

State Trails Advisory Committee Notes

Hotel Madison & Shenandoah Valley Conference Center
710 South Main Street, Harrisonburg
Wednesday, April 26, 2023

Meeting slides available [here](#)

Attendees

Kyle Lawrence, Shenandoah Valley Bicycle Coalition
Valerie Kramer, James Madison University
Grace Rust, Virginia Capital Trail Foundation
Kelsey Mackest, Northern Virginia Conservation Trust
Chris Ridder, Charlottesville-Albemarle Convention & Visitors Bureau
Peter Krebs, Piedmont Environmental Council, VA Trails Alliance
Nathan Hilbert, National Park Service Rivers, Trails and Conservation Assistance
Tom Saielli, Blue Ridge PRISM
Champe Burnley
Chris Gensic, City of Charlottesville
Matthew Helt, U.S. Forest Service
Andrew Downs, Appalachian Trail Conservancy
Patti Nylander, VA Dept. of Forestry
Kelly Miller, VA Dept. of Environmental Quality
Heather Barrar, Friends of the Lower Appomattox River
Don Hindman, Shenandoah Rail Trail
Jimmy Walters, Tobacco Heritage Trail
Nathan Burrell, VA Outdoors Foundation
Allison Wishon, VA Dept. of Transportation
Jim Lynch, Potomac Heritage Trail Association, Dahlgren Railroad Heritage Trail
Lisa Quigley, Virginia Creeper Trail Conservancy
Kindra Greene, Elizabeth River Trail
Sally Aungier, VA Horse Council, VA Trails Alliance
P.K. Pettus, Tobacco Heritage Trail
Francis Maguire, Roanoke Valley Greenways
Kim Woodwell, Alliance for the Shenandoah Valley
Phil Riggan, PlanRVA
Max Goldman, VA Dept. of Wildlife Resources
Shane Sawyer, VA Dept. of Transportation
Elliott Caldwell, East Coast Greenway Alliance
Heather Mackey, VA Dept. of Environmental Quality
Jill Jefferson, Town of Woodstock
Don Owens, Lands, Trails & Parks, LLC

Kim Williams, Alta Planning and Design
Laura Martlock, DCR Rec. Trails Advisory Committee
Olivia Langford, Austin Brockenbrough
Carly Pavan-Ballard, Pulaski County High School
December Ward, Pulaski County High School
Sawyer Judy, Pulaski County High School
Morgan Lindsey, Pulaski County High School

DCR Staff: Dave Neudeck, Emi Endo, Kellie Seaton, Jennifer Wampler, Kelly McClary, Frank Stovall, Joshua Ellington, Charlie Marston, Rebecca Jones, Kathryn Roddy
VDOT Trails Office Staff: Torsha Bhattacharya, Wood Hudson

Kelly McClary welcomed attendees and called attention to the list of outgoing STAC members since 2019 printed on the back of the agenda. She announced the upcoming retirement of DCR Trails Coordinator, Jennifer Wampler, and honored her with a plaque acknowledging 18 years of service to DCR.

State Trails Office and Plan

Jennifer Wampler provided an overview the agenda and introduced VDOT's new state trail office staff, Torsha Bhattacharya (Locality and Funding Lead) and Wood Hudson (Planning Lead). The office email is statetrailsoffice@vdot.virginia.gov. They are beginning stakeholder outreach and engagement with a survey <https://publicinput.com/stp> that is now open to collect information along with email addresses to build their stakeholder list. They are also working with a consultant to identify key stakeholder groups across the state.

They want to be intentional with engaging diverse audiences and collaborating with DCR and STAC both online and in-person throughout the process. The Statewide Strategic Trails Plan (working title) will be complimentary to the Virginia Outdoors Plan (VOP), VTRANS: Virginia's Transportation Plan, and the Statewide Bike/Ped Plan. The strategic plan will straddle both the transportation systems and recreation systems. They are currently working on the scope of work for this statewide plan, which will identify existing trails, trail gaps, options for future trail investments and funding sources, and provide policy recommendations for equitable and geographically diverse trail development.

They are also working on a trails clearinghouse/resource hub to create a go-to resource site for access to Virginia trails-related information, since it is currently spread across many locations. They are also developing the State Trails Office website. They are also in the process of collecting data on existing and planned trails/trail networks, with plans to standardize trail attributes, spatialize trails data and develop an interactive mapping interface.

The General Assembly has identified five priority trails:

- Craig Botetourt Scenic Trail
- Eastern Shore Rail Trail
- Peaks to Creeks Trail
- Shenandoah Valley Rail Trail

- Tobacco Heritage Trail

The next steps for the State Trails Office:

- Launch State Trails Office website.
- Stakeholder and public outreach for the Statewide Strategic Trails Plan.
- Data gathering to inform the Trails Clearinghouse/resource hub.

Q&A

- Josh Ellington, DCR State Parks Division, requested VDOT capture a trail definition that includes different types of trails, not just shared-use paths, and how trail systems within recreation hubs interact with linear connecting trails.
- Matt Helt with the U.S. Forest Service (USFS) echoed the need for a standard definition, since many USFS trails are not covered by the definition of multi-use trails in the 2022 [Virginia Multi-use Trails Initiative](#) report.
- STAC member Champ Burnley couldn't stress enough the importance of single track and gravel trails for bringing visitors to Virginia. They are great assets and economic drivers.
- Heather Barrar with the Friends of the Lower Appomattox Trail mentioned the past use of trail length as criteria for what qualifies as a regional trail but stated that short trails could be critical for making important connections.
- Peter Krebs, with the Piedmont Environmental Council, said a potential flaw in the system is the silos that exist between "recreation" and "transportation" agencies and funding sources. Also, the current VDOT survey asks participants to identify their user type (can only check one), when really most users are multi-modal users. The State Trails Office is in a place to break down the silos.
- DCR Planning and Recreation Resources Division Director, Kelly McClary, said STAC members are concerned with how they will work with and inform the Statewide Trails Office.

Torsha replied to these questions that the survey is a start, but that there will be multiple opportunities for data gathering and input.

[Sustainable Materials for Trail Construction](#)

Kimberly Williams, Senior Planning Associate with Alta Planning & Design, presented on sustainable materials for trail construction with a focus on greenways, not natural surface trails. Some reasons to use sustainable trail materials are 1) everyone benefits, and 2) it helps to advance technologies and cost effectiveness. Innovative projects that incorporate sustainable materials also compete better for federal funds and using greenways and other sustainable transportation results in carbon reduction.

Some alternative materials to consider for trail surfacing:

- [Epave](#) is a polymer-based concrete that reduces radiant heat.
- The [State of Tennessee](#) has a program that is utilizing recycled tires for permeable/recycled pavement on state park trails. A plant-based binder can be used instead of asphalt.

- Permeable Pavers are used along the [Indianapolis Cultural Trail](#) with stormwater basin gardens.
- Recycled decking – [Trex](#) uses plastic bags and sawdust to create decking, fencing and outdoor furniture.
- Use locally sourced materials such as southern cypress and demolition waste.
- [PermaTrak](#) uses top-down construction to minimize wetland impacts.
- Streets can be reconfigured to fewer lanes so the existing pavement can be readapted for non-motorized traffic and stormwater control.

Some alternatives to consider during design:

- Use land outside of the trail treadway to capture and treat stormwater and develop wildlife habitat.
- Include bank stabilization/stream restoration in projects where possible.

Other considerations:

- Utilize recycled materials for trailside amenities and signage.
- Upcycle materials onsite.
- Use solar power for electricity at mobility hubs.

Q&A

Champe Burnley said spending a little more during trail construction to have parallel paths can minimize management costs over the long term. For example, utilizing different materials within the treadway can segregate different user types to manage user conflicts. For example, runners and walkers will generally seek rubberized asphalt and bicyclists will seek harder pavement. (See image of Chicago 606 Trail in Figure 1 below). Maintaining a grass strip along an asphalt trail for equestrians also minimizes user conflicts, as along the Pere Marquette Trail in Figure 2.



Figure 1



Figure 2

Matt Helt observed that in rapidly developing areas, developers are leaving only unbuildable land for trails (floodplains, wetlands, steep slopes), increasing costs to build trails and creating more impacts. Planners should also consider when natural surface trails make sense in urban areas to minimize costs and impacts.

Regarding the questionable lifecycle of innovative materials, Elliot Caldwell asked whether phasing projects adds to maintenance costs, because different sections of the trail require replacement at different intervals.

Champe Burnley said a good role for the state trails office could be promoting and funding pilot projects to expand the use of innovative techniques.

Sensory Trails Panel

Jennifer introduced the Sensory Trails Panel by saying access to the outdoors and outdoor education is important for all individuals, including people with disabilities. Enabling everyone to experience nature through trails broadens the base of people who will support trail development.

Kathryn Roddy, Trails Coordinator at Sky Meadows State Park, began the Sensory Trails Panel with a description of the park. Sky Meadows, a designated dark sky park, is a historic farm with 10.5 miles of equestrian trails, 22 miles of hiking trails, 9 miles of bike trails, and access to the Appalachian Trail.

In 2019, park staff partnered with Virginia Master Naturalists, the Friends of Sky Meadows State Park and the Lion's Club to create a 3/10-mile sensory trail for people who are blind and visually impaired. They researched other local sensory trails, including Catoctin Creek Nature Center, and the Lions Trail in the George Washington Jefferson National Forest to find best practices and lessons learned. Based on this research, the following decisions were made:

- Used material changes instead of ropes to aid navigation.

- Constructed the trail in a location that allowed easy access to restrooms, parking and control of slope and other trail features.
- Considered a wide range of topics for content.
- Created an audio tour as a first step.
- Located Braille numbers on each sign.
- Included hands-on exhibits to explore tactilely.

Multiple grants were received to total \$37,000. Over 50 volunteers contributed over 2,600 hours to complete the trail in August 2019. The partners are working on future opportunities including programming for children with autism.

The next panelist, Carley Pavan-Ballard, works at Pulaski County High School as the Agricultural Education FFA Advisor. She presented on sensory trails with students December Ward, Sawyer Judy and Morgan Lindsey. The Sensory Trail will open in a few weeks.

Carley began the project in the Fall of 2020 due to the need to balance virtual and in-person learning, along with the desire to increase hands-on opportunities to learn. She quickly observed that outdoor locations and education were not accessible to all students, including those with mobility impairments and intellectual disabilities. Some family members with disabilities were also not able to access the outdoor classrooms of their children. The school needed an outdoor space that would be accessible to all, as a learning environment for students, teachers and families.

The class decided to develop educational and sensory exhibits located along a trail that would also serve as a community garden and be open to the public when school was closed. As part of the planning process, people with disabilities visited to help identify barriers. Students without disabilities experienced navigating the trail by wheelchair or without their use of vision. They utilized the [Accessibility Guidebook for Outdoor Recreation and Trails](#) as a resource.

Students took ownership of the project. All projects were student led, and students were able to include skills learned on their resumes. Student projects included marketing of the trail, including scripts for the QR codes on the trail; developing a pollinator garden with native species; and adding a sound garden, food garden, and rope navigation. Students also researched and designed a more accessible garden bed that provided knee clearance beneath the table for wheelchairs. The garden bed also included a rounded surface to allow people to lean over into the garden bed and touch soil.

The project was funded mostly through grants, but also with donations and funding from the high school. Salem Stone Corp donated all of the gravel and committed to donating gravel for the lifetime of the project. Virginia Outdoors Foundation provided the largest grant, but funding was also provided by Keep Virginia Beautiful. Contributors were acknowledged on a slide.

Some additional benefits:

- The trail provided co-curricular opportunities for a variety of school classes.

- Students are finding ways to continually improve the trail.
- The project met many required learning competencies.
- For some disabled students, this was their first time interacting with nature.

The students want to teach other schools to complete similar projects. Please share this project with your local schools.

Navigating Water Regulations

Four speakers discussed Navigating Water Regulations. Chris Gensic, Parks and Trails Planner for the City of Charlottesville spoke to the minimal stormwater impacts from a linear trail, where sheet flows don't build up and are transferred to trail shoulders, as compared to a parking lot. He said that more and more hard surfaced trails are being installed to increase accessibility, and some of the required stormwater/E&S studies seem excessive, adding too much to project cost.

Olivia Langford, P.E., Project Manager with Austin Brockenbrough & Associates, provided two case studies as examples of navigating water regulations.

Case Study 1 – James River Conservation Area Trail

- Over the long term, this trail will be connected into Chesterfield County's bike and ped network.
- The project included fishing platforms and a boat launch, 2,500 LF of paved shared use path and 800 LF of stone shared use path. The first phase required engineering was funded by DCR's Recreational Trails Program, and included Civil Engineering Design, Geotechnical Borings, Wetland Delineation, Waters of the U.S. (WOUS) Flagging, RPA Determination, and Phase 1 Archeological studies.
- They were able to get a categorical exclusion although early on they thought it may have required an environmental assessment.
- They received a maintenance determination for this project because they utilized the footprint of existing trails, so the project did not require as many reviews from Chesterfield County Planning and Environmental Department. This determination reduced the civil engineering fee by 45% and expedited design to construction schedule (design package shrunk from 23 to 7 pages).

Case Study 2 – Relic River Trail

- This project is near Dutch Gap Conservation Area and included 5,065 LF of stone trail, 3,283 feet of elevated boardwalk and 322 LF of floating boardwalk.
- Engineering services funded by Dominion included Civil Engineering Design, Geotechnical Borings, Wetland Delineation, Threatened & Endangered Species, WOUS Flagging, RPA Determination, Phase 1 Archeological survey, Water Quality Impact Assessment, Joint Permit Application, and No Rise Certification.
- Stormwater measures for water quality and water quantity were studied due to a disturbance of 2.52 acres. The total phosphorus load reduction was met by maintaining

forest land that exceeded water quality criteria. The velocity of a 10-year storm was found to be non-erosive by using sheet flow for flood protection discharged to a flood plain.

The next speaker, Kelly Miller, is the Stormwater & Watershed Planning Manager for DEQ's Southwest Regional Office. She manages the stormwater program and completes watershed planning. Spearhead Trails (Southwest Regional Recreation Authority or SRRA) is in this region and oversees 400 miles of multi-use trails serving a variety of trail user types but primarily off-road motorized users. The Mendota Trail and the Virginia Creeper Trail are also within this region serving non-motorized users.

Kelly mentioned that administrative codes that define land disturbance include 9VAC25-840-10 and 9VAC25-870-10. For one, basically moving dirt over 10,000 sq ft. requires an erosion and sediment control permit from a local body. If water or wetland is on site and may be impacted by your project, the requirement for a Virginia Water Protection permit from DEQ, Army Corps, and/or Virginia Marine Resources Commission) may also apply. For the other code section, land disturbance defined as over one acre triggers local government requirements as well as Virginia Stormwater Management Act and Regulations from DEQ. Some localities opt-in to the state requirements and do their own oversight of the Construction General Permit.

Kelly provided a handout, a DEQ memo to help determine if a permit is needed (prompted by the recreational trail development in southwest Virginia). Daily operations that involve ground disturbance are not construction and do not require a construction general permit.

Because there have been 49 complaints about Spearhead Trails but only three that required DEQ action, DEQ developed a memorandum of agreement (MOA) with SRRA that covered environmental compliance, better environmental stewardship, and best management practices. This document was created by researching best management practices from DEQ, DCR, Dept. of Forestry, Virginia Energy (formerly the Dept. of Mines, Minerals and Energy) and USFS. The MOA requires DEQ to provide education and training as well as consultation for upcoming projects.

Some key takeaways that Kelly highlighted:

- Routine maintenance is not exempt from erosion and sediment control, but it is exempt from stormwater (but check with your locality or DEQ to make sure).
- Look at the entire scope of the project: consider the trail plus any parking or other facilities attached to the project. Also think about the entirety of the project through all phases over time.
- Gravel and asphalt are treated the same for stormwater calculations.

The next speaker was Heather Mackey, Bay Act Program Coordinator at DEQ. She serves as a liaison to Central Virginia localities and planning district commissions (PDCs). Implementation of the Chesapeake Bay Preservation Act seeks to balance economic development and water

quality protection: they are not mutually exclusive. This Act affects 84 localities, primarily east of I-95, and is enforced by local governments. Localities identified three types of areas within their boundaries that determine what is permitted, resource protection areas, resource management areas and intensely developed areas. Within resource protection areas:

- Certain uses are permitted, others “by-right.”
- Trails are an exempted use, except all-terrain vehicle (ATV) trails.
- Compliance with erosion and sediment control and stormwater management regulations are required (land disturbance criteria are stricter—2,500 square feet of disturbance limit)
- Trails do have to comply with some General Performance Criteria.
- Primary guidance is available in the [Riparian Buffer Manual](#), which includes a list of stable surface materials with some specs.
- Larus Park¹ in the City of Richmond is a good example of a passive park with minimal impacts.
- Localities can be stricter than these regulations, and “guidance” is not mandatory, so there can be differences between localities.

[Virginia Trails Alliance Update](#)

Peter Krebs, Albemarle & Charlottesville Community Advocacy Manager with the Piedmont Environmental Council gave the Virginia Trails Alliance Update. He said the Alliance represents over 30 different organizations that share the mission of promoting trails and greenways across the commonwealth. It is not a non-profit, but they have a board with seven members.

- One of their major activities is backing the Virginia Outdoor Recreation Caucus, a legislative group that gathers each year (most recently in February in Richmond).
- The Alliance is hosting a reception tonight 4/26 from 8-10 p.m. at the Quills in the hotel lobby.
- The Alliance has an active listserv and mailing list – contact [Cat Anthony](#) to be added.
- Visit the website at [Virginiatrails.org](#).

[DCR Grants Update](#)

Kellie Seaton, Recreation Grants Coordinator with DCR, provided the grants update. There will be two funding opportunities this year. The Virginia Land Conservation Foundation grant round is expected to open after the May 16th VLCF Board meeting, with funding per category to be determined. The contact is [Suzan Bulbulkaya](#).

The Recreational Trails Program grant round is open and closes on May 9th. Only maintenance and amenities will be funded with this grant round.

The Land and Water Conservation Fund (LWCF-both state and local) is expected in early 2024. The Outdoor Recreation Legacy Program (ORLP) is timed based on a national call from the National Park Service and is anticipated late in 2023 or early 2024. DCR will issue the request for pre-applications.

Funding for the Trail Access Grant is based on taxpayer donations to the open space recreation and conservation fund (tax check-off funds), so timing is based on the accumulation of funding from taxpayer donations.

The Virginia Outdoors Plan, which will be interactive using [ESRI's ArcGIS Hub](#) platform, is anticipated late 2023.

Next steps

[Kelly McClary](#) said that a survey will go out asking questions about the optimal organization of STAC and how it should look and function in the future. She also noted that both she and PRR Chief Planner, [Samantha Wangsgard](#) are available to answer any questions related to DCR Trails and STAC, and with Jennifer Wampler's upcoming retirement, will be the designated points of contact for any inquiries including ideas for topics to be addressed at the next meeting, a virtual meeting to be held in the Fall.

Jennifer's position, environmental program planner, is currently being advertised [here](#).

ⁱ No part of Larus Park meets accessibility guidelines