



Upper & Middle James Riparian Consortium Middle James Urban Roundtable Online Meeting Summary

Wednesday, May 12th, 2021

Executive Summary

The third general meeting of the Upper & Middle James Riparian Consortium (Consortium) of 2021 was held on Wednesday, May 12th, 2021 as a virtual meeting. This meeting was an Urban Roundtable focused on stakeholders of the Middle James Watershed. The meeting included small group discussions around opportunities and challenges, and presentations by Amber Ellis of the James River Association on the Consortium's various tools as well as Laura Greenleaf with the James River Park System Invasive Plant Task Force.

The last Consortium meeting summary focused on outreach and targeting on April 22nd, 2021 can be found at this [link](#). For more information on the Consortium, see www.jamesriverconsortium.org. A PDF of general presentation slides for this meeting can be found [here](#), and Laura Greenleaf's slides on the James River Park System Invasive Plant Task Force are available [here](#). Finally, a list of attendees is included at the end of the summary.

Ways to Engage

- [Register](#) to participate in the Upper James Urban Roundtable on Thursday, May 20th from 10:00 am-12:00 pm and please help spread the word!
- Sign up for the June 3rd Catawba Sustainability Center webinar [here](#) and save-the-date for June 26th for a field day to the center!
- Save the date for Wed. Sept 1, 10:30 am-2:30 pm for an Urban Roundtable follow-up meeting for the Upper + Middle watersheds.
- Check out the Consortium's [Coordination Tool](#) and the [Streamside Program Report Tool](#).
- To learn more about the James River Park System Invasive Plant Task Force or reach out to Laura Greenleaf for resources and manuals, email at auragreenleaf@verizon.net.
- To stay up-to-date on events, please visit the website at www.jamesriverconsortium.org and sign up for the Consortium's monthly newsletter there.
- Reach out to Amber Ellis at aellis@thejamesriver.org or another member of the Planning Team if you are interested in potentially serving in a greater capacity with the Consortium.

Action Items

- **The Planning Team** will follow up with **Matt Lawless** and others about next steps for coordinating with the railroads as potential buffer stakeholders and a possible follow-up meeting.
- **The Planning Team** will follow up with **Sarah Hagan and Nancy Lilly** about organizing some thoughts about ordinances and codes in the City of Lynchburg and how they might advance this to share with the larger group at the Sept. 1st Urban Roundtable Follow-up meeting.
 - Nissa Dean volunteered to work with this group as well.

Welcome and Introductions

At the beginning of the meeting, Christine Gyovai with Dialogue + Design Associates welcomed everyone to the meeting and provided a brief overview of Zoom best practices and technology. Christine shared that this is the first of two Urban Roundtables that the Upper & Middle James Riparian Consortium (Consortium) is hosting this May with the purpose of developing a deeper shared understanding of the needs, opportunities and challenges of urban stakeholders in the James watershed, as well as to foster new partnerships. Christine emphasized that because the Consortium is a collaborative, all action depends on the work of Action Team members, so there are plenty of opportunities to engage the Consortium's work to address the gaps that may be raised today. The second Urban Roundtable focused on the Upper James Watershed will take place on Thursday, May 20th from 10:00 am- 12:00 pm and participants are encouraged to register [here](#) and attend!

Next, Emily Carlson with Dialogue + Design Associates provided a brief agenda review. Participants were then invited to share their name, affiliation and a favorite river spot in the Middle James Watershed. A list of meeting attendees and affiliations is included at the end of this summary.

Overview of the Consortium

Amber Ellis with the James River Association (JRA) provided a brief overview of the Upper & Middle James Riparian Consortium. Amber emphasized that the Consortium's primary objective is working to get riparian forest buffers installed throughout the Upper and Middle James Watershed, though they support buffers of all types, along all the tributaries within the watershed. The Consortium is funded by the National Fish and Wildlife Foundation (NFWF) as well as the Virginia Environmental Endowment (VEE), which is supporting much of the implementation work. The Consortium was launched in 2019 and has grown in the last couple of years to grow partnerships and leverage resources through the establishment of four Action Teams: the Planning Team, Knowledge Network Team, Outreach & Targeting Team, and Implementation Team. The Consortium also has a Steering Committee and welcomes individuals to reach out about interest in serving on this committee.

The Consortium's Steering Committee and Action Teams operate based on the following vision, mission, and values.

VISION

Growing partnerships to create healthy streamside ecosystems for clean water in the James River today and tomorrow.

MISSION

The Upper and Middle James Riparian Consortium is a network of private, non-profit, and public partners. We share expertise and resources to increase implementation, as well as awareness of riparian buffers and their value to landowners, with a priority focus on riparian forest buffers, across the Upper and Middle James watersheds.

VALUES

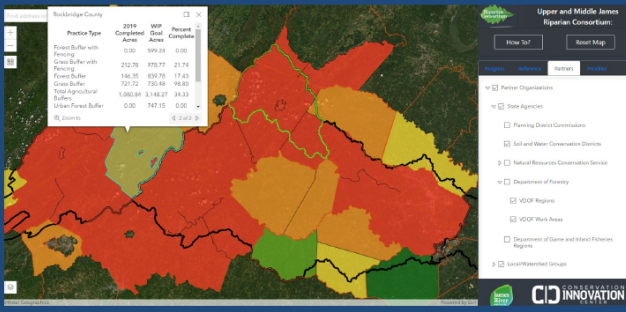
- **Collaboration-** We can go further together and seek opportunities to support, collaborate with, and learn from diverse partners both within and outside the James River watershed.
- **Stewardship-** We care for our existing riparian buffers and believe that stewardship is vital to sustained improvements in water quality and successful buffers.
- **Holistic-** We integrate practices such as livestock exclusion fencing, streambank stabilization, grass and forest buffers, and conservation easements that respond to landowner, landscape, and habitat needs.
- **Initiative-** We are proactive and take initiative to create solutions that respond to the needs of Consortium partners and our streamside ecosystems for long-term health of the James River and our communities.

More information about the Consortium is available at www.jamesriverconsortium.org and in the presentation slides [here](#).

Consortium and Tool Overview

Next, Amber Ellis provided an overview of two tools developed by the Consortium for use by partners and stakeholders in the Upper and Middle James Watershed. These include the [Coordination Tool](#) and the [Streamside Program Report Tool](#). Amber shared that when the Consortium was first initiated, participants flagged that the greatest need was knowing who was working on projects and where as well as what assistance programs exist out there for landowners to install and maintain riparian buffers. The easiest way to currently navigate to these tools is via the Consortium's website home page: www.jamesriverconsortium.org.

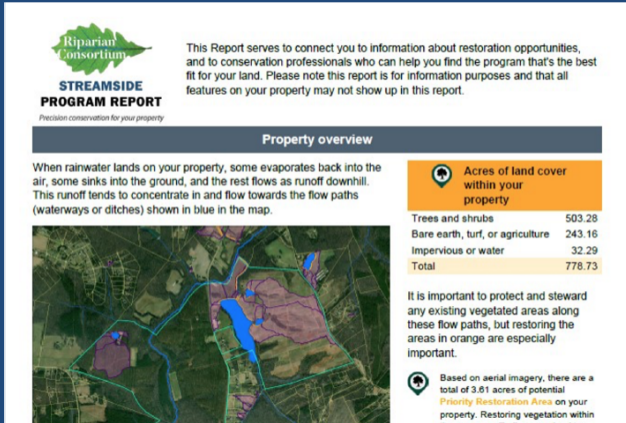
COORDINATION TOOL »
EXPLORE OUR PROGRAMS »
www.jamesriverconsortium.org



Practice Type	2019 Acres	2018 Acres	Percent Change
Forest Buffer with Fencing	212.78	899.77	21.74
Forest Buffer	142.31	820.78	17.43
Grass Buffer	22.52	252.48	98.88
Total Agricultural Buffers	1,085.04	3,148.27	34.33
Urban Forest Buffer	0.00	747.10	0.00

Coordination Tool

WIP III Progress
Partner Work Areas
Priority Layers



Acres of land cover within your property	
Trees and shrubs	503.28
Bare earth, turf, or agriculture	243.16
Impervious or water	32.29
Total	778.73

Streamside Program Report

Property Overview
Riparian Programs
Local Contacts

Coordination Tool Overview

The Consortium's [Coordination Tool](#) developed by the Chesapeake Conservancy through the [Chesapeake Assessment Scenario Tool \(CAST\)](#) is available through the Consortium website at this [link](#). Amber provided a brief overview of the data visualization available in the Coordination Tool, including WIP Buffer goals by HUC 12, HUC 10, and county; type of progress (i.e. forest buffer, fenced pasture); year of progress; percentage of goal reached to date, and a number of other reference layers. This data is updated annually. For example, you can filter the data to look at urban forest buffers by county for example. Amber highlighted the "Partners" layer, although not comprehensive, can be useful for identifying other organizations and agencies working on watershed restoration projects in a particular geographic area. Planning District Commissions, Soil and Water Conservation Districts, and Department of Forestry offices are also listed which helps in identifying potential partners to reach out to since contact information is also included. The "Priority" layer highlights areas of overlap for various organizations working in the watershed. The Consortium also plans to send out a survey shortly to solicit feedback on the tools and information that should be added during updates.

Christine noted that the Coordination Tool is primarily geared toward practitioners, while the second tool- the Streamside Program Report Tool- is geared toward landowners and practitioners interacting directly with landowners.

Streamside Program Report Tool Overview

Amber also highlighted the Consortium's [Streamside Program Report Tool](#), which is available on the Consortium's website [here](#). This tool allows individuals, including practitioners, to enter a landowner's address and generate a report of all relevant programs available in that particular regional footprint. Included in the report is a list of contacts at relevant offices and a number of fact sheets about best practices. This could potentially be a very useful tool particularly for those working with localities. This tool was developed with data collected by the Chesapeake Conservancy in partnership with Consortium members in an iterative review process, and both tools are housed on the Consortium website: www.jamesriverconsortium.org.

Questions

- Are Virginia Cooperative Extension Unit offices in the Coordination Tool?
 - Amber responded no, but they should be! They will be added.

Break Out Groups

Next, Christine shared that meeting participants will be invited to join separate breakout groups of 4-5 individuals for 20-25 minutes to take notes in a shared [google note taking doc](#). The specific questions that participants were asked to engage with included:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Large Group Discussion

After participants met in small groups, meeting participants returned to the large group to share top ideas from their small group conversations. A complete list of ideas from the note taking document is included in Appendix A of this meeting summary. Participants shared the following top ideas from their group.

Group 1

- Nicole shared that their group flagged the need for policy updates for many urban areas. For example, the City of Richmond's tree ordinance is 30 years old.
- The group discussed the need to identify cities, municipalities and other urban areas that have effective, up-to-date ordinances that can serve as models for other localities.
- Landowner and resident education is necessary.
- A more streamlined decision-making process for municipal governments and private landowners is also necessary, since it is easy to get overwhelmed by the many programs and partners. A flow chart for example would be helpful.

Group 2

- Sarah shared that their group did not get to discuss the second question in detail.
- A significant challenge is the outdated and conflicting ordinances and policies.
- Urban planning in localities needs to be on board.
- Maintenance limitations also need to be considered.

Group 3

- Amber shared that the group identified an opportunity as the integration of urban greenways and riparian buffers in planning.
- Working with Homeowners Associations is a way to work with property owners in a more efficient and collective manner.
- Urban areas have more people who may be able to volunteer on projects. This also creates more opportunities for outreach and education.
- Leverage messaging around the human health benefit of buffers and outdoor recreation (especially highlighted during COVID).
- Challenges include maintenance for new buffers and existing streamside forests.
- Urban areas often have more stakeholders with competing interests and priorities.
- People in urban areas may not want to compromise their viewshed.
- There is sometimes a fear of forests in urban areas.
- Historically most cost-share programs have not been created for urban areas.
- Next steps include maintenance stewardship for staff of local governments, connecting them to the human health benefits of buffers.

Group 4

- Laurel shared that the group talked that in urban areas, most green infrastructure tries to get water to stay in place and infiltrate without flowing.
- The group talked about upstream-downstream connections and an opportunity for upstream folks to work on green infrastructure and infiltration to mitigate impacts downstream.
- Aesthetics was flagged as a challenge in an urban area in particular. There is often a high demand for "park-like" spaces.
- Ellen asked, "how can you create that 'magical space'?" where the land looks functions as a park in that it is accessible but also has functional ecological features.

- Rob flagged that having a multiplicity of stakeholders involved in urban projects is essential for making the urban fabric work for riparian buffers.

Group 5

- Matt shared that this group discussed the value of partnering with Homeowners Associations since many of these groups have landscaping contracts and control a large area.
- Both advocacy and having model recommendations to share with them can be effective.
- It may also be helpful to frame riparian buffers in terms of cost improvements if possible, but this is not always the case.
- Watershed management practices may be a first step for shifting conservative practices and culture within the HOAs.
- The group also discussed the aesthetics of parks and outdoor areas in urban areas; it is a challenge when what people want is not the best practice.
- Leveraging a shared best practice exchange up and down the watershed, where localities share what is working well and/or model ordinance is valuable. This already exists to some extent but could be leveraged more.
- Parking ordinances are a good example of something that needs to be updated and could incorporate buffers.
- Railroad partnerships are important since much of the land along rivers is owned by railroads.

Group 6

- Shereen shared that the group discussed the impacts of development when buffers are not protected, especially in the Upper James where there isn't the Chesapeake Bay Protection Act.
- Through the Chesapeake Bay Protection Act, localities are empowered to adopt the protection of buffers along waterways. There are many examples of this being done in the watershed including Albemarle County and Charlottesville.
- Localities are also empowered to enforce stormwater regulations and there are environmental site design practices to protect buffers. There is a need to educate locality staff and planners on this.
- The team also discussed the value of outreach and education. Social marketing campaigns can be highly effective where people are living in higher density and can model behavior for their neighbors.
- Design can be used to address aesthetic concerns.
- Leveraging other programs like the National Flood Insurance Program and Community Rating System may be useful, especially as localities face greater flood impacts.

Christine summarized some of the key ideas shared during small group report outs including sharing model ordinances, the importance of aesthetics in the design of urban riparian buffers, and an opportunity to coordinate directly with Homeowner Associations at the neighborhood scale. Outreach to a broad array of stakeholders is important as is considering long term maintenance challenges. Participants were then invited to share recommendations on next steps to be incorporated prior to the Urban Roundtable Follow-up Meeting that will be hosted by Consortium on Wed. Sept 1, 10:30 am-2:30 pm.

Specific feedback from attendees included:

- David Wise noted that Matt Lawless pointed out the huge land ownership of railroads in the watershed. This could be a good point of intervention with CSX or the Consortium given its

diverse members. Or perhaps there is some policy connection given the current federal infrastructure bill. Could someone do homework on potential outreach to railroads?

- Matt Lawless is interested in working on the outreach to railroads issue.
- Dave Jasinski shared via chat: “Norfolk Southern living shoreline project. - <http://www.nscorp.com/content/nscorp/en/about-ns/sustainability/living-shoreline.html>”
- Sarah Hagan noted how even within a particular city or municipality different departments often work in isolation and do not always coordinate even when they could. Having more coordination and sharing of ideas would be helpful especially in working to update local ordinances together.
 - Sarah and Nancy agreed to organize some thoughts about ordinances and codes in the City of Lynchburg and how they might advance this to share with the larger group at the Sept. 1st Urban Roundtable follow-up meeting.
 - Nissa Dean also volunteered to continue working with this group as well.
- David Wise added via chat: “Flow charts may serve professionals better than individual landowners. It may be that a relationship/person is the better tool for individuals than thinking they can navigate a flowchart.”
- Shereen shared via chat: “The Better Site Design approach developed by the Center for Watershed Protection may have model ordinances; I think the Green Infrastructure Center may be working on some model ordinances.”
- Keith added: “Powhatan County also has stream and wetland buffer requirements in county code.”
- David Hirschman added: “Ordinance updates are good, but also accompanied by an updated buffer mitigation manual, with reference to conservation landscaping and other measures. Some localities have good examples of such manuals and many are outdated.”
- Amber added: “not sure if it's similar, but RVAH2O may have some lessons learned around the cross departmental stuff!”
- Shereen added to the chat: “Also, the University of Maryland Environmental Finance Center did a Stormwater Financing Report for Lynchburg https://arch.umd.edu/sites/default/files/docs/lynchburg_nfwf_final_report_1-27-14%20compressed_O.pdf compares the economic benefits of green infrastructure versus gray infrastructure”

James River Park System Invasive Plant Task Force Presentation

Next, Amber Ellis with JRA introduced Laura Greenleaf who is a founding member of the James River Park System Invasive Plant Task Force. This group is primarily a volunteer-based organization based in Richmond, Virginia that has been working for six years in parks throughout the city. A link to Laura's presentation slides, including details, are available [here](#).

Laura started her presentation by providing an overview of the James River Park System, which is a linear system of mostly noncontiguous urban and riparian tracts of land. The system comprises 562 acres, 280 acres of which are under easement, that stretch approximately seven miles. All of the parks in the system include riparian areas. Laura noted that most of the invasive species growing in the James River Park System were actually intentionally introduced or are ornamentals that have escaped gardens and landscaping projects. During her presentation, Laura covered the ecological impacts of invasive plant species and how they impact native species.

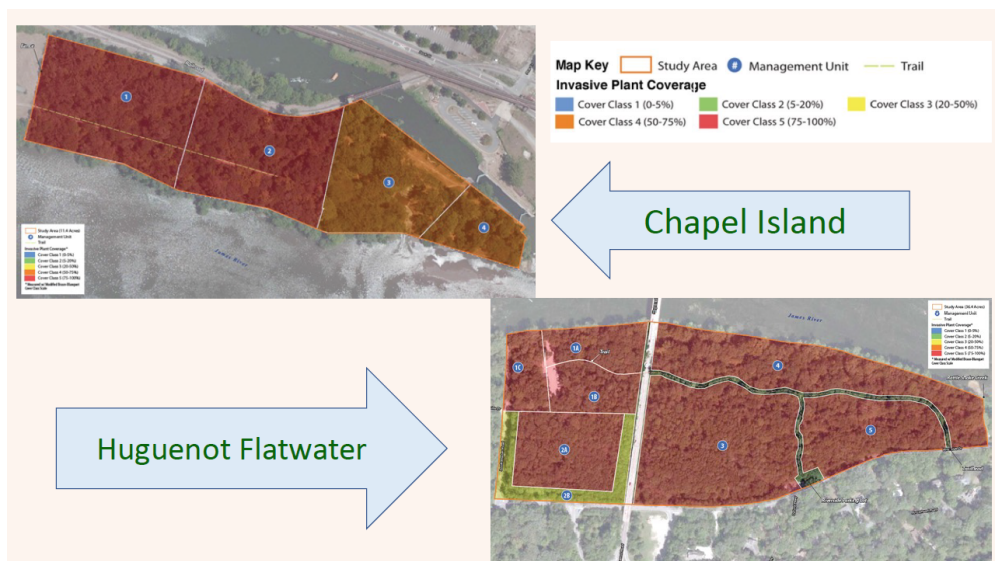
Laura also shared several images of parks that have been taken over by invasive plants as well as sites before, during, and after some work that the James River Association, a core member of the James River Park System Invasive Plan Task Force, did at Chapel Island near downtown Richmond (below).

Credit: James River Association



Laura shared that six years ago, a few Master Naturalists and Tree Stewards sat down together and discussed a proposal for a coalition to strategically address the park systems' invasive plant crisis. They wanted to pursue this work in a coherent and deliberate way together working in partnership with the City of Richmond. Serendipitously, the City and park system was also keen on conducting a baseline survey of existing invasive plant species and then developing a management plan. Volunteers trained with scientists in specific methodology for estimating the cover or abundance of different species of invasive plants and were organized into groups for surveys.

The Task Force completed its research in 2015 confirming expectations about the dominance of invasive species in the city park system. Areas, for example, shaded in red on the below map indicate 75% of coverage area by invasive plants.

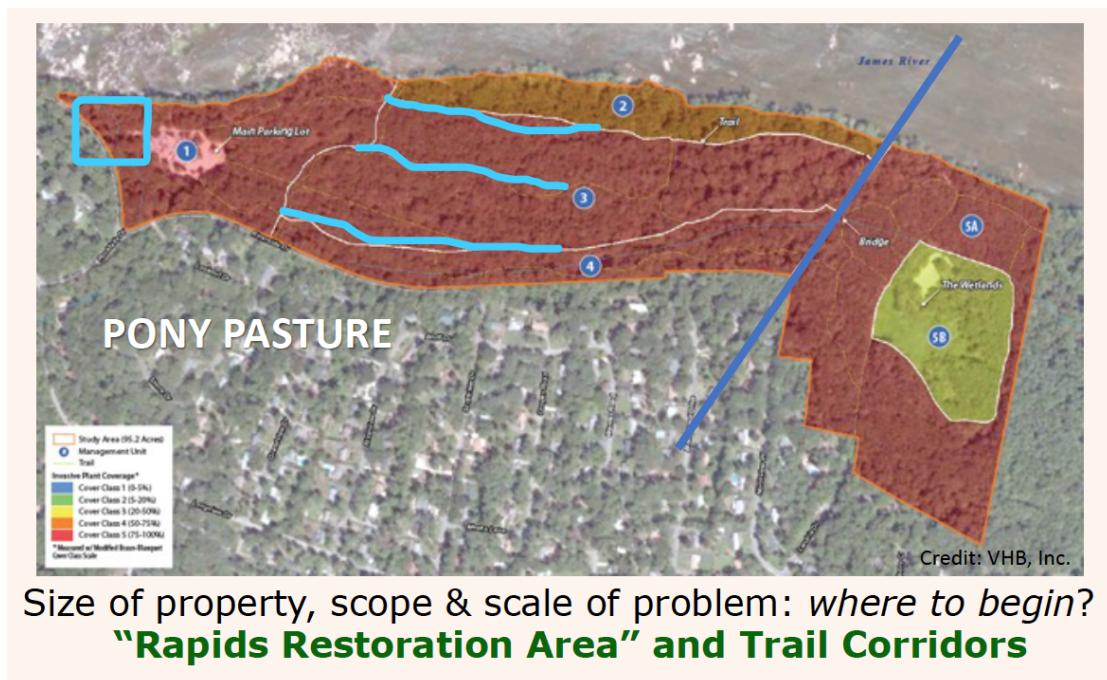


The James River Park System Invasive Plant Task Force functions as a coalition and does not have 501(c)3 status but continues to meet monthly. The Task Force is focused on management not eradication and functions based on the following vision and mission statements:

The vision of the JRPS Invasive Plant Task Force is a healthy and resilient James River Park System where native plants predominate.

The mission of the JRPS Invasive Plant Task Force is to foster a thriving park ecosystem through invasive plant species management, restoration of native plant communities, public awareness, and citizen involvement.

Laura then provided a deep dive case study of the Pony Pasture site which has at least 30 invasive species. For more information on this case study, please see Laura's slides linked [here](#).



Through this work, Laura has resources and manuals on how to manage various invasives common in urban parks including fig buttercup and Japanese knotweed. To learn more or reach out to Laura

Greenleaf, contact her at lauragreenleaf@verizon.net. Laura concluded that cooperation and resources are key to success!

Questions and Discussion

- Is this effort all volunteer?
 - Laura shared that almost entirely, but the City of Richmond staff and the James River Association operate in a professional capacity.
- Is there an overall timeline and management plan?
 - Laura said that individual project leaders develop management plans for their particular areas that address and anticipate issues.
 - Sarah will follow up with Laura Greenleaf to trade experiences and best practices based on her work in the City of Lynchburg.

Next Steps and Upcoming Events

Meeting participants were invited to share feedback on the meeting content and structure by completing this [evaluation](#). To stay up-to-date on events, please visit the website at www.jamesriverconsortium.org and sign up for the Consortium's monthly newsletter there!

Upcoming meetings include:

- Thurs. May 20, 10:00 am -12:00 pm - Urban Upper Roundtable ([register here](#))
- Thurs. June 3, 6:00-7:00pm - Buffers at Catawba Webinar ([register here](#))
- Sat. June 26 - Hold the Date: Catawba Sustainability Center Field Day
- Wed. Sept 1, 10:30 am-1:00 pm - Urban Follow-up Upper + Middle Meeting followed by an hour lunch break and a free group float trip on the James River with James River Reeling & Rafting from 2pm until around 5pm! [RSVP here!](#)

Meeting Participants

- | | |
|---|--|
| 1. Kim Biasioli, County of Albemarle | 9. Matt Ehrhart, Stroud Water Research Center |
| 2. Keith Burgess, Monacan Soil and Water Conservation District (SWCD) | 10. Ellen Ford, Mountain Soil and Water Conservation District |
| 3. David Byrd, US Fish and Wildlife Service | 11. Michael Gee, City of Richmond Department of Parks and Recreation |
| 4. Sarah Coffey, Chesapeake Bay Foundation (CBF) | 12. Genevieve Goss, Valley Conservation Council |
| 5. Brian Davis, University of Virginia | 13. Laura Greenleaf, James River Park System Invasive Plant Task Force |
| 6. Nissa Dean, Alliance for the Chesapeake Bay | 14. Sarah Hagan, City of Lynchburg |
| 7. Heather Dowling, Virginia Department of Forestry | 15. David Hirschman, Hirschman Water & Environment, LLC |
| 8. Amber Ellis, James River Association (JRA) | |

16. Shereen Hughes, Wetlands Watch and CBLP
17. Rob Jones, Groundwork RVA
18. Dave Jasinski, GreenFin Studio
19. Lara Johnson, Virginia Department of Forestry
20. Marilyn Knight, US Fish and Wildlife Service
21. Matt Lawless, Town of Scottsville
22. Grace LeRose, City of Richmond
23. Nancy Lilly, City of Lynchburg
Department of Water Resources and
Middle James Roundtable
24. Rex Linville, Piedmont Environmental Council
25. Jenny McGarvey, Alliance for the Chesapeake Bay
26. Kathleen Ogilvy, Virginia Department of Forestry
27. Taylor Parker, Virginia Department of Transportation
28. Eli Podyma, Virginia Department of Forestry
29. Deya Ramsden, Virginia Department of Forestry
30. Nicole Shuman, Virginia Cooperative Extension
31. Scott Smedley, Chesterfield County
32. Laurel Williamson, Albemarle County
33. David Wise, Stroud Water Research Center
34. Michelle Wolfgang, EPA Region 3
35. Joey Shelton, JRA
36. Sammy Vest, Trout Unlimited
37. Christine Gyovai, Dialogue + Design
38. Emily Carlson, Dialogue + Design

Appendix A. Notes from Small Group Discussions

Breakout Group 1

Participants: Keith Burgess, Dave Hirschman, Kathleen Ogilvy, Eli Podyma, Nicole Shuman

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Notes:

- City of Richmond has a 30 year old tree ordinance that needs updating. Specifies a certain caliper of trees (excludes bare root seedlings unless a variance is obtained). City is hesitant to commit to 15 years of maintenance.
- Much of the urban work in the City of Richmond is reforestation rather than afforestation. Much of “riparian buffer” is composed of invasive species, or is otherwise not a healthy ecosystem. No money available for these kinds of restoration projects. Other BMPs could maybe be implemented?
- Resident aesthetic preferences and multiple stakeholders can complicate the planning and maintenance. Resident groups can and do shut down restoration projects.
- Lack of resident education as to what a healthy ecosystem looks like, proper tree care, invasive species identification.
- Stormwater management is critical in urban areas. VCAP can help with this.
- Many urban streams are rapidly eroding, in part due to stormwater issues. Bank stabilization is resource intensive and requires engineering input.

Recommended Steps:

- Start with publicly held, highly visible sites?
- Need for rigorous site evaluation to identify all applicable programs and funding sources. Some projects will fall outside the scope of the Consortium.
- Pushing for policy updates. Additionally, are there any cities that serve as models for good policy/ordinances that support riparian buffer work?
- Simplify decision making process for municipal governments and private landowners. There are a lot of different programs/partners, and we can better help people understand the differences between programs/partners/funding sources. Decision flow chart?

Breakout Group 2

Participants: Deya Ramsden, Kim Biasioli, Michael Gee, Nissa Dean, Sarah Hagan, Sarah Stewart

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Notes:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
 - Challenges:
 - No easy/responsible way to wash off heavy equipment
 - Invasive species - removal and how to deal with waste
 - Space limitations
 - Conflicts in land use
 - Lack of education
 - Maintenance issues
 - Parcelization - need to consolidate parcels to create good buffers
 - Erosion
 - Urban Planning
 - Outdated/unclear/conflicting policies and inadequate enforcement of existing policies
 - Lack of a tree ordinance
 - Opportunities
 - Standards for what is an effective urban buffer
 - Incentive programs - increase local support for VCAP and other similar programs.
 - Trails and greenways- urban planning
 - Updating policies
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Breakout Group 3

Participants: Amber Ellis, Jenny McGarvey, Sarah Coffey, Grace LeRose, Lara Johnson, David Byrd

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Notes:

- **Opportunities**
 - Integration of urban greenways/planning with riparian buffer installation (e.g., FOLAR, Gillies Creek).
 - Working with smaller municipalities (towns, smaller cities)
 - Had success with commercial and private property due to tax deduction to donate land to the city under easement.
 - Conservation of existing buffers
 - HOA approach to get more at one time
 - Utilizing local place based organizations to do outreach
 - Lots of people for volunteers
 - Human health, trees, riparian areas are good for you!
- **Challenges**
 - Number of stakeholders and competing interests involved in the planning process slow progress.
 - Maintenance of buffers (both for existing/established buffers + new ones) - mentioned multiple times. Education challenge. Turnover rates high within maintenance staff.
 - City does not actually own most of the riverfront in Richmond. A lot of private property.
 - Viewsheds. Landowners don't want to 'ruin' view of water
 - Fear of woods in urban areas due to impression (trash dumps, bad activity)
 - Lots of little properties
 - Sometimes wrong tree wrong place
 - Most cost share programs don't fit urban environments and haven't been created with urban creeks (CREP, etc.) - JRBP
- **Steps to address challenges and build opportunities**
 - Getting mayors, officials, and stakeholders together to discuss
 - Land could be deeded to the city in a conservation easement.
 - Build on positive aspects of trees (shade, habitat, etc.)
 - Connecting to human health benefits
 - Education around maintenance/stewardship
- **Other**
 - Tax breaks - only for production properties

Breakout Group 4

Participants: Ellen Ford, Rob Jones, Marilyn Knight, Sammy Vest, Laurel Williamson

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Notes:

Sammy Vest: Aesthetic preferences (wild and wooly) can be a real challenge.

A healthy riparian buffer system *versus* a park setting aesthetics are sometimes in conflict.

Ellen Ford: Flooding can be dramatic to us. There are known places where water floods and can be a challenge to establish buffers. Keeping water where it lands - a challenge and an opportunity. Some upstream tributaries need fencing - from the highest and tiniest tributaries.

Upstream folks have a duty/role to keep water where it lands.

How can we make it a *magical* place - a park setting that still has ecological features. Accessible, but not manicured.

Rob Jones: A lot of efforts in urban areas have focused on keeping water where it lands (infiltration) (e.g., Greening Southside - replacing impervious cover w/ trees). Small-scale green infrastructure and tree planting helps reduce pollution and mitigate flooding. Not always working streamside, but more in the uplands.

Capitol Trees - canal street GI

Many hands, light work. Constantly challenged...always need some gray infrastructure. Faith communities have large parking lots - pay high on stormwater utility. Replacing unused asphalt with trees.

Having a stormwater utility in place ...capacity to manage stormwater has increased w/ stormwater utility. Paired strategy - stick and carrot.

Also Alliance for the Chesapeake Bay project in Fulton

Aesthetics: Can be a very wide range of park settings (Belle Isle vs. Brown's Island)

Breakout Group 5

Participants: Rex Linville, Matt Lawless, David Wise, Dave Jasinski, Heather Dowling

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Add notes here:

- Starting observation that project cost in urban areas tends to be much higher.
- Clashing trends: sometimes fragmented small parcels make projects harder. But huge waterfront control by railroads create a different problem.
- Observation: the natural tendency of succession is for trees to grow up and create a buffer. So if a buffer is absent, someone is spending money to keep it that way. But what is the succession pattern? No, we don't automatically get a succession pattern to large native trees. Stroud has evidence that native species matter for aquatic life: *rosa multiflora* and *pawlonia* retain soil but don't help the bugs.
- City and Town history, and built inventory, has tended to ignore and turn away from creeks and rivers.
- Good comment on buffer plantings that don't hurt the pedestrian view: plant a bigger tree to start with, of a species that grows taller quickly, so folks can see under the trees.
- HOAs are important partners to talk to --get the rules changed if needed. Things like open space landscaping contracts matter a lot. They control a lot of important land, and changing practices there is visible as culture change.
- Railroads matter as partners. We have to team up for advocacy and work with them.

Breakout Group 6

Participants: Brian Davis, Emily Carlson, Joey Shelton, Nancy Lilly, Shereen Hughes

Discussion questions:

- What are the biggest opportunities or challenges to riparian forest buffers in urban/developed areas in the Middle James watershed?
- What specific steps could be taken at a watershed scale to address these challenges and build on opportunities?

Notes:

- **Challenges**
 - Difficulty of maintenance of BMPs.
 - Lack of access to waterways on private lands
 - Small lots, small incremental change, hard to access and often buffers are missing. Also, steep slopes and severely eroding stream banks without the space to correct.
 - Lack of model ordinances or programs to create, restore, and protect urban riparian areas
 - Rapid development in the watershed whether timbering, or housing developments where everything is cleared.
 - Protect existing buffers with demand for development and encourage regulatory protection (like the lower James has the Ches Bay Protection Area).
 - **Opportunities**
 - The National Flood Insurance Program has a program for conservation of open space that can reduce flood insurance rates. [Link here.](#)
 - Better Site Design has model ordinances Center for Watershed Protection. [Link here.](#)
 - The University of Maryland Environmental Finance Center did a Stormwater Financing Report for Lynchburg. [Link here.](#)
 - For commercial and suburban sites, existing low impact regulations on buffer areas may be an opportunity such as retention basins.
 - Perception of riparian areas and urban greenspace
 - Owners want clean and clear viewsheds or be able to access waterways without being impeded by trees and shrubs.
 - Property owner needs/desires are conflicting (want water views, worried about messy appearance).
 - Lack of general knowledge of infrastructure systems/ impacts of development on waterways,
 - Abandonment of impacted stream (i.e. development hiding stream or turning houses away from natural areas in favor of roads)
 - **Opportunities**
 - Flip the narrative and perception with better designs but still retain ecosystem function.
 - Market riparian areas as flood mitigation and erosion control/prevent land loss.

- Look at successful outreach programming or community-based social marketing. Watershed groups have front yard flag programs such as River Hero Homes where neighbors share their conservation practices.
- Possibility to use these infrastructure corridors as riparian space albeit occasionally disturbed to access utilities.
- Examine the dichotomy of perceptions of waterfront properties as valuable vs where traditionally at-risk communities live in bottomlands.
- Shift public perception from water as risk to a beautiful asset.
- Landscape solutions can cost less than larger infrastructure interventions.

Main Points

- **Develop environmental site design practices and incentives, using model ordinances.** Coordinate with developers, offering incentives for responsible riparian and stormwater. Use stormwater knowledge to engineer protection of open space in riparian areas, already built into regulations. Need more understanding/education.
- **Outreach and addressing public perceptions of riparian areas and green infrastructure are imperative to progress.** With already developed areas, reintroducing natural areas requires more creativity to include other values such as outreach and education. Social marketing campaigns can be really effective and design makes a difference.
- **Infrastructure near streams present both challenges and opportunities.**
- Maintenance is always a need.