

# Accomack-Northampton PDC Technical Assistance Program & Coastal Resiliency Planning

*Final Product Report*

*VCZMP FY22 Task 41, Grant #NA22NOS4190187*



*Photo Credit: Eastern Shore of Virginia Tourism Commission*

This project was funded by the Accomack-Northampton Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant # NA22NOS4190187 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



Virginia Coastal Zone  
MANAGEMENT PROGRAM



PREPARED BY: STEELMAN COASTAL CONSULTING, LLC



## **I. Introduction**

This report is a comprehensive overview of the efforts and achievements of the Accomack-Northampton Planning District Commission (A-NPDC) within the Eastern Shore of Virginia. The A-NPDC addresses critical facets such as coastal management, navigable waterways, groundwater preservation, abandoned and derelict vessel issues, and resilience planning. At its core, the A-NPDC has demonstrated ongoing support to the Virginia Coastal Zone Management Program and align efforts with the Coastal Resources Management Goals.

## **II. Coastal Management & Technical Assistance**

This report provides an overview of the training opportunities and technical assistance provided by the Accomack-Northampton Planning District Commission (A-NPDC) over the course of the grant year. These initiatives are aimed at supporting Virginia's Coastal Zone Management Program (CZM) Coastal Resources Management Goals.

The A-NPDC committed to offering a total of four (4) training opportunities throughout the grant year. These training sessions were designed to align with CZM's Coastal Resources Management Goals and served as a valuable resource for local governments and residents in the coastal region. The topics covered in these training sessions were intended to enhance knowledge and understanding of coastal resource management, promote sustainable practices, and foster community engagement.

In addition to the training opportunities, A-NPDC staff continued to respond to technical assistance requests from localities and residents. This support is provided to address specific needs, challenges, or questions related to coastal resource management. While A-NPDC is committed to delivering technical assistance, it is essential to note that the availability of such support may vary based on the capacity of the agency.

The technical assistance offered by A-NPDC is a valuable resource for those seeking guidance on compliance with coastal regulations, sustainable development practices, and the conservation of coastal resources. It is an essential component of the agency's mission to promote responsible coastal management. Specific examples of technical assistance provided include grant seeking for Onancock Bayside Community; providing hours of operation and accepted waste items to residents for disposal at the Shore's Household Hazardous Waste Center; grant seeking for Brinkley Nature Preserve (Northampton County); designing trail maps for local nature trails; and liaising between residents and municipalities as needed.

The A-NPDC remains dedicated to advancing CZM's Coastal Resources Management Goals by providing accessible training opportunities and responsive technical assistance to local governments and residents. These initiatives play a crucial role in building awareness, capacity, and collaboration within coastal communities, ultimately contributing to the sustainable management of coastal resources.

A-NPDC staff provided the following trainings this grant year:



1. 2023 Master Gardener's Groundwater 101 Training
  - a. Date: 2023-02-15
  - b. Attendees: 11
  - c. Purpose: to collaborate with DCR to provide one of many trainings on a topic of regional importance to the Master Gardeners. Each year, the A-NPDC provides the training *Groundwater 101*. This involved coordination with a state agency (and local chapter), and incorporated elements of coastal habitat, coastal hazards, and coastal dependent uses through a groundwater lens.
  - d. Take Away: participants walked away with a comprehensive understanding of groundwater as a natural resource and specifically the critical asset that the Eastern Shore has in its sole source aquifer. Participants learned the history of the sole source aquifer, where groundwater comes from and how it passes through various confining units, the risk of saltwater intrusion and over-pumping, and were provided resources for further self-learning.
2. Virginia Water Trails How To: NAI Region 2 Conference
  - a. Date: 2023-03-08
  - b. Attendees: 42
  - c. Purpose: to collaborate with National Association of Interpreters (NAI) to provide a training to a wider audience in the ecotourism industry on the topic of coastal Virginia's water-based recreation opportunities and tools to help plan and navigate visitor experiences.
  - d. Take Away: participants walked away with a comprehensive knowledge of the Virginia Water Trail map assets/itinerary tool, public access sites across Coastal Virginia, and the ecotour guide certification process and benefits.
3. Local Resources & Best Practices for Flood Management: Master Naturalists Panel
  - a. Date: 2023-07-19
  - b. Attendees: 42
  - c. Purpose: to collaborate with the local chapter of Master Naturalists to share the role of the A-NPDC in flood management as a local resource and highlight best management practices the Master Naturalists can implement.
  - d. Take Away: participants walked away with a more fully developed concept of flood hazards/risks, the role native plants and ecosystems play in flood mitigation, and how the A-NPDC can provide technical assistance in flood mitigation activities.
4. Resilience & The Eastern Shore
  - a. Date: 2023-05-25
  - b. Attendees: 9
  - c. Purpose: to educate members of the resilience plan steering committee on the past, current, and future challenges the region will face with regards to resilience against climate change impacts and sustainability of all assets – businesses, homes, land, etc.
  - d. Take Away: participants walked away with a current and updated impression of the threats the ESVA is facing with respect to climate change



and how their insights and engagement in developing an action-oriented plan will help to build resilience.

### **III. Eastern Shore Regional Navigable Waterways Committee (ESRNWC)**

The Eastern Shore of Virginia features unique coastal characteristics and faces many navigability challenges. The region comprises two counties and 19 incorporated towns. Its geographical features, including barrier islands, tidal marshes, creeks, and dynamic coastal environments, shape its distinctive coastal landscape. Furthermore, the Eastern Shore faces various challenges such as coastal flooding, erosion, and sea-level rise, which can significantly impact the navigability of its coastal waterways.

The Eastern Shore of Virginia boasts a diverse range of coastal features that define its landscape:

- **Barrier Islands:** A chain of barrier islands acts as a buffer against coastal impacts along the Atlantic coast. These islands provide protection against oceanic forces and are home to unique ecosystems.
- **Tidal Marshes:** Vast tidal marshes contribute to the natural resilience of the peninsula by absorbing and mitigating the effects of coastal storms and sea-level rise. They are essential for maintaining water quality and supporting wildlife.
- **Chesapeake Bay Coast:** The Chesapeake Bay coast features numerous islands and tidal marshes. Creeks along this coast are often larger than those on the ocean side of the peninsula.
- **Sedimentation:** Historic land-use activities and changes to the coastal environment have led to sedimentation in many creeks of the Eastern Shore. This has implications for the navigability of coastal waterways.

Navigability is a critical concern for the economic viability of the Eastern Shore of Virginia, as it directly affects residents, tourists, and businesses. Several factors contribute to navigability challenges:

- **Access to Coastal Resources:** Adequate access to coastal waters is essential for residents and tourists to explore and utilize the diverse ecosystems, wildlife, and recreational opportunities offered by the Atlantic Ocean and Chesapeake Bay.
- **Natural Processes:** Natural coastal processes, such as sedimentation, erosion, and sea-level rise, can impact water depths and accessibility to facilities and infrastructure.
- **Storm Impacts:** Changes in storm intensity and frequency can further affect navigability by altering sedimentation patterns and the shoaling of coastal waterways.

To address these navigability challenges, dredging of coastal waterways is essential. Dredging not only ensures safe and reliable access but also provides an opportunity for beneficial use of dredged material. This material can be employed to mitigate coastal erosion, reduce flooding, and aid in habitat restoration, promoting the overall health of the coastal environment.



The ESRNWC accomplished several objectives this year: securing \$3.5M for Northampton County dredging projects (Kings Creek & Nassawadox Creek); exploring potential avenues for development of a feasible and more affordable dredging program; remaining current on General Assembly legislation for navigable waterways; continuing communication and project priorities with the US Army Corps of Engineers; ongoing engagement with Cedar Island project team and Committee support; and corresponding with federal and state municipalities to advocate local waterways for consideration in legislative priorities for the region.

Links:

[ESRNWC Meeting Packets & Minutes](#)

#### **IV. Eastern Shore of Virginia Ground Water Committee (GWC)**

The Eastern Shore of Virginia is the only region in coastal Virginia whose public water supply has been designated by the EPA to be derived from a Sole Source Aquifer. Since the region is solely reliant on groundwater for its public water supply, A-NPDC staff has worked with the GWC to facilitate and host educational programs in accordance with GWC goals.

The GWC has continued to review relevant public notices, permit requests, environmental reviews and water quality/usage reports. A-NPDC staff worked with the Committee to design and fund a water quality monitoring program, collaborate with other local agencies – Department of Health and Eastern Shore Area Agency on Aging, and provide ongoing education to localities and local groups on the importance of the sole source aquifer.

The GWC meets monthly on the third Tuesday at 10:00AM, with the exception of June and December. GWC agendas, minutes, publications, and announcements can be found on the A-NPDC webpages dedicated to the Eastern Shore of Virginia Ground Water Committee.

The GWC accomplished several objectives this year: securing \$\_\_\_\_\_ for a region-wide well-testing program; establishment of a sub-committee to begin development of the well-testing program; and publication of a technical assistance report of Captain's Cove water quality.

Links:

[Ground Water Committee Meeting Packets & Minutes](#)

#### **V. Virginia Abandoned & Derelict Vessel Work Group (VA-ADV)**

The Virginia Abandoned and Derelict Vessel Work Group (VA-ADV Work Group) seeks to address the issues of abandoned and derelict vessels (ADV) in Virginia. This collaborative effort has been driven by the collective interest of various agencies, nonprofits, and members of the boating committee to find effective solutions to ADV-related challenges.

The VA-ADV Work Group was established in response to the growing concerns about ADVs within Virginia's waterways. It brought together stakeholders from diverse backgrounds,





including pollution regulatory agencies, marine law enforcement, marinas, tribes, nonprofit organizations, the boating community, coastal management, coastal policy experts, and other interested parties. The primary objectives of this work group were:

- Examination of ADV Issues: To comprehensively investigate the issues associated with recreational, commercial, and "legacy" ADVs in Virginia.
- Exploration of Solutions: To focus on identifying and studying solutions that have been attempted or implemented in other states with well-developed ADV programs.

The VA-ADV Work Group conducted meetings in both 2021-2023 to facilitate the coordination of efforts and the exchange of knowledge among its diverse membership.

During these meetings, several key activities were undertaken:

- Prevention & Public Education Subcommittee: A vital component of the work group, this subcommittee was chaired and staffed by work group members. Its responsibilities included agenda development, meeting facilitation, notetaking, creative material development, and public engagement efforts. One of its main goals was to engage the boating community in discussions about responsible vessel ownership. This involved considering the hazards ADVs pose to public safety and environmental health. A-NDPC staff chaired this sub-committee.
- Voluntary Vessel Turn-In Program (VTIP): The work group explored the feasibility of implementing a voluntary vessel turn-in program to encourage responsible ADV disposal.
- Terminology and Reporting: The Subcommittee worked to define terms associated with ADVs and develop a flowchart for public reporting of ADVs to government entities. Clear terminology and reporting mechanisms are essential for effective policy changes and public awareness campaigns.
- Information Sharing: The work group ensured that developments in one Subcommittee were consistently shared with the others. This cross-collaboration allowed for the refinement of terminology and ensured that proposed policy changes were grounded in public perception.

The VA-ADV Work Group represents a commendable collaborative effort to address the pressing issues of ADVs in Virginia's waterways. By engaging a wide array of stakeholders and focusing on comprehensive examination, exploration of solutions, and public education efforts, the work group is actively working towards mitigating the impact of ADVs on navigation, ecosystems, economies, and communities.

The commitment of the work group members, particularly the Prevention & Public Education Subcommittee, is instrumental in driving responsible vessel ownership and raising public awareness about the hazards associated with ADVs. As the work group continues its efforts, it is poised to make a positive and lasting impact on Virginia's coastal and waterway environments.

Links:

[Virginia Abandoned & Derelict Vessels Work Group](#)



## VI. Benefits Accrued

A-NPDC staff identified measurable benefits accrued from previous grant products that have served as a foundation for additional projects. These benefits build on existing CZM-funded initiatives and emphasize the importance of the work being done and highlight the amount of outreach and collaboration that was implemented. Furthermore, the benefits accrued provide insight to the continued positive impacts CZM-funded projects have on the Eastern Shore.

Through initial and ongoing funding for coastal management, the Climate Adaptation Working Group (CAWG) can continue addressing resilience efforts in the region. The CAWG members provided support to A-NPDC staff in the development of a steering committee for the regional resiliency plan. Several CAWG members serve on the steering committee, while others remain available as a resource.

Through FY17-FY22 CZM Task 72 funds in the focal area of ecotourism and resiliency, the Virginia Certified Ecotour Guide (VCEG) course is offered. This benefit continues to enhance the economy on the Eastern Shore by increasing the work-force, promoting tourism to the Eastern Shore for nature-lovers and explorers alike, and contributing to preserving our region through spreading knowledge of the *Leave No Trace* principles and understanding proper land use and mismanagement issues to locals and visitors alike.

Through initial and ongoing funding for coastal resilience, A-NPDC staff are able to continue to engage local audiences on local and state efforts, educating individuals on what can be done, what is currently being done, and how to ask for assistance. This benefit highlights what A-NPDC staff are currently engaged in by presenting resilience efforts and technical assistance services to groups such as the Master Naturalists & Master Gardeners (both volunteer organizations are major advocates and stewards of the Eastern Shore landscape).

Links:

[ESVA Climate Adaptation Working Group](#)

## VII. Resilience Planning

Under this grant, the A-NPDC received funding for resilience planning. The A-NPDC plays a critical role in regional resiliency coordination, providing technical assistance and collaboration with local governments, while also serving as liaisons to the state and federal agencies in charge of developing new policies and regulations. The Climate Adaptation Working Group (CAWG) is a regional platform for resilience and climate impact awareness and initiatives. This year, several CAWG members have offered their time to serve on the regional resilience plan steering committee; this allows the CAWG to take part in distributing information and keeping their constituents up to date and involved in the resilience planning process.

In addition to these resilience efforts, the A-NPDC provided support in the development of state level resilience initiatives by participating on the Coastal Resilience Technical



Advisory Committee (TAC) throughout the ongoing development and publication of the Virginia Coastal Resilience Master Plan (CRMP) Phase II. Lastly, to increase regional capacity and support locality project implementation, the A-NPDC is now implementing the awarded grant from the *Community Flood Preparedness Fund* to develop a community resilience and sustainability plan. This plan is in progress and continues to engage partners and local stakeholders to identify critical community needs.

As the development of the regional resilience plan progresses, A-NPDC staff will finalize additional (to the original 84 submitted during CRMP Phase I) resilience projects for inclusion in the CRMP. Additionally, CAWG members are working to develop – for submission upon completion of the regional resilience plan – a list of critical assets for inclusion in the CRMP. Lastly, as capacity allows, A-NPDC staff will incorporate Hazard Mitigation Plan (HMP) shapefile maintenance in alignment with HMP updates, as needed.

Links:

[Virginia Coastal Resilience Technical Advisory Committee](#)

## **VIII. Conclusion**

In summary, this report highlights the significant efforts and accomplishments of the Accomack-Northampton Planning District Commission (A-NPDC) in various areas related to coastal management, navigable waterways, groundwater preservation, abandoned and derelict vessel issues, and resilience planning in the Eastern Shore of Virginia. The A-NPDC has demonstrated a strong commitment to supporting Virginia's Coastal Zone Management Program (CZM) Coastal Resources Management Goals and addressing the unique challenges faced by the region.

1. Coastal Management & Technical Assistance: The A-NPDC provided valuable training opportunities and technical assistance to enhance coastal resource management, promote sustainability, and engage the local community. These initiatives contribute to the sustainable management of coastal resources and support CZM's goals.
2. Eastern Shore Regional Navigable Waterways Committee (ESRNWC): The report underscores the importance of navigability for the economic viability of the Eastern Shore. The region's unique coastal characteristics and challenges require ongoing dredging efforts and the beneficial use of dredged material to maintain safe and reliable access to its waterways.
3. Eastern Shore of Virginia Ground Water Committee (GWC): As the sole source aquifer region in coastal Virginia, the Eastern Shore relies on groundwater for its public water supply. The A-NPDC's collaboration with the GWC has focused on education, monitoring, and preservation of this critical resource.
4. Virginia Abandoned & Derelict Vessel Work Group (VA-ADV): The VA-ADV Work Group represents a commendable collaborative effort to address ADV issues in Virginia's waterways. Through examination, exploration of solutions, and public education, the work





group is making strides in mitigating the impact of ADVs on the environment and communities.

5. Benefits Accrued: The report acknowledges the measurable benefits accrued from previous grant products, highlighting the positive impacts of CZM-funded initiatives in the region, including ecotourism development and resilience planning.

6. Resilience Planning: The A-NPDC's involvement in regional and state-level resilience initiatives demonstrates its commitment to building resilience against climate impacts. Collaboration with the Climate Adaptation Working Group (CAWG) and participation in the Coastal Resilience Technical Advisory Committee (TAC) contribute to regional capacity building and sustainability planning.

Overall, the A-NPDC's multifaceted efforts align with the objectives of CZM's Coastal Resources Management Goals and serve as a testament to their dedication to responsible coastal management and the preservation of Virginia's Eastern Shore.

