recommendations





Discussion of Resilience Tools

Coastal Resilience TAC

November 2, 2023

Member NYSE | FINRA | SIPC

Virginia Resilience Tools

- Special Tax District
 - Ad Valorem (No Limitation)
- CDA
 - Special Assessments
 - Ad Valorem (up to \$0.25/\$100 unless approved by all owners)
- Regional Taxing Authorities
 - NVTA, CVTA, HRTAC
- GO / Moral Obligation Bonds



<u>General</u>

- Service districts are created pursuant to Va. Code §15.2-2400, to provide additional, more complete, or more timely services of government than are desired in the locality as a whole.
- Service districts can be created by ordinance of the local government at its discretion upon determination of a benefit.
- Districts are formed to provide services or infrastructure, including utility projects that will be paid for by those who benefit from the services or infrastructure.
- No direct burden to the larger community or tax base.

Ability to Raise Revenue

- The local government is authorized to levy and collect an annual tax on property in the district.
- The annual tax may be based on the full assessed value of the taxable property within the service district.
- The tax is based on an amount per \$100, similar to ad valorem tax.
- The tax collected will fluctuate with the assessed value of the property.
- The local government has the ability to adjust the tax rate on an annual basis.
- Proceeds from the annual tax must be segregated in order to be spent only in the district in which raised.



 Virginia localities have utilized service districts to pay for infrastructure improvements for specific areas.

 A service district does not have the power to issue debt to finance improvements.

 Debt must be issued by the local government or a related entity (e.g. Industrial Development Authority) and repaid from taxes in the service district.



How Does a CDA Work?

Bonds are issued by the CDA to finance public infrastructure projects, reserve funds and cost of issuance.

- Bonds are secured only by assessment/special taxes levied in the CDA. Foreclosure is only remedy.
- Two methods to pay for debt service on Revenue Bonds:
 - Special Tax
 - Limited to .25/\$100 of assessment value, unless 100% of landowners in CDA District agree to increased rate.
 - Special Assessment
 - Paid back up to 40 years in an annual amount calculated to cover debt service and administration costs.
 - Full amount of assessment is levied on all property based on equitable apportionment.



Primary Distinctions:		
	CDA	Service District
Formation:	Landowner	Local Government
Issuer of Debt:	CDA	Local Government Entity
Revenues:	Special Assessment Special Tax ⁽¹⁾	Special Tax (unlimited – changes with Assessed Value of the District each year)
Determination of Project Components:	Landowner	Local Government
Impact on Locality's Credit:	Indirect – Considered "Overlapping"	Varies, depending upon any Moral Obligation support of Locality
Security to Bond Holders:	Lien up to total debt service with Special Assessment	Lien equal only to annual debt service

⁽¹⁾ Limited to \$0.25 of Assessed Value in a given year unless 100% of landowners agree otherwise



Disclaimer

The U.S. Securities and Exchange Commission (the "SEC") has clarified that a broker, dealer or municipal securities dealer engaging in municipal advisory activities outside the scope of underwriting a particular issuance of municipal securities should be subject to municipal advisor registration. Davenport & Company LLC ("Davenport") has registered as a municipal advisor with the SEC. As a registered municipal advisor Davenport may provide advice to a municipal entity or obligated person. An obligated person is an entity other than a municipal entity, such as a not for profit corporation, that has commenced an application or negotiation with an entity to issue municipal securities on its behalf and for which it will provide support. If and when an issuer engages Davenport to provide financial advisory or consultant services with respect to the issuance of municipal securities, Davenport is obligated to evidence such a financial advisory relationship with a written agreement.

When acting as a registered municipal advisor Davenport is a fiduciary required by federal law to act in the best interest of a municipal entity without regard to its own financial or other interests. Davenport is not a fiduciary when it acts as a registered investment advisor, when advising an obligated person, or when acting as an underwriter, though it is required to deal fairly with such persons,

This material was prepared by public finance, or other non-research personnel of Davenport. This material was not produced by a research analyst, although it may refer to a Davenport research analyst or research report. Unless otherwise indicated, these views (if any) are the author's and may differ from those of the Davenport fixed income or research department or others in the firm. Davenport may perform or seek to perform financial advisory services for the issuers of the securities and instruments mentioned herein.

This material has been prepared for information purposes only and is not a solicitation of any offer to buy or sell any security/instrument or to participate in any trading strategy. Any such offer would be made only after a prospective participant had completed its own independent investigation of the securities, instruments or transactions and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the completeness of this material. Davenport has no obligation to continue to publish information on the securities/instruments mentioned herein. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, sale, exercise of rights or performance of obligations under any securities/instruments transaction.

The securities/instruments discussed in this material may not be suitable for all investors or issuers. Recipients should seek independent financial advice prior to making any investment decision based on this material. This material does not provide individually tailored investment advice or offer tax, regulatory, accounting or legal advice. Prior to entering into any proposed transaction, recipients should determine, in consultation with their own investment, legal, tax, regulatory and accounting advisors, the economic risks and merits, as well as the legal, tax, regulatory and accounting characteristics and consequences, of the transaction. You should consider this material as only a single factor in making an investment decision.

The value of and income from investments and the cost of borrowing may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions or companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance and estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes or to simplify the presentation and/or calculation of any projections or estimates or events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. This material may not be sold or redistributed without the prior written consent of Davenport.

Version 01/01/2023 ZL | JS



Old Business

Funding Subcommittee Lines of Effort

Funding Subcommittee Lines of Effort



Building the Financial Baseline



Making the Financial Case



Document Opportunities for State Support



Providing Guidance and Information



Building the Financial Baseline Overview

- What is the value of the assets with exposure?*
 - Human, built, natural infrastructure baseline valuation
- What is the financial risk of this exposure?*
 - Direct and indirect costs
- What is the financial supply and demand for resilience?
 - Historical spending, current financial supply, future demand*
- Do we have the capacity to invest in resilience?
 - Locality fiscal capacity and readiness

* Coordination with Project Prioritization Subcommittee



Impact Assessment Approach

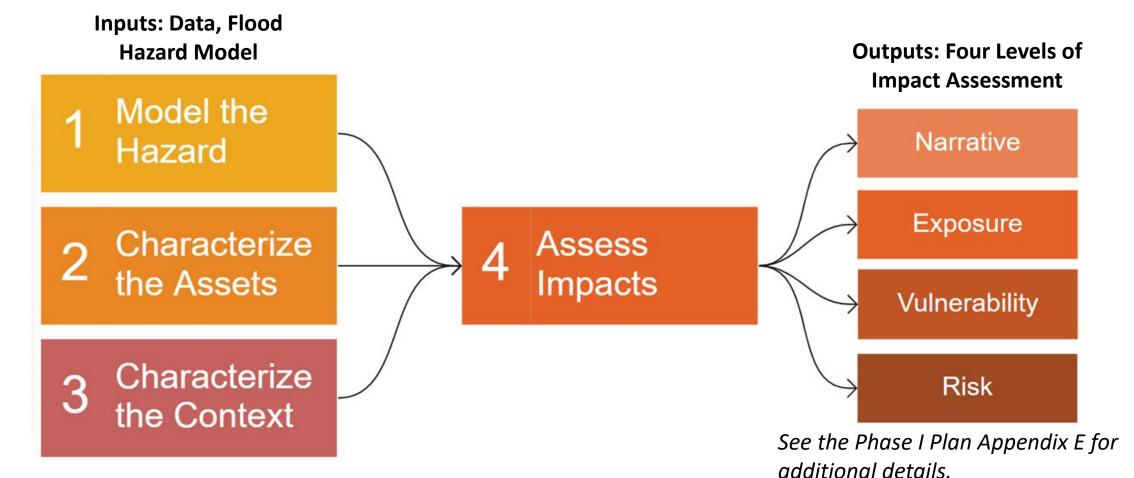


Figure 3: Overview of the impact assessment approach.

* Coordination with Project Prioritization Subcommittee

11/2/2023

Funding Subcommittee



Financial Consequences are the most detailed level of Impact Analysis

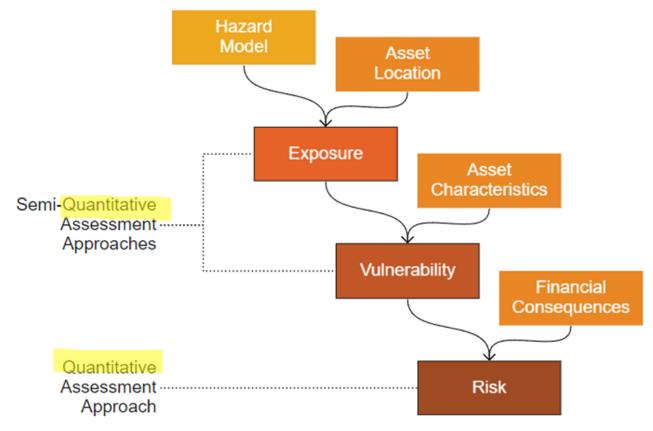


Figure 7: Asset information required to describe impacts with varying levels of detail.

11/2/2023

Funding Subcommittee

At this scale, using quantitative assessment approaches, available asset and flood hazard data creates limitations for the assessment.

Should also consider what level of analysis is most useful for the anticipated end-users to receive via this plan, and feasible to produce.

> * Coordination with Project Prioritization Subcommittee



Building the Financial Baseline Asset Baseline Assessments

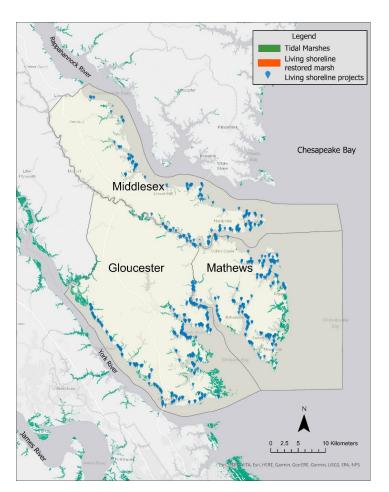
- Prior Subcommittee Input:
 - Investment should be tied to public trust doctrine and resources.
 - Establish baseline values for Natural Infrastructure.
 - This baseline could be tracked over time as events occur allowing economic dollars to determine where efforts should be made and conduct a costbenefit analysis.
 - Baseline value connected to asset categories more informative than a general total value for resilience.

22

Building the Financial Baseline Natural Infrastructure Baseline Assessment

Valuation of ecological and social benefits provided by marshes and living shorelines for communities and fisheries (VIMS CCRM/NOAA Pending)

- 1. Estimate the ecological and social benefits provided by marshes and living shorelines for local communities within the Middle Peninsula Virginia region
- 2. Develop a Shoreline Restoration Benefit Calculator that allows users to input project specific information and output net societal benefits.







Building the Financial Baseline Natural Infrastructure Baseline Assessment

Societal benefits of floodplains in the Chesapeake Bay and Delaware River watersheds (USGS 2023)

- 1. Valuation of floodplain sediment and nutrient retention
- 2. Quantifying floodplain flood regulation





Building the Financial Baseline Natural Infrastructure Baseline Assessment

Table 4

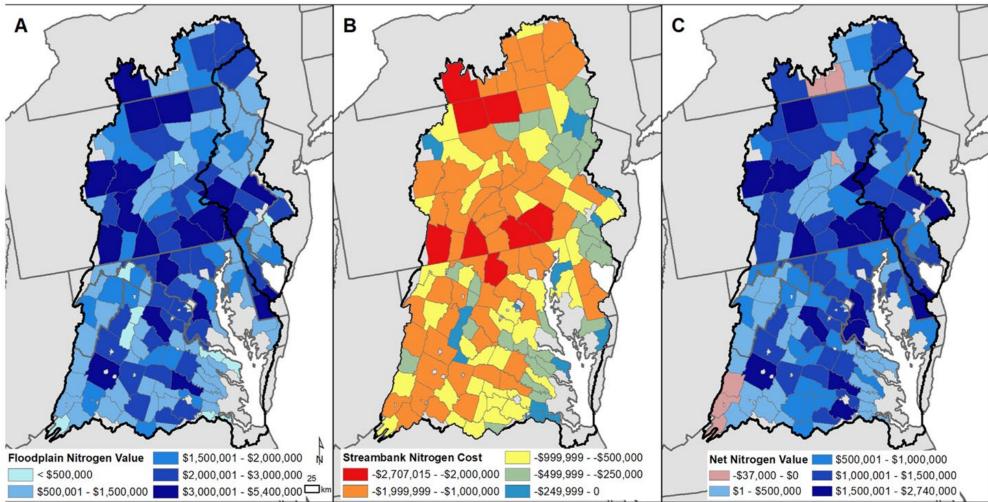
Modeled loads of sediment-bound nitrogen and the estimated monetary value associated with nutrient retention for each state in the study area. Positive loads indicate retention/deposition and negative indicate export/erosion. Monetary values are reported in millions of 2022 U.S. dollars (USD). Floodplain nitrogen benefits per stream length, reported in USD, were calculated based on the total stream length in the jurisdiction within the study area.

Jurisdiction	Proportion of the state included	Streambank nitrogen load (Mg–N/yr)	Floodplain nitrogen load (Mg–N/ yr)	Net nitrogen load (Mg–N/ yr)	Streambank nitrogen cost (millions USD/yr)	Floodplain nitrogen benefit (millions USD/yr)	Net nitrogen benefit (millions USD/yr)	Stream length (km)	Floodplain nitrogen benefit per stream length (USD/km)	Net floodplain nitrogen benefit per stream length (USD/km)
Delaware	84%	-194	488	294	-\$3.13	\$7.9	\$4.7	2,423	\$3,250	\$1950
District of Columbia	100%	-2	7	5	-\$0.03	\$0.1	\$0.1	25	\$4,780	\$3400
Maryland	93%	-1072	2328	1256	-\$17.29	\$37.5	\$20.2	14,074	\$2,670	\$1440
New Jersey	39%	-196	711	515	-\$3.16	\$11.5	\$8.3	3,187	\$3,600	\$2610
New York	18%	-853	1246	393	-\$13.76	\$20.1	\$6.3	12,686	\$1,580	\$500
Pennsylvania	64%	-3113	5976	2863	-\$50.18	\$96.3	\$46.2	46,943	\$2,050	\$980
Virginia	55%	-2615	4867	2252	-\$42.16	\$78.5	\$36.3	37,227	\$2,100	\$980
West Virginia	15%	-416	613	197	-\$6.71	\$9.89	\$3.18	6,740	\$1,470	\$470

Source: USGS 2023



Building the Financial Baseline Natural Infrastructure Baseline Assessment



Funding Subcommittee

Source: USGS 2023

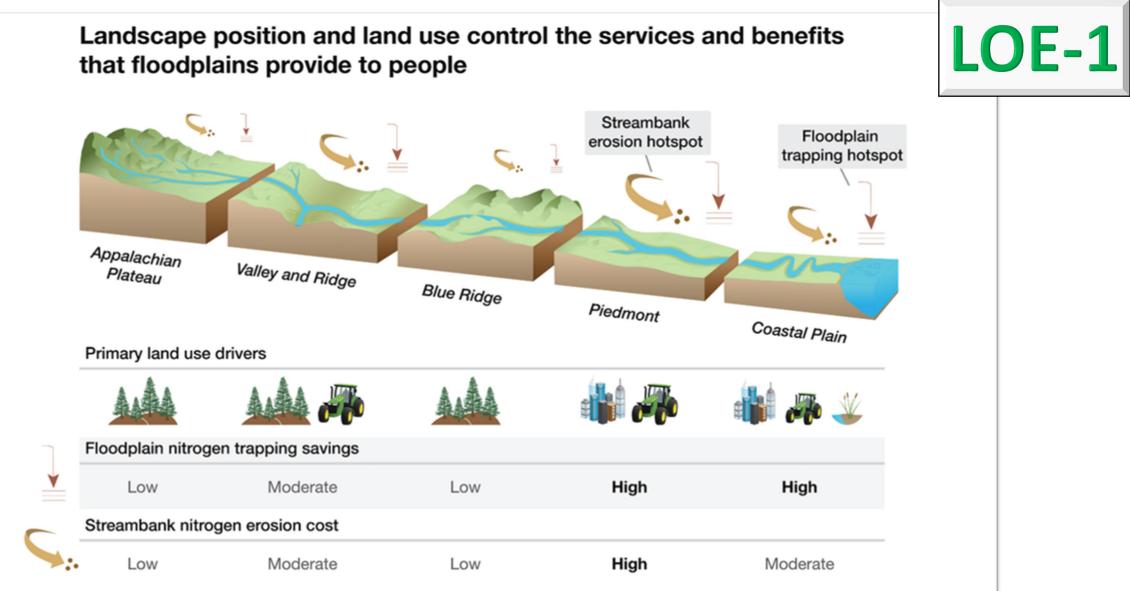


Fig. 7. Landscape position and land use are controls on floodplain sediment and nutrient trapping (down arrow) and streambank erosion (arrow with dots). Floodplain trapping benefits are greatest in the Piedmont and Coastal Plain. Streambank erosion costs are highest in the Piedmont. Primary land use drivers are depicted as trees for forested areas, a tractor for agriculture, buildings for urban areas, and cattails for wetlands.



Building the Financial Baseline Annual floodplain flood regulation value

Table 7

Floodplain flood attenuation values (in U.S. dollars (USD)) for each annual exceedance probability (AEP) for the baseline and counterfactual scenarios. Results include all 18 areas of interest in the Schuylkill River watershed.

Annual exceedance probability	Baseline damage (USD)	Counterfactual damage (USD)	Floodplain avoided damage (USD)	Annualized floodplain avoided damage weighted by AEP (USD/yr)
0.5 (2-year)	\$350,427	\$441,034	\$90,607	\$45,300
0.2 (5-year)	\$480,413	\$599,618	\$119,205	\$23,840
0.1 (10-year)	\$534,059	\$704,814	\$170,755	\$17,080
0.04 (25- year)	\$697,044	\$980,626	\$283,582	\$11,340
0.02 (50- year)	\$784,685	\$1,312,404	\$527,719	\$10,550
0.01 (100- year)	\$1,051,319	\$1,718,986	\$667,667	\$6,680
	ain flood regula	tion value		\$114,790

Source: USGS 2023

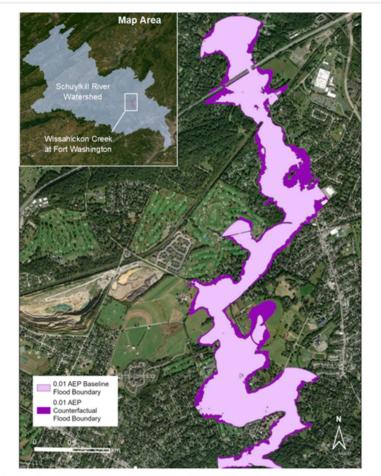


Fig. 6. Example flood inundation boundary for the 0.01 annual exceedance probability (AEP) for the baseline and counterfactual scenarios for the area of interes AOD at Wissahickon Creek at Fort Washington. PA. Inset map shows the location of the AOI within the Schuvlkill River watershed in Pennsylvania. USA.

Building the Financial Baseline

Value by Land Cover Category Ecosystem Services

FEMA BCA Toolkit calculates annual and net present value of ecosystem services according to the area (i.e., acres or square feet) of each land cover category

Source: FEMA 2022

Ecosystem	Value by Land Cover Category (2021 USD/acre/year)									
Service	Urban Green Open Space	Rural Green Open Space	Riparian	Forest	Coastal Wetland	Inland Wetland	Coral Reefs	Shellfish Reefs	Beaches	
Aesthetic Value	7,010	7,505	767	1,477	1,648	1,303	327		223,8	
Air Quality	201		254	711		-	-	-	•	
Biological Control		-	199							
Climate Regulation	54	77	96	199	125	56				
Erosion Control	78	78	13,823	1,672						
Existence Value				7,531						
Flood and Storm Hazard Reduction	316		6,052	368	1,035	1,264	3,269			
Food Provisioning			736	-			18	1,905	-	
Habitat	5,890	2,021	2,547		2,420	1,416	2,222			
Pollination	350	350		•		-			-	
Recreation/Tou rism	1,642	601	6,215	94	1,624	1,906	1,261	253	76,8	
Research and Education							23			
Water Filtration			6,239	435	1,558	1,584	-	600		
Water Supply			272	103	544	643				
Total Estimated Benefits	15,541	10,632	37,199	12,589	8,955	8,171	7,120	2,757	300,6	



Building the Financial Baseline Economic Baseline Data

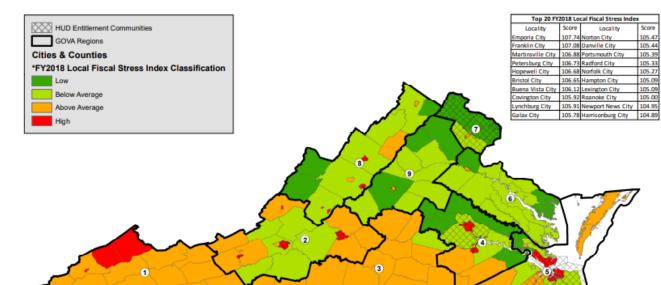
- Economic Indicators
 - Gross Domestic Product
 - Per Capita Income
 - Population
 - Total Personal income
 - Employment
 - Total Industry Earnings
 - Average Earnings Per Job

ĸ	eal* Gross Domestic Product Growth by	Decade,
	Counties of Virginia, 2002-2021	
	Real* Gross Domestic Product Growth by Co	unty
	Average Annual Percent Change, 2021	arry
Se	lect a Time Period: 0 2002-2021 0 2010-2019 0 2020-202	21 2021
	More than 4% 🔲 4% to 3% 📄 3% to 2% 📄 2% to 1%	6
	1% to 0% 0% to -1% 🚺 -1% to -2% 🚺 -2% or B	elow
rginia: 21 = 5.52%		U.S.: 2021 = 5.95%
21 - 3.3270	Source: Virginia.REAProject.org	2021 = 5.55%

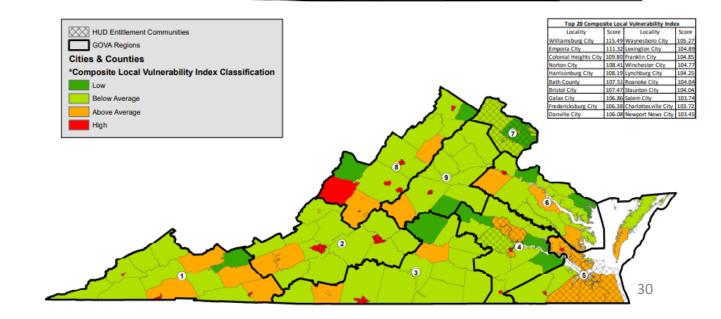
Source: VirginiaREAP

Building the Financial Baseline Financial Capacity

- CRMP Phase I utilized the DHCD Local Fiscal Stress Index.
- Other metrics?
 - Local Tax Revenue Dependence
 - Local Economic
 Vulnerability
 - Local Vulnerability Index
- Regional metrics?



LOE-1



Building the Financial Baseline Financial Readiness

- Readiness is a measurement of our capacity to research, apply, WIN, and manage financial opportunities successfully within our limited resources.
- Should DCR develop metrics to baseline and monitor readiness?
 - Readiness Context Annual operating budget and # of financial FTE staff
 - Readiness Capacity
 - Research Estimated annual # of financial opportunities reviewed
 - Apply Estimated annual # and/or \$ of financial opportunities sought
 - Win Estimated annual # and/or \$ of funding opportunities secured and implemented
 - Manage Estimated annual # funding sources and staff to manage funding

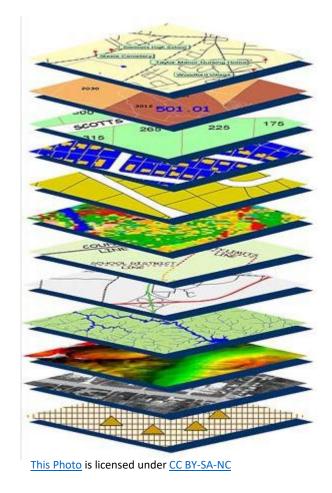
LOE-1



Building the Financial Baseline Federal/State Funding Focal Areas

Overlay funding focal areas?

- Federal
 - Justice40
 - Climate and Economic Justice
 - Community Disaster Resilience Zones
 - [Others?]
- State
 - Low Income Geographic Area
 - Opportunity Zones
 - [Others?]





Building the Financial Baseline Other Contextual Data Needs

- Resilience Resources
 - Staff and financial resources needed for sustainable flood resilience capacity in PDCs and local government
- Shared Risk
 - Measuring the in-direct financial costs of flooding to people, the economy, and the environment
- Co-Benefits
 - Measuring the direct and in-direct financial benefits to people, the economy, and the environment from resilience activities
- [Others?]

Making the Financial Case Overview



What/How is financial information communicated?

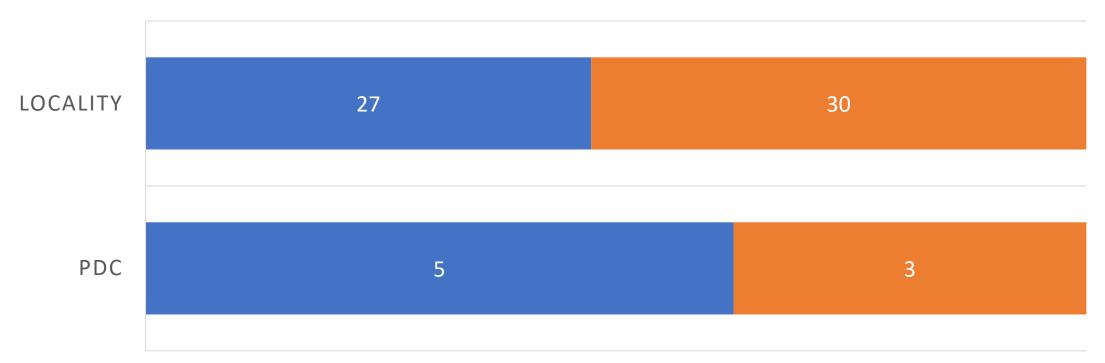
- Tailored Messaging
 - CRMP Primary Audience / End Users = PDCs, Localities, State Agencies
- Gathering regional and local perspectives
 - CRMP Phase I information summary
 - CRMP Phase II information gathering
- Information Sharing



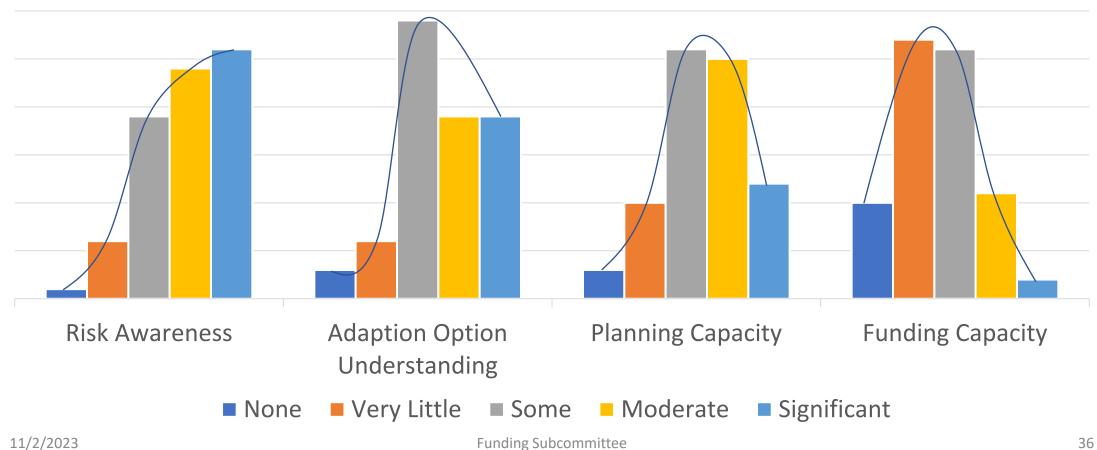
Making the Financial Case CRMP Phase I Organizational Survey Results

PARTICIPATION RATE

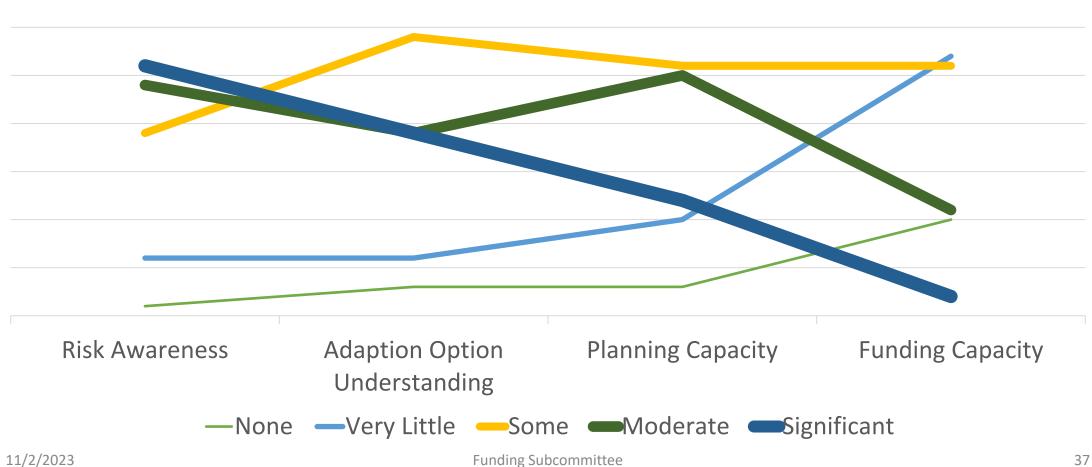
Participated Did Not Participate



Making the Financial Case **CRMP** Phase I Organizational Survey Results



Making the Financial Case **CRMP** Phase I Organizational Survey Results



Making the Financial Case CRMP Phase I Organizational Survey Results

What funding and finance tools have you considered for coastal resilience?

Virginia Grants Federal Grants Non-Federal Grants Public-Private Partnerships Taxes/Fees Special Assessments Bond Issuance Loans None of the above Unknown Other

Common Financial Hurdles Theme: Concerns with Federal Benefit Cost Analysis



Making the Financial Case CRMP Phase II Information Gathering

- Methods: Workshops, survey, phone interview, other...
- Who: Regional and local decision makers?
 - County/City Administrators
 - PDC Commissioners
- What: What are the questions we need to be asking?
- Coordination with Outreach & Coordination Subcommittee



Making the Financial Case End User Survey – Financial Questions (1/2)

 What types of financing have you successfully used to fund your flood resilience activities (projects, staffing, initiatives, planning, etc.)?
 a. Traditional Bonds, b. Green Bonds/Environmental Impact Bonds,

c. State Grant Funding , d. Federal Grant Funding,

e. Federal Technical Assistance/Cost Share, f. Special Tax, g. other: [write in]

- What types of financing have you sought to fund your flood resilience activities (projects, staffing, initiatives, planning, etc.)? [Repeat list from above]
- Are there any specific barriers that have prevented you from seeking or accessing financing for flood resilience activities? [Write in]



Making the Financial Case

End User Survey – Financial Questions (2/2)

- What could the State of Virginia do to help address barriers to seeking or accessing financing for flood resilience activities? [Likert Scale]
 - Model ordinances where policy making is required
 - Targeted education on financing need and options to elected officials or other leaders
 - Best practices and case studies highlighting where flood resilience funding has been successful and why
 - Training for local government staff and/or elected officials regarding setting up structures to support flood resilience financing
 - Targeted technical assistance for navigating applications and/or setting up structures to manage resilience
 - Resources for evaluating grant funding options (go/no go decision making)
 - Metrics to support prioritize action for flood resilience
 - Other: [write in]
- Any other opportunities for the State of Virginia to support your flood resilience efforts? [Write in]

Making the Financial Case Information Sharing



The report presents several key findings:

- 1. Mitigation saves, but it doesn't do so in proportion to individual stakeholder investments.
- 2. Co-beneficiaries can share the cost of such investments but they face similar challenges to those of the property owner.
- 3. Public-private coordination is essential.

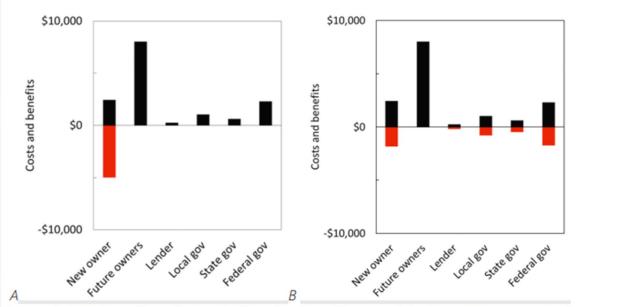


Figure A-4. Costs and benefits in a decision situation with owner 2, lender, and governments: A. moderate hazard, without incentives and B. moderate hazard, with incentives. Notice how at moderate hazard, even though the societal benefit-cost ratio is above 1, without incentives the investment does not make sense to the owner on a benefit-cost basis. With incentives, the owner's net cost drops from \$5,000 to \$1,800 and the investment provides a benefit-cost ratio over 1.0.



Document Opportunities for Financial State Support and Leadership

Top Down

 State-Led Local Support

Bottom Up

 Local-Led State Support

- Where is state leadership vs support needed?
- What does the state leadership vs support look like?
- What are the challenges and opportunities to implement state leadership vs support?
- Are there local led program that could be scaled to a larger region?



Document Opportunities for Financial State Support and Leadership

DRAFT TEMPLATE	Local-led efforts with state support	State-led efforts with local support
Existing	 DEQ CZM Program PDC Funding CFPF and RVRF Grant Funds [Others] 	 VDEM – FEMA Applications [Others]
Gaps/ Opportunities	 Financial Training and Technical Support? 	 [Fill in the Blank]
Examples Beyond VA	• [Fill in the Blank]	New Jersey Blue Acres



Providing Guidance and Information Overview

- Financial Tool Sheets
- Financial Process Mapping
- Other
 - Parametric Insurance Feasibility Study
 - Public vs Private Land Ownership Mapping



Providing Guidance and Information Financial Tool Sheets

- Expand on limited information provided Phase I
- Make relevant to Virginia regarding implementation and case study examples
 - Does Virginia code allow localities to take advantage of the financial tools?
 - Where has this financial tool succeeded?
 - End user challenges or logistics that prevent implementation?
- How do these tools influence behavior?
- How do/are private companies leverages these financial tools?
- Which financial tools might be suited to a state agency leadership role?
- When localities lack the capacity to implement a funding or financing mechanism, what could the state do to augment this capacity?



Providing Guidance and Information Financial Tool Sheets

Inventory of VA tools and additional VA tools needed

NOAA FUNDING AND FINANCING: Options and Considerations for Coastal Resilience Projects

Funding

- <u>Taxation</u>
 - State
 - Agencies
 - Local
 - Special Tax District
 - Community Development Authority
- Fees
- Grants
- Public-Private Partnership
- Crowdfunding
- Voluntary Surcharge

Financing

- Loans
- State Revolving Funds
- <u>Bonds</u>
 - Local Government Bonds
 - Environmental Impact Bond
 - Green Bond
 - Resilience Bond
- <u>Insurance</u>
 - NFIP/Private Flood Insurance
 - Event-Based Insurance (Parametric Insurance)



Providing Guidance and Information Financial Tool Sheets

• Financial Adjacent Tools?

- Purchase/Transfer of Development Rights
- Land Use Value Assessments
- Easements
 - Conservation, Rolling, Climate
- Acquisition
- Condemnation/Reverse Condemnation
- Resilience Banks
 - Wetlands, Watershed, ...
- [Others?]



Providing Guidance and Information Financial Process Mapping

- Funding & Financing Process Maps
 - Process flow chart
 - Resources and skillsets needed at each step in the process
 - Cashflow requirements
 - Best practices for success
 - Decision support tool
 - Screening checklist





Providing Guidance and Information Parametric Insurance

Tide (and stream?) gauge network to implement parametric insurance

- Feasibility Study
 - What is the coverage threshold for private insurers to start providing coverage?
 - Where are water level gauges needed across the Region?
 - Total Coverage? X% Population/Structure Coverage?
 - What is the cost to install and manage the gauge network?
 - Initial capital costs for installation and data management?
 - Yearly operating and maintenance costs
 - What are the co-benefits from additional water level information?
 - Are there areas that should be prioritized to phase in implementation?
- Pilot Project MPPDC



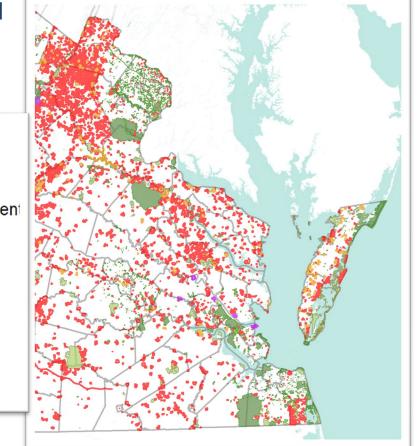
Providing Guidance and Information Private vs Public Lands Dataset

Use Case

- Implementation challenges
 - Federal funding for private land
 - Public action on private land
- Data
 - Ownership
 - Management

Virginia's Managed Conservation Lands Map







Providing Guidance and Information Training and Technical Support

- What is needed beyond what is included in the "Plan"?
- Is training and technical supported needed to build financial capacity?

Comments + Questions

Next Steps

- Prior to the next meeting
 - Subcommittee members to submit additional financial needs across the lines of effort
- At the next meeting
 - Subcommittee members to prioritize financial needs
 - CRMP Phase 2 vs Future Plans
 - DCR to provide an overview of other State/Regional Plan financial sections

New Business

Subcommittee Members Discussion

Action Items, Scheduling

- Action Item Review
- 2024Q1 Meeting
 - Date/Time
 - Location
 - Agenda Items

Public Comment

If you would like to provide public comment, please let us know using the Chat window.