



A-NPDC

ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION
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WEBSITE: www.anpdc.org

April 8, 2022

Wendy Howard-Cooper
Director for Dam Safety and Floodplain Management
Virginia Department of Conservation and Recreation
cfpf@dcr.virginia.gov

RE: Eastern Shore of Virginia Regional Resilience Community Plan Development CFPF Application

Dear Ms. Howard-Cooper and Members of the Review Team:

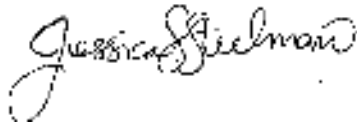
The Eastern Shore, being a land between two waters, is extremely vulnerable to flooding as a result of storm events, sea level rise, climate change, and increased rainfall. In addition to these vulnerabilities, both Accomack and Northampton Counties are considered low-income geographic areas with median household incomes falling below the \$59,377.60 threshold. According to the US Census Bureau QuickFacts table, Accomack County median household income equals \$46,178 and Northampton County median household income equals \$50,819. The development of a regional resilience plan, guided by a steering committee made up of community leaders and region-wide stakeholders, is a critical need of the counties and localities in the Eastern Shore Region for both sustainability of the region and for prioritization of mitigation projects. A plan is also a critical prerequisite when seeking potential funding to aid in flood preparedness and mitigation.

In an effort to increase the number of community flood mitigation projects that meet criteria for the Community Flood Preparedness Fund (CFPF), staff at the Accomack-Northampton Planning District Commission (A-NPDC) are applying for funds from CFPF Round 3. This will increase the A-NPDC's capacity to address the critical needs across the Shore for a region-wide resilience plan. A regional resilience plan is instrumental in increasing coastal resilience and protection for the community and its culture, preserving natural habitats, and using nature-based solutions (NBS) where possible. The A-NPDC currently leads the Climate Adaptation Working Group (CAWG), focused on identifying resilience needs in the region, and working with members of the community and local government to connect these region-wide resilience needs (projects, studies, plans, etc.) with appropriate funding sources. The CAWG has developed a living database of Eastern Shore Regional Resiliency Projects, 85 of which were submitted for the Virginia Coastal Resilience Master Plan, Phase 1. The next step in these efforts is the development of a comprehensive regional resilience plan that describes the entire local government's approach to flooding. The completion of this Regional Resilience Plan will build capacity across Eastern Shore communities by qualifying flood protection and mitigation projects for various funding, including the Community Flood Preparedness Fund.

This Eastern Shore Regional Resilience Plan will be project-based with a focus on flood control and resilience; it will simultaneously incorporate nature-based infrastructure to the greatest extent possible, and be based on the best available science, incorporating climate change, sea level rise, storm surge (as

appropriate), and current flood maps. This plan will consider all parts of local government and include the coordination with other local and inter-jurisdictional projects, plans, and activities, and lastly will have clearly articulated phasing for plan implementation. Regardless of socioeconomics and race, public outreach will be conducted and community input will be requested to ensure the development of a truly comprehensive Regional Resilience Plan.

Sincerely,

A handwritten signature in black ink that reads "Jessica Steelman". The signature is fluid and cursive, with the first name "Jessica" and last name "Steelman" clearly legible.

Jessica Steelman, Coastal Planner
Accomack-Northampton Planning District Commission
jsteelman@esvaplan.org

Cc: Anne Doyle, Director of Planning
Accomack-Northampton Planning District Commission
adoyle@a-npdc.org

Cc: Elaine Meil, Executive Director
Accomack-Northampton Planning District Commission
emeil@a-npdc.org

Accomack-Northampton Planning District Commission

Application For The

Community Flood Preparedness Fund

Round 3

Capacity Building: Development of the Eastern Shore Regional Community Resilience Plan

Jessica Steelman, Coastal Planner
Accomack-Northampton Planning District Commission
April 8, 2022

Scope of Work Narrative	
Supporting Documentation	Included
Detailed map of the project area(s) (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
FIRMette of the project area(s) (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Historic flood damage data and/or images (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current floodplain ordinance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Non-Fund financed maintenance and management plan for project extending a minimum of 5 years from project close	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current hazard mitigation plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current comprehensive plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Social vulnerability index score(s) for the project area from ADAPT VA's Virginia Vulnerability Viewer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If applicant is not a town, city, or county, letters of support from affected communities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Completed Scoring Criteria Sheet in Appendix B, C, or D	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Budget Narrative	
Supporting Documentation	Included
Authorization to request funding from the Fund from governing body or chief executive of the local government	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Signed pledge agreement from each contributing organization	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Appendix A: Application Form for Grant Requests for All Categories

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government: Accomack-Northampton Planning District Commission (A-NPDC)

Category of Grant Being Applied for (check one):

☒ Capacity Building/Planning

☐ Project

☐ Study

NFIP/DCR Community Identification Number (CID) 510001 and 510105

If a state or federally recognized Indian tribe, Name of tribe NA

Name of Authorized Official: Elaine Meil, Executive Director

Signature of Authorized Official: Elaine Meil

Mailing Address (1): PO Box 417

Mailing Address (2): 23372 Front Street

City: Accomack State: VA Zip: 23301

Telephone Number: (757) 787-2936 Cell Phone Number: ()

Email Address: email@a-npdc.org; Cc: jsteelman@esvaplan.org; Cc: adoyle@a-npdc.org

Contact Person (if different from authorized official): Jessica Steelman, Coastal Planner

Mailing Address (1): PO Box 417

Mailing Address (2): 23372 Front Street

City: Accomac **State:** VA **Zip:** 23301

Telephone Number: (757) 787-2936 **Cell Phone Number:** ()

Email Address: isteelman@esvaplan.org; Cc: adoyle@a-npdc.org

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? **Yes** X **No**

Categories (select applicable project):

Project Grants (Check All that Apply)

- ☐ Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development.
- ☐ Wetland restoration.
- ☐ Floodplain restoration.
- ☐ Construction of swales and settling ponds.
- ☐ Living shorelines and vegetated buffers.
- ☐ Structural floodwalls, levees, berms, flood gates, structural conveyances.
- ☐ Storm water system upgrades.
- ☐ Medium and large-scale Low Impact Development (LID) in urban areas.
- ☐ Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool.
- ☐ Dam restoration or removal.
- ☐ Stream bank restoration or stabilization.
- ☐ Restoration of floodplains to natural and beneficial function.
- ☐ Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.

Study Grants (Check All that Apply)

- ☐ Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.
- ☐ Revising other land use ordinances to incorporate flood protection and mitigation goals, standards and practices.
 - ☐ Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA). For example, a local government might conduct a hydrologic and hydraulic study for an area that had not been studied because the watershed is less than one square mile. Modeling the floodplain in an area that has numerous letters of map change that suggest the current map might not be fully accurate or doing a detailed flood study for an A Zone is another example.
 - ☐ Studies and Data Collection of Statewide and Regional Significance.
 - ☐ Revisions to existing resilience plans and modifications to existing comprehensive and hazard.
 - ☐ Other relevant flood prevention and protection project or study.

Capacity Building and Planning Grants

- ☒ **Floodplain Staff Capacity.**
- ☒ **Resilience Plan Development.**
- ☒ **Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.**
- ☒ **Resource assessments, planning, strategies and development.**
 - ☐ **Policy management and/or development.**
 - ☐ **Stakeholder engagement and strategies.**

Location of Project (Include Maps): Eastern Shore, VA region

NFIP Community Identification Number (CID#):(See appendix F): FIRMette Product IDs listed below.

Accomack County All Jurisdictions - FIRMette Panels			
Product ID	Effective Date	Product ID	Effective Date
51001CIND0B	05/18/2015	51001C0455G	05/18/2015
51001C0020G	05/18/2015	51001C0460G	05/18/2015
51001C0040G	05/18/2015	51001C0465G	05/18/2015
51001C0045G	05/18/2015	51001C0470G	05/18/2015
51001C0065G	05/18/2015	51001C0480G	05/18/2015
51001C0070G	05/18/2015	51001C0485G	05/18/2015
51001C0090G	05/18/2015	51001C0505G	05/18/2015
51001C0135G	05/18/2015	51001C0595G	05/18/2015
51001C0145G	05/18/2015	51001C0605G	05/18/2015
51001C0155G	05/18/2015	51001C0610G	05/18/2015
51001C0170G	05/18/2015	51001C0615G	05/18/2015
51001C0195G	05/18/2015	51001C0620G	05/18/2015
51001C0205G	05/18/2015	51001C0630G	05/18/2015
51001C0210G	05/18/2015	51001C0635G	05/18/2015
51001C0215G	05/18/2015	51001C0640G	05/18/2015
51001C0220G	05/18/2015	51001C0645G	05/18/2015
51001C0230G	05/18/2015	51001C0655G	05/18/2015
51001C0235G	05/18/2015	51001C0660G	05/18/2015
51001C0240G	05/18/2015	51001C0665G	05/18/2015
51001C0245G	05/18/2015	51001C0755G	05/18/2015
51001C0255G	05/18/2015	51001C0760G	05/18/2015
51001C0260G	05/18/2015	51001C0765G	05/18/2015
51001C0265G	05/18/2015	51001C0770G	05/18/2015
51001C0270G	05/18/2015	51001C0780G	05/18/2015
51001C0280G	05/18/2015	51001C0785G	05/18/2015
51001C0285G	05/18/2015	51001C0790G	05/18/2015
51001C0290G	05/18/2015	51001C0795G	05/18/2015
51001C0295G	05/18/2015	51001C0805G	05/18/2015
51001C0360G	05/18/2015	51001C0810G	05/18/2015
51001C0380G	05/18/2015	51001C0815G	05/18/2015
51001C0390G	05/18/2015	51001C0820G	05/18/2015
51001C0395G	05/18/2015	51001C0830G	05/18/2015
51001C0415G	05/18/2015	51001C0840G	05/18/2015
51001C0420G	05/18/2015	51001C0855G	05/18/2015
51001C0430G	05/18/2015	51001C0860G	05/18/2015
51001C0435G	05/18/2015	51001C0880G	05/18/2015
51001C0440G	05/18/2015	51001C0885G	05/18/2015
51001C0445G	05/18/2015		

Northampton County All Jurisdictions - FIRMette Panels			
Product ID	Effective Date	Product ID	Effective Date
51131CIND0B	03/02/2015	51131C0305F	03/02/2015
51131C0065F	03/02/2015	51131C0310F	03/02/2015
51131C0070F	03/02/2015	51131C0315F	03/02/2015
51131C0090F	03/02/2015	51131C0320F	03/02/2015
51131C0095F	03/02/2015	51131C0330F	03/02/2015
51131C0155F	03/02/2015	51131C0335F	03/02/2015
51131C0160F	03/02/2015	51131C0340F	03/02/2015
51131C0165F	03/02/2015	51131C0345F	03/02/2015
51131C0170F	03/02/2015	51131C0355F	03/02/2015
51131C0180F	03/02/2015	51131C0410F	03/02/2015
51131C0185F	03/02/2015	51131C0430F	03/02/2015
51131C0190F	03/02/2015	51131C0435F	03/02/2015
51131C0195F	03/02/2015	51131C0440F	03/02/2015
51131C0205F	03/02/2015	51131C0445F	03/02/2015
51131C0210F	03/02/2015	51131C0455F	03/02/2015
51131C0215F	03/02/2015	51131C0460F	03/02/2015
51131C0220F	03/02/2015	51131C0465F	03/02/2015
51131C0285F	03/02/2015	51131C0555F	03/02/2015
51131C0295F	03/02/2015	51131C0560F	03/02/2015

Is Project Located in an NFIP Participating Community? ☒ Yes, the project covers both communities currently participating in a NFIP and those not yet participating in a NFIP. ☐ No

Is Project Located in a Special Flood Hazard Area? ☒ Yes ☐ No

Flood Zone(s) (If Applicable): The Eastern Shore, VA region falls within Flood Zone X.

Flood Insurance Rate Map Number(s) (If Applicable): Refer to FIRMette Product ID tables above.

Total Cost of Project: \$375,000

Total Amount Requested \$375,000

Appendix D: Scoring Criteria for Capacity Building & Planning

Virginia Department of Conservation and Recreation

Virginia Community Flood Preparedness Fund Grant Program

Applicant Name:	A-NPDC	
Eligibility Information		
Criterion	Description	Check One
1. Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?		
Yes	Eligible for consideration	✓
No	Not eligible for consideration	
2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?		
Yes	Eligible for consideration under all categories	
No	Eligible for consideration for studies, capacity building, and planning only	✓
3. If the applicant is <u>not</u> a town, city, or county, are letters of support from all affected local governments included in this application?		
Yes	Eligible for consideration	✓
No	Not eligible for consideration	
4. Has this or any portion of this project been included in any application or program previously funded by the Department?		
Yes	Not eligible for consideration	
No	Eligible for consideration	✓
5. Has the applicant provided evidence of an ability to provide the required matching funds?		
Yes	Eligible for consideration	✓
No	Not eligible for consideration	
N/A	Match not required	
Capacity Building and Planning Eligible for Consideration		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Applicant Name:	A-NPDC	
Scoring Information		
Criterion	Point Value	Points Awarded
6. Eligible Capacity Building and Planning Activities (Select all that apply)		
Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.	55	
Development of a new resilience plan.	55	
Resource assessments, planning, strategies and development.	45	
Policy management and/or development.	40	
Stakeholder engagement and strategies.	25	
Goal planning, implementation and evaluation.	25	
Long term maintenance strategy.	25	
Other proposals that will significantly improve protection from flooding on a statewide or regional basis.	15	
7. Is the area within the local government to which the grant is targeted socially vulnerable? (Based on ADAPT VA's Social Vulnerability Index Score.)		
Very High Social Vulnerability (More than 1.5)	15	
High Social Vulnerability (1.0 to 1.5)	12	
Moderate Social Vulnerability (0.0 to 1.0)	8	
Low Social Vulnerability (-1.0 to 0.0)	0	
Very Low Social Vulnerability (Less than -1.0)	0	
8. Is the proposed activity part of an effort to join or remedy the community's probation or suspension from the NFIP?		
Yes	10	
No	0	
9. Is the proposed project in a low-income geographic area as defined in this manual?		
Yes	10	
No	0	
10. Does this project provide "community scale" benefits?		
Yes	20	
No		
Total Points		

Scope of Work Narrative

Assessment of Capacity Needs and Assets

The Eastern Shore is considered a part of *Rural Coastal Virginia* and features the Nation's longest stretch of undeveloped barrier islands – key land formations in protecting the mainland from storm events that cause flooding. According to the Virginia Coastal Resilience Master Plan (CRMP), the Eastern Shore is at risk of losing up to 171,830 total acres of Tidal Wetlands, Beaches and Dunes, Upland Habitat, and Conserved Lands, respectively, by 2080 due to flooding. This loss significantly impacts the economy of the region, driven by commercial/recreational fishing, aquaculture, and ecotourism where the region's "natural landscapes are fundamental to its identity, attracting visitors and new residents alike" (CRMP, 2021). Critical Sectors across the Eastern Shore are also at risk of being impacted negatively by flooding; where the CRMP shows a +1029% change in Energy Assets exposed and a +13,185% change in Water, Wastewater, and Waste assets impacted by 2080. Community resources on the Eastern Shore are also highly susceptible to hazards from flood events. By the year 2080, the region will see an increase of +3,816% in Residential Population exposed – from 200 residents in 2020 to 7,800 residents in 2080. Annualized Structure Losses are predicted to hit \$289M by 2080, a +1,299% change, and Agricultural Land Acres exposed will increase +236% from 5,300 acres in 2020 to nearly 18,000 acres in 2080 (CRMP, 2021). As referenced in the CRMP, current and future flood events can "result in increased soil salinity, potentially harming crop health and viability to harvest for years after a flood. These effects may lead to reduced profits, interruptions to the supply chain, and damage agricultural ways of life, leading to economic and social impacts locally and regionally" (CRMP, 2021). The Eastern Shore has a social vulnerability index average rating of 0.9 (high moderate vulnerability), not including Wallops or Assateague Island, according to [ADAPT VA's Virginia Vulnerability Viewer](#) (2016). According to the [Center for Disease Control \(CDC\) Social Vulnerability Index](#) (2018), where possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), Accomack County rates a 0.8025 and Northampton County rates a 0.6764.

Localities across the Eastern Shore have town governments made up of volunteers; some are teachers, some are business owners, etc. While this demonstrates a passion and love for the place they live, it also highlights a lack of capacity in the number of full-time local government and non-profit staff to develop individual plans in the area of environmental and coastal resilience. The Accomack-Northampton Planning District Commission (A-NPDC) seeks to provide coastal management technical assistance to localities across the region to address the lack of capacity at the local level. One way the A-NPDC can do this is through the development of a region-wide resilience plan that all localities and counties can utilize to prioritize mitigation projects and reference when seeking future flood preparedness and hazard funds. Currently, the Eastern Shore also lacks financial resources to plan and implement flood preparedness and mitigation projects. The development of a regional resilience plan will act as a bridge for localities to qualify for available and future flood and coastal resilience funds.

A regional resilience plan is instrumental in increasing coastal resilience and protection for the community and its culture, preserving natural habitats, and using nature-based solutions (NBS) where possible. The A-NPDC currently leads the Climate Adaptation Working Group (CAWG), focused on identifying resilience needs in the region, and working with members of the community and local government to connect these region-wide resilience needs (projects, studies, plans, etc.) with appropriate funding sources. The CAWG has developed a living database of Eastern Shore Regional Resiliency Projects, 85 of which were submitted for the Virginia Coastal Resilience Master Plan, Phase 1. The A-NPDC was awarded CFPF Round 1 funds to develop an

agriculture study, examining crop impacts from flood events; this information is intended to be incorporated into the regional resilience plan. The next step in this effort is the development of a comprehensive regional resilience plan that includes every local government's approach to flooding. The completion of this regional resilience plan will build capacity across Eastern Shore communities by prioritizing and qualifying flood protection and mitigation projects for various funding avenues, including the Community Flood Preparedness Fund.

This Eastern Shore Regional Community Resilience Plan will be project-based with a focus on flood control and resilience; it will simultaneously incorporate nature-based infrastructure to the greatest extent possible, and be based on the best available science, incorporating climate change, sea level rise, storm surge (as appropriate), and current flood maps. This plan will consider all local governments and include coordination with other local and inter-jurisdictional plans, programs, and activities, and lastly will have clearly articulated phasing for plan implementation. The Planning District Commission will conduct broad, inclusive public outreach and community response will be recorded and quantified to ensure the development of a truly comprehensive regional resilience plan. Through public engagement, including public listening sessions, surveys, and educational materials, this effort will raise awareness across the region about flood hazard areas, the social vulnerability of coastal communities, and steps to manage these risks. Planning District Commission staff will further build capacity within the region by utilizing these funds to become trained and certified in stormwater management, using coursework offered by the Department of Environmental Quality (DEQ). If funded, the Planning District Commission will establish an internship program to increase capacity for resource assessment, data collection, plan compilation, and public engagement.

Goals & Objectives

1. Develop a Regional Resilience Plan

A. Guided by a Steering Committee consisting of local officials, experts in coastal resilience, and Eastern Shore leaders.

B. Basis in community-wide approach to flood resilience, identifying economic impacts, critical assets at risk, and communities facing forced migration.

C. Incorporate relevant data and plan segments from other published regional, local, and county plans (i.e., Hazard Mitigation Plan, Comprehensive Plans, Coastal Resilience Master Plan maps, etc.).

D. Make available to localities updated data/resources for incorporation into local plans.

E. Develop general template of policy language relevant to the regional resilience plan, as determined by the Steering Committee, for use by counties and localities in the revision or modification of existing plans.

F. Adoption of the Regional Community Resilience Plan by counties/localities.

2. Seek Department of Conservation and Recreation (DCR) certification that the plan meets minimum requirements

A. Build rapport with DCR representative who can provide guidance in the development of a regional resilience plan that will meet minimum requirements for future funding.

B. Develop a plan with these minimum requirements in mind.

3. Publish and Distribute the Regional Resilience Plan

A. Make available, copies of the DCR certified regional resilience plan in the A-NPDC library and online.

B. Distribute electronic file of the regional resilience plan to localities, academia and nonprofits (i.e., VIMS, Eastern Shore Community College, TNC, etc.), and public libraries.

C. Provide one (1) print copy of the regional resilience plan to each County.

4. Capacity Building, Training, and Education

A. Certify A-NPDC staff member(s) in stormwater management and/or erosion and sediment control, as course is available from DEQ and feasible to attend (location or virtual) to increase floodplain staff capacity.

B. Engage and educate community members impacted by the region's floodplains through public meetings and providing information about available trainings and workshops facilitated by state entities.

C. Hire a student intern to assist in research development and assessment, plan compilation, and public outreach.

Stakeholders, Outreach, and Education

Stakeholders

The following table lists potential stakeholders.

	Stakeholder	Entity
1	Residents	Community
2	Property Owners	Community
3	Students	Community
4	Business Owners (Agriculture, Aquaculture, Restaurants, Shops, Attractions, etc.)	Community
5	Accomack County	Local Government
6	Accomack County Public Works	Local Government
7	Northampton County	Local Government
8	Northampton County Public Works	Local Government
9	Towns/Communities	Local Government
10	Virginia Tech Eastern Shore AREC	Higher Education
11	College of William and Mary Virginia Institute Marine Science	Higher Education
12	UVA Coastal Research Center	Higher Education
13	The Nature Conservancy	Non-Profit 501 (c)(3)
14	Virginia's Eastern Shore Land Trust	Non-Profit 501 (c)(3)
15	Eastern Shore Regional Navigable Waterways Committee	Professional/State Government
16	DCR Region Steward	State Government
17	US Army Corps of Engineers	Federal Government
18	Accomack-Northampton PDC	Professional/State Government
19	Chesapeake Bay Foundation	Non-Profit 501 (c)(3)
20	Wetlands Watch	Non-Profit 501 (c)(3)
21	Citizens for a Better Eastern Shore (CBES)	Non-Profit 501 (c)(3)

Steering Committee Members

The following table lists who will be invited to participate on the Steering Committee.

	Steering Committee Invitee	Entity
1	Accomack County Official/Staff	County Government
2	Accomack County Public Works Representative	County Government

3	Northampton County Official/Staff	County Government
4	Northampton County Public Works Representative	County Government
5	Town or County Official/Staff/Leader	County Government
6	Virginia Tech Eastern Shore AREC	Higher Education
7	College of William and Mary Virginia Institute Marine Science	Higher Education
8	UVA Coastal Research Center	Higher Education
9	The Nature Conservancy	Non-Profit 501 (c)(3)
10	Virginia's Eastern Shore Land Trust	Non-Profit 501 (c)(3)
11	Eastern Shore Regional Navigable Waterways Committee Member	Professional/State Government
12	DCR Region Steward	State Government
13	US Army Corps of Engineers Representative	Federal Government
14	Accomack-Northampton PDC (<i>Lead</i>)	Professional/State Government
15	Chesapeake Bay Foundation	Non-Profit 501 (c)(3)
16	Wetlands Watch	Non-Profit 501 (c)(3)
17	Citizens for a Better Eastern Shore (CBES)	Non-Profit 501 (c)(3)

Outreach & Education Strategies

Community members, including, but not limited to: community leaders, students, influencers, and business owners will be engaged through public meetings held during the planning process and other means of gathering public input (i.e., surveys, email campaigns, etc.). Trainings and workshops offered by state entities will be shared through social media channels to provide education opportunities for community members.

Implementation Plan & Timeline

The Planning District Commission will complete all grant activities within twenty-four (24) months following a CFPF award, allowable for this round of CFPF grant funds. During this time, the following activities will be conducted: resource assessment, data collection, report compilation, community engagement, and plan development. Within the first three (3) months, a steering committee will be established to begin the guidance of the regional resilience plan development. The steering committee will create a timeline for meeting each objective and set a public input meeting for stakeholders across the region's communities. Staff training for stormwater management and/or erosion and sediment control through DEQ will occur within the project's development period. The intern will be hired in the first half of the grant period to build capacity for data/report compilation, resource assessment, and public outreach.

Parties Responsible

The Resilience Plan Steering Committee, led by Planning District Commission staff, will be charged with guiding the development of the resilience plan. Planning District Commission staff will be responsible for overseeing and implementing all grant activities.

Performance Outputs and Measures

The key short-term result of this project will be the development of the Eastern Shore's Regional Community Resilience Plan. Achieving the publication of this plan within eighteen (18) months, while remaining on budget, would be considered a success. Another short-term result with long-term benefits would be the training of an A-NPDC staff member to become certified in stormwater management and/or erosion and sediment control. This has the potential to enable the A-NPDC to conduct regulatory inspections for a Virginia stormwater management program, review erosion and sediment control (ESC) plans and stormwater management (SWM) plans, and build knowledge in the following areas: Virginia stormwater management law and regulations, basic stormwater principles, construction general permit requirements, stormwater BMPs, Virginia erosion and sediment control law and regulations, fundamentals of erosion and stormwater runoff, and erosion and sediment control measures. The output of this request will be a comprehensive approach to flood mitigation, preparedness, and coastal resilience in the form of a regional resilience plan.

Plans for Maintaining Capacity

Once the resilience plan has been finalized, there is no anticipated need for continuing support in its immediate development. The Eastern Shore region will utilize the plan for subsequent grant requests and project proposals for a period of three (3) years in accordance with the 2021 CFPF manual and as a resource for managing flood mitigation, preparedness, and coastal resilience. It is intended to align this regional resilience plan with the region's Hazard Mitigation Plan (HMP) and, if funding is available, update the regional resilience plan every five (5) years.

Supporting Documents

Hazard Mitigation Plan 2016

<http://www.a-npdc.org/wp-content/uploads/2016/04/FullHMP2016.pdf>

Note: HMP 2022 Update has been completed; awaiting final approval from FEMA.

Current Floodplain Ordinances

Accomack County –

https://library.municode.com/va/accmack_county/codes/code_of_ordinances?nodeId=CO_CH106ZO_ARTXVFLHAOVDI

Northampton County –

https://codelibrary.amlegal.com/codes/northamptoncounty/latest/northampton_va/0-0-0-16924

Comprehensive Plans

Accomack County –

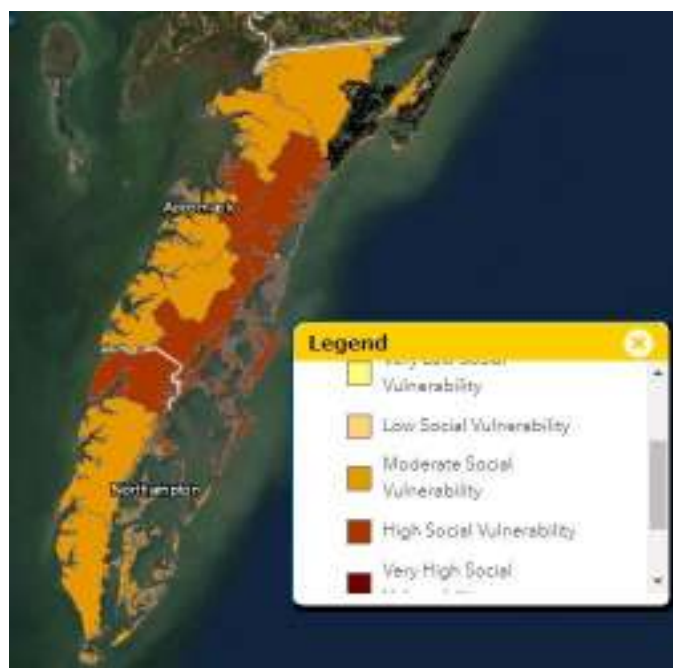
<https://www.co.accomack.va.us/home/showpublisheddocument/10669/636761702081200000>

Northampton County –

https://p1cdn4static.civicleve.com/UserFiles/Servers/Server_14877142/File/I%20Want%20To%E2%80%A6Volunteer/Comp%20Plan/Complete_Comp_Plan_Apr_2009.pdf

Social Vulnerability Scores

The Eastern Shore has a social vulnerability index average rating of 0.9 (high moderate vulnerability), not including Wallops or Assateague Island, according to [ADAPT VA's Virginia Vulnerability Viewer](#) (2016).



According to the [Center for Disease Control \(CDC\) Social Vulnerability Index](#) (2018), where possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability), Accomack County rates a 0.8025 and Northampton County rates a 0.6764.



Historic Flood Damage

Further historical flood damage data dating back to pre-1564 can be viewed in The Eastern Shore of Virginia Hazard Mitigation Plan 2016 (linked below) on pages 5-7 of Chapter 1: Hazards on the Shore.



Flooding on Randolph Avenue, 3 ½ blocks from the Chesapeake Bay, in Cape Charles from one of the 1930s hurricanes. Photo Credit: U.S. Army Corps of Engineers Flood Plain Cape Charles Report

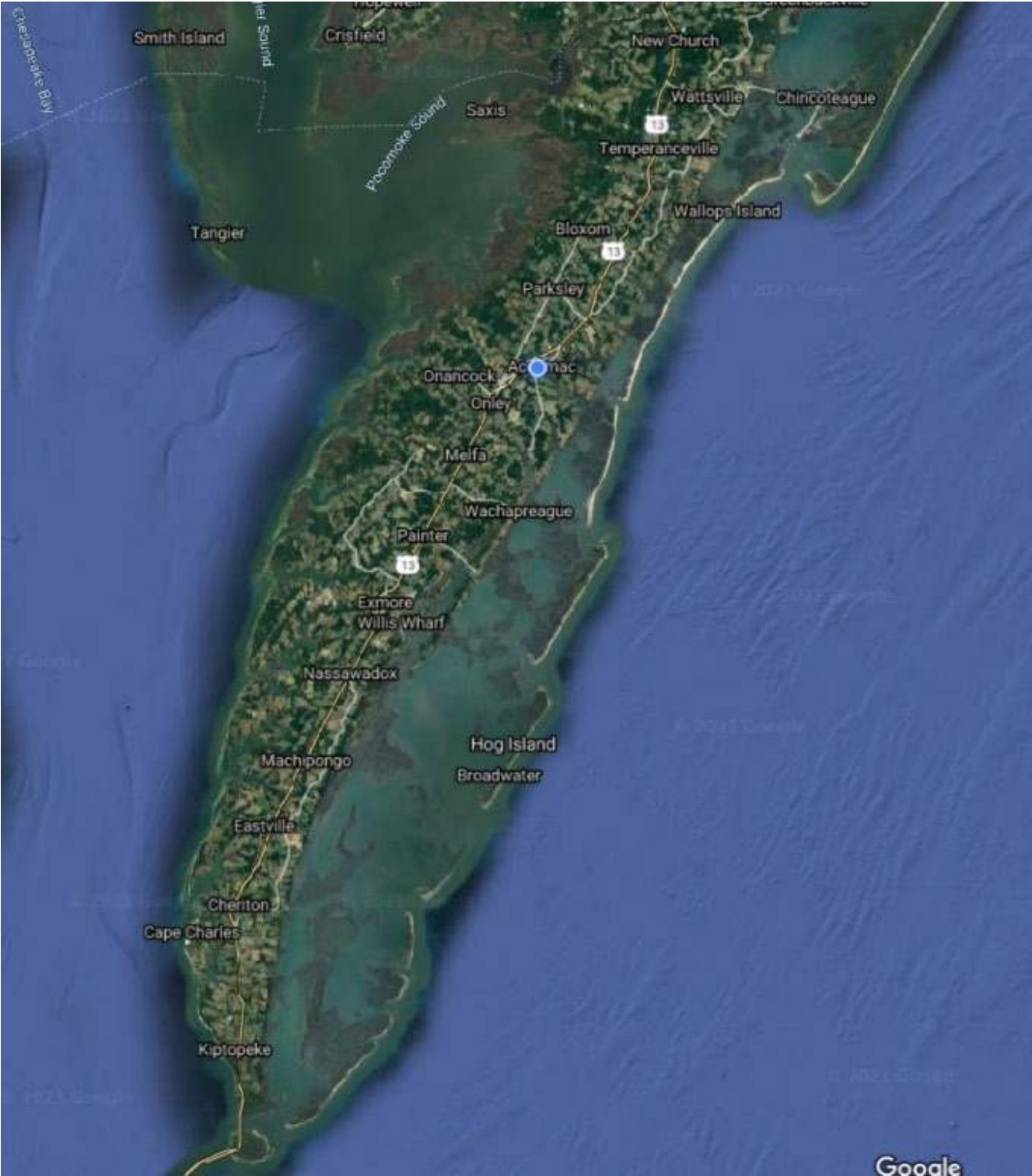


Flooding during the Ash Wednesday Storm of 1962. Photo printed in the Army Corp of Engineers Flood Plain Report for Wachapreague

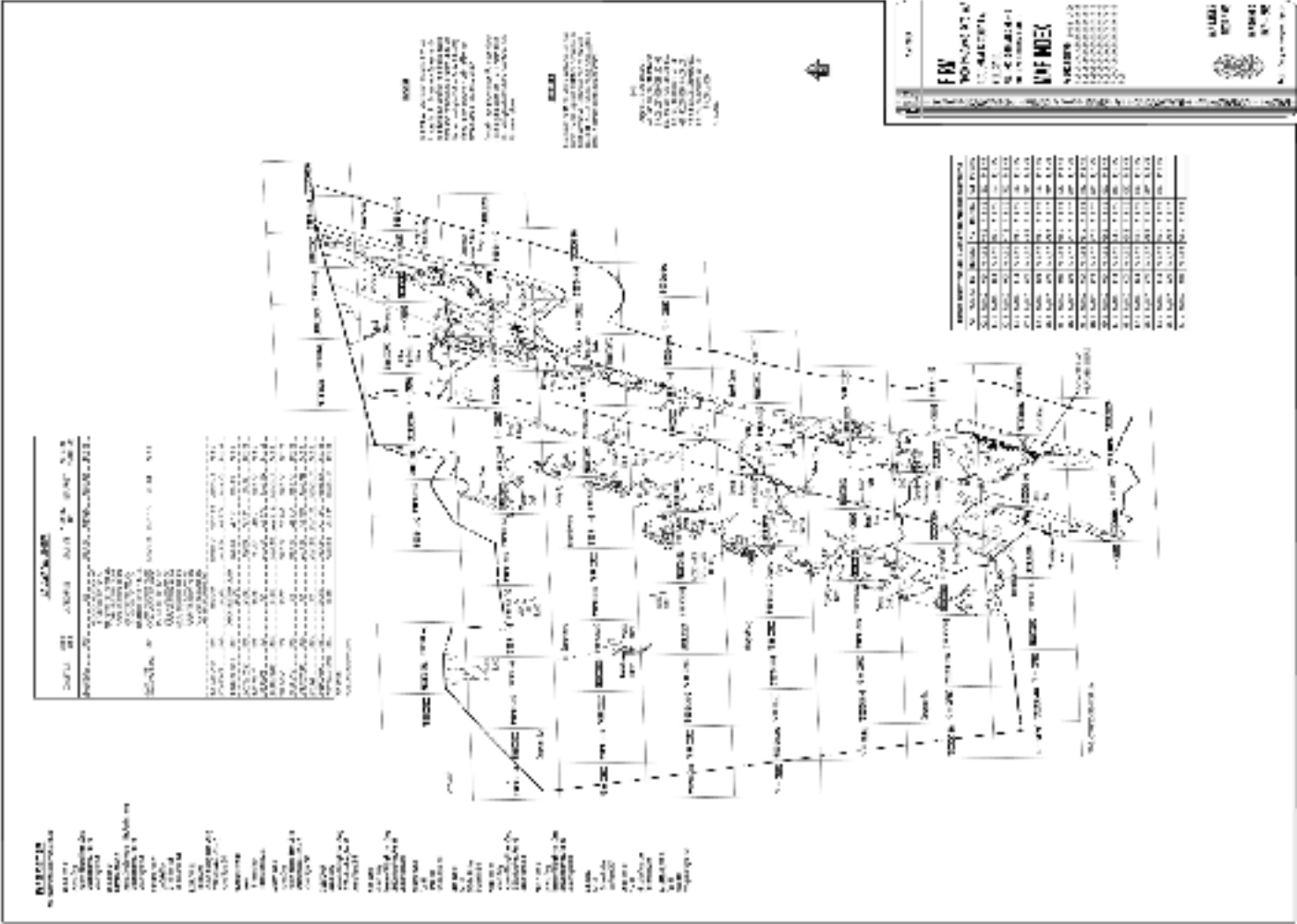


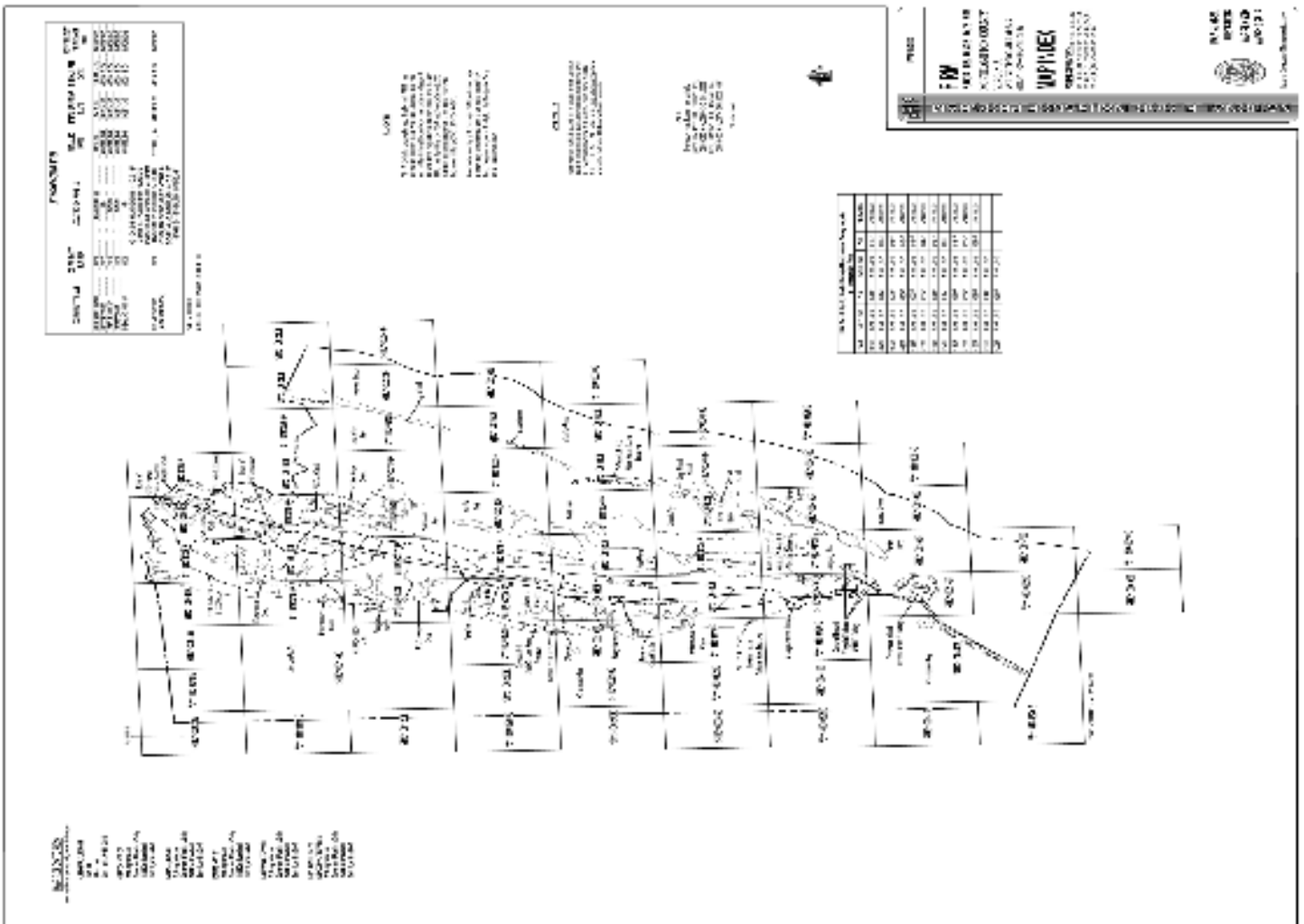
Storm water flooding on U.S. Route 13 during Tropical Depression Ernesto in 2006. Photo Credit: Jay Diem, Eastern Shore News

Detailed Map of the Region



FIRMettes of Project Areas
Accomack County





Non-Fund financed Maintenance and Management Plan

While the development of this plan will take only one to two years for full completion, the intention is to update it every five years, in alignment with other regional plans, such as the Hazard Mitigation Plan. A-NPDC staff will aim to do this with non-fund finances, seeking alternative coastal management and resilience funds to support staff time necessary to facilitate and publish update(s) of the Regional Resilience Plan.

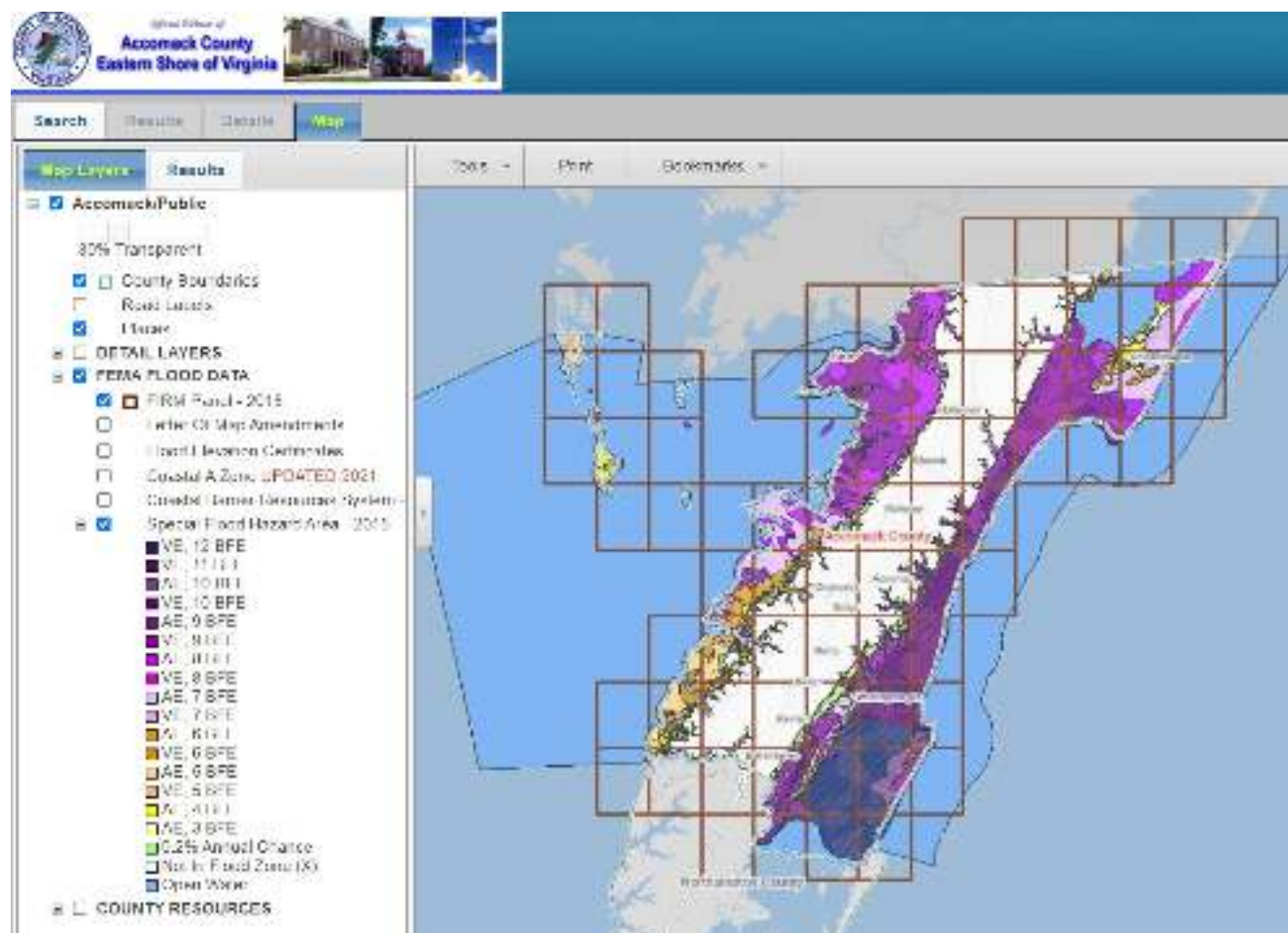
Virginia Coastal Resilience Web Explorer, *Virginia Coastal Resilience Master Plan*

23

FEMA Flood Data Accomack County

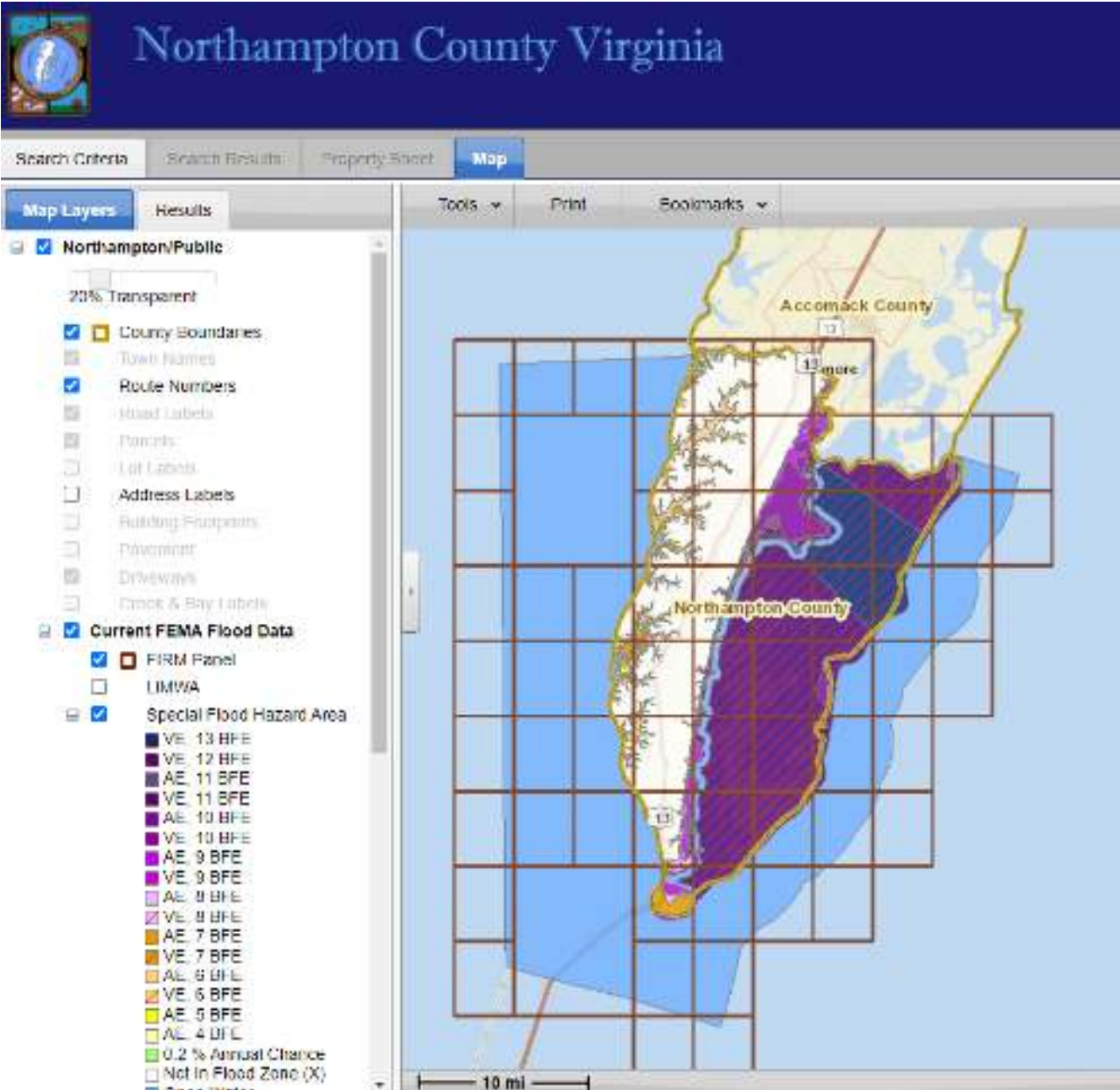
[Accomack County FEMA Flood Data](#)

According to the [County](#), the area is “... a relatively flat area between two major bodies of water. Large portions of the County consist of hydric soils or have a high-water table that are poorly drained and subject to ponding. Tides play a role in possible flooding. Accomack is also subject to severe impacts from nor’easters, tropical storms and hurricanes. During these events and other periods of strong winds rainfall entering ditches and creeks can flood an area if a rising tide is pushing the water back up into creeks. This combination of flat terrain, climate, coastal location, and tides creates large areas subject to flood risk.”



Northampton County

Northampton County FEMA Flood Data



Letters of Support

1. Accomack County
2. Northampton County
3. Chesapeake Bay Foundation
4. Wetlands Watch
5. Virginia Institute of Marine Science
6. CBES

Additional Supporting Documents

1. Shoreline News, April 2022, *Flooded Roads: Maintain or Abandon?*, p. 24, by Sue Mastyl
2. Potential Economic Disruptions Due to Flooding, NOAA database



COUNTY OF ACCOMACK

OFFICE OF THE COUNTY ADMINISTRATOR

23296 Courthouse Ave – Room 213 | P.O. Box 388 | Accomack, Virginia 23301
(757) 787-5700 | administration@co.accomack.va.us
www.co.accomack.va.us

Michael T. Mason, CPA
County Administrator

March 30, 2022

Virginia Department of Conservation and Recreation (VDCR)
RE: Community Flood Preparedness Fund, Round 3
cfpf@dcv.virginia.gov

To Whom It May Concern:

On behalf Accomack County, I fully support the efforts of the Accomack-Northampton Planning District Commission (A-NPDC) in seeking funding from the Community Flood Preparedness Fund (CFPF) for Capacity Building & Planning through the development of a regional resilience plan.

The Eastern Shore, being a land between two waters, is extremely vulnerable to flooding as a result of storm events, sea-level rise, climate change, and increased rainfall. In addition to these vulnerabilities, Accomack County is considered a low-income geographic area with median household incomes falling below the \$59,377.60 threshold. According to the [US Census Bureau QuickFacts](#) table, Accomack County's median household income equals \$46,178. The development of a regional resilience plan, guided by a steering committee made up of community leaders and region-wide stakeholders is a critical need of Accomack County and its localities in the Eastern Shore region for both sustainability of the region and for prioritization of mitigation projects. A plan is also a critical prerequisite when seeking potential funding to aid in flood preparedness and mitigation.

The anticipated regional resilience plan will directly impact Accomack County, increasing assets the localities of Accomack County have when seeking funding for flood preparedness and mitigation projects. With this resilience plan, Accomack County is hopeful that more localities will seek flood funding to address critical projects and identified needs within their community.

Sincerely,

A handwritten signature in blue ink, appearing to read "MTM", is written over a horizontal line.

Michael T. Mason,
County Administrator

Cc: Jessica Steelman, Coastal Planner
Accomack-Northampton Planning District Commission
jsteelman@a-npdc.org



Board of Supervisors of Northampton County
P.O. Box 66 • Eastville, Virginia 23347

Charles Kolakowski
County Administrator

PHONE: 757-678-0440
FAX: 757-678-0483

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March 25, 2022

Ms. Jessica Steelman
Coastal Planner
Accomack-Northampton Planning District Commission
jsteelman@a-npdc.org
(757) 787-2936 x114

Re: Support for *Capacity Building: Development of the Eastern Shore Regional Community Resilience Plan*

Dear Mrs. Steelman:

On behalf of Northampton County, I fully support the efforts of the Accomack-Northampton Planning District Commission (A-NPDC) in seeking funding for a Community Flood Preparedness Fund (CFPF) grant through the Virginia Department of Conservation & Recreation to develop a Regional Resilience Plan.

A Regional Resilience Plan is instrumental in increasing coastal resilience and protection for the community and its culture, preserving natural habitats, and using nature-based solutions (NBS) where possible. The A-NPDC currently leads the Climate Adaptation Working Group (CAWG), focused on identifying resilience needs in the region, and working with members of the community and local government to connect these region-wide resilience needs (projects, studies, plans, etc.) with appropriate funding sources. The CAWG has developed a living database of Eastern Shore Regional Resiliency Projects, 85 of which were submitted for the Virginia Coastal Resilience Master Plan, Phase 1. The next step in these efforts is the development of a comprehensive regional resilience plan that describes the entire local government's approach to flooding. The completion of this Regional Resilience Plan will build capacity across Eastern Shore communities by qualifying flood protection and mitigation projects for various funding, including the Community Flood Preparedness Fund.

March 25, 2022

Page Two

This Eastern Shore Regional Resilience Plan will be project-based with a focus on flood control and resilience; it will simultaneously incorporate nature-based infrastructure to the extent possible, and be based on the best available science, incorporating climate change, sea level rise, storm surge (as appropriate), and current flood maps. This plan will consider all parts of local government and include the coordination with other local and inter-jurisdictional projects, plans, and activities, and lastly will have clearly articulated phasing for plan implementation. Regardless of socioeconomics and race, public outreach will be conducted and community input will be requested to ensure the development of a truly comprehensive Regional Resilience Plan.

If you have any questions, please advise.

Sincerely yours,



CHARLES KOLAKOWSKI
County Administrator
ckolakowski@co.northampton.va.us

Cc: Anne Doyle, Director of Planning
Accomack-Northampton Planning District Commission
adoyle@a-npdc.org



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April 8, 2022

Virginia Department of Conservation and Recreation
Attention: Virginia Community Flood Preparedness Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, Virginia 23219

To Whom It May Concern:

On behalf of the Chesapeake Bay Foundation (CBF), I submit this letter of support for the Accomack-Northampton Planning District Commission (ANPDC) Eastern Shore Regional Community Resilience Plan.

CBF is a nonprofit organization dedicated to saving the Chesapeake Bay with more than 91,000 members in Virginia. CBF carries out its mission through restoration, advocacy, education, and litigation from offices in Richmond, Virginia Beach, and other locations in the Bay watershed, including Virginia's Eastern Shore.

ANPDC's application to the Virginia Community Flood Preparedness Fund (CFPF) is aligned with the Commonwealth's objectives for resilience laid out in the Coastal Resilience Master Plan (CRMP) and the preferences included in the CFPF. ANPDC's proposal to develop a plan that is protective of communities in Accomack and Northampton Counties as well as their natural resources makes it an ideal candidate for CFPF support.

Sea level rise and increased flooding threaten communities around the Commonwealth. However, many smaller localities do not have the personnel or resources to begin assessing those impacts, or the funds necessary to implement solutions. The proposal from ANPDC would help Eastern Shore communities with the essential first step of developing a resilience plan. Their projects-based approach builds upon the work of the CRMP by opening the door for Eastern Shore localities to receive CFPF awards, as well as federal dollars dedicated to resilience efforts.

Rising waters carry potential impacts to habitat and water quality throughout the Chesapeake Bay watershed which is why the CFPF included a strong preference for nature-based designs. The proposal acknowledges the risks to the tidal wetlands, beaches, and dunes, as well as uplands, and as such, will focus on those projects that maximize nature-based designs. Additionally, given the region-wide focus of the proposal, it also meets CFPF objectives for community scale.

ANPDC has a demonstrated track record of coordinating regional resilience efforts through the Climate Adaptation Working Group (CAWG) and their numerous partnerships with localities. It is the ideal organization to help coordinate the creation of this regional plan. We hope the agency will look favorably upon this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret Sanner", with a long horizontal flourish extending to the right.

Margaret L. (Peggy) Sanner
Virginia Executive Director



April 6, 2022

Wendy Howard-Cooper
Director of Dam Safety & Floodplain Management
Virginia Department of Conservation & Recreation
cfpf@dcr.virginia.gov

Re: Eastern Shore of VA Regional Resilience Community Plan Development CFPF Application

Dear Ms. Howard-Cooper,

I am writing as Wetlands Watch's Executive Director to communicate our organization's support of Accomack-Northampton Planning District Commission's (A-NPDC) application to the Virginia Community Flood Preparedness Fund (CFPF) for the development of the "Eastern Shore of VA Regional Community Resilience Plan."

Understanding the risks facing a region and planning to address the impacts of those risks is critical to build community-wide resilience. Virginia's Eastern Shore is experiencing a number of flood risks related to current and projected future conditions. Recurrent tidal flooding and increased rainfall makes many roads impassable, farmlands not farmable, tree buffers die, and septic systems fail. Planning for these impacts will help educate local government staff, community decision makers, residents, businesses, and many other stakeholders about their specific risks so they can take action during and after flood events. The creation of the Resilience Community Plan will also allow those Eastern Shore local governments participating in the plan to apply for future CFPF project funding that is essential to implement strategies identified in the resultant plan.

We strongly support ANPDC's application to the Community Flood Preparedness Fund. We believe the state resources invested in the development of the Eastern Shore Regional Community Resilience Plan will enhance flood safety and community resilience in communities where staff capacity is low and resources are scarce. We look forward to work with the A-NPDC and Eastern Shore communities on this endeavor.

Sincerely,

William "Skip" Stiles, Jr.
Executive Director
Wetlands Watch

6 April 2022

Wendy Howard-Cooper
Director for Dam Safety and Floodplain Management
Virginia Department of Conservation and Recreation
cfpf@dcr.virginia.gov

RE: Eastern Shore of Virginia Regional Resilience Community Plan Development CFPF Application

Ms. Howard-Cooper and Members of the Review Team:

I am writing to you in support of the application by the Accomack-Northampton Planning District Commission (A-NPDC) for funding from the Community Flood Preparedness Fund (CFPF) to support development of a regional resilience plan.

As I'm sure you are aware, the topography of the Eastern Shore of Virginia (ESVA) is, well, there is little to no topography here. Storm water infiltrates and pools in flooded woodlands as much or more than it runs off, and we are in an area with one of the highest relative level rise rates. Farm land and houses are being lost to rising salt water on both Seaside and Bayside, where small increases in sea level impact significant horizontal area due to the flat terrain. It is an economically depressed area, dominated by agriculture and use of marine resources (wild harvest fisheries and aquaculture). Many of our residents lack the education, resources, and scope of attention beyond survival to address future needs, reacting rather than planning.

The development of a regional resilience plan under the leadership of A-NPDC would be a great service to the residents of the ESVA and the local governments struggling to meet basic services for their citizens.

I started my current position with VIMS here in Wachapreague in 2015. I quickly realized that the A-NPDC was a leader in addressing economic and environmental issues for the ESVA, providing critical planning resources for individuals, communities, and local government, and securing and managing grants and contracts to improve conditions here on the ESVA. I have always found them to be highly professional and practically oriented. They are well qualified for the proposed task.

Please contact me if any further information is needed.

Sincerely,



Richard A Snyder
Professor and Director
rsnyder@vims.edu



CITIZENS FOR A BETTER EASTERN SHORE

Non-profit Organization "Protecting What You Love About the Shore Since 1988"
PO Box 882 • Eastville, VA 23347 • 757-678-7157 • info@cbes.org • www.cbes.org

April 6, 2022

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Virginia Department of Conservation and Recreation **RE: Eastern Shore of Virginia Regional Resilience Community Plan Development CFPF Application**

To Whom It May Concern:

I am writing to you on behalf of CBES Board and membership in support of the Accomack-Northampton Planning District Commission's [A-NPDC] grant application to develop a regional resilience plan for the Eastern Shore.

As a 34-year nonprofit with a focus on conservation, natural resource protection and community action, we have long recognized and advocated for the need to comprehensively address rising sea levels and the ramifications of increased and more intense storm events on our vulnerable peninsula.

Our monthly *ShoreLine News Journal* has covered this issue extensively including our latest edition which addressed maintaining or abandoning flooded roads.

CBES knows the solid track record of the A-NPDC and firmly believes they are the agency our community can depend on to facilitate the development of a Shore wide regional plan. Such a planning, project-based strategy is not a luxury but a necessity for the protection of our community's future.

Godspeed,

Donna Bozza, CBES Executive Director

Cc: Jessica Steelman, Coastal Planner
Accomack-Northampton Planning District Commission

Flooded Roads: Maintain or Abandon?

By Sue Mastyl

A spring 2020 paper from the Virginia Coastal Policy Center (VCPC) of William & Mary Law School outlines the potential liability issues of closing roads due to increased flooding.¹

As policymakers continue to update plans for flooding due to sea-level rise (SLR), increased precipitation, and more frequent storm events, one area of concern is road flooding. Some roads on the Eastern Shore and throughout coastal Virginia already flood on a regular basis with king tides and storms; this will only increase in severity and frequency.

Flooded Roads on the Eastern Shore

The Virginia Department of Transportation (VDOT) oversees 57,867 miles of roads in Virginia – 1,516 miles on the Shore. The 2021 VTrans (Virginia's Transportation Plan) cited 32,100 miles of roads at risk of flooding due to SLR, storm surge, and inland/riverine flooding.²

A 2015 study by Accomack-Northampton Planning District (A-NPDC) and VDOT assessed the vulnerability of Eastern Shore roads to flooding.³ They determined that with 1 foot of SLR (currently projected by 2040⁴), 33 miles of roads would be vulnerable to inundation; the number rises to 371 miles (24.5% of all roads) with 6 feet of SLR, which could occur as early as 2090 under the NOAA intermediate-high scenario.⁵ Over 80% of the vulnerable roads were in Accomack County. The study noted that the SLR predictions “represent stillwater conditions,” without considering wind, storm events, or astronomical tides, so that “a larger number of roads may be subject to flooding than what is indicated by this study.”

The A-NPDC study showed that:

- 100% of roads on Tangier will be inundated with 1 foot of SLR; this will occur for Chincoteague and Saxis with 4 feet of SLR, and for Wachapreague with 6 feet of SLR.
- Major access roads will be inundated with 2 feet of SLR, including:
 - Bell's Neck Road, Chincoteague Causeway, Crystal Beach Road, East Point Road, Greenbackville/State Line Road, Hopkins Road, North Chesconessex/Northside Road, Saxis Causeway, and Schooner Bay Road in Accomack County
 - Bayford Landing, Church Neck/Bayside Road, Johnsons Cove/Old Neck Road, Webbs Island, and Wise Point Landing in Northampton County

The study noted that estimating costs to maintain or elevate roads vulnerable to flooding is difficult. A 2003

study for 3 Chesapeake Bay communities in Maryland estimated costs from \$385,000 to \$1.5 million per lane mile; a 2009 study for 6.75 miles of roads on the Middle Peninsula of Virginia estimated \$5.3 million for short-term solutions and \$26.5 million for long-term plans. All of these estimates would have to be adjusted for inflation.

Potential Liabilities

Failure to maintain a flooded road could leave a locality open to liability. Abandoning a section of road due to flooding may also create liability.

The VCPC paper notes that local governments will play a key role in deciding whether to 1) replace roads vulnerable to flooding (including the option to elevate the roads), 2) continue to maintain them in place, or 3) abandon them altogether. Some policymakers are taking steps to address the threat of SLR on roads, including plans by the U.S. Fish & Wildlife Service and National Park Service to move the road and parking lot for the beach on Assateague Island to a more stable location.^{6,7} However, communities are already seeing pushback on some plans, including homeowners in Gloucester County who threatened to sue after the county and VDOT posted “Road May Flood” signs, because it might decrease property values; and homeowners in Florida who successfully sued the county when it stopped repairing a low-lying, flood-prone road due to increasing costs.

The primary source of funding for roads in Virginia is the SMART SCALE program; importantly, only historical flooding, and not future SLR, is factored in, and only with respect to disruption to traffic. Environmental quality is only 1 of 6 factors considered in evaluations.

In deciding to abandon a road, the governing body must determine that either there is “no public necessity” (which could include scenic value alone) for continuing its use, or “the safety and welfare of the public” are best served by the abandonment. Once abandoned, it may not be possible to add the road back into the system.

Of the options outlined above, replacing or elevating sections of road will be the most expensive in many cases. Maintaining roads in place also has significant costs, while failure to maintain a flooded road could leave a locality open to liability under the takings clause, either by preventing access to property or by causing damage to property. Abandoning a section of road due to flooding may also create liability if a property owner feels they have been denied access to their property.

To avoid these liabilities, the VCPC authors recommend including the community in the process, with early

See Flooded Roads, cont'd on p. 5
35



Calling All Anglers

You Too Can Be a Fisheries Scientist

By George Mapp

Birdwatchers have excellent phone apps to help identify birds in the field. Simply take a picture, submit it, and if the picture is detailed enough, the app will identify the bird. Or submit a sound recording. If it's a new species for you, click and it's added to your life list. More importantly, your observation is added to a database, catalogued, and made available to researchers and the public. For users, it's convenient – there's no need for field guides or notebooks. For the rest of us, the data reveal what both sexes look like and sound like at all ages, when and where species normally occur, and enables estimates of abundance and migration patterns.


Now the Virginia Institute of Marine Science (VIMS) has developed a similar app for anglers. RecFish (<https://www.recfish.org/>) is now available on mobile devices and as a website. The initial version is not fully functional, as it can only recognize a few species. It takes several thousand pictures of each species to “train” the machine learning software – software also used for facial recognition and optical character readers. So, the goal of this first version is to gather pictures. As more and more are added, identification “skill” will improve.

The goal is to identify the fish, estimate size and weight, and determine if it is legal to keep. Future enhancements may include whether it is edible, legal regulations, and the citation size and weight. One possible enhancement – virtual fishing tournaments. Like the

bird databases, this one will add to our knowledge of the appearance of both sexes at all ages, migration patterns, abundance, and size and weight statistics.

VIMS has been doing trawl surveys for 67 years, but only in waters deeper than 9 feet. While the data are invaluable for managing fisheries, it misses shallow waters – important fish habitats of grass beds and oyster reefs.

There are approximately 300 fish species reported in the Bay, but only about 30 year-round resident species. The rarer the species, the more important the pictures are. Anglers are not inclined to pose with throw-back fish, but by photographing them, they will be doing a good deed. Those who prefer not to divulge the location of their favorite fishing spot can opt to provide an approximate location or no location at all.

More and more anglers, like birders, are content to observe without harming the animals. For anglers, this is catch-and-release. Injuries to fish can be minimized in several ways, for example, by using barbless hooks, leaving the fish in the water while carefully removing the hook, and releasing promptly. 


Sources

Malmquist, David. VIMS scientists want to hear your fish tales. VIMS. Edu, 2021. <https://www.vims.edu/newsandevents/topstories/2021/recfish.php>

Techniques to reduce catch-and-release mortality. Florida Fish and Wildlife Conservation Commission, 2022. <https://myfwc.com/research/saltwater/fish/snook/reduce-catch-release-mortality/>

Flooded Roads, *cont'd from p. 4*

discussions and negotiations with affected property owners; ongoing education of citizens about current and predicted flooding risks in the community; and developing alternative plans to provide access to affected properties.

As SLR increases and storm events increase in frequency and intensity, localities “will need to consider whether it is worth the expense to continuously maintain roads that are repeatedly damaged by flooding,” the authors note. “Localities will ... have to consider the option of abandoning certain roads that become problem areas for repeated flooding,” which may remove the legal risk and costs associated with ongoing maintenance, “but does come with its own potential legal risks, ... from landowners who lose sole access to their properties.” 

Sources:

¹ Howieson W, Tentilucci M. Closing roads due to increased flooding: potential liability issues in Virginia. College of William & Mary Law School, Virginia Coastal Policy Center, spring

2020. https://law.wm.edu/academics/programs/jd/electives/clinics/practicum_list/vacoastal/reports/transportation-paper-4-26-213.pdf

² VTrans: Virginia's Transportation Plan. Long-term risks & opportunity register. Jan. 21, 2022. <https://vtrans.org/long-term-planning/long-term-risk-register>

³ Accomack-Northampton Planning District. Eastern Shore of Virginia transportation infrastructure inundation vulnerability assessment. May 2015. http://www.a-npdc.org/wp-content/uploads/2016/05/THIVA-Report-ANPDC-May2015_final-no-appendices.pdf

⁴ Virginia Institute of Marine Science. Sea-level report cards: Chesapeake Bay. 2022.

⁵ ADAPTVA. Virginia sea level: evidence-based planning for changing climate. 2022. http://adaptva.com/info/virginia_sea_level.html

⁶ U.S. Fish & Wildlife Service and National Park Service. Your new beach experience: a project to support and sustain the local tourism-based economy, Chincoteague, VA. May 2017. <https://www.fws.gov/uploadedFiles/New%20Beach%20Experience%20-%20May%20update%202017.pdf>

⁷ U.S. Fish & Wildlife Service. Finding of no new significant impact: environmental assessment for the recreational beach relocation. Dec. 11, 2018. <https://www.fws.gov/uploadedFiles/2018%20EA%20for%20Beach%20Relocation.pdf>

Geoid	GeoName	stateName	SquareMiles	Year	SectorID	SectorName	Establishments	Employment	Wages	RealWages	GDP	RealGDP
51001	Accomack, VA	Virginia	4.49E+02	2019	NALL	Total, all industries	1130	13214	525592554	472010924	1300267456	1142114943
51001	Accomack, VA	Virginia	4.49E+02	2019	NCONS	Construction	91	391	15810968	14199116	31812843	23684736
51001	Accomack, VA	Virginia	4.49E+02	2019	NFINA	Financial Activities	70	245	11115629	9982444	78637758	63041296
51001	Accomack, VA	Virginia	4.49E+02	2019	NHAED	Education and Health Services	271	1491	66535867	59752856	85340725	76494676
51001	Accomack, VA	Virginia	4.49E+02	2019	NINFO	Information	13	81	3804494	3416644	10979628	12201322
51001	Accomack, VA	Virginia	4.49E+02	2019	NLAHS	Leisure and Hospitality	113	1422	25021340	22470535	52362066	41850687
51001	Accomack, VA	Virginia	4.49E+02	2019	NMANU	Manufacturing	25	3285	117564188	105579085	358511388	323994574
51001	Accomack, VA	Virginia	4.49E+02	2019	NNATR	Natural Resources and Mining	21	150	7084971	6362692	26320144	32423436
51001	Accomack, VA	Virginia	4.49E+02	2019	NOTHR	Other Services	108	364	8969569	8055165	20262045	16430168
51001	Accomack, VA	Virginia	4.49E+02	2019	NPABS	Professional and Business Services	118	1265	83466431	74957430	142202680	136695204
51001	Accomack, VA	Virginia	4.49E+02	2019	NPUBA	Public Administration	55	1253	77950661	70003966	393655933	336810997
51001	Accomack, VA	Virginia	4.49E+02	2019	NTRAD	Trade, Transportation, and Utilitie	239	1830	59276249	53233321	149571095	133464877
51131	Northampton, VA	Virginia	2.12E+02	2019	NALL	Total, all industries	597	4359	141241026	126842184	349417259	306917373
51131	Northampton, VA	Virginia	2.12E+02	2019	NCONS	Construction	30	113	4498681	4040062	9051681	6738997
51131	Northampton, VA	Virginia	2.12E+02	2019	NFINA	Financial Activities	31	136	4980512	4472773	35234740	28246528
51131	Northampton, VA	Virginia	2.12E+02	2019	NHAED	Education and Health Services	225	603	19565926	17571274	25095793	22494471
51131	Northampton, VA	Virginia	2.12E+02	2019	NINFO	Information	1	0	0	0	0	0
51131	Northampton, VA	Virginia	2.12E+02	2019	NLAHS	Leisure and Hospitality	46	744	13727590	12328128	28727677	22960764
51131	Northampton, VA	Virginia	2.12E+02	2019	NMANU	Manufacturing	12	234	8526951	7657669	26002893	23499382
51131	Northampton, VA	Virginia	2.12E+02	2019	NNATR	Natural Resources and Mining	40	797	30408961	27308914	112967045	139162604
51131	Northampton, VA	Virginia	2.12E+02	2019	NOTHR	Other Services	64	159	4136623	3714914	9344534	7577333
51131	Northampton, VA	Virginia	2.12E+02	2019	NPABS	Professional and Business Services	33	91	3975854	3570535	6773706	6511362
51131	Northampton, VA	Virginia	2.12E+02	2019	NPUBA	Public Administration	24	294	11849499	10641500	59840744	51199586
51131	Northampton, VA	Virginia	2.12E+02	2019	NTRAD	Trade, Transportation, and Utilitie	86	536	15090559	13552149	38077838	33977514

The National Oceanic and Atmospheric Administration (NOAA) recently released a first of its kind database that helps communities understand the potential economic disruptions due to flooding.

The database provides employment in coastal inundation zones statistics, and is one of the newest products available from NOAA's Digital Coast.

Information about the number of businesses and employees that could be impacted by flood events can be hard to find and can leave a big gap in a risk analysis. To help fill this data gap, NOAA's Office for Coastal Management partnered with the Bureau of Labor Statistics to create employment statistics for different coastal inundation zones. These highly anticipated data include the number of establishments—and the number of people employed by those business establishments—that fall within various coastal inundation footprints. These data are reported as aggregated statistics at state and county levels.

<https://coast.noaa.gov/digitalcoast/data/coastal-inundation-zones.html>

Budget Narrative

The total cost for capacity building and planning is \$350,000. The A-NPDC respectfully requests full funding of this project and a waiver of match funds. Both counties within the region – Accomack and Northampton – are significantly vulnerable to flood hazards and climate change being surrounded by the Chesapeake Bay to the west and the Atlantic Ocean to the east. According to the grant manual for CFPF Round 3, on p. 24, “For local governments designated as low-income geographic areas, 100 percent of the estimated total project costs should be included”. It is crucial that the Eastern Shore possess a Regional Community Resilience Plan and the CFPF would allow this process to be initiated and implemented far sooner than possible than seeking local funds. Additionally, this regional plan is a key criterion for localities to apply for future CFPF for projects, 85 of which have already been identified as needed during the past year’s efforts to provide projects for the Virginia Coastal Resilience Master Plan and an additional 43 which are still in pre-planning stages.

Task	Project Budget
Resilience Plan	\$340,000
Community Engagement (Four county-wide sessions, 14 town and site-specific sessions, and 2 regional sessions, to include all advertisement and marketing materials)	\$20,000
Steering Committee meetings and materials	\$5,000
Staff Training	\$2,000
Internship Program (12-16 weeks) conducted over two years	\$8,000
Total	\$375,000



A-NPDC

ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION
P.O. BOX 417 • 23372 FRONT STREET • ACCOMACK, VIRGINIA 23301
(757) 787-2936 • TOLL FREE: (866) 787-3001 • FAX: (757) 787-4221
WEBSITE: www.a-npdc.org

Authorization to Request Funding

The Executive Director has authorized the submission of this grant application in the amount of \$375,000 to the Community Flood Preparedness Fund for project titled *Capacity Building: Development of the Eastern Shore Regional Community Resilience Plan*.

Elaine Meil, Executive Director

Name & Title

Accomack-Northampton Planning District Commission

Organization

Elaine K. Meil

Signature

Date 4/8/2022

Cc: Anne Doyle
Director of Planning
Accomack-Northampton PDC
adoyle@a-npdc.org
(757) 787-2936

Cc : Jessica Steelman
Coastal Planner
Accomack-Northampton PDC
jsteelman@esvaplan.org
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CFPF, rr <cfpf@dcr.virginia.gov>

CID510001_CID510105_Accomack-NorthamptonPDC_CFPF Round 3 Application

1 message

Jessica Steelman <jsteelman@esvaplan.org>

Fri, Apr 8, 2022 at 3:55 PM

To: cfpf@dcr.virginia.gov

Cc: jsteelman@esvaplan.org, Anne Doyle <adoyle@a-npdc.org>, "Elaine K. N. Meil" <emeil@a-npdc.org>

Dear Ms. Howard-Cooper and Members of the Review Team:

Please see attached our application for CFPF Round 3.

Thank you,

PS - NEW EMAIL, Same Planner! Please note and update my email in your contacts as we begin transitioning our domain.

*Jessica Steelman***Coastal Planner**

Accomack-Northampton Planning District Commission

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