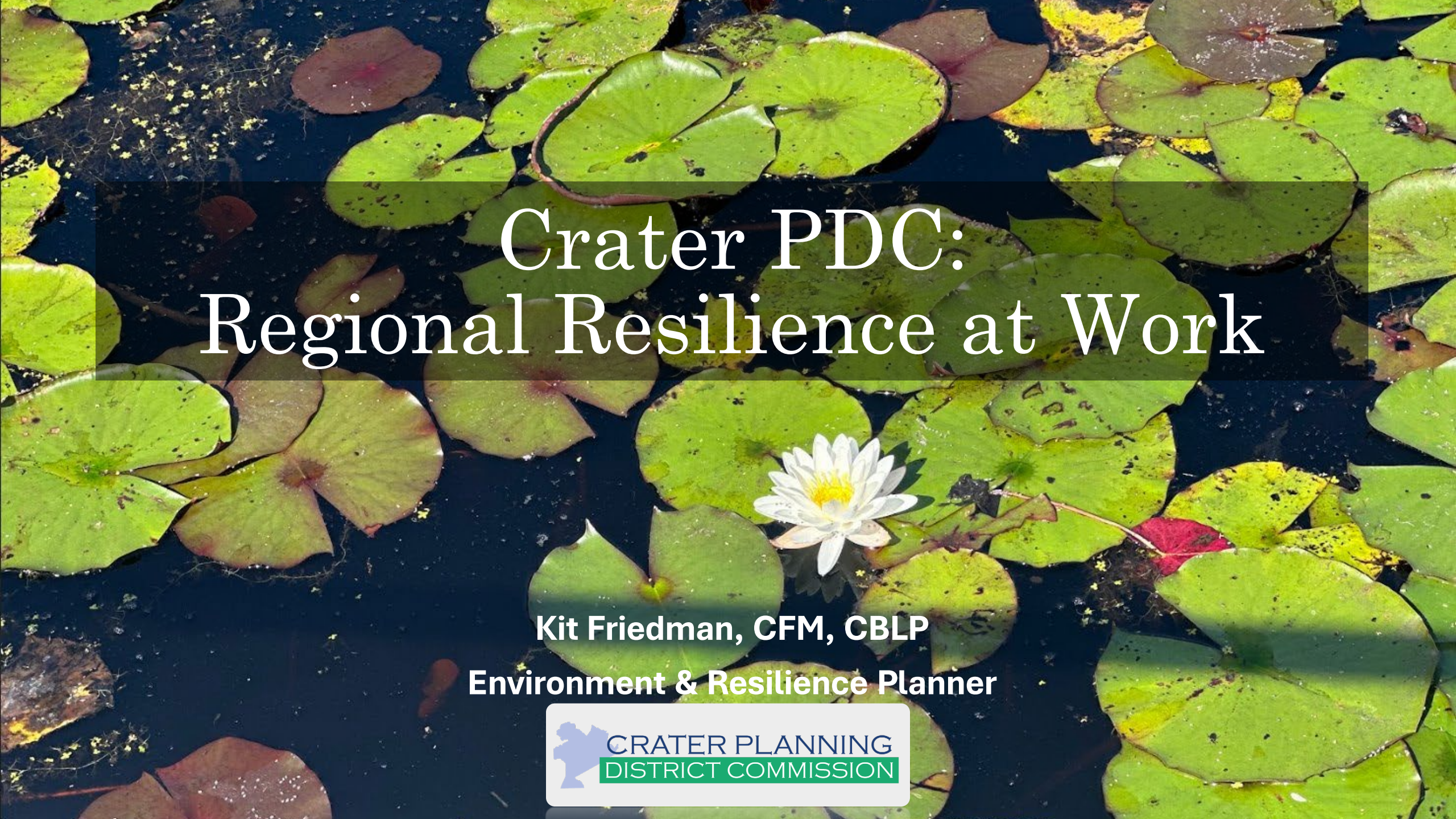


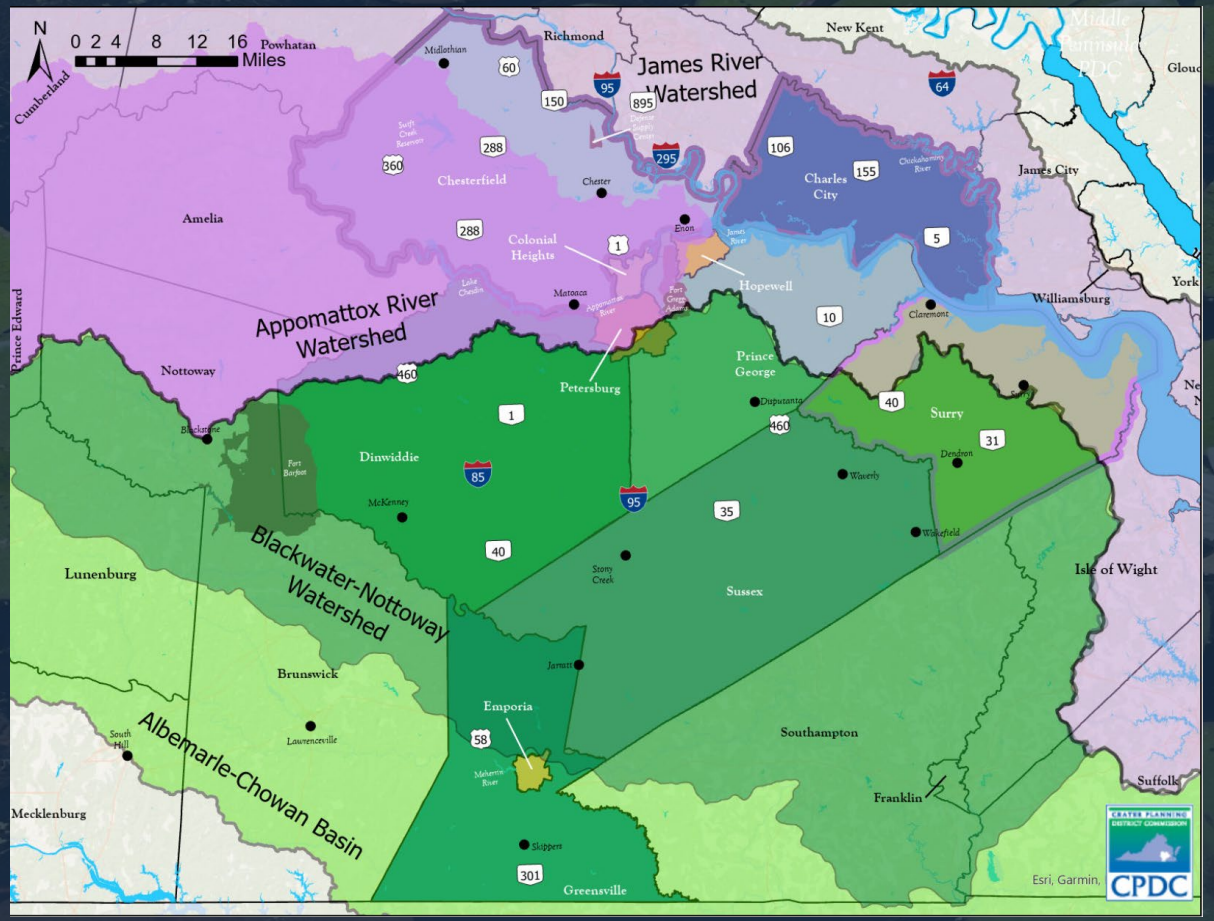
Crater PDC: Regional Resilience at Work

Kit Friedman, CFM, CBLP

Environment & Resilience Planner

CRATER PLANNING DISTRICT COMMISSION

About the Region



- Population: ~558,000 people (ACS 2023 5-yr estimate)
- Diverse!
- North-south split between Chesapeake Bay & Albemarle Sound
- East-west split between the Piedmont & Coastal Plain

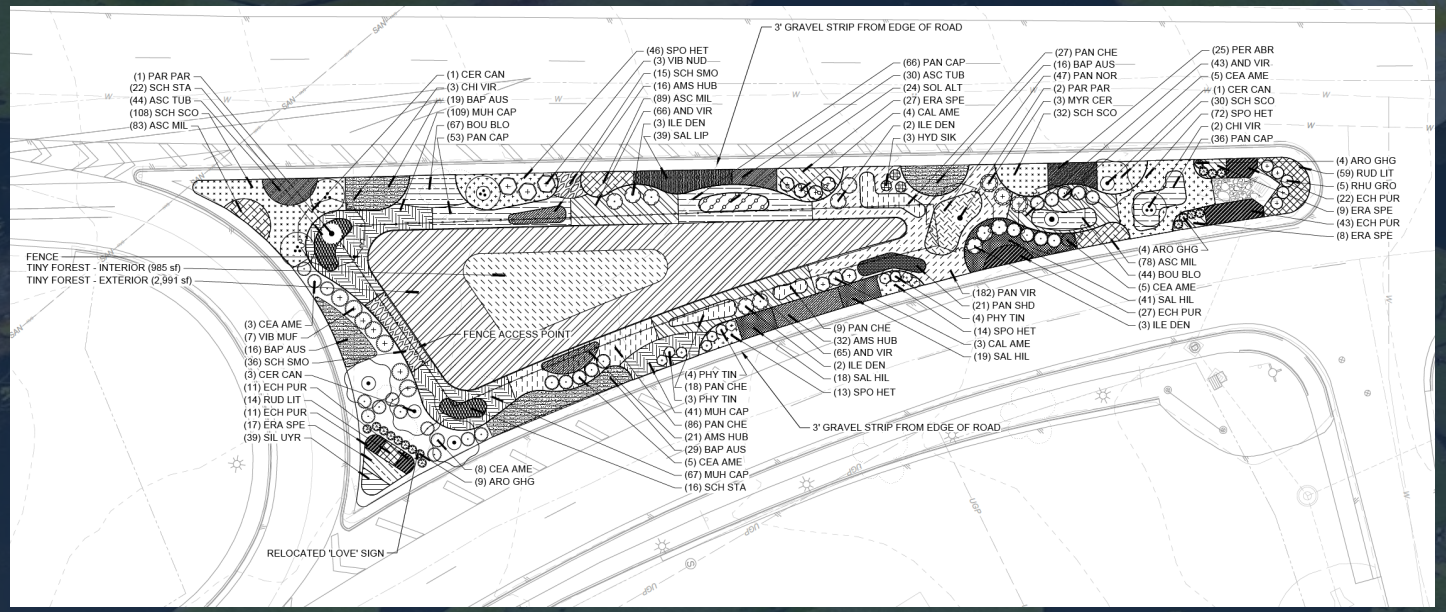
Coastal Zone Management in Crater

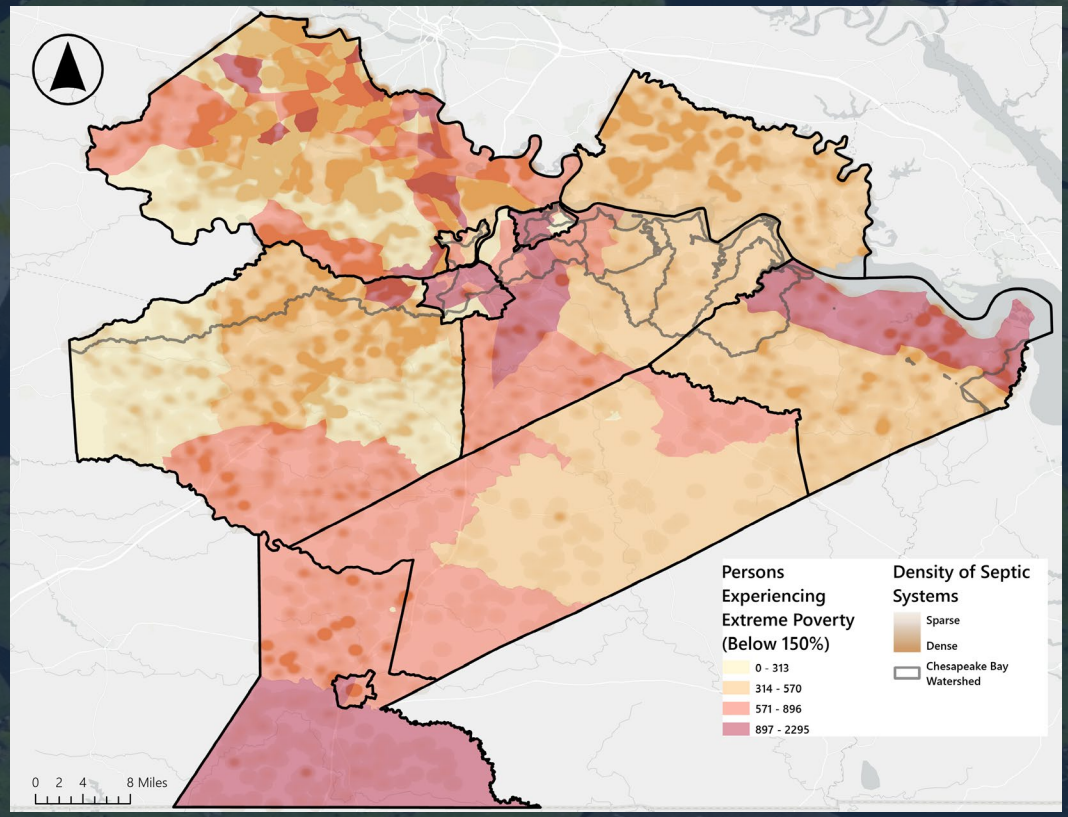
- Quarterly CREST meetings, four trainings
  - Topics: Floodplain Administration, Salt Management for Water Quality, GIS Mapping Tools, Grant Application Walkthroughs
- Coastal Policy Team, Virginia Wetlands Policy Task Force appointments
- River Hero Homes partnership with James River Association
  - Rain Barrels & Native Plant Workshops
- Ches. Bay Landscape Professional Certification Sponsorship
- Public Access Inventory & Analysis
- Heirs' Property Resilience Study and Toolkit

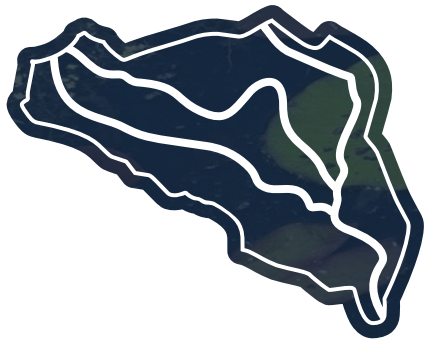


Watershed Implementation Plan

- **Restricted to Bay watershed localities**
- **Local water quality initiatives**
- **Explorative Septic study/plan**
- **Community engagement in Charles City**
- **Infrastructure, Investment, & Jobs Act**
  - **Hopewell Downtown Tree Planting**
  - **Petersburg East Washington Street Beautification**







SOUTHERN RIVERS ROUNDTABLE

Coming Together to Protect & Enjoy Our Local Watersheds

Our Mission

The Southern Rivers Roundtable aims to *convene* regional agencies and stakeholders to *facilitate dialogue* and *collaboration* on initiatives pertaining to the well-being of the watershed's *ecosystems* & *communities*

Our Vision

We envision a *resilient regional coalition of partners* across the Chowan Basin and Albemarle-Pamlico Watershed that *centers natural resources* and *the communities that rely upon them* in its work to *improve visibility, resources, public access, and project implementation.*

FLOOD RESILIENCE	OUTDOOR RECREATION	LAND CONSERVATION	WATER QUALITY
GOAL 1.1: Support localities in the Chowan Basin with floodplain administration and management through policy, ordinance, etc.	**GOAL 2.1:** Create a model ordinance toolkit for ecotourism and agritourism by-right zoning/land use	**GOAL 3.1:** Understand existing conditions and actors in the region's land conservation efforts	**GOAL 4.1:** Increase system redundancy and reduce vulnerability of potable water infrastructure and waterways to natural and man-made disasters
GOAL 1.2: Support project identification/development, grant applications, and administration of CFPF and other flood resilience grants to pursue project implementation	**GOAL 2.2:** Pursue state and federal scenic river designation for Blackwater, Nottoway, and Meherrin Rivers where possible	**GOAL 3.2:** Explore land/water/wetland credit bank development to support and protect high value conservation lands	**GOAL 4.2:** Improve water quality through the remediation of identified TMDL watersheds across the Chowan Basin
GOAL 1.3: Promote the use of nature-based solutions	**GOAL 2.3**: Complete an Outdoor Recreation/Ecotourism/Agritourism Marketing, Feasibility, & Branding Study for the Chowan Basin region to better understand assets and opportunities to leverage outdoor recreation as economic development	**GOAL 3.3:** Interface with Tribal communities and leadership to identify and protect historic and culturally significant natural heritage sites	**GOAL 4.3:** Advocate for policy/regulatory updates to create additional funding for water quality beyond the Bay, including a basin-wide TMDL and funding mechanism for implementation
GOAL 1.4: Increase public awareness and visibility of flood risk and types of flooding in the Chowan Basin (ie. Flash flooding, erosion, etc.)	**GOAL 2.4:** Support existing and new outdoor recreational facilities, operators, and efforts to expand public access	**GOAL 3.4:** Conduct outreach to local governments and landowners to educate the public on conservation opportunities and benefits	**GOAL 4.4:** Explore outreach and implementation of BMPs in urban, rural, agricultural, and timber communities
	GOAL 2.5: Develop a Blueway/Greenway Plan for the entire Nottoway, Blackwater, and Meherrin Rivers modeled on the Sussex County Nottoway Blueway Master Plan		
	Goal 2.6: Identify and secure funding to remove/remediate derelict dams and other structures that obstruct waterways and create hazards for paddlers, anglers, and swimmers		

Southern Rivers Roundtable



Virginia DWR

DCR
Virginia Department of Conservation & Recreation

DEQ
North Carolina Department of Environmental Quality

Nottoway Indian Tribe of Virginia

Virginia Department of Forestry

Virginia Outdoors Foundation

NRCS
Natural Resources Conservation Service

Crater Planning District Commission

DEQ
Virginia Department of Environmental Quality

Albemarle-Pamlico National Estuary Partnership

Sierra Club

Wetlands Watch
wetlandswatch.org

Albemarle Commission
Region 9 Council of Governments
Rural Planning • Senior Services & Nutrition • Workforce & Economic Development

City of Petersburg
E Pluribus Unum
State of Virginia

Airfield conference center
Southeast 4-H Educational Center Inc

FCRVA
Friends of the Rivers of Virginia

The Nature Conservancy

Commonwealth Regional Council
Virginia's Heartland

Sussex County Virginia Created 1754
The Seal of Sussex County
1804
Board of Supervisors

Hampton Roads PDC

LRNow
Restoring Virginia Beach Waters

Dinwiddie County Virginia
Established 1752
Virtus Libertas Ibi Patria

City of Emporia
19 67
Virginia

Mecklenburg County
1765
Virginia
Justice and Truth

Lunenburg County
1746
Virginia

Isle of Wight
Virginia
1634

James River Soil and Water Conservation District

City of Suffolk, Virginia
19 74

County of Prince George
Virginia

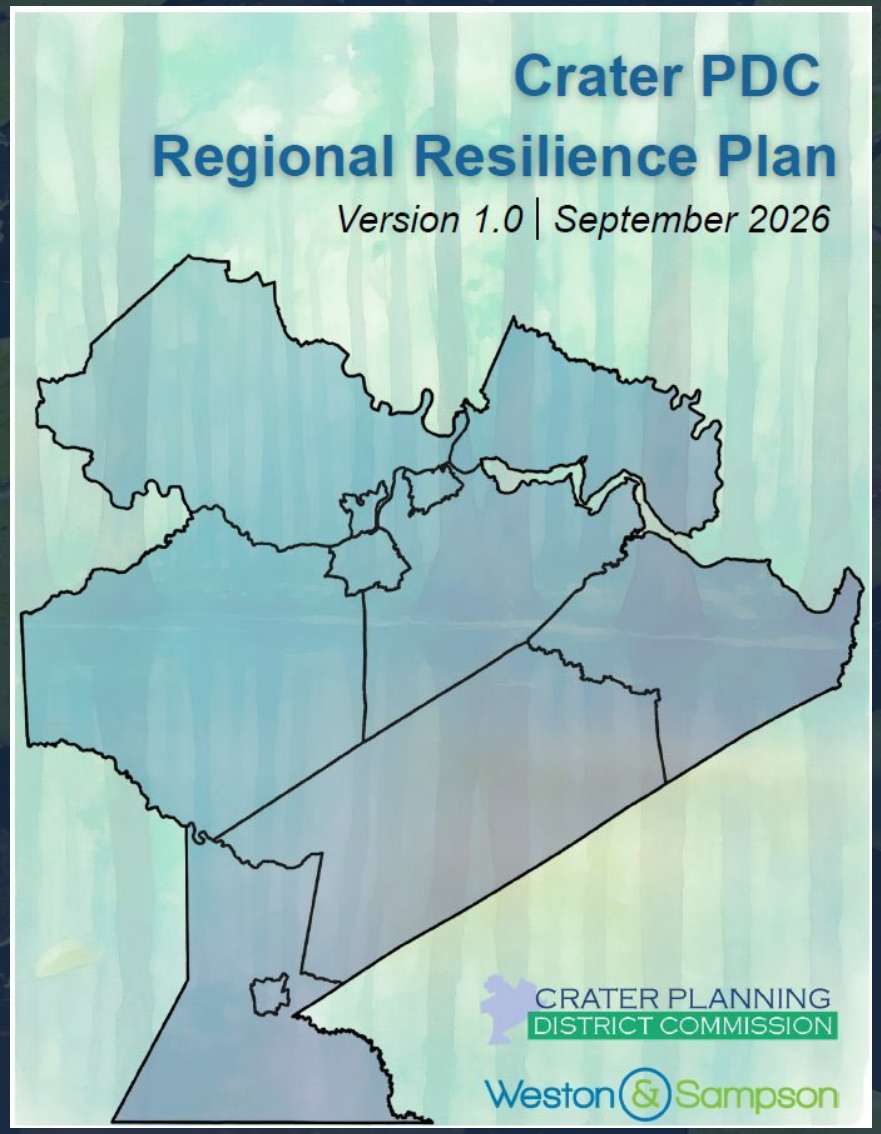
County of Surry
Virginia
1652

City of Franklin
Virginia
Growth • Community • Spirit

Southampton County, Virginia
1749

Blackwater Nottoway Riverguard

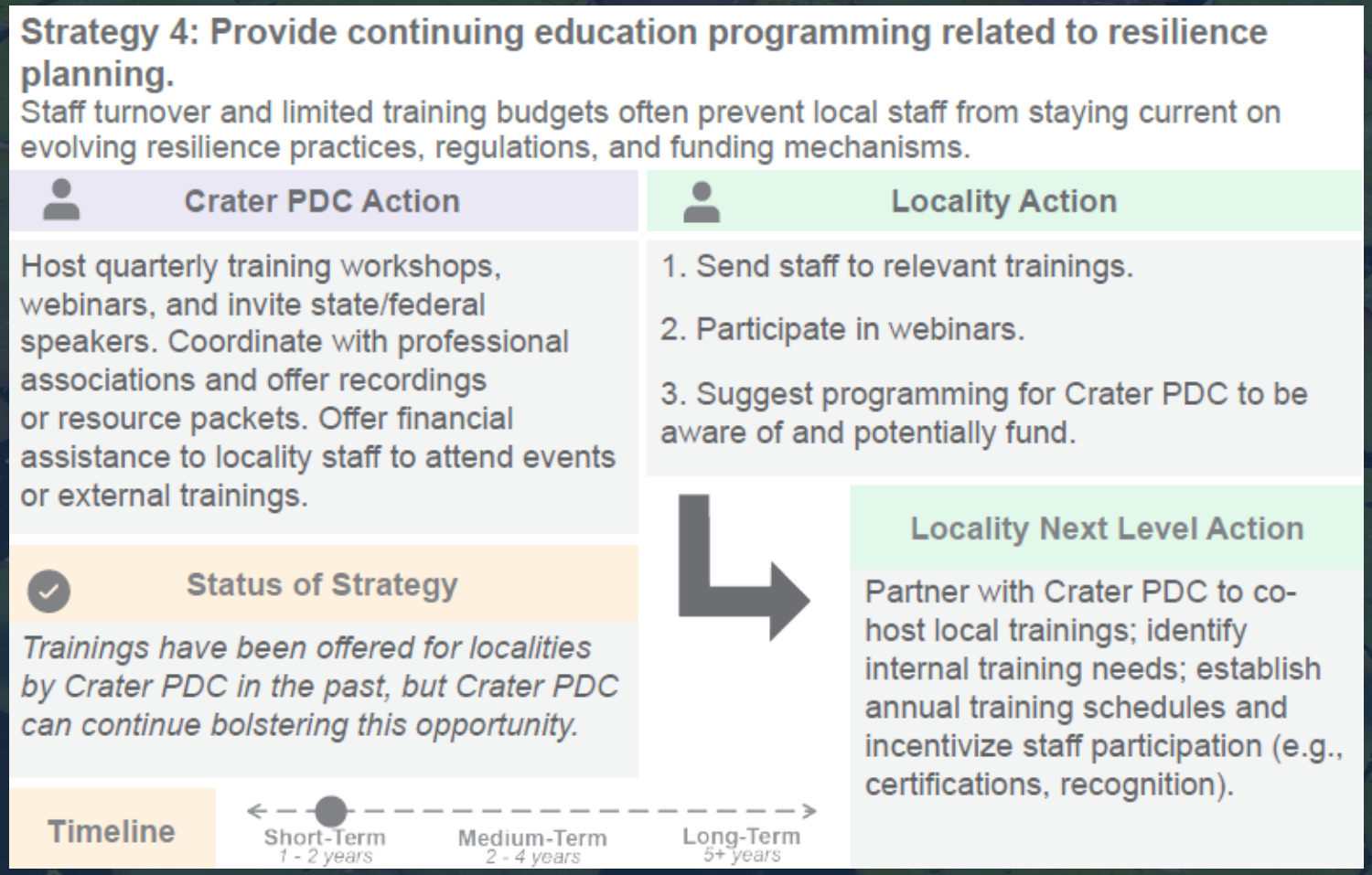
Crater Regional Resilience Plan



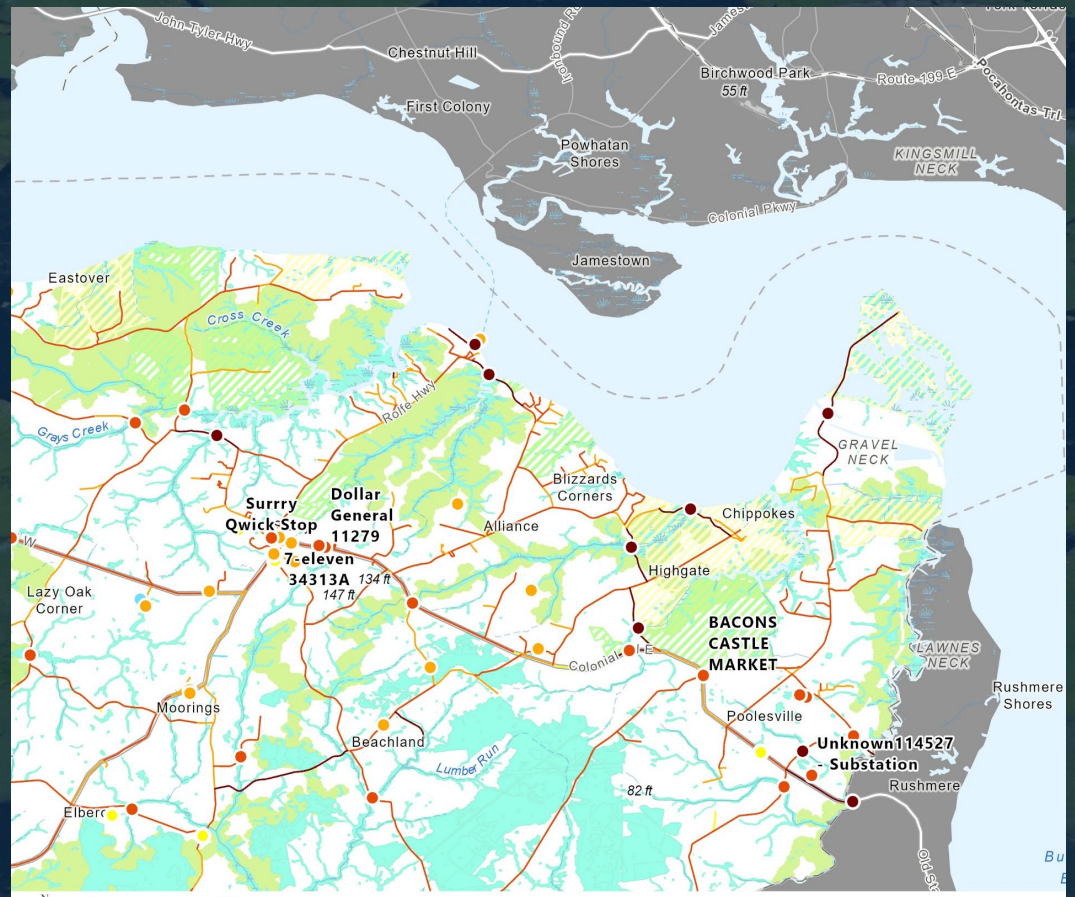
- CFPF Round 4 Capacity Building & Planning
  - New E&R staff position, Certified Floodplain Manager
- Multi-hazard approach
  - Coastal & Pluvial Flooding, Wildfire, Wind, Extreme Heat
  - In dialogue with HMP, locality comp plans, RAFT assessments
- Fall 2026 adoption, 2 annual updates
  - 5-Year Period of Performance
- Developed with line-of-sight to implementation as soon as Spring 2027
- Equity & Capacity Building focus—meeting localities where they are to set them up for success, even if incremental
- Quarterly steering committee meetings
  - Knowledge Sharing, Capacity Needs Assessment, Goal & Objective Setting, Preliminary Hazard Scoring, Action Feedback & Development

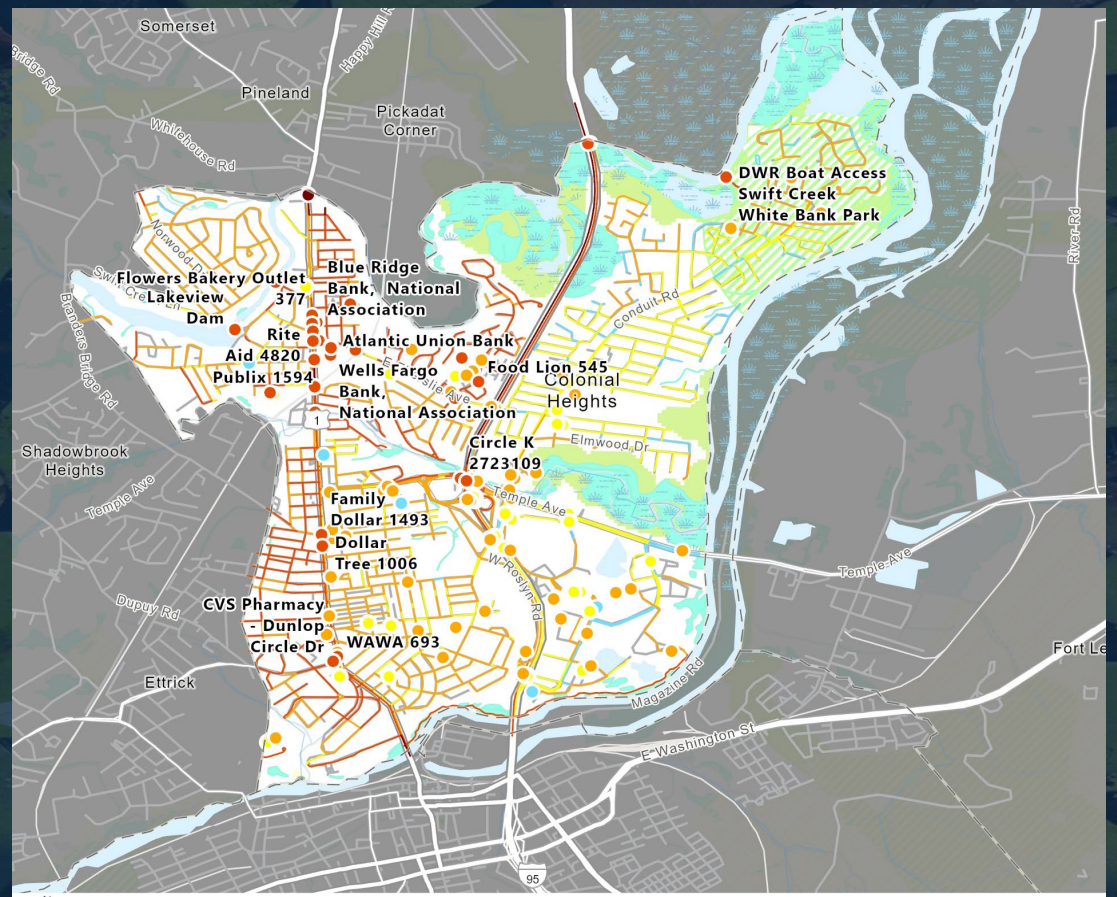
Capacity Building Roadmap

- Identifies a **concise list of actions** to enhance the region's overall capacity to perform current / future resilience actions
- Strategies are **two-fold in action**– Crater PDC led and Locality specific
- Strategies will be **monitored in annual updates** + beyond



Locality Focused Vulnerability Scores of Assets





Multi-Hazard Vulnerability Assessment

Weston & Sampson

CRATER PDC

Draft Hazard +
Social Vulnerability Index Scoring

Hazard Score
SVI Score

High
-
Both High

Both Low — Low - High

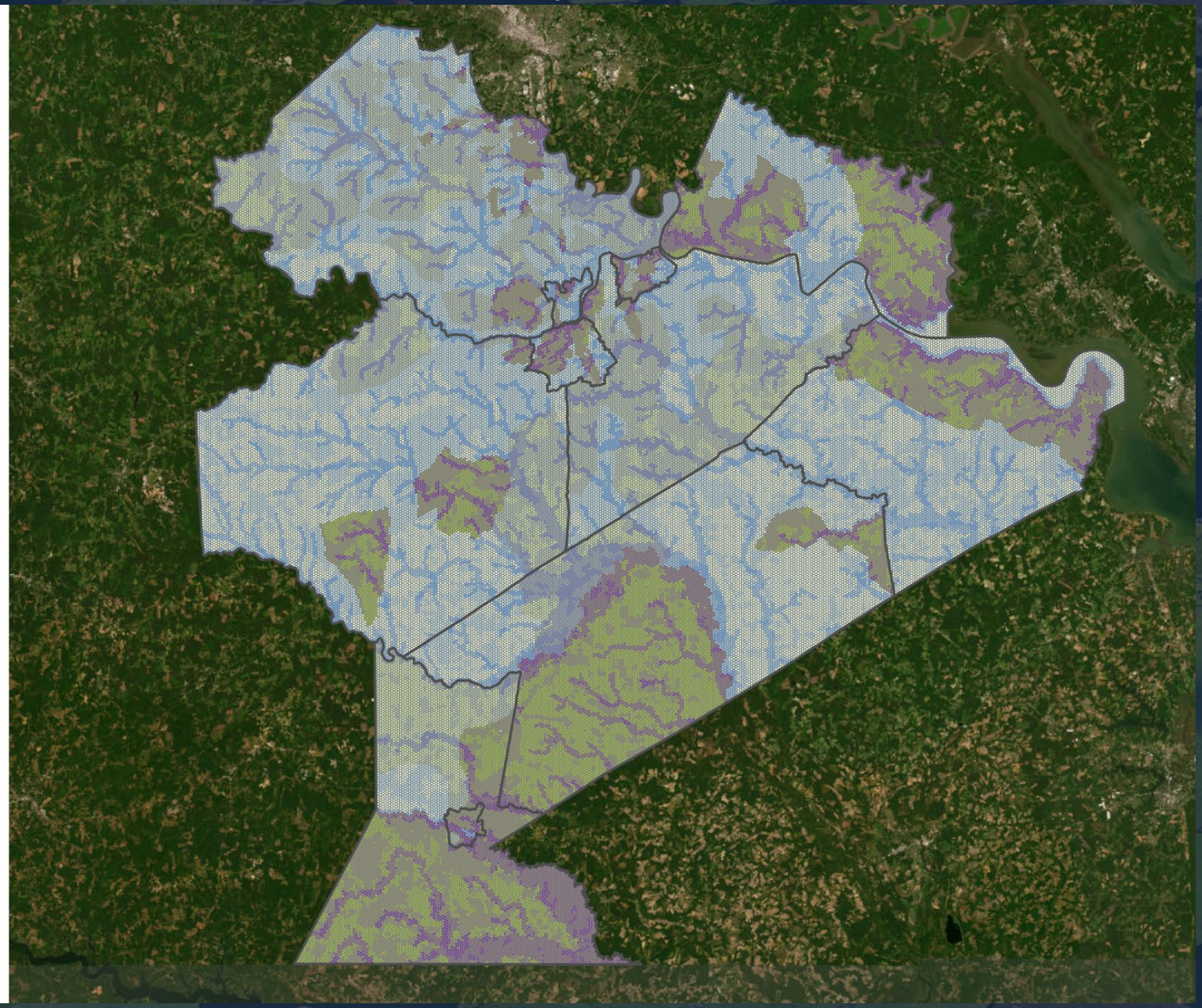
Regional bivariate map

Exposure
- DCR Pluvial Model
- Heat

+

- Social Vulnerability, CDC Index

0 5 10 Miles



Action Implementation Plan

Crater Partner Action (CPDC-1): Develop Regional Model Ordinance for Nature-Based Solutions

Integrate nature-based solution design standards, requirements, and incentive mechanisms into local stormwater ordinances to reduce flood risk, improve water quality, and enhance climate resilience. Crater PDC will develop regional baseline standards, model ordinance language, and guidance to support integration of nature-based solutions into ordinance updates. This action promotes practices such as rain gardens, bioswales, permeable pavement, riparian buffers, and urban tree canopy to manage runoff at its source. By incorporating these approaches into local requirements and incentives, communities can advance cost-effective stormwater management, protect natural systems, and encourage consistent, resilient development across the region.

Action Components:

Conduct an analysis on existing zoning ordinances to understand barriers, incentives, and gaps; update ordinances related to stormwater and development; review case studies from other localities.

Responsible Entity:

Crater PDC – Environment, Economic Development, & Housing, in coordination with Member Locality Departments of Public Works, Housing Development, and/or Environment / Floodplain Management.

Primary Goals:

- Strengthen Natural Systems and Land Use Resilience
- Advance Regional Collaboration and Coordination
- Promote Nature-Based Solutions

Potential Partners:

Crater PDC member localities; Chesapeake Bay Foundation; Virginia Department of Environmental Quality (DEQ); watershed organizations.

Priority Rating:

High.

Hazards Addressed:

Flooding.

Partner Action:

Member localities will use this regional framework to adopt and tailor ordinance updates, incentives, and design standards within their own zoning and stormwater regulations.

Estimated Cost:

Capacity Building/Study: Low (Less than $100k)

Type of Action:

- Policy and Planning
- Programs and Implementation
- Technical Assistance and Capacity Building
- Nature-Based Solutions

Source:

Capacity and Needs Assessment; Action Development Workshop

Implementation Readiness: Near-term.

Action Development for the Region & Localities

Three types of actions were developed:

1. **PDC Actions**
2. **Actions for All Localities**
3. **Locality-Specific Actions**

Action elements such as the goal area, components, hazards addressed, timeline, and cost were developed for each.

Grant Application Pathway

- **Likely Funder:** Virginia Community Flood Preparedness Fund (CFPF); Virginia Department of Environmental Quality (DEQ) Stormwater Local Assistance Fund (SLAF)
- **Grant Type:** Planning / technical assistance grant (non-competitive matching grant for SLAF; CFPF Capacity Building and Planning Grant as alternate)
- **Anticipated Match:** Historically 50% local match for SLAF (lower within the Chesapeake Bay Preservation Act service area).
- **Required Supporting Data:** Inventory of existing stormwater/zoning ordinances; identified regulatory gaps; locality letters of support; designated lead applicant.
- **Immediate Next Step:** Confirm applicant structure with DEQ and select a pilot locality within the next quarter.

1 2 PDC and regional actions were provided with a "grant application pathway" that provided additional information on how the action may be funded.

Investing in Resilient Communities Pays Off!

Grant Title	Agency/Division	Award Total
DEQ Coastal Zone Management (CZM)	DEQ/NOAA	$99,500.00
DEQ Watershed Implementation Plan (WIP)	DEQ/EPA	$72,500.00
Round 4 CFPF Resilience Planning & Capacity Building	DCR/Floodplain	$622,995.09
Round 5 CFPF Emporia Stormwater Study	DCR/Floodplain	$120,000
FY23 Hopewell IIJA Tree Planting Grant	DEQ/EPA	$319,404.00
FY24 Petersburg IIJA East Washington Street Planting Grant	DEQ/EPA	$335,000
DEQ Southern Rivers Roundtable	DEQ/Non-Point Source	$15,000.00
Round 6 CFPF Town of Waverly Green Infrastructure Feasibility Study	DCR/Floodplain	$500,000
Round 6 Town of Jarratt Stormwater Study	DCR/Floodplain	$120,000
RUNNING TOTAL		**$2,234,399.09**



Thank you!

Questions? Ideas? Challenges? Reach out!

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Environment & Resilience Planner

Kfriedman@craterpdc.org

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