

G. Project Portfolio

G.1 Introduction

During Phase 2, the consulting team worked with the CAT and community members to identify, plan, and prioritize projects to increase the resiliency of the community. The identified projects address vulnerabilities identified in the RVA. In addition to infrastructure actions, policy based and nature-based solutions were considered. For each of the projects, the type of solution, cost, timeline, and priority rating were defined in the ranges shown in **Figure 16**.

Figure 16: Project Portfolio Ranges

<i>Type of Solution</i>	<i>Cost</i>	<i>Projected estimated timeline</i>	<i>Priority Rating</i>
Infrastructure	Low (\$0-\$50,000)	0-6 months	Low
Plans and policies	Medium (\$50,000-\$200,000)	6-12 months	Medium
Ordinances	High (\$200,000-\$500,000)	12-24 months	High
Non-regulatory programs	Very High (\$500,000+)	24+ months	

Additionally, funding opportunities were identified for each project. The following funding opportunities were reviewed. The funding program, acronym, and source are shown in **Figure 17**.

Figure 17: Reviewed Funding Opportunities

<i>Acronym</i>	<i>Funding Opportunity</i>	<i>Information</i>
HSGP	Homeland Security Grant Program	https://www.fema.gov/authorized-equipment-list-item/10ge-00-genr
HM	FEMA Hazard Mitigation	https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning
AFG	FEMA Assistance to Firefighters Grant	https://www.fema.gov/grants/preparedness/firefighters
DOECEDS	Department of Energy Cybersecurity for Energy Delivery Systems	https://www.energy.gov/ceser/office-cybersecurity-energy-security-and-emergency-response
EECBGP	Energy Efficiency and Conservation Block Grant Program	https://www.energy.gov/eere/wipo/energy-efficiency-and-conservation-block-grant-program
ECWAG	USDA Rural Development Community Water Assistance Grants	https://www.rd.usda.gov/programs-services/water-environmental-programs/emergency-community-water-assistance-grants

<i>Acronym</i>	<i>Funding Opportunity</i>	<i>Information</i>
NFWF	National Fish and Wildlife Federation Emergency Coastal Resilience Fund	https://www.nfwf.org/programs/emergency-coastal-resilience-fund
EHP	Environmental Planning and Historic Preservation	https://www.fema.gov/grants/mitigation/floods/when-you-apply
BRIC	Building Resilient Infrastructure and Communities	https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
GL	Golden Leaf	https://www.goldenleaf.org/opengrants/

G.2 Identified Projects

<i>Project Name</i>	<i>Culvert and Drainage Improvements</i>	
Project Description	Enlarging of existing culverts, cleaning of roadside ditches and outfalls. All intended to better convey rainfall out to the sound or allow tidal flooding to recede more quickly.	
Natural/Nature-Based?	Yes - restores and enhances connectivity between sound and areas that were previously tidally influenced. Enhances and restores original aquatic biota as tidal water rises and falls more efficiently.	
Hazard(s) addressed by project	Flooding (rainfall/tidal/riverine)	
Type of Solution	Infrastructure	
Project Estimated Cost	High (\$200,000-\$500,000)	Assuming this work would be phased such that the first phase would fall within this range.
Potential Implementation Funding Sources	NFWF, EHP, GL	
Projected Estimated Timeline	12-24 months	
Priority Rating	High	
Project Map or Location	Multiple locations, see culverts shown on Critical Asset and Hazard maps in Appendix B .	

<i>Project Name</i>	<i>Road Elevation to 100-yr Floodplain</i>	
Project Description	Raise road elevations to reduce frequency of overtopping. Priority should be given to roads that serve as the singular ingress and egress into the community or residential areas such as Pennsylvania Avenue, Griggs Road, Griffin Road, and Jones Street.	
Natural/Nature-Based?	No	
Hazard(s) addressed by project	Flooding (rainfall/tidal/riverine)	Sea level rise
Type of Solution	Infrastructure	
Project Estimated Cost	Very High (\$500,000+)	
Potential Implementation Funding Sources	BRIC	
Projected Estimated Timeline	24+ months	
Priority Rating	High	
Project Map or Location	Roads in Figure 18 shaded in yellow or red. Approximately 5.3 miles.	

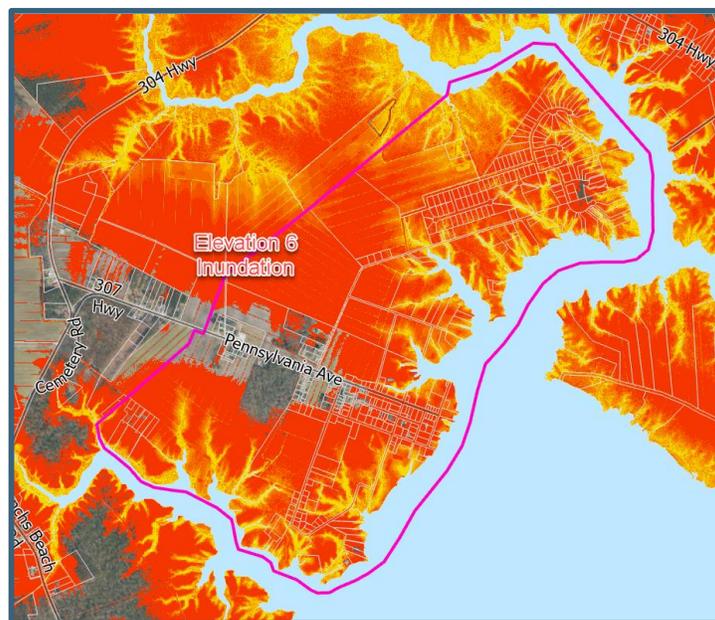


Figure 18: Vandemere Elevation Map showing roads in 100-year floodplain

<i>Project Name</i>	<i>Long term maintenance plan - ditches, pipes, and outfalls</i>	
Project Description	Develop a plan for long term maintenance plan and ordinance revisions to allow Town to obtain easements and right of entry to maintain critical conveyances.	
Natural/Nature-Based?	No	
Hazard(s) addressed by project	Flooding (rainfall/tidal/riverine)	
Type of Solution	Infrastructure	Ordinances
Project Estimated Cost	Medium (\$50,000-\$200,000)	5-year maintenance plan cost approximation.
Potential Implementation Funding Sources	None identified at this time	
Projected Estimated Timeline	24+ months	
Priority Rating	High	
Project Map or Location	Multiple locations, see culverts and ditches shown on Critical Asset and Hazard maps in Appendix B .	

<i>Project Name</i>	<i>Town Hall Improvements</i>	
Project Description	Elevate record and equipment storage, digitize records, relocate, or raise Town Hall to lower vulnerability, install raised emergency generator with natural gas connection. Resources for Emergency Generators are detailed in Appendix H .	
Natural/Nature-Based?	No	
Hazard(s) addressed by project	Wind	Flooding, sea level rise, wind, and storm surge
Type of Solution	Infrastructure	
Project Estimated Cost	Low (\$0-\$50,000)	Medium (\$50,000-\$200,000)
Potential Implementation Funding Sources	None identified at this time	
Projected Estimated Timeline	12-24 months	
Priority Rating	Medium	
Project Map or Location	1042 Pennsylvania Avenue, Vandemere, NC 28587	

<i>Project Name</i>	<i>Living shorelines</i>	
Project Description	Construct living shorelines to reduce erosion and dissipate wave energy along the coastline	
Natural/Nature-Based?	Yes	
Hazard(s) addressed by project	Storm Surge	Wind
Type of Solution	Infrastructure	
Project Estimated Cost	Very High (\$500,000+)	
Potential Implementation Funding Sources	NFWF	
Projected Estimated Timeline	12-24 months	
Priority Rating	Medium	
Project Map or Location	See Figure 19	

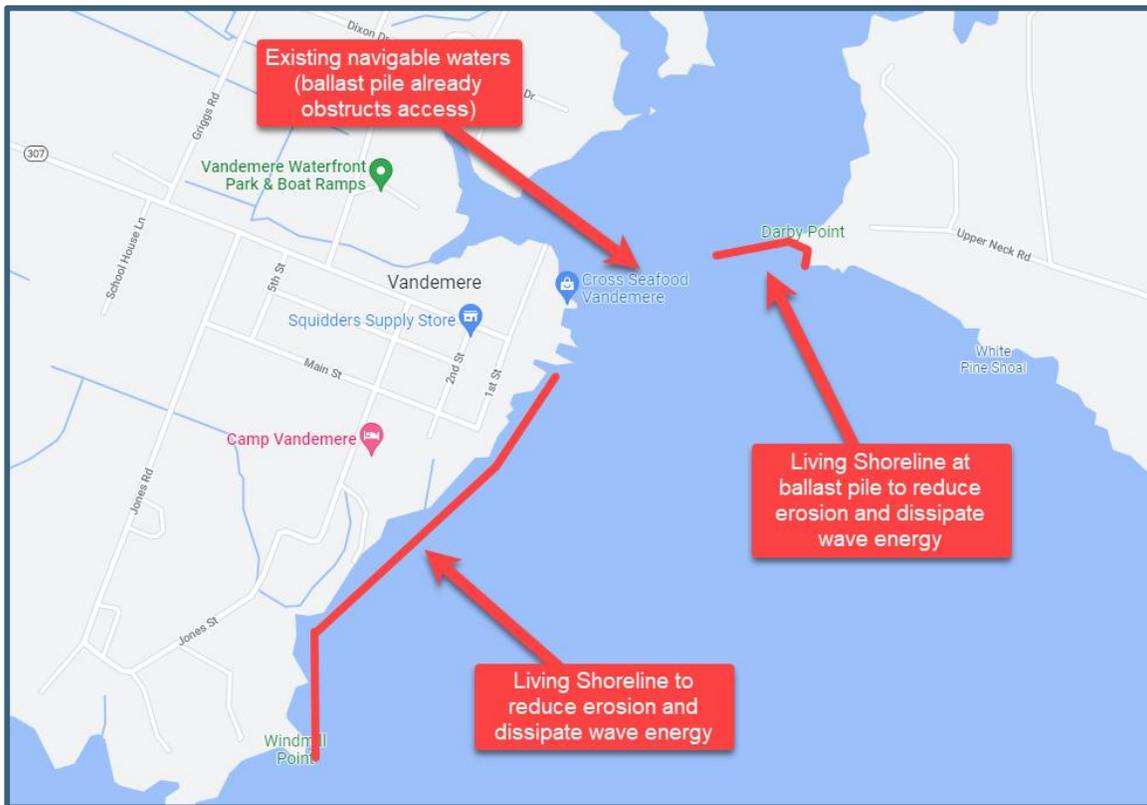


Figure 19: Vandemere Living Shoreline Locations

<i>Project Name</i>	<i>Home and Business Flood Mitigation and Preparedness Guide</i>	
Project Description	Develop guidance document for distribution to residents and businesses. Preparing for storm, following storm, grants for home elevation, simple home improvements to reduce flood impact, hazard map illustrations, and how to report evacuation status.	
Natural/Nature-Based?	No	
Hazard(s) addressed by project	Storm Surge	Wind
Type of Solution	Plans and policies	
Project Estimated Cost	Low (\$0-\$50,000)	
Potential Implementation Funding Sources	Draw upon resources developed in other communities and counties to develop document.	
Projected Estimated Timeline	0-6 months	
Priority Rating	Low	
Project Map or Location	N/A	

<i>Project Name</i>	<i>Undergrounding of Electric</i>	
Project Description	Move electrical service lines along Pennsylvania Avenue from aerial to underground	
Natural/Nature-Based?	No	
Hazard(s) addressed by project	Wind	Flooding, sea level rise, wind, and storm surge
Type of Solution	Infrastructure	
Project Estimated Cost	Very High (\$500,000+)	
Potential Implementation Funding Sources	FEMA Hazard Mitigation	
Projected Estimated Timeline	12-24 months	
Priority Rating	Low	
Project Map or Location	Top priority is along Pennsylvania Avenue coming into town.	