

CRATER PLANNING DISTRICT COMMISSION TECHNICAL ASSISTANCE PROGRAM



Virginia Coastal Zone Management Program

Crater Planning District Commission
Technical Assistance Grant Final Report



NOAA Grant: NA20NOS4190207

Grant Year 2020

Task 42

November 15, 2021

Fiscal Year 2020 Technical Assistance Annual Report

November, 2021

Prepared For:

Virginia Coastal Zone Management Program

Virginia Department of Environmental Quality

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NOAA Grant No. NA20NOS4190207

Grant Year 2020

Task 42

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Crater PDC Staff – Alec Brebner, Jay Ruffa, and Judith Smith

Virginia Coastal Zone Management Program – Laura McKay, Jeff Flood, Shep Moon, Virginia Witmer, April Bahen, and Nick Meade

Cover: Photograph taken by John A. Rooney Jr. Used as part of the Department of Conservation and Recreation Scenic Rivers Program "Scenic Rivers 50th anniversary Gallery".

19.2 miles of the Appomattox River received Scenic River Designation by the General assembly originally in 1977 with the newest extension added in 2011. Paddlers are traveling downriver through a section that separates Petersburg Virginia on the right and Virginia State University, Chesterfield Virginia, on the left. The cement towers in the background are what remains of an old rail trestle. These pillars are in plans to use and construct a bike/pedestrian bridge to cross the Appomattox River as the southernmost portion of the Fall Line Trail connecting it to the Appomattox Regional Trail in Petersburg. The river provides spectacular views of the many water features, historic sites, and beautiful tree lined riverside, highlighting the very things FOLAR seeks to preserve.



Virginia Coastal Zone
M A N A G E M E N T P R O G R A M



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Crater Planning District Commission, Virginia Coastal Zone Management Program Technical Assistance Grant FY 20, Task 42 Final Report

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Introduction

For Crater Planning District Commission, the CZM Technical Assistance program has continued to be a source of opportunities to enhance communication regarding resiliency issues across the region and to implement planning and projects to address Crater region localities' needs. Although it has been a difficult year due to the ongoing Covid-19 pandemic and multiple staff changes, Crater PDC has sought to bolster its member communities against current and future climate threats through its 9 CZM products:

Product #1: Environmental Impact Reviews

Product #2: Report on Coastal Meetings

Product #3: Coastal Trainings

Product #4: Friends of the Lower Appomattox River (FOLAR)

Product #5: Benefits Accrued from Prior CZM Grants

Product #6: Regional Resiliency Coordination

Product #7: Regional Resiliency Priorities

Product #8: CZM Database Support

Product #9: Coastal Resilience Master Plan

Product #1: Environmental Impact Reviews

Crater Planning District Commission (CPDC) staff provided continuing support to eleven local governments (7 counties and 4 cities) located in the south central region of Virginia as well as Friends of the Lower Appomattox River (FOLAR), and Petersburg Area Regional Tourism (PART). The Crater PDC staff provided assistance to its coastal communities with environmental impact reviews of local, state, and federal projects. The objective of these reviews is to ensure that the goals of the Virginia Coastal Zone Management (CZM) Program are adequately and fully considered and that the Crater Region provides a coordinated response.

During the 2020 Virginia CZM Program Grant year several environmental impact reviews were formally undertaken. The projects were varied and included solar sites, electric transmission, wastewater treatment facilities, water quality, best management practices, university facilities, power generation, natural gas, and state and federal grant funding applications. In addition, environmental CZM and Chesapeake Bay funding programs were reviewed per the request of the Virginia Department of Environmental Quality.

A sample listing of coastal and coastal-related environmental impact reviews that assisted localities and partner entities of local, state and federal projects follows:

- Stater Water Control Board, Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges Resulting from the Application of Pesticides to surface waters (9VAC25-800)
 - State Water Control Board, Virginia Pollutant Discharge Elimination System (VPEDS) General Permit Regulation for Vehicle Wash Facilities and Laundry Facilities (9VAC25-194)
 - State Water Control Board, Water Quality Management Planning Regulation (9VAC25-720) and the General Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake By Watershed in Virginia ((VAC25-820)
 - State Water Control Board, Erosion and Sediment Control Regulations (9VAC25-840)
 - State Water Control Board, Virginia Stormwater Management Program Regulation (9VAC25-870)
 - State Water Control Board, Certification of Nonpoint Source Nutrient Credits (9VAC25-900)
 - Virginia Department of Environmental Quality, Draft Permit Review for Permit No. VA0059161. Wastewater release into Prince George from Fort Lee VA
 - Virginia Department of Environmental Quality, Draft Permit review for Permit No. VA0061646. Town of Surry Wastewater Treatment Facility.
 - Environmental Permit review Red Hill Utility, LLC. Permit No. VA0028258 Puddledock Road, Prince George VA.
 - SCC Cavalier Solar A LLC (Project No. DEQ 20-1415)
 - Federal Consistency Determination regarding Army Corps of Engineers, Project No. 20-143F
-

- Virginia Department of Environmental Quality - Grant application performance Partnership Grant year 4 (21-03)
- Virginia Department of Environmental Quality -State law consistency regarding Guidance Documents Memo No. 21-2006. Use of Stormwater Best Management Practice to meet Virginia Stormwater Management Program Technical Criteria for Water Quality Compliance
- Federal Consistency Certifications for Columbia Gas Transmission, LLC, TCO Align RNG Owens Grove Meter Station Project (VA21-054) Surry County DEZ 21-117F
- Federal Consistency Certification for Courthouse Landing Mixed-Use Development, U.S. Army corps of Engineer (DEQ 21-122f) Chesterfield County
- Environmental Impact Report for Construction Associated with Virginia State University Rogers Stadium Renovation (Agency Code 212, DEQ 21-111S)
- Virginia Department of Environmental Quality- Environmental impact review Rountrey Section 9 Chesterfield County (DEQ 21-131F)
- Federal Consistency Determination 712 High Street, City of Petersburg, U.S.. Department of Housing and Urban Development (DEQ 21-106F)
- Draft Environmental Impact Statement for Atlantic Coast Pipeline Restoration Project and Supply Header Restoration Project (OEP/DG2E GasBranch4, Nos. CP15-554-009, CP15-555-007;; FERC/EIS-0303D; DEQ 21-094F)
- Draft Environmental Assessment and Federal Consistency Determination for the Implementation of the 2019 Master Plan at Defense Supply Center Richmond proposed by U.S. Army Corps of Engineers, (DEQ 21-089F) Chesterfield VA
- Application of Virginia Electric and Power Company for Approval of Electric Transmission Facilities, State Corporation Commission, Case No. PUR-2011-00194: Transmission Lines #202 and #238/249 230 kV Partial Rebuild

For a sample review letter, see Appendix 1.

Product #2: Report on Coastal Meetings

Crater PDC staff coordinated four meetings of the Environmental Resources Management Task Force. Crater PDC conducted meetings for the regional environmental managers and other stakeholders on March 17, 2021, May 12, 2021, June 25, 2021, and the September 15, 2021 meeting was rescheduled to (and held on) October 19, 2021 (see meeting agendas in Appendix 2). In addition to local government and Crater PDC staff, representatives from the following entities attended at least once: Fort Lee, The Cameron Foundation, The Virginia Department of Mines, Minerals and Energy, Virginia Department of Transportation, The Virginia Department of Conservation and Recreation, The Virginia Department of Environmental Quality, Friends of the Lower Appomattox River (FOLAR), and Wetlands Watch to coordinate planning efforts and to provide training to local officials and staff. During each of the quarterly meetings time was set aside for training sessions. The Crater PDC sponsored several training sessions on the following topics:

- 1) A discussion of the Coastal Resilience Master Plan with Rear Admiral Ann Phillips and a discussion of the RAFT tool and flood risk and resiliency,
 - 2) A workshop discussion on the Crater region's definition of resiliency and identifying the localities' multi-hazard threats, as well as on TMDL and FOLAR updates,
 - 3) A discussion on the Community Flood Preparedness Fund and relevant legislative updates,
 - 4) Presentations on forest sustainability, the urban forestry program, and water quality initiatives, as well as a presentation on environmental justice and equity.
-

Product #3: CZM Trainings

Crater PDC hosted/attended four CZM training events:

1. February 22nd, 2021: FOLAR State of the Trail Third Annual Jurisdictional Stakeholder Engagement for the Appomattox River Trail. The meeting recording can be accessed here: <https://www.youtube.com/watch?v=ql94XVcDgLk&t=9s>

2. March 17th, 2021: Training on the Virginia Coastal Resilience Master Plan Framework, Ann Phillips.

Special Assistant to the Governor Rear Admiral Ann Phillips gave a presentation on Commonwealth-wide resiliency needs and how the Coastal Resilience Master Plan aims to address them. She discussed the enabling legislation, the emphasis on green infrastructure and nature-based solutions, and the coordination between the state and PDCs. She mentioned some of the state's data gaps and needs, such as Atlas 14 IDF projections, riverine and coastal gauge systems, and predictive flood mapping tools.

3. June 25th, 2021: New Legislation Overview and Training, Denise Nelson Berkley Group.

Luke Peters and Denise Nelson led trainings on the Community Flood Preparedness Fund and new legislation and regulations that will affect Crater member localities. Participants were informed of how to begin planning for resilience and upgrading their capacity to do so, as well as steps to take for prioritizing projects with the goal of helping the most vulnerable communities. Local planners were also briefed on changes to the Chesapeake Bay Preservation Act, new tools through DEQ to assist in Comprehensive Plan updates, and some of the new data tools being released to help with floodplain planning.

4. October 19th, 2021: Social Equity/Environmental Justice Training Celeste Green Berkley Group.

Celeste Green led a presentation on the where, why, how, and what of environmental inequities – including all forms of environmental hazards such as waste, air and water quality, and lead, pesticide, and other poisonous exposures – and gave information on how to begin addressing these issues through policymaking, local government administration, and datasets that overlay demographics with human health risks. Highlighted the importance of looking to match multiple vulnerability risks (like age, literacy rates, race, population density, etc.) with multiple hazards, such as manufacturing emissions, lead and other chemical contamination, and storms and flooding.

5. August 27th, 2021: A tour of a Utility Scale Solar and onsite large medium scale battery backup facility was also given.

Meeting agendas or other meeting materials are provided in Appendix 2.

Product #4: Friends of the Lower Appomattox River

The Crater Planning District Commission continued to provide staff support to “Friends of the Lower Appomattox River” (FOLAR) organization throughout the 2020 grant year. FOLAR is a regional nonprofit volunteer organization formed in 2000 with a mission to work in partnership with communities to conserve and protect the Appomattox River for all to enjoy. FOLAR’s strategy to achieve their mission includes:

- Development, maintaining and protecting the Appomattox River Regional Greenway/Blueway Corridor, a 20+ mile waterway and trail system that includes 7 boat access points, 10 miles of riverside trails and 11 riverside parks. Their priority focus is the build -out of the Appomattox River Trail (ART) as Guided by the Appomattox River Trail Master Plan.
- Devoting resources to protecting water quality and to land conservation; through organized regular regional river cleanups campaigns.
- Promoting economic growth and healthy lifestyles through tourism and recreation programs. Supporting programming to expand regional education and environmental stewardship and offering the FOLAR Environmental Stewardship Scholarship in partnership with the John Randolph Foundation.

To date, FOLAR has established several public trailheads, held more than 20 river clean-ups, and participated with other organizations that promote environmental awareness. The Crater PDC has provided technical assistance to FOLAR for several years and continued providing assistance through full time staff to include such items as participating in meeting facilitation, website maintenance (www.folar-va.org), participation in river clean-ups and other relevant events, map production, and assistance with establishing trails, trailheads, and trail signage.

Crater PDC’s executive director serves as an ex-officio non-voting member of the FOLAR Board and is in attendance at all FOLAR board meetings. Crater PDC provides support to FOLAR through the use of office and storage space and general office equipment and supplies such as printers and mail service.

Crater PDC has included FOLAR in regional discussions such as WIP development, VOP, and transportation planning for the region. Staff is working alongside FOLAR in a regional effort for Trail connections.

CPDC provides letters of support to private foundations and state funders, as needed for grant applications so that FOLAR can continue work to secure funding for these efforts.

Crater PDC attended FOLAR bi-monthly Board Meetings (February 17, 2021, and April 21, 2021).

Crater PDC staff provided technical and GIS mapping support for updates to master plan maps, used to reflect progress in trail development. Crater staff provided help and support for the two year update to the Appomattox River Trail Guide. Specifically, Crater PDC helped with the update of additional new data on the map from version one to current

version. Staff also helped review and edit descriptions and language on the back of the map. Then staff worked with the printing company to get the new version printed.

Visit FOLAR website for where a digital version of this is shared with the public here:

<https://folar-va.org/appomattox-river-trail/map/>

Or download a digital version in PDF format Here: https://folar-va.org/wp-content/uploads/2021/10/2021-APPOMATTOX-RIVER-TRAIL-MAP_web.pdf

Excerpts are available in Appendix 3 and 4.

Product #5: Benefits Accrued from Prior CZM Grants

The Lower Appomattox Trail Master Plan has been utilized and updated to its current form which has led to work in 2021 developing the Lower Appomattox Blueway Plan. Riverwalk phase 2 was completed. The 3rd annual State of the Trail meeting was held virtually with regional coordination and training efforts. The video describing the State of the Trail can be found at: <https://www.youtube.com/watch?v=qI94XVcDgIk>



Above: still frame from 3rd Annual State of the Trail video depicted bicyclists on a designated bike lane along a paved street next to residential homes.

Product #6: Regional Resiliency Coordination

CPDC held a successful coordination meeting for resilience stakeholders on March 17 to kick off the project, discuss resiliency needs, and define what resilience means in the region. Resilience issues were further discussed with stakeholders at monthly and specifically-convened meetings.

PDC Staff in coordination with consultants derived a unique definition of resilience for the region based off of the Commonwealth's definition, input from localities, and other resources. The final definition for the Crater region is:

"In Crater PDC, resilience is the capability to rebound from multi-hazard threats with minimum negative impact on the community.

Rebounding includes: anticipating, preparing, responding, adjusting, and/or recovering from change.

Multi-hazard threats include: chronic or acute, natural or man-made hazards, including more frequent and intense storms and droughts and increased water levels in our tidal areas.

Community includes: the social well-being and health of people and the economy within the built and natural environment."

This definition was presented to the Crater PDC member localities at the May 12, 2021 meeting in order to workshop novel or underrepresented resilience issues in the region and generate new foci for future planning efforts. Specific concerns included ignored elements of rural stormwater systems such as drainage ditches, the impact of road construction on flooding, problems with existing roads and bridges, severe storms, sedimentation (especially behind dams), the impact of climate refugees, and ALICE populations.

After collaboratively achieving a definition of resilience for the region, Crater sought to create a resilience plan to be approved by DCR for the Community Flood Preparedness Fund. Crater seeks to meet the five (5) required elements of the plan: 1) It is project-based with projects focused on flood control and resilience; 2) It incorporates nature-based infrastructure to the maximum extent possible; 3) It includes considerations of all parts of a locality regardless of socioeconomics or race; 4) It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation; and 5) It is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps.¹ The PDC will achieve this through a combination of regional plans, including the joint Crater-PlanRVA Regional Hazard Mitigation Plan (currently undergoing its 5 year update for 2022), which includes information about the multi-hazard threats facing Crater member localities, as well as the Crater 2021 Comprehensive Economic Development

¹ For more information regarding the Community Flood Preparedness Fund and resilience plan requirements, visit: <https://www.dcr.virginia.gov/dam-safety-and-floodplains/dsfpm-cfpf>

Strategy, which features detailed breakdowns of the socioeconomic profiles of different communities as well as a priority list of projects that may overlap with flood resilience needs.

A current draft of the resilience plan will be distributed to localities to garner comments and input. Should they choose to, member localities can use the Crater Resilience Plan as a base or inspiration for their own local resilience plans, combining information from their own Comprehensive Plans and other locally adopted planning efforts. The cities of Hopewell and Petersburg have already created resilience plans and are in the process of applying for grant project funds.

Crater PDC will use these efforts as a starting point to address other resilience issues in the future and create a more comprehensive strategy for meeting citizens' needs and protecting their livelihoods.

Introduction and Purpose

The Crater Planning District Commission (CPDC) is a regional planning agency that represents Chesterfield County, Charles City County, Dinwiddie County, Greensville County, Sussex County, Surry County and the cities of Hopewell, Petersburg, Colonial Heights, and Emporia. CPDC has a population of approximately 526,000 residents located within the 11 member jurisdictions covering an area of 2,500 square miles.

CPDC straddles the Fall Line, the geological divide that restrains the inland flow of ocean tide, with the western portions of Dinwiddie and Greensville counties in the Piedmont Plateau and the remaining area in the Coastal Plain. Elevations range from 400 feet in the west to less than 100 feet above sea level in the east.

Multiple rivers flow through the region including the James, York, Pamunkey, Chickahominy, Appomattox, and North Anna Rivers. The region sees urban flooding, flash flooding, and riverine flooding. Low-lying areas adjacent to rivers, streams, or creeks are susceptible to riverine flooding.

The area's rivers have played a role in its development: Petersburg, a river port throughout the nineteenth century, was settled at the point where the Appomattox River crosses the Fall Line, and Hopewell, just downstream, is at the confluence of the Appomattox and the James. Surry, across the James River from Jamestown, was settled concurrently with Jamestown.



Figure 1: Crater Planning District Commission Map
Source: <https://craterpdc.org/about-us/>

Product #7: Regional Resiliency Priorities

CPDC worked with stakeholders to identify regional resiliency needs, such as data gaps, local capacity, etc. and establish regional resilience priorities. The needs and priorities were shared and discussed at regional meetings.

The priorities for localities have not been fully fleshed out, and is an ongoing and evolving discussion. Some localities have immediate and obvious needs, such as stormwater management issues in Petersburg, Hopewell, and Emporia. Others understand some of their issues and even know where they are, but need further help and resources for identifying the totality and causes of problems, such as blocked ditches and culverts or erosion along streams and roadways. Dams are a serious issue in some communities, with silt and debris buildup causing concern. There are also more nebulous concerns, such as whether climate change will lead to greater emigration to the central Virginia region, and how the region's roads, public facilities, and other resources will accommodate them. Employment opportunities in a changing world – which may include more jobs related to climate adaptation and mitigation and green technologies – and how to capitalize on them are also a major concern.

Data needs and new tools are continuously being researched through cooperation with Crater PDCs member localities. Some data tools have already been put to use to aid in planning efforts, especially GIS mapping software. Using the DEQ Environmental Data Mapper, a list of all identified impaired waterways and tributaries and their impairment causes was created for the region and for each locality. This list will be important for future planning and project prioritization efforts. An example listing of impaired waters can be found in Appendix 6.

Product #8: Resilience Database Support

Through standing meetings Crater PDC staff have engaged localities in discussions on their ongoing projects and resiliency needs, and plan to develop and submit a list of projects to the Coastal Resilience Master Plan team or other DEQ CZM or statewide resilience database in the coming years. Crater PDC is currently in its first year of its 3-year CZM 309 Special Project to identify resilience needs and potential projects in the region. Crater PDC and PlanRVA are currently in discussions regarding the RAFT pre-planning process. Preliminary discussions with localities at standing meetings have revealed a number of different priorities, from clogged dams and culverts to capacity concerns and understanding the challenges of increasing effects from climate change.

Product #9: Coastal Resilience Master Plan

The Coastal Resilience Master Plan was created to provide a comprehensive framework for statewide flood resiliency planning and mitigation project prioritization, as well as to align state and local efforts with available federal funding. One of the biggest advantages for localities, especially rural regions with limited capacity, will be the advanced data analysis and visualizations that will assist in planning for future threats to multiple sectors due to sea level rise and other statistically significant natural hazards juxtaposed with identification of the communities, physical assets, and land uses that will be most vulnerable to them.

Crater PDC participated in several Technical Advisory Committee and other stakeholder meetings:

- the Virginia Coastal Master Plan Framework release meeting November 4, 2020;
- TAC meetings on December 14, 2020, February 26, 2021, April 4, 2021, June 22, 2021, September 2, 2021, and November 7, 2021;
- Community Outreach Subcommittee meetings on February 19, 2021, March 11, 2021, April 7, 2021, April 28, 2021, June 1, 2021, and June 23, 2021; and
- Project Identification Subcommittee meetings on February 23, 2021, March 23, 2021, April 6, 2021, April 27, 2021, May 25, 2021, June 7, 2021, and June 22, 2021.

Crater PDC staff and stakeholders participated in the charette held by Vision outreach consultants. The PDC engaged the localities on areas of concern that they would like to see reflected in the final Master Plan document and how they would like the Plan to be implemented locally. Crater Staff participated in two meetings specifically with DCR staff and Dewberry to support revisions to the Plan and website.

The Coastal Resilience Master Plan has been published at:

<https://www.dcr.virginia.gov/crmp/plan>

The open data portal, the Virginia Coastal Resilience Web Explorer, has been published at: <https://experience.arcgis.com/experience/9e32e928ed304fa98518b71905e43085>

An example of the products created for the Crater region with Crater PDC Staff assistance is presented in Appendix 5.

Appendix

Appendix 1: Sample Review Letter

9/30/2020

Craterpdc.org Mail - Chesapeake Bay Implementation Grant (CBIG IV)



Dennis Morris <dmorris@craterpdc.org>

Chesapeake Bay Implementation Grant (CBIG IV)

1 message

Dennis Morris <dmorris@craterpdc.org>

Wed, Sep 30, 2020 at 9:24 AM

To: "Prior, Michelle" <michelle.prior@deq.virginia.gov>

Dear Michelle,

The Crater Planning District Commission has reviewed the information regarding the VADEQ Chesapeake Bay Implementation Grant Application (CBIG-IV).

The Crater Commission has determined that the proposed application is in full compliance with regional environmental policies and plans.

Thank you for allowing the Crater Commission to comment on this proposed Application.

Denny Morris
Crater Planning District Commission
(804) 861-1666

Appendix 2: CZM Training Agendas and Meeting Materials

February 22nd, 2021:



New 2021 FOLAR Leadership



Sam Hayes
Chair
Sr. Transportation
Engineer, Moffat
Nichol; Planning
Commission,
Dinwiddie Co.



Christian Volk, Ph.D.
Vice-Chair
Water Quality
Manager
VA American Water



Betty Estes
Treasurer
Broker/Owner
Rockwater Realty

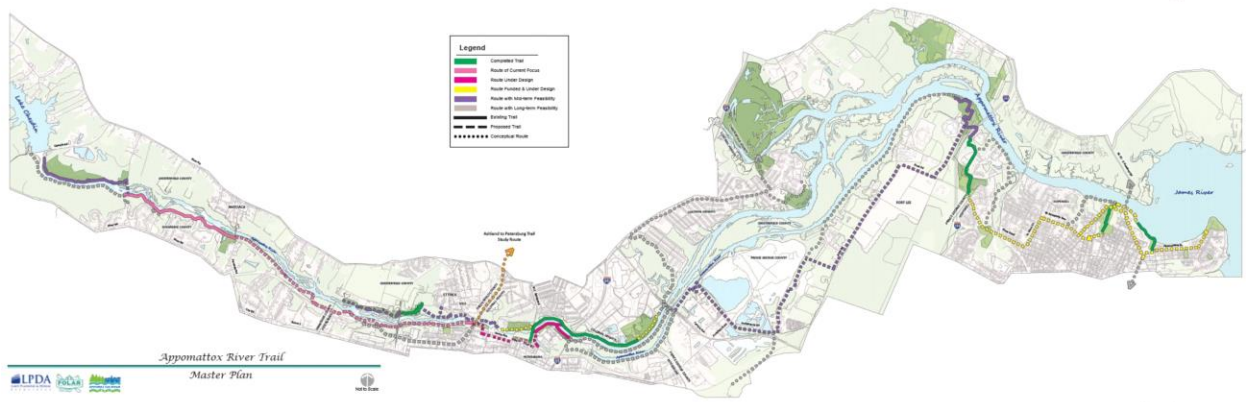


Kim Conley
Secretary
Board and
Community Affairs,
Chesterfield Co.;
Exec. Director,
James River
Advisory Council



Mike Golden
Immediate Past
Chair
Director Parks &
Rec (Ret.),
Chesterfield Co.



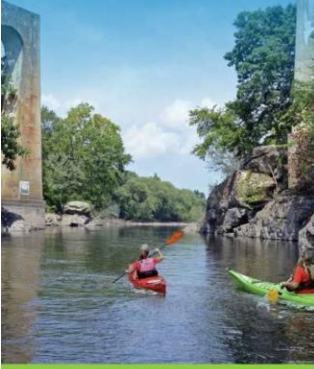


EXPLORE

the

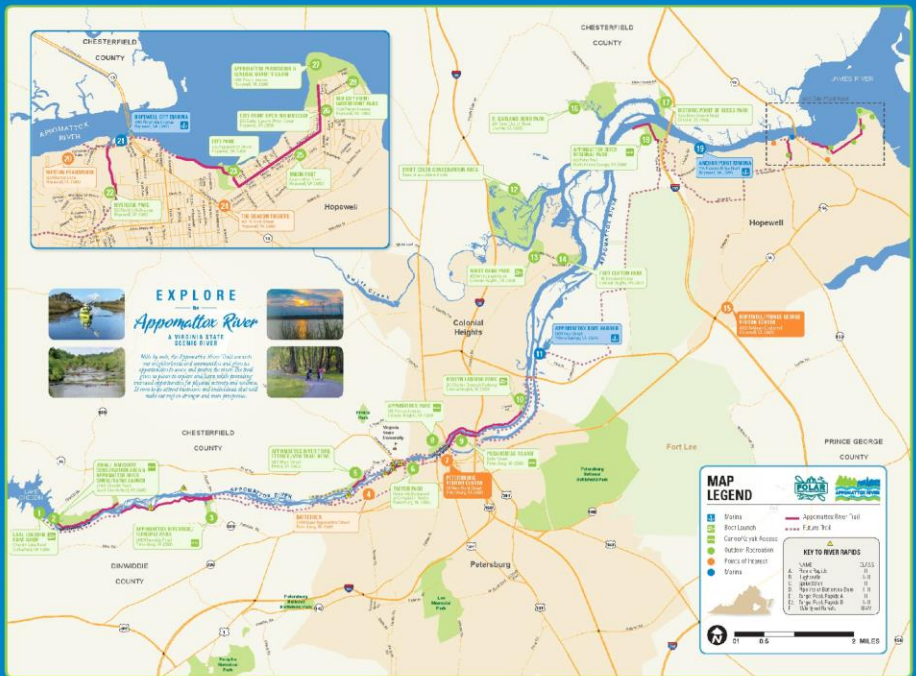
Appomattox River

A VIRGINIA STATE
SCENIC RIVER



Over 20 miles of river from the dam at Lake Chesdin to the confluence with the James River in Hopewell

Appomattox River Trail • Points of Interest
Boat Access • Parks

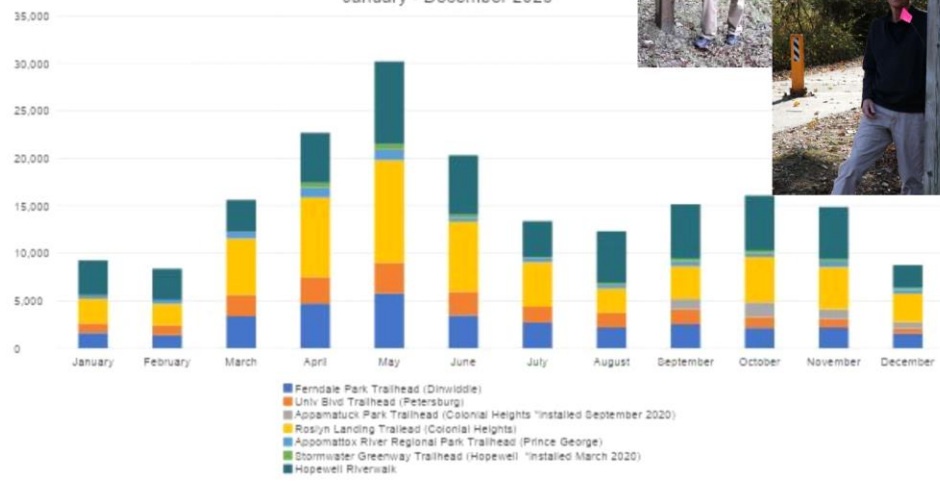


EXPLORE
the
Appomattox River
A VIRGINIA STATE
SCENIC RIVER

Map by Emily De Appomattox River Trail Inc. This is a map of the Appomattox River Trail, a scenic river in Virginia. The map shows the river's course from the dam at Lake Chesdin to the confluence with the James River in Hopewell. It highlights various points of interest, boat access, and parks along the river. The map is color-coded by county: Chesterfield County (orange), Dinwiddie County (green), and Prince George County (yellow). Key locations include Hopewell, Colonial Heights, Fort Lee, and Petersburg. The map also shows major roads and the Appomattox River Trail route. A legend in the bottom right corner provides details on symbols used on the map, including points of interest, boat access, parks, and various types of trails. A scale bar and north arrow are also included.

Trail Traffic

Monthly Trail Counter Data
January - December 2020



www.countonustraf.gov

50th Anniversary of the Scenic River

Virginia rivers that possess outstanding scenic, recreational, historic, and natural characteristics of statewide significance for future generations.

Website: www.dcr.virginia.gov/recreational-planning/sr50

Be sure to check out the Scenic River Celebration Video and the Lower Appomattox River story

The Lower Appomattox River Offers Something for Everyone

The Lower Appomattox River offers an experience like no other through unparalleled natural beauty and the relaxed convenience of nearby small-town hospitality.

Offering both whitewater and tidal flatwater for paddlers, unspoiled riverbanks for fishing and birding, and the experience of an explorer while walking and discovering the historic remains of the early industrial era, this river offers a little bit of something for everyone.



The Hopewell Riverswalk has opened up the scenic Appomattox River to more access. Photo by Daniel Jones, courtesy of Virginia Tourism Corporation.

[READ MORE](#)



Land Conservation Plan

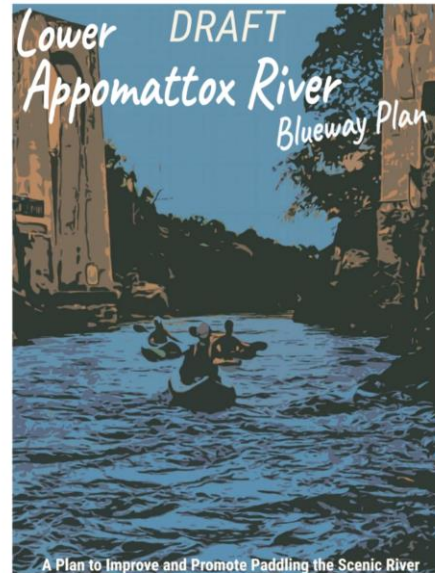
- Creating a new GIS layer & plan to prioritize land conservation along the Lower Appomattox River
- Prioritization will be based on many factors including the trail master plan, local comprehensive plans, natural and historic resource data and will involve a public survey to identify scenic resources
- Will send to stakeholders and partners to review before public release and will used to inform future land acquisition & easement projects for the region



Virginia
Environmental
Endowment

Draft Blueway Plan

- Thanks to Virginia Commonwealth University (VCU) graduate student Mark Glass – and for everyone who participated in the plan development!
- Recommendations include site specific improvements, as well as increased programming and supports, like an outfitter
- Currently under review by FOLAR Committee
- Next steps - will send out to stakeholders for review, then hold a community meeting



Land Conservation and Trail WORK

- Work to complete 8-acre land acquisition for the Appomattox River Trail in Petersburg is being made possible by grants to FOLAR from the DCR Virginia Land Conservation Fund and the Virginia Outdoors Foundation (VOF).
- A generous grant from the Dominion Energy Charitable Foundation will support continued improvements to the Petersburg section of the Trail.



\$500,000 Challenge Grant

- The Cabell Foundation in Richmond recently awarded FOLAR a \$500,000 challenge grant for the purpose of supporting improvements to the Appomattox River Trail, bridge, and park in the historic Ferndale Park area in Dinwiddie. All donations raised toward this section will be matched 1-to-1, up to the \$500,000 amount. We have two years to achieve the match amount.

THE CABELL
FOUNDATION

THE ROBERT G. CABELL III
AND MAUDE MORGAN
CABELL FOUNDATION



FOLAR-VA.ORG



FOLAR Manager of Development and Philanthropy

- FOLAR is excited to be expanding our team and is accepting applications for our first Manager of Development and Philanthropy position. The Manager of Development and Philanthropy is key to building the philanthropy program of FOLAR and developing the resources needed to power our mission of working with our communities to conserve and protect the Appomattox River for all to enjoy.
- Starting part time (Approx. 25-30 hours per week) with potential to full time.
- See position description at FOLAR-VA.ORG
- Made possible by the John Randolph Foundation and the Virginia Environmental Endowment.



Community Outreach Engagement

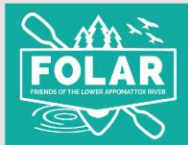
5TH ANNUAL 5K TRAIL RUN-WALK
SATURDAY, APRIL 17, 2021 AT 9AM



Appomattox River Regional Park, N. Prince George
All proceeds go toward Special Olympics and FOLAR
More Information at FOLAR-VA.ORG or
<https://runsignup.com/arrp-5k>

DIY CLEAN-UPS/TRAIL OBSERVATION

- FOLAR is partnering with Crater Planning District Commission to organize Clean-ups in 2021
- 2021 CLEAN THE BAY DAY with Chesapeake Bay Foundation; 6 days, Monday, May 31st to Saturday, June 5th
- COMMUNITY CARES TEAM
Volunteer for FOLAR land monitoring. Walk the trail and pick up trash, monitor for graffiti and other issues.



Contact Us!

Wendy Austin, Executive Director

waustin@folar-va.org

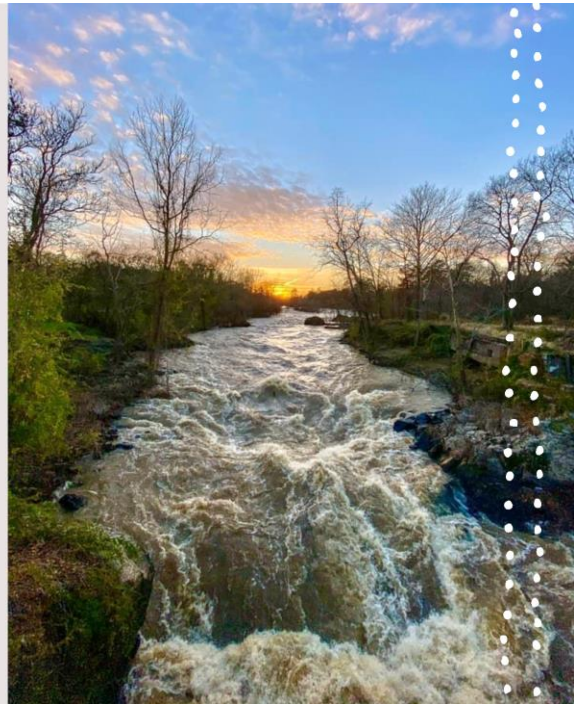
543-0325

Heather Barrar, Regional Trails Program Director

hbarrar@folar-va.org

512-4486

Thank you to our virtual host – SyCom Technologies



March 17th, 2021:

CRATER PLANNING DISTRICT COMMISSION

Monument Professional Building • 1964 Wakefield Street • Post Office Box 1808 • Petersburg, VA 23805
Phone: (804) 861-1666 • Fax: (804) 732-8972 • info@craterpdc.org • craterpdc.org

WIP III Working Group/ Environmental Resource Management Task Force

**Crater PDC Conference Room
1964 Wakefield Street
Petersburg, VA 23805**

**Wednesday, March 17, 2020
10:00 AM – 12:00 PM**

AGENDA

Join Zoom Meeting

<https://us02web.zoom.us/j/88006583938?pwd=UG95SEFqRnJnZlFucWozZUYvWWNHZz09>

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

Meeting ID: 880 0658 3938

Passcode: 519346

1. **Welcome and Introductions**
2. **Brief Overview of Programs**
 - Coastal Zone Management Technical Assistance (CZM TA)
 - Advancing Ecosystem and Community Resilience (CZM R)
 - Chesapeake Bay Watershed Implementation Program (WIP)
 - Hazard Mitigation Plan update planning
3. **Coastal Zone Management Technical Assistance (CZM TA)**
 - Overview of Deliverables
 - Training: VA [Coastal Resilience Master Plan Framework](#) – Rear Admiral Ann Phillips
 - Future Sea Level Rise and Recurrent Flooding Risk for Coastal Virginia:
<https://www.floodingresiliency.org/futurerisk/>
 - Ask about CZM training needs?
4. **Advancing Ecosystem and Community Resilience (CZM R)**
 - Overview of Deliverables
 - Discuss resilience and develop local definition
5. **Chesapeake Bay Watershed Implementation Program (WIP)**
 - Overview of Deliverables
 - Activity 1: Discuss local Flood Risk Communication Tools – Denise Nelson
 - Activity 4: Ask about WIP training needs
6. **Locality and Stakeholder Roundtable/ Discussion**
 - Update From FOLAR

May 12th, 2021:

5/12/2021

Resilience

What does “resilience” mean to CPDC and member localities?

In the **Virginia Coastal Resilience Master Planning Framework** (October 2020), page 3 states:

Following the guidance of the U.S. Global Climate Change Research Program, we define **resilience** as

“the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment.”

Similarly, we define **adaptation** as

“adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects.”

The primary objective of the Virginia Coastal Resilience Master Plan will be to improve the Commonwealth’s resilience and ability to adapt to **rising seas, increased nuisance flooding, and more frequent and intense storms** that result from climate change and threaten our coastal communities.

More generally, Merriam-Webster Dictionary defines resilience as:

1. *the capability of a strained body to recover its size and shape after deformation caused especially by compressive stress.*
2. *an ability to recover from or adjust easily to misfortune or change.*

We need to create a CPDC definition of resilience identifying what/who needs the ability to recover from or adjust, what the ability looks like, how easy it is, and what are the misfortunes or change. Please consider:

A. What are the misfortunes or changes?

- a. The state is focused on rising seas, nuisance flooding (i.e., tidal flooding), and more frequent and intense storms. Are these relevant to CPDC? To your locality?
- b. What else might there be?
 - i. Flash flooding
 - ii. Droughts
 - iii. Wildfires
 - iv. Trees damming rivers at bridges
 - v. Demographic changes
 - vi. Economic changes
 - vii. Others?

B. What/who needs the ability to recover from or adjust?

- a. This might be
 - i. Streambanks
 - ii. Roadways
 - iii. Bridges
 - iv. Hospitals
 - v. Businesses
 - vi. Others?

June 25th, 2021:

CRATER PLANNING DISTRICT COMMISSION

Monument Professional Building • 1964 Wakefield Street • Post Office Box 1808 • Petersburg, VA 23805
Phone: (804) 861-1666 • Fax: (804) 732-8972 • info@craterpdc.org • craterpdc.org

WIP III Working Group/ Environmental Resource Management Task Force

1964 Wakefield Street
Petersburg, VA 23805

Friday, June 25, 2021
1:00 PM – 3:00 PM

AGENDA

Join Zoom Meeting

<https://us02web.zoom.us/j/84646228409?pwd=NTNlN0RDULXUeXk4dDZlSnlFWUUtXzZz09>

Dial by your location

+1 646 558 8656 US (New York)
+1 301 715 8592 US (Washington DC)

Meeting ID: 846 7622 8409

Passcode: 001009

1. Welcome and Introductions
2. Advancing Ecosystem and Community Resilience (CZMR)
 - Review and comment on PDC Regional Resilience Definition
 - Legislation Overview and Training -Denise Nelson
 - a. Finalized Regulations (9VAC25-830-40 et seq.)
 - i. [Climate Adaptation](#)
 - ii. [Tree Amendments](#)
 - b. The Salt Water Control Board Finalizing [June 29, 2021 Meeting](#)
 - c. Tidal Wetlands Guidelines (Chapter 13 Title 28.2 Code of Virginia)
https://mrc.virginia.gov/regulations/Final-Wetlands-Guidelines-Update_05-26-2021.pdf
3. Chesapeake Bay Watershed Implementation Program (WIP)
 - Community Flood Preparedness Fund Grant Fund Training- [Luke Peters](#)
 - [Link to Virginia Department of Conservation and Recreation \(DCR\): 2021 Virginia Community Flood Preparedness Round Announcement and Workshop Sessions](#)
 - [Link to 2021 Virginia Community Flood Preparedness Fund Grant Manual \(PDF\)](#)
 - Applications are due by 4 p.m. September 3, 2021
4. Locality and Stakeholder Roundtable/ Discussion
 - Update From FOLAR
 - Any other information to be shared for others with the group?
5. News and Events
 - July 2021 – Award recipients notified
 - To Be Determined – Second round of applications

October 19th, 2021:

CPDC Environmental Working Group Agenda

October 19, 2021, 1pm-3pm

Join Zoom Meeting

<https://us02web.zoom.us/j/88006583938?pwd=UG85SEFqRnJnZ1FvcWp3ZUlyWWNNHkZk09>

Meeting ID: 880 0658 3938

Passcode: 519348

Dial +1 301 715 8592 US (Washington DC)

Chesapeake Bay Watershed Implementation Program (WIP) meeting #4

- Progress update – Jay Ruffa
- Forestry Programs – VDOF - Bryant Bays; Matt Poirot; Lara Johnson
 - Basic introduction
 - Silvicultural Water Quality Program
 - Riparian Forest Buffer and Afforestation Programs
 - Urban Forestry Program
 - Virginia Trees for Clean Water
 - Urban and Community Forestry Assistance Program Grants
 - Forestland Conservation
 - Working Forests
 - Sentinel Landscapes

Coastal Zone Management Technical Assistance (CZM TA) meeting #4

- Progress update – Jay Ruffa
- Resilience Plan update – Luke Peters
- Social Equity/Environmental Justice Training – Celeste Greene, Berkley Group

Locality and Stakeholder Roundtable

Upcoming Deadlines

- FEMA BRIC Grants proposals will be due to VDEM in November.

Next Meeting: November 15, 2021, 10am-12pm

August 27th, 2021:

Briefing Document

Planning Commissioners Site Visit – Dominion Energy’s Scott Solar

Date: Friday, August 27, 2021

Time: 10:00 AM – 12:00 PM

Location: 4325 Old Buckingham Road, Powhatan, Virginia 23139 (see map below)

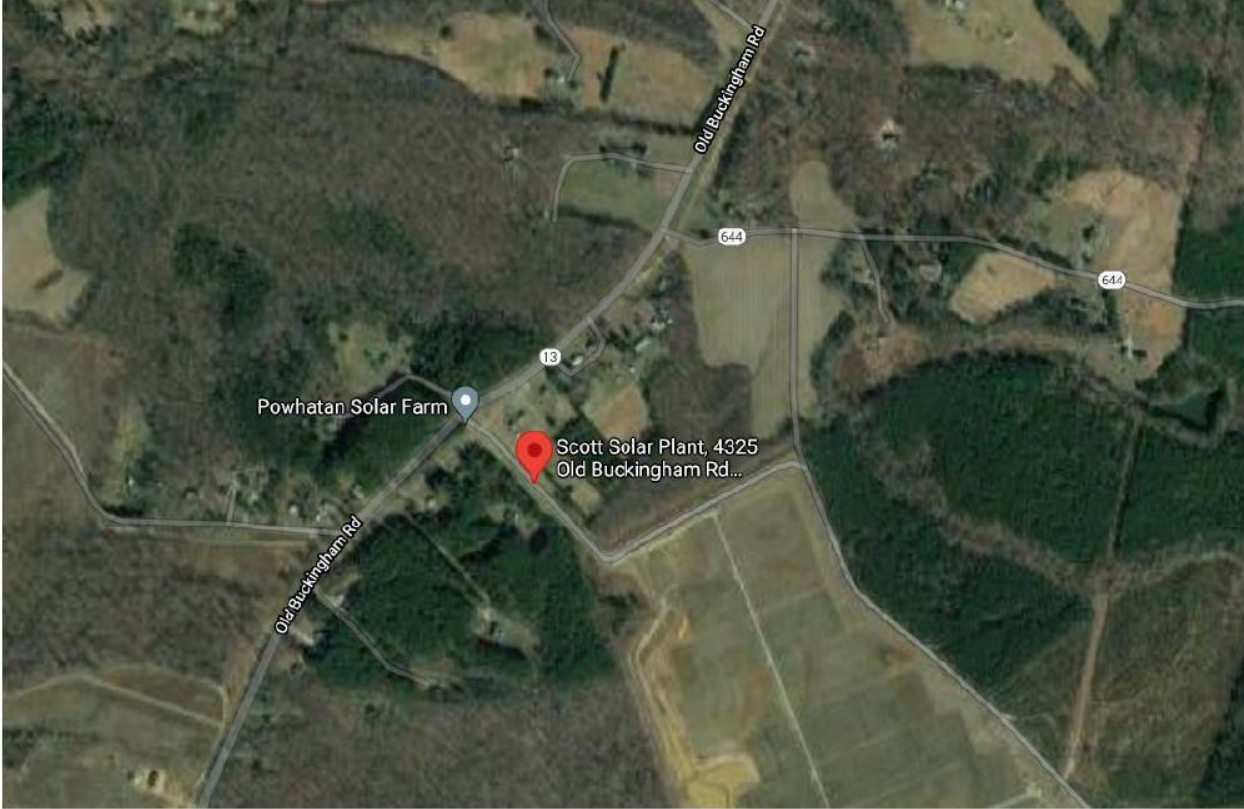
Contact: Jason De La Cruz – 804-205-8268, cell

COVID: In accordance with Dominion Energy’s COVID policy and recommendations from the Centers for Disease Control regarding outdoor gatherings, individuals who are fully vaccinated are not required to wear a face mask. Those not fully vaccinated are required to wear a face mask if social distancing cannot be maintained. All those in attendance will be encouraged to maintain social distancing.

Dress Code: Please wear closed-toe shoes, comfortable cotton-type clothing is highly recommended as the weather will most likely be warm. PPE (hard hat, safety glasses, and safety vest) will be required for all attendees. If you have these PPE items, please bring with you. However, PPE will be provided to all who need.

Agenda:

- 10:00 AM – Welcome
- 10:05 AM – Site and Construction Safety Briefing
- 10:20 AM – Site Tour (Solar Facility, Battery Storage)
- 11:30 AM – Questions
- 12:00 PM – Conclusion



Appendix 3: "Explore the Appomattox River Trail" guide update

EXPLORE
the
APPOMATTOX RIVER TRAIL

A VIRGINIA STATE SCENIC RIVER
Points of Interest • Boat Access • Parks

Over 20 miles of river from the dam at Lake Chesdin to the confluence with the James River in Hopewell

FOLAR
FRIENDS OF THE LOWER APPOMATTOX RIVER

CRATER PLANNING DISTRICT COMMISSION
CPDC

APPOMATTOX RIVER TRAIL

Produced by Friends of the Lower Appomattox River (folar-va.org) and Crater Planning District Commission (craterpcdc.org)

Virginia Coastal Zone MANAGEMENT PROGRAM

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

This guide was funded in part by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA20NOS4190207 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

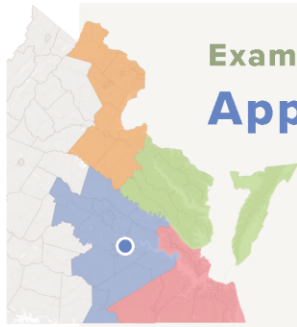
Logos for: CRATER PLANNING DISTRICT COMMISSION, COUNTY OF SPOTSWOOD, VIRGINIA, COUNTY OF GILES, VIRGINIA, COUNTY OF DANVILLE, VIRGINIA, COUNTY OF PRINCE GEORGE, VIRGINIA, COUNTY OF ROANOKE, VIRGINIA, COUNTY OF PETERSBURG, VIRGINIA.

VIRGINIA IS FOR LOVERS

09/21

Appendix 4: Appomattox River Trail - Master Plan Excerpt

// COMMONWEALTH OF VIRGINIA WORKING DOCUMENT — CONTENTS CONSIDERED DRAFT AND SUBJECT TO CHANGE. DO NOT DISSEMINATE //



Example Hybrid Project: Appomattox River Trail

The Appomattox River Trail is a 25-mile blueway and greenway that will span through six municipalities that border the lower Appomattox River. The area encompasses the counties of Chesterfield, Dinwiddie and Prince George, and the cities of Colonial Heights, Hopewell and Petersburg. This project will conserve riverfront land, improve the quality of life of the region, provide safe alternative transportation and increase the economic development of the region. This recreation and transportation facility will also help protect sensitive riverfront lands to serve as a buffer to flooding and sea level rise.



Location

Appomattox River
Shorelines, Crater PDC



Owner

Friends of the Lower
Appomattox River



Cost

\$25,000,000



Status

Multi-Phased



Resilience Strategies Employed

Natural and Nature-Based Strategies: Land Acquisition and Conservation, Habitat Restoration (Forest Restoration), Floodplain Restoration, Green Infrastructure

Structural Strategies: Stormwater Drainage and Utility Improvements



Coastal Hazards Addressed

A greenway is a protected stream corridor and open space managed for conservation and recreation. By conserving the land along the river and in some cases restoring the land, the greenway system will help reduce hazards by preserving green space and acting a buffer between the water and development for hazards such as sea level rise, storm-surge flooding, shoreline erosion and inland flooding from stormwater. Riparian buffers will be managed for invasive species, making the native forest healthier and more resilient to change.



Anticipated Project Benefits

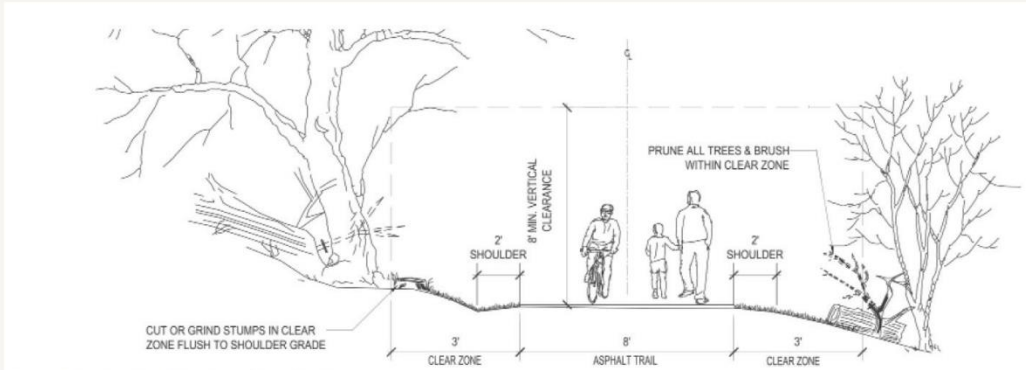
The project features several resilient design elements including living shorelines, stream restoration, upgrades to stormwater drainage systems, and other techniques that will work together to improve flood storage capacity along the river. This additional capacity will act as a buffer during flood events and help protect several community assets located along the river, such as wastewater treatment facilities and railroad infrastructure. In addition, the trail and new bike and pedestrian bridges will increase alternative transportation and mobility options for a community with high poverty and low car ownership, providing social benefits. Because this project is permanently protecting land, this project will have long-term benefits for the community, both from an ecological and societal resilience standpoint.



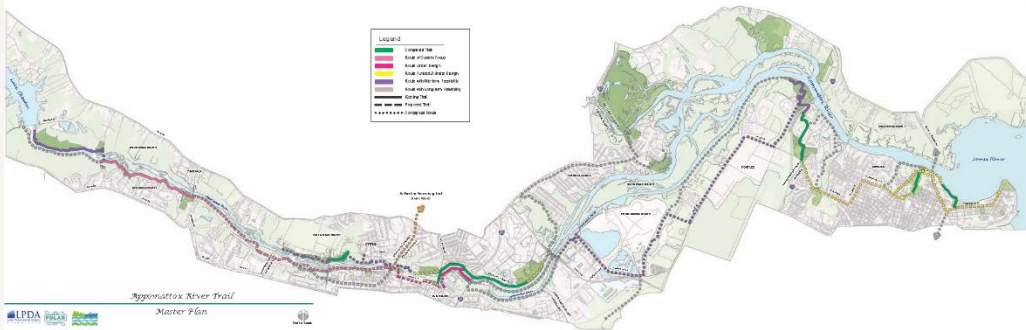
Notable Characteristics

The project aligns with the Commonwealth's vision to address socioeconomic inequities and work to enhance equity through coastal resilience efforts. The project is being designed to bring multiple and intersecting benefits to a population that is socially vulnerable and under-resourced. Public education and awareness will be a major component of the project.

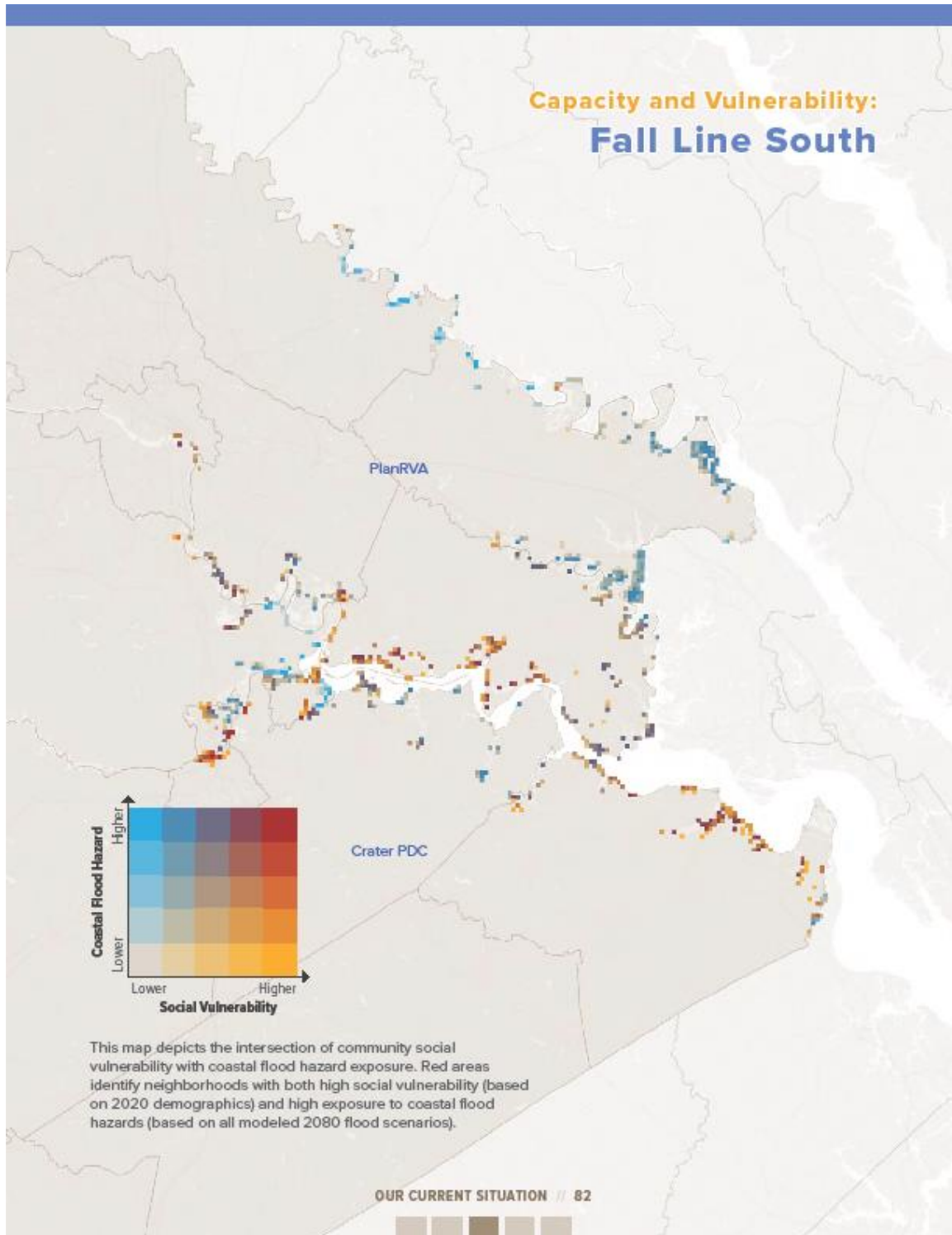




Typical section for the shared-use trail



Appendix 5: Crater Coastal Resilience Master Plan Excerpt



Appendix 6: Example Impaired Waterways for Resilience Priorities

Locality	Water Name	Location	Impairment Causes
Sussex County	Applewhite Swamp	Located south of Mason & northeast of Arringdale. Segment extends from start of swamp (near Harrells Mill) downstream to confluence with Three Creek. The Appomattox River from the Lake Chesdin dam to the confluence of Rohoic Creek	Benthic Macroinvertebrates Bioassessments
Chesterfield County	Appomattox River		PCBs in Fish Tissue
Chesterfield County	Appomattox River	From Deep Creek Downstream to Lake Chesdin The Appomattox River from the Rohoic Creek to the fall line at the Route 1/301 bridge.	Escherichia coli (E. coli)
Chesterfield County	Appomattox River	Virginia Scenic River The Appomattox River from river mile 53.70 downstream to the confluence of Deep Creek. The segment was extended in 2006 to incorporate VAP-	Escherichia coli (E. coli), PCBs in Fish Tissue
Chesterfield County	Appomattox River	J10R_APP02A04. The portion of the Appomattox River within this	Escherichia coli (E. coli)
Chesterfield County	Appomattox River	watershed.	Escherichia coli (E. coli)
Dinwiddie	Arthur Swamp	RM 4.669 to the mouth	Escherichia coli (E. coli), Mercury in Fish Tissue
Dinwiddie	Arthur Swamp	I-85 bridge to RM 4.66 Headwaters to mouth at Appomattox River	Mercury in Fish Tissue
Chesterfield County	Ashton Creek	02080207	Escherichia coli (E. coli)