

Northern Neck Planning District Commission Virginia Coastal Zone Management Program Technical Assistance Grant FY 21, Task 45 Final Report



Virginia Coastal Zone
MANAGEMENT PROGRAM



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant # NA21NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

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I. Coastal Management Support

NNPDC staff provided continuing coastal management support to the four counties and six towns of the Northern Neck as well as the Northern Neck Land Conservancy, Friends of the Rappahannock, the Northern Neck Master Gardeners Shoreline Evaluation Program, the Northern Neck Chesapeake Bay Public Access Authority, Northern Neck Soil & Water Conservation District, and myriad other regional, state and federal entities dedicated to environmental stewardship, conservation and resiliency. Support provided includes, but is not limited to, regional coordination, technical assistance, planning, grant writing, project management, GIS analysis, and mapping products. Support through regional coordination included collaboration with DCR and the Secretary of Natural Resources in support of the development of the Virginia Resilience Master Plan for the purposes of maximizing consideration of rural coastal management issues and alignment with local priorities. Additional support through regional coordination included collaboration with Wetlands Watch to further discussions for local participation in the CRS program by all four counties of the Northern Neck through NNPDC staff participation in the CRS Workgroup and by disseminating that information to local staff. Other support through regional coordination included collaboration with state academic institutions through participation in forums and contributions to reports and collaborative documents to maximize policy considerations for coastal management issues facing rural coastal localities.

Technical assistance and GIS mapping support were provided to localities for zoning updates, business district development, and other community development projects. Comprehensive plan analysis and coastal zone management support were provided to Colonial Beach for the development of a resilience plan, comprehensive stormwater management plan, and comprehensive shoreline management plan. Additional support included planning, grant writing, and technical assistance for a proposed stormwater management plan for the Town of White Stone and a shoreline management project in Lancaster County. Additionally, GIS analysis and mapping products were supplied to the Northern Neck Master Gardeners Shoreline Evaluation Program, Northern Neck Chesapeake Bay Public Access Authority, Friends of the Rappahannock, and the Northern Neck Septic Pump-out Program. Additional support was provided through collaboration in projects pertaining to the furtherance of eco-tourism and the support of coastal resource dependent industries and job sectors.

The benefits of this continuing support range in their effects and include the identification and mitigation of environmental impacts of those projects reviewed where construction is being undertaken, such as the White Stone Business District Revitalization. Other benefits include ensuring the accuracy and completeness of local zoning and comprehensive plans, such as with the Towns of White Stone, Colonial Beach, and Richmond County. Additionally, benefits to erosion and sediment control and nutrient management of the Northern Neck's waterways through regional efforts to increase consideration of natural and nature-based best management practices, such as continued support of the Northern Neck Master Gardeners Shoreline Evaluation Program and Northern Neck Soil and Water Conservation District Programs; and more specifically, through local projects such as those proposed projects in the Town of White Stone and Lancaster County. Other benefits include education and outreach through a myriad of environmental stewardship, conservation, and resiliency efforts and educational initiatives in partnership with Friends of the Rappahannock, the Northern Neck Soil and Water Conservation District, and other stakeholders. Countless other unquantifiable benefits result from the regional coastal management support provided to Northern Neck localities and environmental organizations.

Examples of these products and additional products of this coastal management support can be found at this link:

https://drive.google.com/drive/folders/1FwKHpd9dMRBuQVrsuGCsN54MjyJRqZyf?usp=share_link

II. Local Planning Coordination and Training

NNPDC staff continued to provide coordination of coastal planning efforts and training opportunities to its member localities. Local planning coordination included collaboration with FEMA, VDEM, DCR, and local stakeholders for the update of the Regional Hazard Mitigation Plan. NNPDC staff convened and facilitated stakeholder meeting throughout the grant year to collect input and make collective decisions regarding the HMP. Additionally, NNPDC staff conducted quarterly Land Use Administrators and Coastal Managers meetings to coordinate planning efforts and to provide training to local Administrators and staff. Trainings and meetings topics aimed to adhere to a continuing theme of concern to coastal communities, resiliency, and the protection of coastal resources.

A local coordination meeting was held on December 9, 2021. The purpose of the meeting was to discuss local and regional efforts to advance public access and improve public access facilities. Using the Virginia Outdoors Plan as a guide, local representatives provided information on public access projects in their respective jurisdictions. The information provided facilitated a discussion about the expansion of the Northern Neck Water Trail Network. Funding opportunities were discussed, and technical assistance was offered and accepted by Lancaster County to advance several public access projects. An update was provided on the recent public access resilience assessment conducted by NNPDC staff. Other topics discussed included progress on watershed improvement plan and local water quality programs. Additionally, regional resilience priorities were discussed in preparation for the HMP update.

A local coordination and training meeting was held on August 4, 2022 in collaboration with Wetlands Watch. The purpose of the meeting was to educate local staff and decision makers regarding recent changes to the National Flood Insurance Program (NFIP), Risk Rating 2.0, and the Community Rating System (CRS) Program. Attendees learned about substantive changes to the NFIP and Risk Rating that will affect rate payers, specifically that many could see a decrease in their premiums. Attendees discussed outcomes of the CRS Workshops conducted by Wetlands Watch (VCZMP grant # NA21NOS4190152) and discussed the merits of joining the program and regional coordination. Other topics for local coordination included the status of the Regional Hazard Mitigation Plan update, the Northern Neck Septic & Well Assistance Program, and other watershed implementation planning activities. Attendees learned of the new Northern Neck SWAP program for low-income households to receive grants for septic and well repair or replacement and how the program contributes to WIP III efforts.

As part of the robust local outreach and engagement strategy for the HMP update, NNPDC staff convened and facilitated five (5) stakeholder group meetings that saw training in the use of HAZUS and regional coordination in the Hazard Identification Risk Assessment, Hazard Planning Goals and Objectives, and the inclusion of new significant hazards. Attendees provided information and input into changes developed by The Olsen Group. NNPDC staff, in coordination with The Olsen Group, convened and facilitated ten (10) local jurisdictional interviews that saw local staff and community leaders incorporate outcomes of the RAFT and Resilience Focal Area efforts into their respective Hazard Mitigation Actions. The actions selected, specific to each locality, serves as path for more integrated resilience planning and implementation.

III. Hazard Mitigation Grant Assistance for House Elevation

The Northern Neck Planning District Commission administers a program to assist localities and residents mitigate the impacts of recurrent flooding through the elevation of structures prone to repetitive loss. NNPDC staff assisted localities in the Northern Neck through the administration of several home elevations funded by FEMA, with additional funding, when required, by VDEM and/or the property owners.

In this grant year, NNPDC staff have assisted Essex County with the elevation of three homes, awarded in 2019, in the Lowry Point area that are prone to recurrent flooding and vulnerable to flooding due to severe weather. NNPDC staff provided grant writing assistance and technical support to Essex County and property owners to apply for funds and received FEMA funding to cover part of the cost to elevate the homes. NNPDC staff conducted project management and oversaw the completion of construction activities and project closeout. To date all three homes have been elevated with the grant awaiting closeout.

The Program also received funding for the elevation of five homes, awarded in 2020, that were completed in this grant year. Two of these are in the Lewisetta area of Northumberland County, where the program has elevated five homes since 2013. One is in the Little Florida area of Richmond County, where there is severe recurrent flooding. One is in the Morattico area of Lancaster County, where flooding is becoming more frequent and intense. One is in the Bluff Point area of Northumberland County along the Chesapeake Bay, where storm surge and fetch lead to severe flooding. In all cases, the homeowners have been affected by repetitive loss and are seeking mitigation assistance. The total FEMA funding to elevate those homes is over 1.3 million dollars. NNPDC staff assisted the counties and property owners with grant writing assistance and technical support in the application process and oversaw project management activities. To date all five homes have been elevated with the grant awaiting closeout.

The Program received funding, awarded in 2019, for the elevation of a home in the Lewisetta area of Northumberland County, that project is ongoing. The Program also has pending applications, with anticipated award in 2023, for Hazard Mitigation Grants to elevate six additional homes in the Northern Neck. NNPDC staff have provided grant writing assistance and technical support to Northern Neck localities and residents to fund the elevations. Pending applications include three additional projects in the Lewisetta area of Northumberland County, one additional project in Essex County, and one project each in the Windmill Point and Morattico areas of Lancaster County.

Before and after photos of completed elevation projects can be viewed at this link: https://drive.google.com/drive/folders/1mIY6T-y4S6k9ZRsmfIahKNCp6qF0s2U3?usp=share_link

IV. Northern Neck Green

NNPDC staff, in collaboration with the newly established Northern Neck Environmental Stewardship Consortium (NNESC), created the www.NNKgreen.org website in 2015 with funds from the VACZM program, grant #NA15NOS4190164. The website acts as a regional clearinghouse and events calendar for environmental topics relevant to the Northern Neck of Virginia. The website is maintained by NNPDC staff, who act as administrator, and members of the NNESC, which consists of organizations dedicated to making the most out of the region's air, land, and water.

This grant year, NNPDC staff maintained and directed content across the site related to environmental news, projects, meetings, and events in the Northern Neck. Topics posted included: Agricultural and Farming; Climate Change & Sea-Level Rise; Environmental Guidelines and Regulations; Environmental equity; Land Conservation; NNK Environmental Organizations; Plants, Trees, Gardening, and Lawn Care; Recreation in Nature; Shoreline Erosion Control; Solar Energy; Stormwater Management and Water Quality; Transportation; Volunteer Opportunities; Waste Disposal and Composting; Wetland Protection and Preservation; and Wildlife, Fisheries, Birds, Insects and Bugs. Examples of posts include an article posted by FOR on paddling safety (link: <https://www.nnkgreen.org/safety-on-the-rappahannock-river>), the Rappahannock River Watershed Survey conducted by Virginia Tech (link:

<https://www.nnkgreen.org/rappahannock-river-watershed-survey>), and the publication of the Virginia Coastal Resilience Master Plan (link: <https://www.nnkgreen.org/virginia-coastal-resilience-master-plan-released>). Examples of events include county Solid and Hazardous Waste Events posted by the NNSWD (link: <https://www.nnkgreen.org/westmoreland-county-fall-household-hazardous-waste-collection>), Chesapeake Bay Awareness Week (link: <https://www.nnkgreen.org/chesapeake-bay-awareness-week-2020>), and a Windmill Point Paddle hosted by FOR (link: <https://www.nnkgreen.org/windmill-point-paddle-may-7th>). Additionally, NNPDC staff engaged with environmental education and outreach leaders, such as the Northern Neck Soil and Water Conservation District, Friends of the Rappahannock, Northumberland Association for Progressive Stewardship, Northern Neck Land Conservancy, and Northern Neck Master Gardeners to increase the site's utilization as the premiere platform to educate residents of the Northern Neck and inform them regarding events and educational opportunities throughout the year. This grant year NNPDC staff convened and facilitated refresher training for existing and incoming staff of the NNSWCD, FOR, NNLC, and NNMN.

The website has been an increasingly useful tool for environmental outreach in the region since it was established and is a way for residents to plan for and engage in environmental activities throughout the region. In 2021-2022, the number of visitors to <http://www.NNKgreen.org> steadily increased with over 19,786 visitors. Usage and visitation metrics are tracked and available upon request.

V. Hazard Mitigation Planning

NNPDC staff, in collaboration with FEMA, VDEM, DCR, and local jurisdictions coordinated planning for the purposes of updating the Regional Hazard Mitigation Plan (HMP); last updated using partial funding from an FY17 VCZMP TA grant # NA17NOS4190152. The NNPDC applied for and received funding for the HMP update from FEMA's Building Resilient Infrastructure and Communities (BRIC) program and DCR's Community Flood Preparedness Fund (CFPF). This funding, along with FY21 VCZMP TA grant funding, enabled the NNPDC to procure a qualified consultant, The Olsen Group, and to engage in with local stakeholders and residents.

NNPDC staff implemented a robust outreach and engagement campaign with local stakeholders, community leaders, and residents to ensure the HMP is more comprehensive in its mitigation strategies and resilience goals and fully meets the needs of the region and its residents. The NNPDC, at the behest of local jurisdictions, appointed a core stakeholder group to oversee the planning and update process. NNPDC staff convened the stakeholder group for a total of 5 meetings this grant period (July 15, July 29, August 4, August 12, and October 7, 2022), three of which were accessible to the public and were advertised as such. The purpose of these meetings was to review, discuss, and provide input on components of the plan with The Olsen Group. During these meetings the core stakeholder group made decisions regarding the Hazard Identification and Risk Assessment, noting a need to raise the hazard indication levels for specific hazards to adapt to climate challenges and improve resilience. NNPDC staff, in coordination with The Olsen Group, convened local jurisdictional interviews; ten in total during this grant year. The purpose of these meetings was to review, discuss, and make decisions regarding locally specific components of the plan. During these meetings, local jurisdictions refined their mitigation goals, objectives, and actions with an emphasis on resilience and implementation, furthering progress that was enabled through past VCZMP funded efforts. The HMP planning and outreach process is still underway with anticipated completion in mid-2023. As such, summary findings, resiliency measures, and a summary of the HMP are not available. Coordination work will continue under the FY22 VCZMP TA grant, # NA22NOS4190187.

NNPDC staff coordinated with The Olsen Group and local stakeholders to help implement the outcomes of the Resilience Adaptation Feasibility Tool (RAFT), conducted through an FY 19 VCZMP grant and an FY 20 VCZMP TA grant, # NA20NOS4190207. Additionally, NNPDC staff incorporated the outcomes of

Product #8: Regional Resiliency Coordination and Product #9: Regional Resiliency Priorities into the hazard mitigation planning process and the hazard mitigation plan and NNPDC staff worked to ensure the completed hazard mitigation plan aligns with the anticipated outcomes of Product #10: Virginia Coastal Resilience Master Plan. Over the course of the past three years, with additional VCZMP funding dedicated to the Resilience Focal Area and with assistance from the RAFT, NNPDC staff have coordinated with stakeholders from all ten local jurisdictions to assess their local resilience priorities. The resilience actions prioritized by each local jurisdiction provided the basis for revamping local mitigation goals, objectives, and actions in the HMP. The intent is for the NNPDC to incorporate those locally specific priorities into the HMP for adoption by local governing bodies and for those priorities to guide local comprehensive planning, land use planning, and capitol improvement planning. This methodical planning to implementation approach hopes to garner support and buy-in from community leaders and residents and further activities that lead to greater community resilience. Alignment with State-wide efforts such as the Virginia Coastal Resilience Master Plan ensure that both local and regional hazard mitigation and resilience efforts utilize the most current and accepted data and methodologies.

NNPDC staff, with coordination from The Olsen Group and DCR incorporated flooding resiliency into the HMP, specifically to include flood plain management, dam safety, and components of a “resilience plan” as outlined by DCR. Challenges from climate change have exacerbated impacts from flooding events and significantly elevated hazard risk for residents. With increases of intensity, duration, and frequency of rain events, pluvial flooding was added to the HMP as a significant hazard. Including pluvial flooding as a hazard will shift the focus and resources to combat the impacts of rain events and protect people and property. A few areas of the Northern Neck are at much higher risk to flooding hazards and as such this plan update will emphasize the need for more comprehensive and engaged floodplain management. A significant component of floodplain management will be an emphasis on High Hazard Potential Dams and the impacts from recent dam failures. As such, the plan update will see a comprehensive inventory of dams and the potential impacts to life and property should the dam fail. This will enable communities to address any High Hazard Potential Dams and take mitigation action to prevent the loss of life and property.

~~VI. Special Project: Regional Green Infrastructure Assessment~~

~~NNPDC staff, in collaboration with the Chesapeake Conservancy, the VA Department of Forestry, the Friends of the Rappahannock, and Northern Neck Land Conservancy to conduct a regional green infrastructure assessment for the purposes of developing a tool for local governments to assist in land use planning decisions that could potentially impact coastal resources, water quality, and community resilience. NNPDC staff will seek funding from the National Fish and Wildlife Foundation’s (NFWF) Small Watershed Grants Program to conduct this much needed planning exercise. NNPDC staff will develop a report on the activities and outcomes of the green infrastructure assessment to include an overview of findings and land use planning tools generated.~~

~~This product is no longer possible through this current scope of work as the NNPDC was unsuccessful in obtaining a NFWF Small Watershed Grant. NNPDC has shifted this 10% effort and \$6,450 in federal funding and \$6,450 in match funding to Product #5.~~

VII. Benefits Accrued from Previous VACZM Grants

NNPDC staff tracked measurable benefits accrued from previous grant products that have served as a foundation for additional projects. The initial funding of projects which developed the region’s first water trails has resulted in the expansion of the Northern Neck Water Trail Network and a plan to improve public access and public access facilities to make them more interpretive, accessible, and resilient. Additionally, a plan has been developed to update and market the Northern Neck Water Trail Network to increase public

access to the trail network and to create uniformity with water trails on the Eastern Shore, Middle Peninsula, and Lower Chickahominy for inclusion in virginiawatertrails.org. This ecotourism collaboration effort will incorporate the tenets of resiliency through continued VCZMP funding (VCZMP FY21 Task 72 grant # NA21NOS4190207), further ensuring its lasting benefit to tourism activities in the region.

Additional benefits include NNPDC staff contributions to the development of the Virginia Resilience Master Plan. VCZMP activities have culminated in the development of the statewide plan and have led to the funding of resilience capacity building in Virginia's Coastal Zone. Continued VCZMP funding of technical assistance and resilience capacity building will see additional benefits accrue in subsequent years.

Additional benefits include the initiation of a blue and green infrastructure assessment and watershed management plan. This work utilizes the assessments of green infrastructure and facilitated meetings funded with past VCZMP grants. Other benefits include the initiation of an assessment of dredging and beneficial use projects in the region. Building off the outcomes of previous VCZMP grants, the NNCBPAA will conduct the assessment of waterways identified in the Shallow Draft Navigation and Sediment Management Plan in order to prioritize critical dredging needs and implementation priorities.

Other benefits include the continuation of the Northern Neck Assign-A-Highway program which saw over ten tons of litter collected along Northern Neck roadways and another successful Virginia Clean Waterways event. The Northern Neck program ensures litter and debris are removed and mitigates local waterway contamination. Other benefits include NNPDC staff participation in and contributions to several environmental and resilience technical advisory groups that indirectly resulted from work funded by the VCZMP. NNPDC staff, in collaboration with academic institutions and environmental groups, have participated in efforts to study the impacts of sea level rise and flooding on critical transportation infrastructure and the economic well-being of the Coastal Region.

VIII. Regional Resiliency Coordination

For the VCZMP resilience focal area, the NNPDC received funding to help build regional resiliency coordination among its member localities, local, state, and federal stakeholders, and residents. NNPDC staff provided technical assistance and coordination to local governments on resiliency while serving as a liaison to state and federal agencies in charge of developing new policies and regulations. This work continued progress from previous VCZMP funding and built on existing relationships and stakeholder engagement at the regional scale. NNPDC staff utilized the RAFT to help localities establish local resiliency stakeholder groups that will focus local efforts to expand existing priorities around resilience and act as liaison for resilience issues to local administrations and elected bodies. These stakeholder groups monitor state and regional resilience efforts, trends, and priorities to champion local priorities to achieve greater local understanding of the challenges, greater local buy-in for solutions to those challenges, and hopefully drive community resilience forward. Local representatives then participated in regional workshops and meetings where they showcase local progress and participate in a more meaningful way to regional planning processes for emergency management, hazard mitigation, and resilience. Locally established resiliency stakeholder groups, such as in Colonial Beach and Richmond County meet regularly to discuss and advance progress on local resilience priorities. NNPDC staff regularly attend those meetings and provide facilitation technical assistance when requested. Additionally, those stakeholder groups are tapped to participate in regional planning efforts, such as the update to the Regional Hazard Mitigation Plan, in order to highlight local resilience efforts and provide local input on regional priorities. The coordination between local department, interjurisdictional coordination, and regional coordination greatly benefit from the addition of a more diverse set of stakeholders and the informal nature of the groups.

IX. Regional Resiliency Priorities

For the VCZMP resilience focal area, the NNPDC received funding to help develop local and regional resiliency priorities. NNPDC staff utilized the RAFT and the regional resilience coordination process to engage with local governments and stakeholders to identify local and regional resilience priorities and needs. These priorities and needs were varied and locally focused but take advantage of regional planning processes; they included data and funding needs, technical capacity, policy and plan development, and implementation projects. With assistance from the RAFT core team and NNPDC staff, localities developed local resilience action checklists consisting of local priorities that once achieved will contribute to incremental resilience capacity. Over the course of the year, with help from the RAFT core team and NNPDC staff, local stakeholders worked through planning and implementation of their respective resilience action checklists.

An example of local resilience action priorities includes the incorporation of resilience into comprehensive plans and the alignment of local plans with the regional hazard mitigation plan for greater continuity in planning with a focus on local implementation. Another example is the development of emergency communications strategies, to streamline and coordinate emergency risk and response across local governments, intragovernmental communications, and outreach to the public. Another example of local resilience action priorities is the development of local stakeholder groups to champion local resilience priorities and coordinate regional efforts at the locality scale. Other examples include building business and economic resilience, studying the economic impacts of high-risk hazards, and conducting comprehensive stormwater and shoreline management assessments to develop strategies for sea level rise and to prioritize projects.

X. CZM Resilience Database Support

For the VCZMP resilience focal area, the NNPDC received funding to help VCZMP develop a resilience database and populate it with local planning and project priorities. NNPDC staff continues to support the ongoing VCZMP resilience database effort and coordinate with the organizing team by providing feedback on the structure, usability, access procedures, and other components of the effort. NNPDC staff utilized the RAFT, local stakeholder groups, and local resilience action priorities to identify and share with VCZMP for the purposes of populating the resilience database.

XI. Virginia Coastal Resilience Master Plan

For the VCZMP resilience focal area, the NNPDC supported the development and implementation of the Virginia Coastal Resilience Master Plan. NNPDC staff acted as members of the Technical Advisory Committee to the VCRMP, was a contributing member of the Outreach Subcommittee, and acted as Co-chair to the Economic Development Subcommittee. NNPDC staff attended all TAC meetings, provided input and responded to data calls in support of the development of the VCRMP. The NNPDC facilitated regional outreach for the plan development process by holding a planning design charrette and a public meeting to educate the public on the plan's development. In all, NNPDC staff contributed significant hours to the development of the VCRMP to ensure that local interests were fully represented and to garner local buy in of the plan's benefit to local interests.