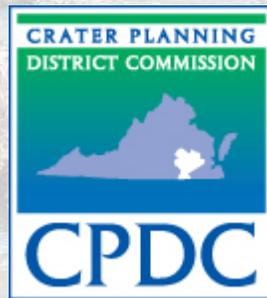


Virginia Coastal Zone Management Project

Final Deliverable Products Report
Task 42, Technical Assistance Program



Crater Planning District Commission

November 29, 2018



Virginia Coastal Zone
MANAGEMENT PROGRAM



This project was funded, in part, by the Virginia Coastal Management Program at the Department of Environmental Quality through Grant # NA17NOS419 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Final Project Summary

The Technical Assistance Program includes various activities coordinated and provided by Crater Planning District Commission staff. All work relating to the products listed in the 2017 Virginia Coastal Zone Management Program Grant is summarized below. Any additional environmental tasks completed during the past year have also been outlined.

Product #1 – Environmental Impact Reviews

Commission staff reviewed 34 Environmental Impact Reports during the past year. The projects were varied and included wastewater treatment facilities, solar power plant operations, energy pipelines, shoreline stabilization, National Guard facilities, university facilities, hotel and apartment developments, a state park cabin facility, and grant funding applications.

Product #2 – Report on Coastal Meetings

Two (2) coastal meetings were held during the past year (2017 - 2018): January 24 and June 12. 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, The Virginia Department of Conservation and Recreation, The Virginia Department of Environmental Quality, and the Friends of the Lower Appomattox River (FOLAR). The main focus of each meeting is outlined below.

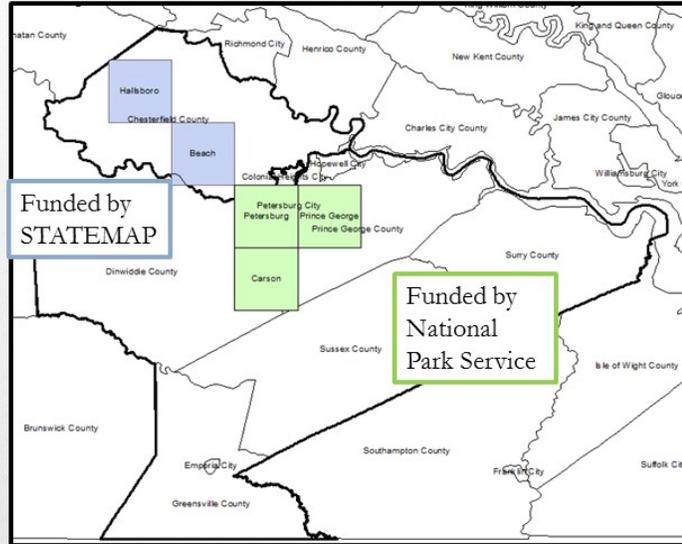
- January 24, 2018 – Biking and Pedestrian Facilities in the Netherlands, Geologic Mapping Priorities, and the Appomattox River Trail Connection to the Virginia Capital Trail: FOLAR representatives met with the Crater PDC to discuss biking and pedestrian facilities in the Netherlands. Potential similar uses in the Crater region was the focus. Virginia DMME representatives presented information on geologic mapping priorities. A status report for the Appomattox River Trail's potential connection to the Virginia Capital Trail was also given.

Hovenring

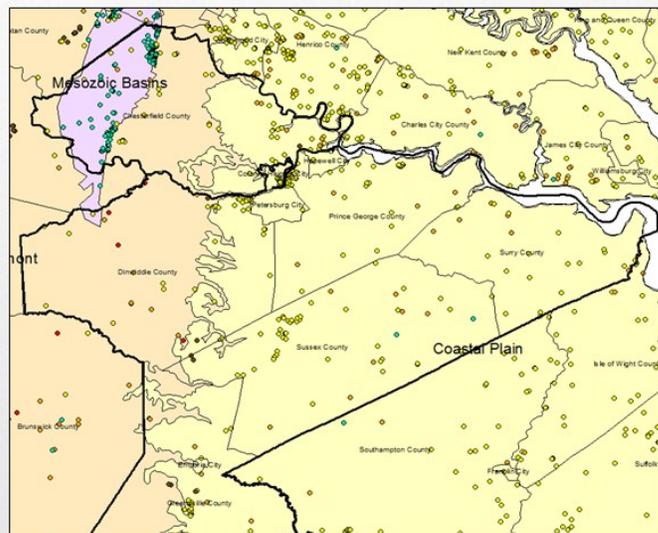


- **My blog:** www.hbarrar.tumblr.com
- **Velo-City Video:** a bit long, but *be sure to watch around 6:45*
<https://www.youtube.com/watch?v=01gCwhHd4ms&feature=youtu.be>
- **Max's blog:** <http://www.sportsbackers.org/blog/velo-city-global-cycling-summit-journal-day-1-2/>

Current Geologic Mapping Projects



Known Mineral Resources in the Crater PDC



Crater Planning District Commis... Appomattox River Trail to Capit...
 https://www.arcgis.com/apps/MapJournal/index.html?appid=f304e4355ab74fab126417caab3036
 Apps Configuring the Acci... Crater PDC | Project... Department of Geo... Background image 1 FEMA's National Ri... National Flood Hazi... DNR Indiana Flood... Other bookmarks

A story map

Appomattox River Trail to Capital Trail Study

Vision
 To provide active transportation users a safe and efficient connection between the Appomattox River Trail and the Virginia Capital Trail.



Introduction
 The one-mile long Benjamin Harrison Bridge is currently the only way for active transportation users, like cyclists and pedestrians, to travel between the Appomattox River Trail (with Hopewell as its planned terminus) and the Virginia Capital Trail. However, the bridge carries roughly 4,500 vehicles per day, has narrow shoulders (if present at all) and lacks sidewalks, forcing cyclists and pedestrians into the same lane as fast-moving motor vehicles.



Crater Planning District Commis... Appomattox River Trail to Capit...
 https://www.arcgis.com/apps/MapJournal/index.html?appid=f304e4355ab74fab126417caab3036
 Apps Configuring the Acci... Crater PDC | Project... Department of Geo... Background image 1 FEMA's National Ri... National Flood Hazi... DNR Indiana Flood... Other bookmarks

A story map

Appomattox River Trail to Capital Trail Study

Recommendations & Alternatives Overview

This study considered various alternatives for crossing the James River and connecting the Appomattox River Trail and the Virginia Capital Trail. Each alternative was evaluated based on its estimated costs, anticipated feasibility, and potential benefits (opportunities) and concerns (constraints) to trail users, the region, and the environment. Public and stakeholder input were invaluable in identifying regional needs and barriers.

Each alternative is unique – several consider shorter-term shuttle or ferry connections, while others recommend longer-term trails or bicycle/pedestrian bridges (Figure 8). While each alternative promises various community benefits, the study recommends deploying a conventional bus/van shuttle (Recommended 1A) or a bicycle/pedestrian ferry (Recommended 1B). Given today's funding constraints, it was determined that these two alternatives are practical, relatively affordable, and can address an immediate need for improved regional trail connectivity. Additionally, this study recommends that the Benjamin Harrison Bridge, when replaced, include a protected bicycle/pedestrian path along with any trail connections to/from the bridge (e.g. to/from Hopewell and to/from the Virginia Capital Trail).

These two recommended options are summarized shortly and are followed by discussions of the other alternatives. All five (5) options are discussed in the context of capital and operating costs (in 2017 dollars), as well as net present value (NPV), which refers to the current dollar value of future investments.

Opportunities & Concerns

REC. 1A – CONVENTIONAL SHUTTLE (BUS/VAN)	REC. 1B – BICYCLE/PEDESTRIAN FERRY	ALT. 1 – PATH ALONG ROUTE 10 AND JAMESTOWN-SCOTLAND FERRY	ALT. 2 – BICYCLE/PEDESTRIAN BRIDGE	ALT. 3 – AUTONOMOUS, ELECTRIC SHUTTLE
<ul style="list-style-type: none"> Economic development potential Potentially year-round service May require reservations 	<ul style="list-style-type: none"> Novelty service Potential for non-bicycle users (e.g. educational programs) Potentially limited service (e.g. seasonal) 	<ul style="list-style-type: none"> High ridership, public support (Fall '17 Survey) Economic development potential Environmental impacts, land acquisition required 	<ul style="list-style-type: none"> High ridership, public support (Fall '17 Survey) Design limitations due to vertical clearance Environmental impacts, land acquisition required 	<ul style="list-style-type: none"> Novelty service Green transportation New technology safety concerns

Estimated Cost (Over 25 Years, in Millions of \$)

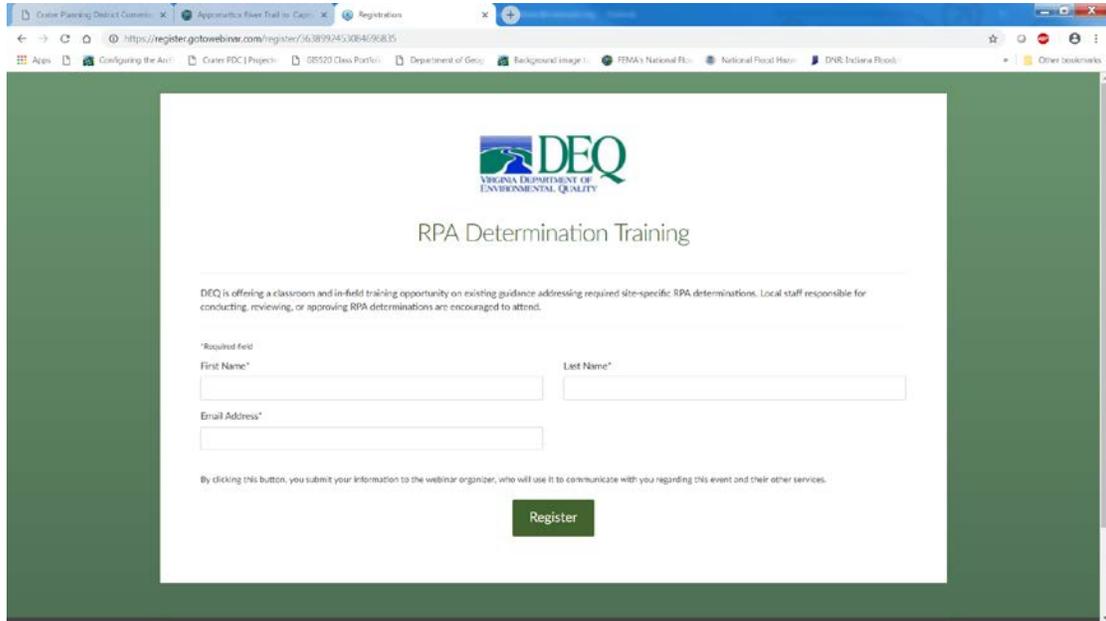
REC. 1A	REC. 1B	ALT. 1	ALT. 2	ALT. 3
\$3M	\$6M	\$47M	\$43M	\$3M

Estimated Time to Implement (Years)

REC. 1A	REC. 1B	ALT. 1	ALT. 2	ALT. 3
2 yrs.	3 yrs.	15 yrs.	20 yrs.	2 yrs.

Rec. 1A - Shuttle (Bus/Van)

- June 12, 2018 – RPA Determination: The Crater PDC worked with DEQ and the Richmond Regional PDC to conduct an “RPA Determination Training” workshop/webinar for the Central Virginia Region:



Local government staff responsible for implementing Bay Act programs were invited. The training included field work and RPA determination on a nearby perennial stream. Proper dress was necessary.

Product #3 – Coastal Training

The Commission sponsored several training sessions on the following topics: 1) Biking and Pedestrian Facilities in the Netherlands, 2) Geologic Mapping Priorities in Virginia, 3) Appomattox River Trail Master Plan, and 4) RPA Determination. Details for these topics are in the previous section.

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

The Commission staff continued its ongoing support for FOLAR by providing financial administration, meeting facilitation, website maintenance (www.folar-va.org), participation in river events, map production, office space, and grants administration. It continued to employ permanent part-time staff to handle its administrative duties.

Highlights of FOLAR activities included the following:

- Performed several local river clean-ups.
- Held its 11th Annual Battle or Paddle.
- Held its 3rd Annual 5K Trail Run at Appomattox River Regional Park
- Held its 4th Annual RiverFest
- Held its 2nd Annual Fall Fling
- Maintained a [Facebook Page](#) of all FOLAR activities.



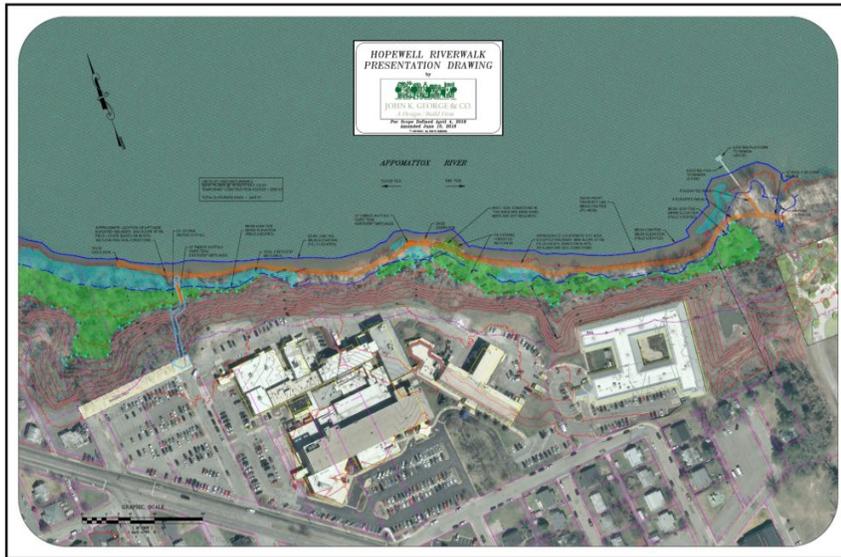
FOLAR continued to implement its Appomattox River “Trail Master Plan” and a “Trail Brand Identity and Signage Master Plan”. The Lower Appomattox River is a major tributary of the James River that meanders 23 miles eastward through six Virginia localities. It begins at the Lake Chesdin Brasfield Dam in Chesterfield County, flows through Dinwiddie County, the Cities of Petersburg and Colonial Heights, Prince George County, and converges with the James River at historic City Point in the City of Hopewell.

[Land Planning & Design Associates](#) (LPDA) produced the trail plan and [AB Design](#) produced the signage plan:

- [Appomattox River Trail Master Plan](#)
- [Appomattox River Trail Signage Master Plan](#)

The Cameron Foundation approved a \$250,000 implementation grant to FOLAR to improve a key section of the Appomattox River Trail. The award supports design development, pre-construction engineering, trail construction, and design and fabrication of wayfinding signage. The area to be developed is between University Boulevard and the Boulevard in Old Towne Petersburg.

The Hopewell Department of Recreation and Parks hosted a groundbreaking ceremony for its Riverwalk on Friday September 28, 2018 at City Park. The Riverwalk is part of the overall Appomattox River Trail. Elected officials, City leaders and FOLAR representatives provided comments prior to officially breaking ground for the project.



Product #5 – Benefits Accrued From Prior CZM Grants

Commission staff maintained our Appomattox River Interpretive guide and online application: <http://www.craterpdc.org/webmaps/arig/>. Staff also reprinted 2,000 brochure copies for distribution around the region.

Additional Environmental Matters

Commission staff participated in several other environmental activities including the Richmond Area Environmental Education Network, Chesapeake Bay WIP III Planning, solid waste reporting, the Albemarle-Chowan Roundtable, the Middle James Roundtable, the Chesapeake Conservancy, floodplain analysis, and the Beaches to Bluegrass Trail. The Crater PDC attended the following environmental meetings and surveys:

- October 23, 2017 – Middle James Roundtable
- November 8, 2017 – Fall Coastal PDC Meeting
- June 13, 2018 – Spring Coastal PDC Meeting
- August 28, 2018 – Surry County Trails Meeting
- September 12, 2018 – Coastal Policy Team Meeting

Commission staff worked with the Town of Surry to complete its Chesapeake Bay Preservation Act Local Program Annual Implementation Report.

Appendix

- RPA Determination Training Agenda
- Appomattox River Trail Master Plan



DEQ Division of Water Planning, Local Government Assistance Programs

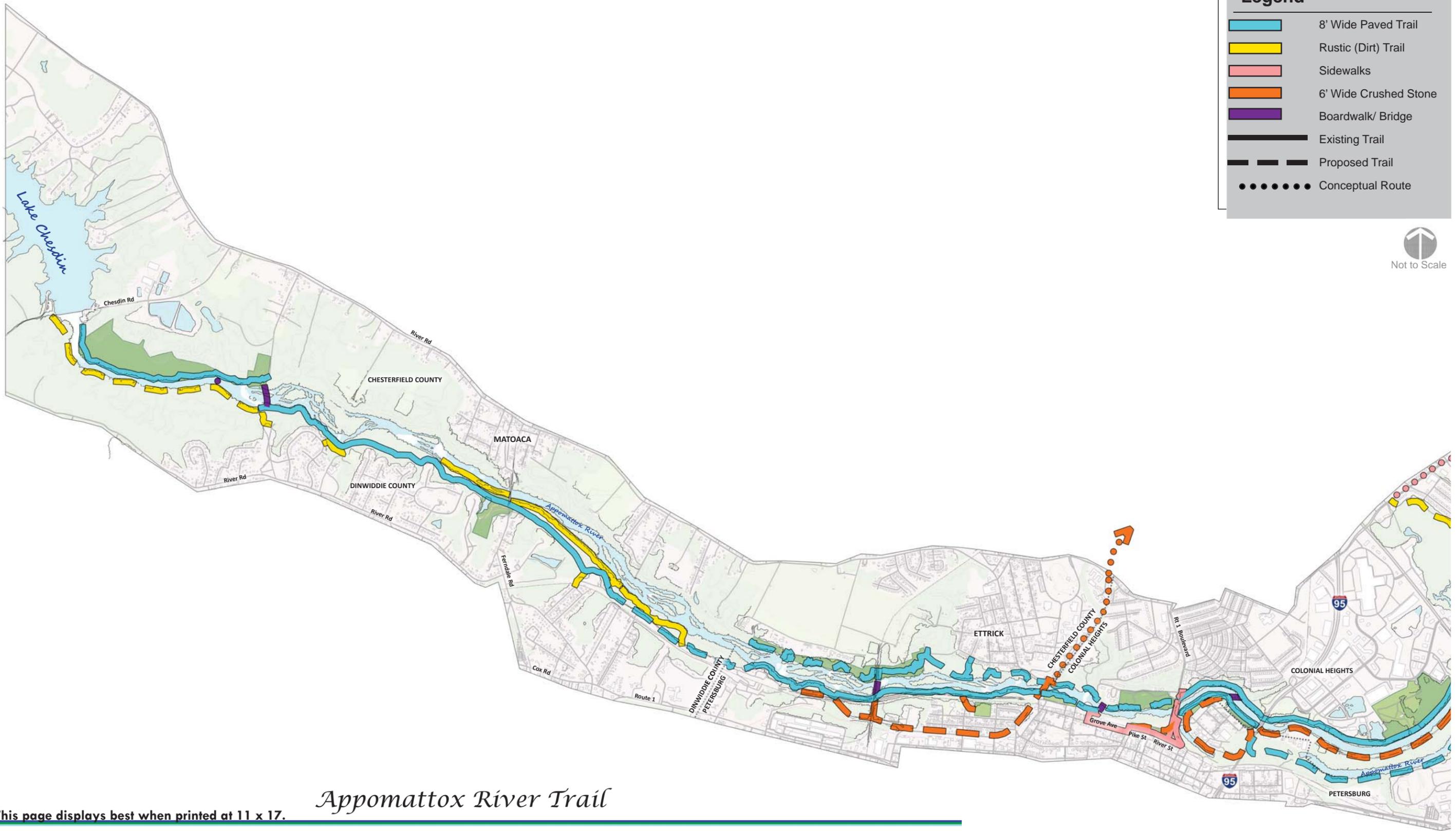
RPA Determination Training

June 12, 2018, 10:00 AM – 3:00 PM

Chesterfield County Community Development Building – Multi Purpose Room, 1st Floor
9800 Government Center Parkway, Chesterfield VA 23832

AGENDA

- 10:00 Welcome
Joan Salvati, Manager, DEQ Local Government Assistance Programs
- 10:15 Review of RPA Determination Guidance
Heather Mackey, Principal Environmental Planner
Nate Hughes, DEQ Wetlands Specialist
- 11:45 – 12:45 LUNCH
You can either bring your own lunch or order online from the group order site we have set up with a nearby Jason's Deli. You will receive an email invitation to the group order site; feel free to pass it along to others in your organization who will be attending the training.
- 12:45 Chesterfield County's Approach to RPA Management
Weedon Cloe, Water Quality Manager and Laura Barry, Water Quality Analyst, Chesterfield County Environmental Engineering
- 1:30 In-Field Training
Following a brief map review of the site by Scott Williams, Chesterfield County GIS Analyst, Nate Hughes, Weedon Cloe, and Laura Barry will conduct a training session in the field on a nearby perennial stream - dress accordingly!



Legend

- 8' Wide Paved Trail
- Rustic (Dirt) Trail
- Sidewalks
- 6' Wide Crushed Stone
- Boardwalk/ Bridge
- Existing Trail
- Proposed Trail
- Conceptual Route



Appomattox River Trail

Trail Types - West

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Legend

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