

Hampton Roads Coastal Resources Management Technical Assistance Program FY2023 Final Report

WR25-01 | APRIL 2025
GRANT # NA23NOS4190255 | TASK 43



HAMPTON ROADS PLANNING DISTRICT COMMISSION

CHESAPEAKE

Debbie Ritter
Ella Ward
Christopher Price
Brian Solis
VACANT

FRANKLIN

Paul Kaplan
Rosylen Oglesby

GLOUCESTER COUNTY

Phillip Bazzani
Carol Steele

HAMPTON

James Gray, Vice-Chair
Steven Brown
Mary Bunting

ISLE OF WIGHT COUNTY

Joel Acree
Randy Keaton

JAMES CITY COUNTY

Michael Hipple
Scott Stevens

NEWPORT NEWS

Phillip Jones
Cleon Long
Alan Archer

NORFOLK

Kenneth Alexander
Courtney Doyle
Patrick Roberts
VACANT
VACANT

POQUOSON

David Hux
Randall Wheeler

PORTSMOUTH

Shannon Glover, Chair
Steven Carter

SMITHFIELD

Steven Bowman
Michael Stallings

SOUTHAMPTON COUNTY

William Gillette
Brian Thrower

SUFFOLK

Leroy Bennett
Albert Moor

SURRY COUNTY

Walter Hardy
Melissa Rollins

VIRGINIA BEACH

Robert Dyer
Stacy Cummings
Barbara Henley
Robert Remick
Amelia Ross-Hammond
Joash Schulman
Patrick Duhaney

WILLIAMSBURG

Douglas Pons
Andrew Trivette, Treasurer

YORK COUNTY

Sheila Noll
Mark Bellamy

Robert A. Crum, Jr.
Executive Director/Secretary

**HAMPTON ROADS COASTAL RESOURCES MANAGEMENT
TECHNICAL ASSISTANCE PROGRAM
FISCAL YEAR 2023-2024**

Final Report

This report was produced, in part, through financial assistance from the Virginia Coastal Zone Management Program in the Virginia Department of Environmental Quality through Grant No. NA23NOS4190255 from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its sub-agencies. Federal financial assistance for this project amounted to \$99,000 or approximately 50% of the total project cost.

This project was included in the Hampton Roads Planning District Commission FY 2024 Work Program, approved by the Commission on May 18, 2023, and in the Hampton Roads Planning District Commission FY 2025 Work Program, approved by the Commission on May 16, 2024.

Prepared by the staff of the Hampton Roads Planning District Commission



April 2025

REPORT DOCUMENTATION

REPORT TITLE:

Hampton Roads Coastal Resources Technical Assistance Program Fiscal Year 2023-2024

REPORT DATE:

February 2025

AUTHORS:

Benjamin J. McFarlane, AICP, CFM
Chief Resilience Officer
bmcfarlane@hrpdcva.gov

GRANT/SPONSORING AGENCY:

DEQ/NOAA/LOCAL FUNDS

ORGANIZATION:

Hampton Roads Planning District Commission
723 Woodlake Drive
Chesapeake, Virginia 23320
(757)420-8300
<https://www.hrpdcva.gov>

ABSTRACT

This report describes the coastal resources technical assistance program conducted by the Hampton Roads Planning District Commission during FY 2023 – 2024 through its Coastal Resources Management Program. This program encompasses environmental impact review, participation in state and federal programs, coordination of regional programs addressing environmental issues, public information and education, and technical assistance to Hampton Roads localities. It contains representative examples of technical work, comment letters, outreach materials, and associated materials generated and used in assisting the region's seventeen local governments, supporting the Virginia Coastal Zone Management Program, and working with the other Planning District Commissions in Virginia's Coastal Zone.

ACKNOWLEDGEMENTS

This report was produced, in part, through financial assistance from the Virginia Coastal Zone Management Program in the Virginia Department of Environmental Quality through Grant No. NA23NOS4190255 from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its sub-agencies.

This project was included in the Hampton Roads Planning District Commission FY 2024 Work Program, approved by the Commission on May 18, 2023, and in the Hampton Roads Planning District Commission FY 2025 Work Program, approved by the Commission on May 16, 2024.



Virginia Coastal Zone
MANAGEMENT PROGRAM



Table of Contents

Introduction	1
Program Objectives.....	3
Program Accomplishments	4
EIA/EIS and Federal Consistency Review (Product #1)	4
Public Information, Education, and Training (Product #2)	4
Regional Coordination Process (Product #3)	7
Regional Environmental Committee	8
Participation in State and Federal Programs	12
Virginia Coastal Zone Management Program	13
Chesapeake Bay Program	13
Regional Technical Studies and Special Projects (Product #4)	14
Subsidence Research Coordination	14
Lower Chickahominy Watershed Collaborative.....	14
Combined Flooding Layers.....	15
Flood Insurance Trends.....	17
Local Assistance and Coordination	17
Benefits Accrued from Prior CZM Grants (Product #5)	18
Regional Resilience Coordination and Technical Assistance (Product #6)	19
Resilience Coordination	19
Coastal Resiliency Master Plan Development Support.....	21
Resilience Project Database Support	21
Identification of Regional Resilience Priorities and Needs	21
Conclusions	22

This page intentionally left blank.

Introduction

In March 2023, the Hampton Roads Planning District Commission (HRPDC) submitted a proposal to the Virginia Coastal Zone Management Program (Virginia CZM) for funding to continue HRPDC's Technical Assistance Program. Funding from this program allows HRPDC to provide technical assistance on a variety of environmental and coastal resources management issues to its seventeen (17) local governments and to coordinate their responses to those issues.¹ HRPDC also provides assistance to the incorporated towns in the region as well as to a wide variety of other stakeholders, including non-governmental organizations, academic institutions, and other for-profit and not-for-profit entities. This program has operated successfully with financial assistance from Virginia CZM since the latter's inception in 1986. In October 2023, HRPDC was awarded financial assistance to maintain its Technical Assistance Program through September 2024. This report provides an overview of the activities and accomplishments of the Hampton Roads Coastal Resources Technical Assistance Program during that period.

The Hampton Roads Technical Assistance Program is a comprehensive program, providing on-call staff capacity, regional coordination mechanisms, and technical analysis and research capabilities. It assists the region's localities on local issues in a timely manner, enables a collective and timely response to regional, state, and federal issues, and facilitates cooperation and coordination among the localities. The Technical Assistance Program provides the resources to begin many efforts which are later funded through specific grants or local assessments. In other cases, the program allows for the continuation of efforts after initial funding. Examples of these programs include HRPDC's participation in the Chesapeake Bay Program and planning support for outdoor recreation. In several cases, Virginia CZM funding for this program has provided seed money allowing the region to undertake new environmental initiatives, such as the Regional Water Supply, Groundwater, Wastewater, Stormwater Management, and Coastal Resiliency Programs, including their public information and education components. These regional initiatives are now institutionalized and have been enhanced through dedicated local funding. These regional programs are unique examples of intergovernmental cooperation that promote responsible use and management of coastal resources in the Commonwealth.

The Hampton Roads Technical Assistance Program also enables HRPDC to participate in and support key elements of the Virginia CZM program, such as the environmental impact review and federal consistency determination processes, wetlands and dune regulations, Chesapeake Bay Preservation Area Designation and Management regulations, air quality regulations, and several state water quality programs. This participation results in cost and time savings to the state by educating localities collectively about state and federal initiatives and coordinating local government input to these efforts. Over the past thirty-eight (38) years, several hundred local government staff members from the region's seventeen (17) local governments have received technical training in topics such as wetlands regulations and delineation,

¹ The Hampton Roads Planning District Commission consists of the Cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg, the Counties of Gloucester, Isle of Wight, James City, Southampton, Surry, and York, and the Town of Smithfield.

Chesapeake Bay Preservation Act (CBPA) implementation, erosion and sediment control, stormwater management, low impact development, environmental site design, floodplain management, geographic information systems, land conservation, land use planning, resilience planning, green infrastructure, watershed management, and comprehensive coastal resources management. Local government board members, staff from other PDCs, and representatives of the private sector also participated. As a result, the capacity of the region to address these issues has increased across the governmental, non-government, and private sectors.

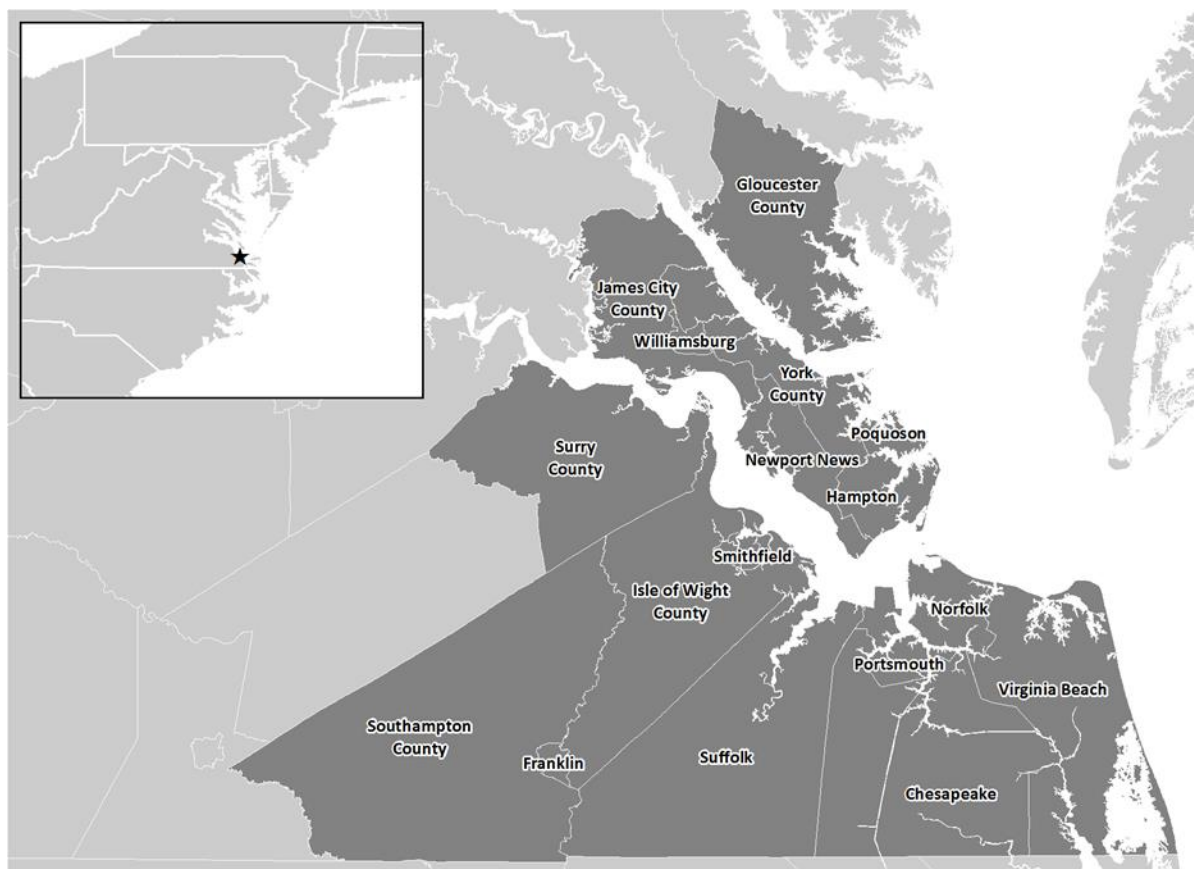


Figure 1: Map of Local Government Members of the Hampton Roads Planning District Commission

Through review of environmental impact documents and coastal zone federal consistency determinations, the regional coastal resources management program has also facilitated rapid resolution of local government concerns with the impacts of state projects proposed by the Virginia Department of Transportation (VDOT), the Virginia Community College System, state supported colleges and universities, and others, as well as federal projects such as federally funded or assisted construction projects, harbor dredging, military facility construction and operations, military-civilian encroachment issues, offshore energy and resource planning, and related resource management programs.

The Technical Assistance Program allows HRPDC to serve as a central source of environmental data and information, including water and wastewater data, soil surveys, historic aerial photographs, and regional land use data. HRPDC also houses and collects a wide variety of GIS datasets from various federal, state,

and local partners, such as U.S. Census data, high-resolution elevation data, and land cover data, as well as datasets developed by HRPDC and Hampton Roads Transportation Planning Organization (HRTPO). Many of these data resources and related applications are housed on HRPDC's regional GIS data portal, HRGEO (www.HRGEO.org), which was launched in 2018. In FY 2023-2024, HRPDC began the process of transitioning to ArcGIS Enterprise, which will further enable to HRPDC to develop online applications and provide data services.

The FY 2023 – 2024 Hampton Roads Technical Assistance Program enabled the region's localities to continue to address, in a comprehensive and integrated fashion, many aspects of coastal resources management: Chesapeake Bay issues (including the Chesapeake Bay Program and CBPA), environmental impact review, local land use and comprehensive planning, alternative energy development, wetlands protection, shoreline management, coastal resiliency, public access, and GIS data analysis. The program has allowed the continuation of regional support for and participation in Virginia CZM activities, regional participation in other state and federal initiatives, completion of necessary technical studies, technical assistance to the region's localities, and conduct of public information and education activities.

Program Objectives

The Hampton Roads Technical Assistance Program has six (6) primary objectives. These objectives, while expanded in scope, have remained largely the same since the program's inception. They are:

- 1) To assist Hampton Roads localities in implementing Virginia CZM recommendations, related state and federal environmental management programs, and related state legislation and regulations.
- 2) To support the Commonwealth of Virginia in implementing the Virginia CZM Program through coordination of local and regional review of environmental impact assessments/statements and applications for state and federal environmental permits and related environmental documents and by serving as an information conduit between the state and localities on coastal resource management issues.
- 3) To complete regional environmental studies that are necessary to support local government consideration of state and federal priorities.
- 4) To enable the Hampton Roads region to continue to play an active role in the development, implementation, and refinement of the Virginia CZM Program, the Chesapeake Bay Program, and related environmental initiatives.
- 5) To improve the coordination and quality of local and regional decision-making concerning coastal and related environmental resources.
- 6) To increase public awareness of the value of coastal resources and of the local and regional efforts to manage them.

To accomplish these objectives, a comprehensive program has been structured involving a range of activities in the following categories: regional coordination, environmental impact review, public information and education, training, regional technical studies, and technical assistance.

Program Accomplishments

EIA/EIS and Federal Consistency Review (Product #1)

HRPDC staff reviews and comments on applications for state and federal regulatory permits, including the associated Environmental Impact Assessments/Statements or federal consistency determinations. Local staff representatives are regularly contacted to identify any concerns individual local governments may have with specific projects. On occasion, the Hampton Roads Planning District Commission may be informed on projects with significant regional or local impacts. Generally, no formal action is taken by the Commission because of these notifications. However, historically, the Commission has requested more extensive HRPDC staff and local government review of particular issues. HRPDC staff reviews requests for comments from DEQ and responds as appropriate. From October 1, 2023, through September 30, 2024, HRPDC staff provided comments on two (2) federal consistency determinations (DEQ#24-039F – FAA NIA Runway 14/32 Closure and DEQ #24-042F – ACOE Bellwood Forest Section II). HRPDC reviewed other projects as requests for comments were sent out by DEQ staff but did not provide comments. HRPDC, in cooperation with the localities, works to ensure that projects are coordinated with and meet local government requirements. HRPDC's responses are combined with any others from state agencies when DEQ makes its final determinations. While these determinations (and the collected comments) are conveyed back to HRPDC, DEQ staff does not generally identify any specific impacts to projects based on HRPDC staff comments. However, in several cases DEQ staff or staff from other state agencies have followed up with HRPDC staff to have comments clarified.

Coordination of review and comment on environmental documents with the region's localities is frequently problematic, because of time constraints placed on the review process by the state and, in some cases, by project applicants who request expedited review from the state. In addition, projects are often submitted for environmental impact review before designs are complete. Localities often wait for permit applications, which require complete designs and plans, prior to review.

Public Information, Education, and Training (Product #2)

An integral component of the Hampton Roads Technical Assistance Program is the provision of public information and education on environmental issues in the Hampton Roads region. Provision of public information and education was identified by the participating localities at the outset of the program in 1986 as a critical need that could be met cooperatively through HRPDC. Since that time, HRPDC staff has provided written communications and briefings to the Commission and a wide range of interest groups on environmental issues and has provided regular briefings to many of those groups. These efforts continued during the grant year.

To ensure that the members of the HRPDC board are kept informed about the status of ongoing HRPDC coastal resources management program activities and pending environmental issues that may affect the Hampton Roads region, HRPDC staff routinely briefs the Commission on coastal resources management issues of importance. During the year, briefings were given to the HRPDC board on regional legislative

priorities, roadway flooding sensors, flood insurance outreach and education, greenhouse gas mitigation programs, and recycling.

HRPDC staff has provided briefings on regional environmental programs, environmental issues and state and federal regulations to a variety of groups and given presentations on related HRPDC technical studies and programs at several state, regional, and national conferences. Briefings are also provided to state agency boards, legislative commissions, local government planning commissions, city councils/county boards, and town councils on request. During the grant period, HRPDC staff presented individually or on panels on several environmental issues, including coastal resiliency, floodplain management, flood insurance, and locality-military coordination. These meetings and presentations are summarized in Table 1.

HRPDC regularly updates its website, www.hrpdcva.gov, with news articles and reports from HRPDC staff. During this grant, HRPDC planning staff posted nine (9) entries related to coastal management issues, covering topics such as local water quality, flooding, stormwater management, outdoor recreation, outdoor cleanup events, and solar power development. HRPDC overhauled its website in 2024, and it continues to add and update program information, meeting materials, presentations from conferences or other outside events, and technical reports and other work products. All Commission meeting agenda materials are posted and available on the HRPDC website. The website also contains an extensive section devoted to HRPDC's regional planning, coastal resiliency, and water resources programs, including links to other federal, state, local, and private sector sites. Efforts to further enhance the website remain ongoing. An "HRPDC Meeting in a Minute (...or two)" video and summary is emailed to HRPDC's distribution list after each meeting, and the meetings can be viewed on the organization's YouTube channel.² Recordings of many virtually held meetings have also been posted to the agency's website and YouTube channels.

² <https://www.youtube.com/channel/UCbfXhXsIMTXxq9wEltbPBVg>

Table 1: FY23-24 Coastal Resources Presentations by HRPDC Staff

Date	Event/Audience	Presentation Title
December 1, 2023	Advancing Land Conservation in Hampton Roads	“Planning for Land Conservation and Resilience in Hampton Roads”
December 14, 2023	HRPDC/HRTPO Community Advisory Committee	“Local and Regional Planning for a Resilient Hampton Roads”
March 29, 2024	American Society for Public Administration (Hampton Roads Chapter)	“Toward a More Resilient Hampton Roads”
April 10, 2024	2024 Environment Virginia Symposium	“Investing in Resilience: Virginia’s Community Flood Preparedness Fund”
May 29, 2024	Coastal Virginia CRS User Group	“Hampton Roads Regional Community Rating System Support”
June 25, 2024	Chesapeake Bay Program Land Use Workgroup	“Unpaving Paradise: Using Land Cover Data to Inform Public Policy & Showcasing a Green Parking Lot Retrofit”
July 11, 2024	FHWA Resilience Peer Exchange	“Integrating Resilience Into Project Prioritization and Decision-Making”

Through the Regional Environmental Committee and other workgroups and committees, HRPDC staff has provided, facilitated, or hosted training on a variety of topics to localities. HRPDC has partnered with state or federal agencies on various training events by providing logistical support. HRPDC continues to partner with Old Dominion University (ODU) and Virginia Sea Grant to hold meetings of the Hampton Roads Sea Level Rise/Recurrent Flooding Adaptation Forum. HRPDC staff helps ODU faculty develop agendas, coordinate speakers, and publicize events. One (1) Forum was held on January 26, 2024. In addition, HRPDC staff has established a CBPA Working Group that brings together CBPA staff from each locality to share insights, ask questions, and discuss program implementation. This group met four (4) times during the grant year. HRPDC staff has also established a Coastal Resiliency Working Group to provide a forum for technical discussions on resiliency-related issues. This group met four (4) times during the grant year. Specific training opportunities are listed in Table 2.

Table 2: Educational and Training Opportunities Provided in FY23-24

Date	Topic	Event	Host	Attendance
October 5, 2023	Impacts of the Supreme Court's <i>Sackett</i> decision on Virginia's wetlands programs	HRPDC Regional Environmental Committee	HRPDC*	64
February 1, 2024	Overview of the new FishSwimPlay.com website and Chesapeake's Industrial Waterfront Study	HRPDC Regional Environmental Committee	HRPDC*	66
March 7, 2024	Solar Power Development Regulations in Gloucester County and BIL funding opportunities for land acquisition and habitat restoration	HRPDC Regional Environmental Committee	HRPDC	29
May 2, 2024	Virginia's Riparian Forest Buffer Action Plan, coagulant enhanced stormwater treatment, and CBPA resiliency guidance	HRPDC Regional Environmental Committee	HRPDC*	55
June 6, 2024	Hampton Natural Infrastructure Resilience Plan and hazardous materials regulations and policies in flood-prone areas	HRPDC Regional Environmental Committee	HRPDC	33
August 1, 2024	C-PACE financing, Chesapeake Bay Beyond 2025, and Military Installation Resilience	HRPDC Regional Environmental Committee	HRPDC*	47

*These meetings were held virtually.

Regional Coordination Process (Product #3)

The regional coordination component of HRPDC's Coastal Resources Management Technical Assistance Program includes the facilitation of meetings between the area's local governments and other organizations as well as participation in state and federal programs. Through the regional coordination process, HRPDC works to ensure that local government planning and implementation activities in the areas of stormwater management, water supply and groundwater management, wastewater, Chesapeake Bay, sea level rise, floodplain management, resiliency, and coastal zone management are coordinated and mutually supportive. This coordination process provides opportunities for local government innovation and enhancement of activities in each of these areas.

The Hampton Roads Technical Assistance Program enables HRPDC to maintain a regional coordination process on environmental issues while also providing links to other ongoing regional environmental programs. Through the Regional Environmental Committee, HRPDC staff support local governments in implementing legal requirements of various state and federal regulatory programs. This process also helps the region by providing support for coastal resources management and environmental education. The Regional Environmental Committee meets approximately ten to twelve times per year. The Hampton Roads Technical Assistance Program also enables HRPDC staff to support regional coordination on issues related to coastal resiliency, sea level rise, recurrent flooding, and other coastal hazards adaptation. These issues fall under the purview of HRPDC's Coastal Resiliency Committee. The Coastal Resiliency Committee meets on a quarterly schedule, with additional working group discussions of technical matters scheduled for off-months when necessary. Additional information on these efforts is described in a later section of this report.

During this grant year, HRPDC staff continued local government coordination of ongoing consideration of various environmental issues. Stormwater management, the Chesapeake Bay Program, solar power development, natural infrastructure, and floodplain management continue to be issues of considerable interest. One new focus during this grant year was the Climate Pollution Reduction Grant (CPRG) Program, under which HRPDC administers a grant-funded regional planning process. The meetings usually include presentations by HRPDC staff, local committee members, or state agency representatives and often include discussion of potential project ideas or responses to regulatory developments. Each meeting also includes opportunities for regional and local staff to provide status reports or ask questions on issues relevant to the committee. These meetings are all open to the public, and guests are allowed to ask questions and participate in discussions.

Regional Environmental Committee

The following meeting summaries describe the discussions of the HRPDC Regional Environmental Committee during the past year. During this grant year the Regional Environmental Committee met nine (9) times. Three (3) of the meetings were held in person, while the rest were held virtually via Zoom. Alternating meeting formats between in-person and virtual allows HRPDC staff to balance increasing attendance and accessibility with network building.

Meeting Date: October 5, 2023

Summary: The primary focus of this meeting was on wetlands protections and funding for environmental programs. The meeting featured a presentation from Mr. Dave Davis, DEQ, on the ramifications of the recent *Sackett* decision by the U.S. Supreme Court related to federal protections for wetlands under the Clean Water Act. The meeting also featured a presentation from Ms. Peggy Sanner, Chesapeake Bay Foundation, on the Virginia*forever* initiative and organization. The meeting also included briefings from HRPDC staff on the askHRgreen.org program and grant programs for resiliency initiatives and projects.

Outcome(s): Outcomes of this meeting included greater understanding of how the *Sackett* decision may affect local and state wetlands protection programs and awareness of environmental and resilience programs.

Total Attendance: 60

Total Stakeholders: 31

Meeting Date: November 2, 2023

Summary: This meeting featured a presentation from Mr. Joe Rieger, Elizabeth River Project, on the organization's 2023 State of the River Scorecard. The meeting also included a presentation from Ms. Whitney Katchmark, HRPDC, on the outcomes from the Commonwealth's Resilience Coordination Working Group related to how the state structures resilience planning and implementation. The meeting also included updates from HRPDC staff on updates to the Virginia Stormwater Handbook, regional legislative priorities, and the recommendations from a regulatory advisory panel on mitigation requirements for solar power projects.

Outcome(s): Outcomes of this meeting included increased awareness of progress in the environmental restoration of the Elizabeth River as well as state-level resilience policy discussions.

Total Attendance: 69

Total Stakeholders: 31

Meeting Date: January 4, 2024

Summary: The primary focus of this meeting was on stormwater management and resilience. The meeting featured a presentation from Ms. Mary-Carson Stiff, Wetlands Watch, on a Virginia CZM Project of Special Merit that is developing recommendations for designing living shorelines to account for sea level rise. The meeting also included a presentation from Ms. Jill Sunderland, HRPDC, on a parking lot retrofit project at HRPDC that will incorporate several stormwater management practices and updates from HRPDC staff on new LiDAR data and the 2024 General Assembly session.

Outcome(s): Outcomes of this meeting included increased awareness of efforts to develop implementation guidance for living shorelines and of legislative developments at the General Assembly.

Total Attendance: 62

Total Stakeholders: 27

Meeting Date: February 1, 2024

Summary: This meeting featured a presentation from Ms. Lucy Stoll, City of Chesapeake, on the City's Industrial Waterfront Study, which focuses on the Southern Branch of the Elizabeth River and incorporates environmental concerns, climate adaptation strategies, and economic development recommendations. The meeting also included presentations from HRPDC staff on updates to the Fish, Swim, Play website, the region's CPRG activities, and the 2024 General Assembly session.

Outcome(s): Outcomes of this meeting included increased awareness of local planning activities and regional initiatives related to greenhouse gas reductions and public access to water and other recreational assets.

Total Attendance: 66

Total Stakeholders: 27

Meeting Date: March 7, 2024

Summary: This meeting highlighted alternative energy production. The meeting featured a presentation on the Virginia Tech Corporate Research Center's clean hydrogen program by Mr. Tony Pierson. The meetings also featured a presentation from Mr. Sean McNash and Mr. Kevin Landry, Gloucester County, on solar energy development and regulation in Gloucester County. In addition, the meeting included presentations on updates to Virginia's Stormwater Handbook from HRPDC staff and Bipartisan Infrastructure Law (BIL) funding for land acquisition and habitat restoration by Mr. Lucas Manweiler, Virginia CZM.

Outcome(s): Outcomes of this meeting included increased awareness of Virginia Tech's research programs in Hampton Roads and increased knowledge of solar power development challenges and regulations.

Total Attendance: 29

Total Stakeholders: 14

Meeting Date: May 2, 2024

Summary: The primary focus of this meeting was on natural resources planning and stormwater management. The meeting featured a presentation from Ms. Meghan Mulroy-Goldman, Virginia Department of Forestry, on Virginia's new Riparian Forest Buffer Action Plan, which supports the Commonwealth's 2025 Chesapeake Bay goals. The meeting also featured a technical presentation by Mr. Jeff Herr, Brown and Caldwell, on coagulant enhanced stormwater treatment, a recently approved stormwater BMP enhancement for wet ponds. The meeting also included briefings from HRPDC staff on the draft Chesapeake Bay Preservation Act resiliency guidance and on the 2024 Environment Virginia Symposium.

Outcome(s): Outcomes of this meeting included increased awareness of state forestry planning efforts and the application of coagulant enhanced stormwater treatment. The meeting also provided input on regional comments related to the CBPA resiliency guidance.

Total Attendance: 61

Total Stakeholders: 29

Meeting Date: June 6, 2024

Summary: The primary focus of this meeting was resilience and environmental restoration. The meeting featured a presentation from Ms. Olivia Askew, City of Hampton, on the City's new Natural Infrastructure Resilience Plan. The meeting also featured a presentation from Mr. Cameron Bruce and Ms. Sam Von, Nansemond Indian Nation, on the Tribe's environmental restoration efforts. The meeting also included a briefing on HRPDC's hazardous floodwaters project by the study consultant, AEOCM, and on regional recycling trends and education by HRPDC staff.

Outcome(s): Outcomes of this meeting included increased awareness of local resilience initiatives and on tribal environmental concerns and activities.

Total Attendance: 33

Total Stakeholders: 16

Meeting Date: August 1, 2024

Summary: The primary focus of this meeting was on the Chesapeake Bay Program, with an additional focus on local planning. The meeting featured a presentation from Dr. KC Filippino, HRPDC, on the Chesapeake Bay Program's Beyond 2025 Committee draft report recommendations. The meeting also included a presentation from Mr. Andy Friedman, Virginia PACE Authority, on Commercial Property Assessed Clean Energy (C-PACE) programs in Virginia and from HRPDC staff on items of interest from the American Planning Association (Virginia Chapter) annual conference and on military-locality resilience planning and coordination.

Outcome(s): Outcomes of this meeting included greater awareness of potential changes to the Chesapeake Bay Program and emerging local and regional planning issues.

Total Attendance: 50

Total Stakeholders: 24

Meeting Date: September 5, 2024

Summary: The primary focus of this meeting was on environmental restoration and local planning. The meeting featured a presentation from Ms. Heather Lockwood, U.S. Army Corps of Engineers (USACE), and Mr. Jim Milliken, City of Virginia Beach, on the Lynnhaven River Basin Ecosystem Restoration Project. The meeting also featured a presentation from Mr. John Harbin, Chesapeake, on the Chesapeake Land Bank Authority. The meeting also included presentations from the Virginia Association of Counties and HRPDC staff on legislative priorities and brownfields programs, respectively.

Outcome(s): Outcomes of this meeting included increased awareness and knowledge of environmental restoration programs and efforts in the region, opportunities for local governments related to redevelopment, and potential topics for the upcoming General Assembly session.

Total Attendance: 36

Total Stakeholders: 19

Participation in State and Federal Programs

Several state and federal environmental programs encourage using regional organizations as a cost-effective mechanism for informing and engaging local governments and seeking their input. For example, the Chesapeake Bay Program in both its 1996 and 2002 Local Government Participation Action Plans recommended better use of technical assistance providers such as PDCs to serve as vehicles to distribute information and outreach on Chesapeake Bay-related issues. It also suggested developing a network of local officials and staff with expertise in dealing with resource protection issues. Virginia's Regional Cooperation Act strongly recommends this type of role for PDCs. Several programs, including Virginia CZM as well as state agencies such as the Departments of Conservation and Recreation, Emergency Management, and Environmental Quality, use the PDCs in this manner. Historically, NOAA's Section 312 evaluation of Virginia's CZM Program has recognized the benefits and cost-effectiveness of the network of PDCs in supporting Virginia CZM and in assisting their member local governments.

In the Hampton Roads region, the Hampton Roads Technical Assistance Program and HRPDC's various committees help provide this function. Both HRPDC staff and local government members of these committees (including the Regional Environmental Committee, Directors of Utilities Committee, and Coastal Resiliency Committee) frequently serve on state and federal advisory groups. On a regular basis, the participating localities request that HRPDC staff serve as their representative to these advisory groups. Alternatively, the committees may recommend a local government member to represent the region. In both cases, HRPDC committees provide all seventeen (17) member localities with a mechanism to participate directly or indirectly in many state or federal programs and efforts. Also, data and information on Hampton Roads conditions are provided by the Hampton Roads representative(s) (HRPDC or local government staff) to state and federal agencies on behalf of the localities, thus minimizing state and federal agency data collection and input costs. During FY 2023-2024, this program included regional participation in state or federal programs addressing water quality, resiliency, stormwater management, groundwater management, and the Chesapeake Bay Program.

HRPDC staff works closely with state and federal agencies on coordination of programs as they affect the Hampton Roads region. This work involves follow-up to previous studies conducted by HRPDC with Virginia CZM funding, serving on advisory committees supporting plan and regulatory development, and development of new cooperative initiatives involving state, local, federal, and private or non-governmental entities. During the past year, this included participating on the York River-Small Coastal Basins Roundtable and its Habitat Restoration Steering Committee (habitat protection and restoration), the VCRMP Technical Advisory Committee and several subcommittees (resilience), the Resilience Coordination Working Group (resilience), the James River Association's Living Shoreline Collaborative (natural resource protection and resilience), the Land Conservation Capacity in Hampton Roads workgroup (natural resource protection), and others. HRPDC staff also participated on local committees for Newport News's floodplain management plan and Norfolk's Program for Public Information committee.

Virginia Coastal Zone Management Program

During the grant period, HRPDC staff continued to participate in Coastal Policy Team (CPT) and coastal PDC meetings, contributing to the ongoing refinement of the Virginia CZM Program. HRPDC staff participated in four (4) CPT meetings on January 30, 2024 (semiannual), April 18, 2024 (BIL capacity funding discussion, July 11, 2024 (BIL competitive funding discussion), and September 30, 2024 (semiannual). HRPDC staff also participated in three (3) quarterly coastal PDC meetings on November 30, 2023 (hosted by PlanRVA), May 23, 2024 (hosted by Accomack-Northampton Planning District Commission), and August 6, 2024 (hosted by Crater Planning District Commission).

The Coastal PDCs provide a network linking all regional agencies and localities in the Coastal Zone to help address environmental issues. In recent years this network has provided support for multi-regional partnerships and initiatives, including the Chesapeake Bay, coastal resilience, ecotourism, working waterfronts, and planning for the Lower Chickahominy River Watershed. HRPDC staff has played an integral role in the development and enhancement of these larger networks. During the past year, HRPDC staff continued to support PlanRVA's coordination of the Lower Chickahominy Watershed Collaborative (LCWC) by participating on the steering committee and workgroups.

Chesapeake Bay Program

The Hampton Roads Technical Assistance Program continues to support HRPDC's participation, on behalf of its member localities, in the Chesapeake Bay Program. Beginning in FY 1998-1999, this element of the Program received increased emphasis through several initiatives, including the renewal of the Chesapeake Bay Local Government Advisory Committee (LGAC), establishment of a Metropolitan Areas Work Group, development of the Chesapeake Bay Agreement 2000 and development of new and revised Chesapeake Bay Program Implementation Strategies. The Commission's involvement with the Chesapeake Bay Program continued with the development of the Tributary Strategies and the Chesapeake Bay Watershed Model. Implementation of the Chesapeake Bay TMDL and aiding localities in complying with stormwater management permit requirements continue to be a major focus of HRPDC's environmental work.

In addition, both HRPDC and Hampton Roads local government staff maintain involvement on various federal and state advisory and regulatory committees. While this participation is also funded by other programs, HRPDC provides a mechanism, through the Regional Environmental Committee and Coastal Resiliency Committee, for those representatives to gather information and responses from other local governments in the region and to convey information from these advisory groups back to the region. HRPDC staff currently participates in the Chesapeake Bay Program's Water Quality Goal Implementation Team and Climate Resiliency Workgroup. This participation includes attending in-person meetings when possible and otherwise participating in conference calls or virtual meetings. HRPDC staff also supports the LGAC as needed.

Regional Technical Studies and Special Projects (Product #4)

HRPDC staff regularly coordinates with local and regional partners to identify timely and appropriate special projects or technical studies that address important regional issues. HRPDC staff and regional advisory committees identify potential topics for special projects or technical studies during the grant application process, but this grant also allows HRPDC staff to respond to emerging issues as they occur. During FY 2023-2024, HRPDC staff identified and completed four (4) such projects: coordination with the USGS and other regional stakeholders on subsidence research and data collection, including development of a new draft agreement for continued monitoring; continued support for the Lower Chickahominy Watershed Collaborative; development and refinement of combined flooding data layers incorporating riverine and coastal flooding; and an analysis of flood insurance policy trends in Hampton Roads.

Subsidence Research Coordination

In 2017, HRPDC began working with the USGS Virginia and West Virginia Water Science Center (VA-WV WSC) to develop and establish a benchmark monitoring network in southeast Virginia to monitor land subsidence at the regional scale. Twenty-two (22) sites were established in 2018 to allow annual data collection using geodetic grade global navigational satellite system observations. This data helps to inform discussion on several issues of regional concern, including coastal flooding, groundwater management, and land subsidence. This project was funded for five (5) years by HRPDC's Coastal Resilience Program. Data from the network is available through the USGS project website.³

Following the conclusion of the original five-year project, HRPDC and USGS VA-WV WSC engaged in a series of discussions to determine options for continuing this work. Topics of discussion included updating methods and procedures, coordinating with other subsidence research efforts in the Chesapeake Bay region, including other monitoring efforts as well as satellite data analysis. Through these discussions, a revised approach and scope of work was developed, which included continuing observations, evaluating sites to determine continued viability, and revisions to observation procedures. HRPDC anticipates beginning the next phase of the project in July 2025.

Lower Chickahominy Watershed Collaborative

HRPDC staff continues to support the LCWC, which is led by PlanRVA. This support includes appointing a representative to be on the Steering Committee, participating in planning discussions for summits and other meetings, and attending workgroup meetings. During the past grant year, HRPDC staff participated on the Land Conservation and Ecological Stewardship Workgroup, the Sustainable Economic Development and Protection of Tribal Sites and Traditions Workgroup, the Recreational Infrastructure and Marketing Workgroup, and the Steering Committee. During these meetings HRPDC staff participated in discussions, reviewed project materials, and helped plan for upcoming meetings and summits.

³ <https://www.usgs.gov/centers/virginia-and-west-virginia-water-science-center/science/hampton-roads-benchmark-monitoring>

Combined Flooding Layers

As part of its ongoing Coastal Resiliency Program, HRPDC regularly develops GIS layers to share with local governments for their individual planning efforts and to use for regional data and analysis products. During this grant year, HRPDC built on work from FY 2021-2022 by collecting and inventorying new regulatory and non-regulatory flood risk GIS data from Federal Emergency Management Agency (FEMA) flood insurance studies in the region, including preliminary products for Franklin, Isle of Wight County, Southampton County, and Suffolk, as shown in Figure 2 below.

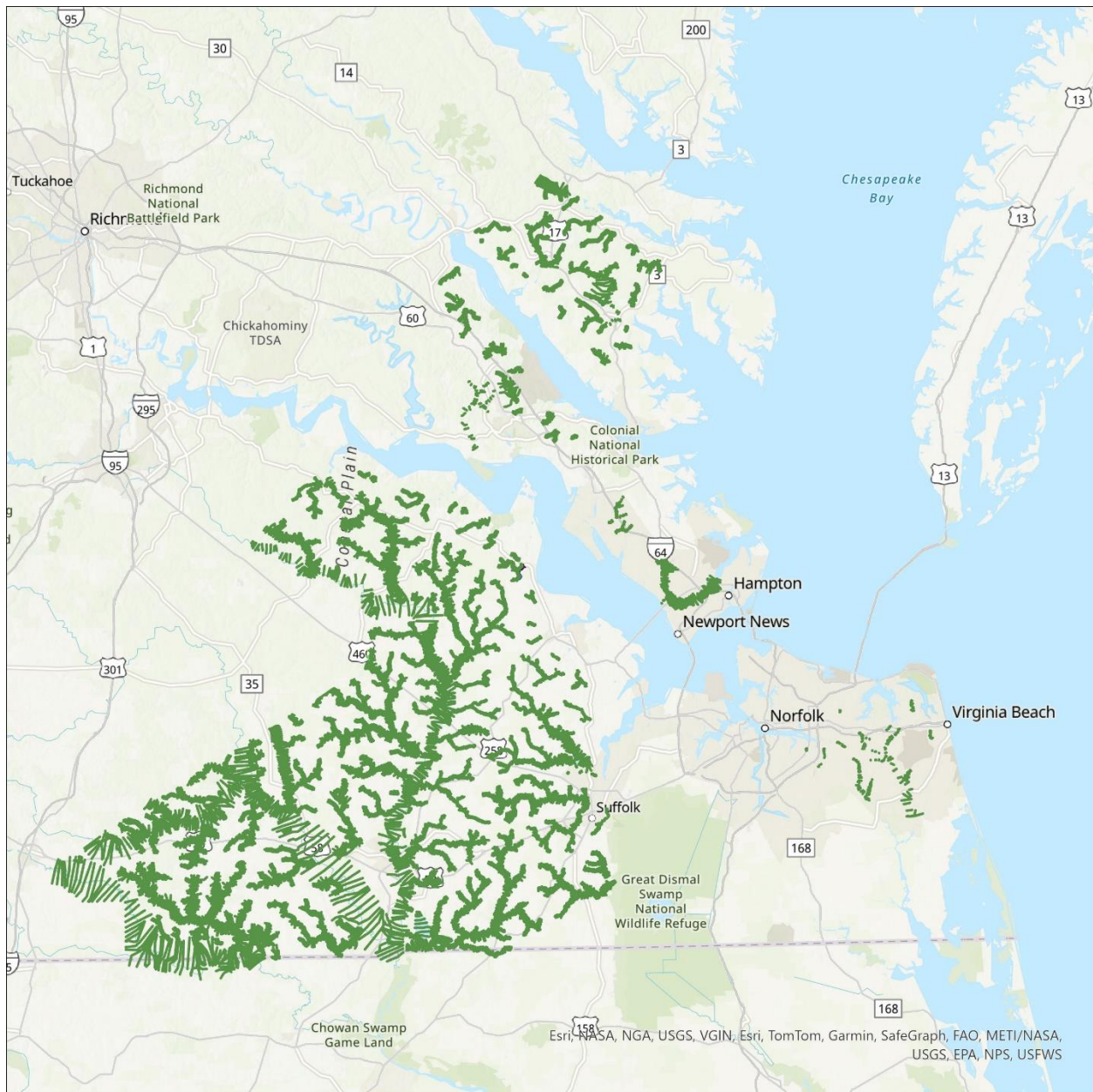


Figure 2: Hampton Roads Riverine Floodplain Cross Sections

These new preliminary products significantly increase both the coverage (in terms of the number of cross sections and streams) and the number of return periods modeled. As a result, the estimated values from the flood profiles for those four communities used in the previous work were updated and replaced. With the new riverine cross sections, HRPDC was able to create new riverine depth grids and new combined flood grids that incorporated both coastal and riverine flooding. An example of a combined flooding depth grid is shown in Figure 3 below. These layers will be made accessible to Hampton Roads localities and other stakeholders through HRGEO.

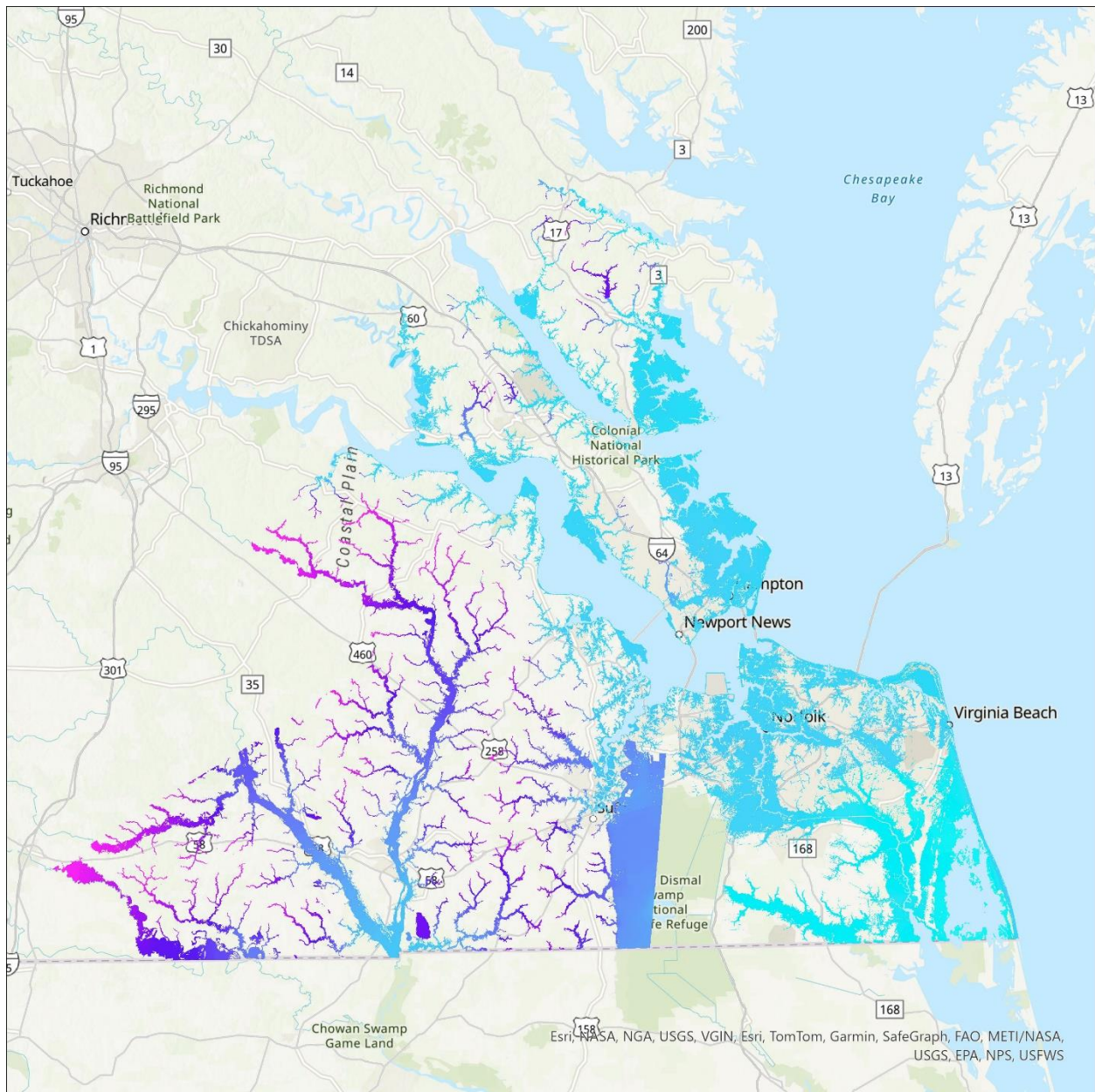


Figure 3: Example Combined Coastal and Riverine Flood Depth Grid

Flood Insurance Trends

HRPDC has been following changes to the National Flood Insurance Program (NFIP) and encouraging residents to consider purchasing flood insurance policies for several years as part of its Coastal Resiliency Program and Get Flood Fluent outreach campaign and website (<https://getfloodfluent.org>). During this grant year, HRPDC took advantage of OpenFEMA, FEMA's open data platform, to obtain and analyze flood insurance policy trends across the region. The primary goal of this analysis was to determine what effect recent changes to the NFIP, specifically the implementation of Risk Rating 2.0, were having on flood insurance policies in Hampton Roads. The analysis included using python notebooks to download and parse the data and ArcGIS Pro to develop visualizations for public presentations. The analysis showed that while average policy costs dropped between 2021 (when Risk Rating 2.0 was fully in place) and 2023, it was unclear whether this was due to a reduction in the cost of flood insurance or if it was due to those with expensive, non-mandatory policies choosing not to renew. Changes in the average policy cost ranged from a decrease of more than \$200 per year in Hampton, Norfolk, and Portsmouth to an increase of more than \$200 per year in York County. Nearly all Hampton Roads localities saw a decrease in the number of policies between 2020 and 2023. Overall, the analysis found that the average cost of policies for properties inside the Special Flood Hazard Area (SFHA), otherwise known as the 1% annual chance flood zone, decreased, while the average cost of policies for properties not located in the SFHA increased, continuing its long-term trend. Additional research and analysis is necessary to determine the causes of these trends.

Local Assistance and Coordination

This element of the Hampton Roads Technical Assistance Program entails staff support and assistance to local governments and private entities as they address key coastal resources and other environmental issues such as sea level rise adaptation, floodplain management, water quality, land conservation, habitat restoration, shoreline management, energy development, wetlands and dune protection, public access, and nonpoint source pollution in their comprehensive planning processes and related activities. Specific local projects or issues to be addressed through this element are identified by the localities throughout the grant year. These requests encompass assisting on grant proposals or permit issues, identification of state or federal agencies that may be of assistance for local projects, providing information about legislation or regulations, identifying technical resources that may be useful to a locality, or responding to an elected official's request for information. Local governments and other entities frequently turn to HRPDC for assistance on GIS mapping and analysis projects. Through this element of the program, HRPDC staff also assists private or non-profit entities in their initiatives. A major component of these services is the maintenance and sharing of GIS data on a variety of topics, such as recreational assets, resiliency, and parcel boundaries. In addition, HRPDC staff continues to work with local government representatives to identify research priorities for issues of interest. HRPDC staff continues to utilize the region's GIS data portal, www.HRGEO.org, by adding GIS datasets created as part of regional initiatives and developing Storymaps, Dashboards, and other applications. This portal provides a convenient way for HRPDC and HRTPO to share data with outside organizations. A "Map of the Month" feature highlights a new topic each month. In the past year, these topics included population distributions in the region, population

distributions in the region⁴, solar power projects⁵, results from the 2024 Great American Cleanup,⁶ housing construction,⁷ electrical vehicle charging stations.⁸ HRPDC continues to expand its GIS capacity across the organization. During this grant year, HRPDC continued implementation of recommendations from the previously completed GIS Needs Assessment and GIS Strategic Plan, including creating an internal steering committee and procuring new equipment and services. Once completed, this effort will allow HRPDC and HRTPO to better provide online tools and data to regional stakeholders.

Benefits Accrued from Prior CZM Grants (Product #5)

In October 2008, HRPDC was awarded the first of a series of grants by Virginia CZM to study the impacts of coastal hazards on the Hampton Roads region and identify potential responses to those impacts (FY '08 Task 12.03). Additional grants were awarded in 2009 (FY '09 Task 12.04), 2010 (FY '10 Task 12.04), 2011 (FY '11 Task 51), 2014 (FY '13 Task 54), 2015 (FY '15 Task 94.01), 2017 (FY '17 Task 84), 2018 (FY '18 Task 84), 2019 (FY '19 Task 84), 2020 (FY '20 Task 43), 2021 (FY '21 Task 43), 2022 (FY '22 Task 43), and FY2023 (FY '23 Task 43 and Task 91.04). These efforts have required considerable research and analysis and have resulted in several reports which are now available on HRPDC's website. These reports document the results of various analyses and investigations and form the basis for an ongoing regional discussion of how local governments in Hampton Roads should respond to coastal hazards impacts, particularly sea level rise. Based in part on this work, HRPDC's member localities have consistently recognized the importance of these issues and have support regional coordination to address them. In 2016, HRPDC created a new, locally funded Coastal Resiliency Program, to provide coordination and technical assistance services to the region's localities. This program continues to identify and implement new priorities, such as partnerships with the Department of Defense and the U.S. Geological Survey, implementing roadway flooding sensors, and developing regional design guidelines.

Support from Virginia CZM through focal area and Technical Assistance grants has been foundational for HRPDC's coordination and technical work. This has allowed HRPDC staff to development not only expertise and capacity in these matters but also to be able to identify gaps and opportunities. During this past year, HRPDC used this capacity to support HRTPO's regional long-range transportation plan. This plan, which guides the region's major transportation investments, incorporates sea level rise and flooding layers created by HRPDC staff into a scenario-based planning approach that will be used to help prioritize investments in highways, bridges, tunnels, and other transportation infrastructure in the region.

⁴ <https://www.hrgeo.org/apps/b588b42041c74f3eb043c388654eb0a6/explore>

⁵ <https://www.hrgeo.org/apps/8a8a5804432e41c0b44fdf3bed4eef2c/explore>

⁶ <https://www.hrgeo.org/apps/b325669e935a47f389098bd77e51577b/explore>

⁷ <https://www.hrgeo.org/apps/ef549d5d9faa4021bfa18866b713bb0f/explore>

⁸ <https://www.hrgeo.org/apps/02f8438e2831450faef362d805d2fd45/explore>

Regional Resilience Coordination and Technical Assistance (Product #6)

This product encompasses HRPDC's regional resiliency initiatives that are supported by Virginia CZM, including coordination efforts, supporting the Virginia Coastal Resilience Master Plan (VCRMP), and identifying regional resilience priorities and needs.

Resilience Coordination

HRPDC coordinates and manages a regional resiliency program that includes policy development, technical analysis, research, and coordination. The coordination aspect of this program is conducted through the HRPDC Coastal Resiliency Committee, which includes representatives designated by each HRPDC locality chief administrative officer. The committee provides feedback on regional initiatives, serves as a forum for discussing best practices and sharing information, and helps develop regional recommendations. The following meeting summaries describe the discussions of the HRPDC Coastal Resiliency Committee during the past year. During this grant year the Coastal Resiliency Committee met four (4) times.

Meeting Date: December 8, 2023

Summary: The primary focus of this meeting was coastal hazards. The meeting featured updates from the HRDDC staff on the Community Flood Preparedness Fund (CFPF) and Resilient Virginia Revolving Fund, the regional roadway flooding sensors project, HRPDC's regional legislative agenda for the 2024 General Assembly Session, LiDAR elevation data, and resilient design guidelines. In addition, the meeting included presentations from Ms. Emily Steinhilber, Environmental Defense Fund, on proposed legislation for disclosing flood risk in real estate transactions and from Ms. Mary-Carson Stiff, Wetlands Watch, on a forthcoming project to develop guidance for designing living shorelines to account for sea level rise. updates from HRPDC staff on the CFPF, the HRPDC board's submitted public comments on proposed regulations from the State Air Pollution Control Board related to the Regional Greenhouse Gas Initiative, the VCRMP, and HRPDC's 2023 legislative agenda. The meeting also included several updates from committee members and other participants.

Outcome(s): Outcomes of this meeting included increased awareness of potential resilience legislation and the status of local and regional resilience initiatives.

Total Attendance: 27

Total Stakeholders: 19

Meeting Date: March 22, 2024

Summary: The primary focus of this meeting was coastal hazards. The meeting featured briefings and updates from HRPDC staff on the CFPC and Resilient Virginia Revolving Fund, regional resilient design standards, outcomes from the 2024 General Assembly session, a proposed USACE rule, and the VCRMP.

Outcome(s): Outcomes of this meeting included increased awareness of legislative developments and local and regional resilience initiatives.

Total Attendance: 24

Total Stakeholders: 18

Meeting Date: June 28, 2024

Summary: The primary focus of this meeting was coastal hazards. The meeting featured a presentation from Ms. Emily Steinhilber, Environmental Defense Fund, and Ms. Mary-Carson Stiff, Wetlands Watch, on efforts to require disclosure of flood risk information during real estate transactions. The meeting also included updates from HRPDC staff on the CFPF and Resilient Virginia Revolving Fund, the VCRMP, the regional elevation certificate database, local outreach meetings for state resilience planning initiatives, and resilient design standards.

Outcome(s): Outcomes of this meeting included increased knowledge of the state of flood disclosure requirements and related legislative efforts, as well as increased awareness of local and regional resilience initiatives.

Total Attendance: 19

Total Stakeholders: 14

Meeting Date: September 27, 2024

Summary: The primary focus of this meeting was coastal hazards. The meeting featured updates from HRPDC staff on the CFPF and Resilient Virginia Revolving Fund, potential legislation to be considered in the 2025 General Assembly session, the FY2026 Coastal Resiliency Program Budget, the VCRMP, and regional resilient design standards. The meeting also included a briefing and discussion on USACE Coastal Storm Risk Management Studies in the region underway in Norfolk, Virginia Beach, and the Peninsula.

Outcome(s): Outcomes of this meeting included increased awareness of the status of local and regional resilience initiatives, coordination on USACE studies, and support for the FY26 HRPDC Coastal Resiliency Program work program and budget.

Total Attendance: 22

Total Stakeholders: 15

The Coastal Resiliency Working Group provides a forum for in-depth discussion of policy and technical issues that require more time and focus than is available during typical committee meetings. During this grant year, the Coastal Resiliency Working Group met four (4) times on February 23, 2024, May 31, 2024, July 26, 2024, and August 23, 2024. Topics included the Resilience Adaptation Feasibility Tool (RAFT), resilience legislation, resilient design guidelines, and the RISE flood insurance challenge.

Coastal Resiliency Master Plan Development Support

During this grant year HRPDC staff continued to support the VCRMP. Ms. Whitney Katchmark, HRPDC Principal Water Resources Engineer, and Mr. Ben McFarlane, HRPDC Chief Resilience Officer, served on the Coastal Resilience Technical Advisory Committee (TAC) and on several subcommittees. Participation included attending and participating in quarterly TAC meetings on December 15, 2023, March 13, 2024, and June 18, 2024. HRPDC staff also attended the Annual Flood Preparedness Coordination Meeting on June 28, 2023. In addition to the TAC, HRPDC staff attended and participated in subcommittee meetings for the Funding Subcommittee (November 2, 2023, February 1, 2024, May 23, 2024, and August 15, 2024), Project Prioritization Subcommittee (October 31, 2023, February 15, 2024, May 17, 2024, and August 7, 2024), and Research, Data, and Innovation Subcommittee (October 17, 2023, May 24, 2024, and August 15, 2024). HRPDC staff also attended and participated in a community meeting held for the Phase II plan held in Chesapeake on September 25, 2024.

Resilience Project Database Support

As part of its support for the VCRMP, HRPDC staff collects and processes data related to resilience projects in Hampton Roads localities. These projects include stormwater management improvements, flood protection measures, planning and capacity building initiatives, and others. HRPDC provided an updated list of projects with associated information to the Department of Conservation and Recreation in July 2024. This list included 461 projects and 29 initiatives from ten (10) HRPDC localities, including Chesapeake, Gloucester County, Hampton, James City County, Newport News, Norfolk, Poquoson, Virginia Beach, Williamsburg, and York County. In addition to the VCRMP database, HRPDC staff also continued to work on its own resilience project database and dashboard.

Identification of Regional Resilience Priorities and Needs

During this grant year, HRPDC staff continued to work with the HRPDC Coastal Resiliency Committee, locality chief administrative officers, and the HRPDC board to identify and refine key priorities for new public policies, funding needs, and data needs. These discussions were reflected in HRPDC's 2024 Regional Legislative Agenda⁹, which was adopted by the HRPDC board on October 16, 2023. Specifically, the 2024 Regional Legislative Agenda included support for the creation of a Chief Flooding Officer for the Commonwealth with a six-person staff, state funding of \$200 million per year for the CFPF, development of a new state funding program to provide assistance for the nonfederal match requirement for large-scale projects, and authorization of the Peninsula flood risk management feasibility study. The HRPDC board also continued to support efforts to make Hampton Roads a hub for offshore wind energy development and funding to extend the Virginia Capital Trail through the Hampton Roads region on both the Peninsula and the Southside.

In addition to its regional legislative priorities, HRPDC in 2023-2024 also considered and continued to support several regional resilience initiatives. HRPDC, through its Coastal Resiliency Committee, continued efforts to develop regional resilient design standards for stormwater management and floodplain

⁹ <https://www.hrpdcva.gov/DocumentCenter/View/8813/2024-Regional-Legislative-Agenda-PDF>

management. These standards are built on previous and ongoing efforts and include regionalized sea level rise and precipitation projections, floodplain maps reflecting future sea level rise, tailwater projections for stormwater management, and design storm values. HRPDC anticipates finalizing and adopting these standards in 2025. HRPDC also continues supporting a regional network of roadway flooding sensors and partners with the U.S. Geological Survey on a project that measures land subsidence across southeastern Virginia. HRPDC anticipates building on both efforts in 2025.

Conclusions

The Hampton Roads Coastal Resources Management Technical Assistance Program continues to enable HRPDC staff to provide important and timely assistance to local governments and other stakeholders throughout Hampton Roads on a variety of coastal resources management issues. HRPDC's capacity to provide these services to its localities and other stakeholders is significantly enhanced through the resources provided by Virginia CZM. The technical assistance, public information, educational opportunities, training, research, analysis, and coordination efforts provided through this program serve the region's decision-makers, locality staff, residents, and other partners and stakeholders. This program continues to be a key part of the region's overall strategy for managing its coastal resources and addressing new challenges. In addition, the funding for resiliency efforts through this grant has allowed for the continued development and evolution of HRPDC's Coastal Resiliency Program, which has had and continues to have an important role in supporting local, regional, and state resiliency efforts. These services continue a decades-long relationship between HRPDC and Virginia CZM to identify issues of interest and concern before they become problems so that they can be addressed in a cost-effective manner.