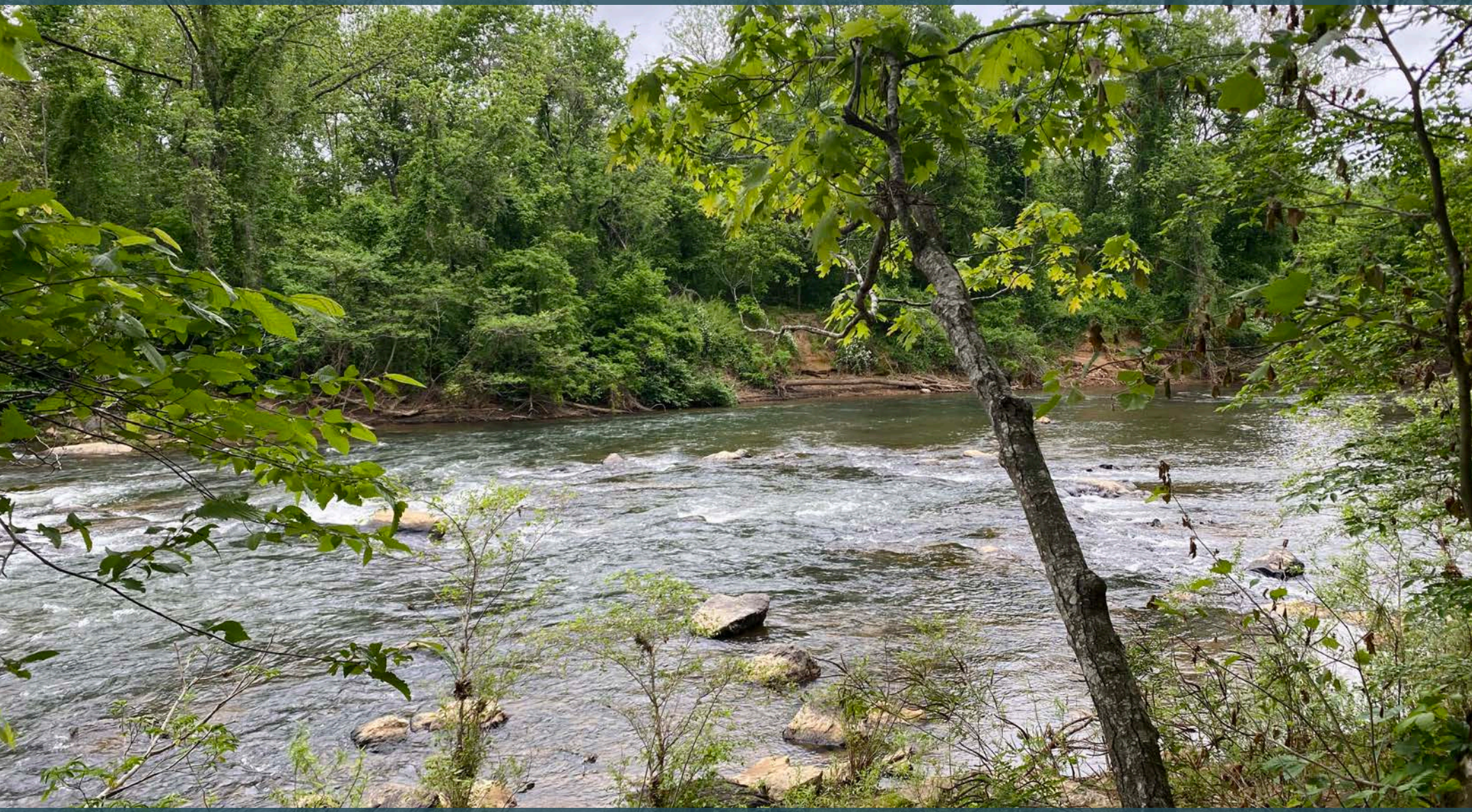
Urban Rivanna River Corridor Plan



Prepared for the County of Albemarle & the City of Charlottesville
Prepared by the Thomas Jefferson Planning District Commission

September 2021

Thomas Jefferson Planning District Commission

Regional Vision • Collaborative Leadership • Professional Service

ACKNOWLEDGMENTS

In July of 2019, the City of Charlottesville and Albemarle County initiated the second phase of the Urban Rivanna River Corridor Plan. While the Thomas Jefferson Planning District Commission (TJPDC) conducted the planning work and managed the public engagement process, many groups and individuals contributed to this effort. The TJPDC would like to thank those who contributed their time, resources, and creativity to make the final plan possible. Additional appreciation goes to all those who will make this plan a reality.

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1 | Introduction



CONTEXT & NEED

In July of 2014, the Albemarle County Board of Supervisors and the Charlottesville City Council held a joint, strategic planning meeting to discuss overlapping priorities between the two localities. One of the priorities they identified was the need for improved coordination and cooperation for the shared urban corridor of the Rivanna River.

This urbanized section of the Rivanna River Corridor is an important community asset. The river corridor has a rich history spanning multiple eras of human history, beginning with the Siouan Indian people of the Monacan Tribe. It was then the site of historic Colonial development as Europeans settled in the area. Enslaved people were forced to work on plantations and farms located near the river. The river served as a navigation and transportation route, as tobacco and other goods were transported downriver and networks of locks, dams, and canals allowed batteaux and other boats to travel upstream. The Rivanna River provided power to mills and later to dams that generated electrical power to nearby neighborhoods and industry. 20th century development patterns resulted in the Rivanna River being primarily forgotten and underutilized, as roads and development was constructed with no relationship to the river.

Today, the urbanized Rivanna River Corridor is a different, but no less important, kind of community asset that runs through the middle of densely developed portions of Albemarle County and the City of Charlottesville. The river corridor provides opportunities to experience natural respite—a special place to paddle on the water, fish in the river, walk along the trails, and experience the seasonal sights and sounds of nature and wildlife.

In addition to being a natural asset, the river corridor contains centuries of urban development. Existing commercial and industrial sites are located along the riverbanks and can be viewed from within the river corridor. New developments see

proximity to the river as a valuable asset that can be leveraged to attract commercial patrons and residents. And the demand for recreational amenities to support river corridor users reached an all-time high during the summer of 2020 when this planning study was being conducted.

With increased development pressure on this section of the river corridor, it is important that a plan is in place to balance the competing priorities to allow for an appropriate number of different types of uses without negatively affecting the environmental quality of the river system or devaluing the most important natural attributes and cultural resources that attract people to the area. As became abundantly clear during the COVID-19 pandemic, opportunities to engage with nature are essential to the overall physical, mental, and social health of a community. At a tumultuous time in our world's history, the river corridor provided opportunities for visitors to spend time together with friends and family, to experience moments of peaceful solitude surrounded by nature, to reflect on the challenges that previous civilizations endured, to have a physical outlet for the stress and anxiety of the moment, and to be anchored in an environment that felt unchanged in the midst of the upheaval of the rest of the world.



Aerial of Rivanna Corridor: Image courtesy of pecva.org

LOCAL AREA HISTORY

INDIGENOUS PEOPLE

The Rivanna River has a rich history dating back to before the first European settlers arrived and named the river after Queen Anne of England, Scotland, and Ireland. This area was home to the Siouan Indian people of the Monacan Indian Nation. With a population of more than 10,000 inhabitants prior to European Colonization, the Monacan Indian Nation is one of the oldest groups of indigenous people still existing in their ancestral homeland today, and is the only group in Virginia whose culture descends from Eastern Siouan speakers.

Settling throughout the piedmont, the Monacans were an agricultural clan whose main crops were corn, beans, and squash. They used shells and fish bones as fertilizer for crops on forestland they cleared. They hunted deer, elk, and small game, mined copper for jewelry, and traded with other nearby tribes. They established villages and constructed their dome-shaped homes of bark and reeds.

Unlike other neighboring Indian Nations, the Monacans buried their dead in mounds and burial rituals played an essential part in Monacan daily life. Monacans honored their deceased ancestors by reburying their remains ceremoniously as part of an earthen structure. This tradition is unique among American Indian tribes in the area. The mounds could reach eight feet tall and 40 feet in diameter. Thirteen mounds have been found to-date and excavated throughout the Piedmont and Blue Ridge Mountain regions of Virginia. According to a map published by famed explorer and Jamestown governor John Smith, this mound was in Albemarle County, but scholars disagree as to whether this mound's builders were Monacan. According to Smith, there were five towns of the Monacan confederacy, which included its capital Rassawek. The town was located at the mouth of the Rivanna River.

Spanish colonizers brought with them new diseases for which the Monacans had no immunity for, greatly reducing their numbers and leaving them at a disadvantage by the time that English settlers arrived to the area. The warring Iroquois, Cherokee, and Catawba were more powerful, and their raids through Virginia in the early 1600s displaced many Monacans, who would later face even more conflict and displacement from the newly arriving colonists. Skirmishes with advancing settlers drove many Monacans westward, while some chose to resettle in the mountains of present-day Amherst County. Other confederacy members, such as Saponis, Occaneechis, and Tutelos, combined with the remaining Monacans, and the few Tuscaroras who chose to remain in Virginia, were adopted by the Monacans.

THE ARRIVAL OF EUROPEAN SETTLERS

The first European settlers began arriving on the Rivanna riverbanks around 1607 and began mapping the territory. As the English colonists began to take over the area, more woodland was cleared for crop cultivation, typically by indentured and enslaved people.

As settlement patterns began to evolve, more roads were built to serve the needs of a growing population. Three Notch'd Road, which spanned from Richmond to the Shenandoah Valley, was a main route from the 1730s to the 1930s. First known as Mountain Road, the first use of "Three Notch'd" is written in a Louisa County ordinary license dated 1742, and a few years later, it appeared in a Goochland County record. Three Notch'd Road would later serve as the basis for Route 250, established in 1930, following much

of the original Three-Notch'd Road with parts of University Ave (near the University of Virginia) and Interstate 64 matching the historic roads course. Part of Jack Jouett's renowned ride that sounded a warning alert of approaching British troops and the Marquis de Lafayette's endeavors to thwart Gen. Charles Cornwallis from obtaining munitions also occurred along this road.



Three Notc'd Road Remnants at Jefferson's Mill

18TH CENTURY

Thomas Jefferson was born in 1743 in Shadwell, Virginia (just east of present-day Charlottesville), and along the north bank of the Rivanna River near the site of his father, Peter Jefferson's, mill. In 1762, a toll bridge was authorized over the Rivanna River to offer an alternative for crossing the river by wading through a ford or by ferry. This newly constructed toll bridge, dubbed Free Bridge, crossed the river at the eastern end of Charlottesville and was so named because it remained free for service and did not charge tolls—the first in Charlottesville. The approximate location of that river crossing still bears the name Free Bridge, where US 250 crosses the river into Albemarle County.

Along the shores of the Rivanna, agriculture formed the basis of the economy. Planters claimed large tracts of land along the river as early as the 1720s. Settlements developed around big plantations, with less affluent landowners starting smaller farms on the uplands. The owners of these large plantations near the river were dependent on slave labor, profiting off of this labor. Founding father Thomas Jefferson's plantation Monticello was built on the River, where hundreds of people were enslaved. It is reported that throughout his lifetime that Jefferson enslaved 607 people in total, with 400 of them laboring on his farm and producing his cash crops of tobacco and wheat. Tobacco, one of the major crops cultivated on Jefferson's plantation, was often used as currency. As tobacco depleted the soil, the planters made way for new fields by clearing more forests.

Thomas Jefferson directed a study of the river in 1763 and realized that it could be made navigable. He collected money and requested that an act of assembly be passed to begin the construction that made the Rivanna River a viable commercial waterway.



Free Bridge

Pen Park belonged to many prominent Virginia families, such as the Hotopps, Cravens, and Gilmers. George C. Gilmer, once the personal doctor of Thomas Jefferson, purchased the property in 1777. All these families had slaves. The Pen Park cemetery is home to the remains of members of the Hotopp, Craven, and Gilmer families. In 2019, 43 possible unmarked graves probably of the enslaved were found outside of the cemetery. Samuel Carr, a nephew of Thomas Jefferson through his sister Martha, was a prominent Albemarle County politician, soldier, and planter who owned 44 slaves. His grandfather was Major Thomas Carr. The elder Carr had amassed more than 10,000 acres along the Rivanna River north of what is now Charlottesville. Many of Thomas Carr's descendants built homes in Albemarle County similar to Jefferson's Monticello and used slave labor. The prominent University of Virginia can be counted among the institutions profiting off slave labor. Approximately 4,000 enslaved laborers built and maintained buildings at the University of Virginia (UVA) between 1817 and 1865.

Colonel Nicholas Meriwether built his home on the sprawling 1020-acre The Farm plantation in 1735. This plantation sits in the river flats between Moore's Creek and Meadow Creek. The house was passed down to Revolutionary officer Col. Nicholas Lewis, Meriwether's grandson. In 1770, a new house was erected to replace the old house that was burned in a fire. British. Col. Banastre Tarleton made the house his headquarters in 1781 in a useless effort to capture Thomas Jefferson. Although, Tarleton did capture Daniel Boone who, at the time, was a member of the Virginia legislature, and held him captive there.

THE 19TH CENTURY AND INDUSTRY ALONG THE RIVER

The Rivanna Navigation Company secured a charter from the state in 1827 and sought to improve navigation on the Rivanna. New locks and dams replaced older and less efficient sluice systems. However, navigation of the river was at odds with the mill industry – and early court battles and legislative petitions illustrate this fraught situation. In the 1850s, the lower part of the Rivanna saw improvements in the form of dedicated canals and towpaths for mules to haul boats upriver; however, there is no evidence that towpath navigation stretches further upstream than Union Mills in Fluvanna.

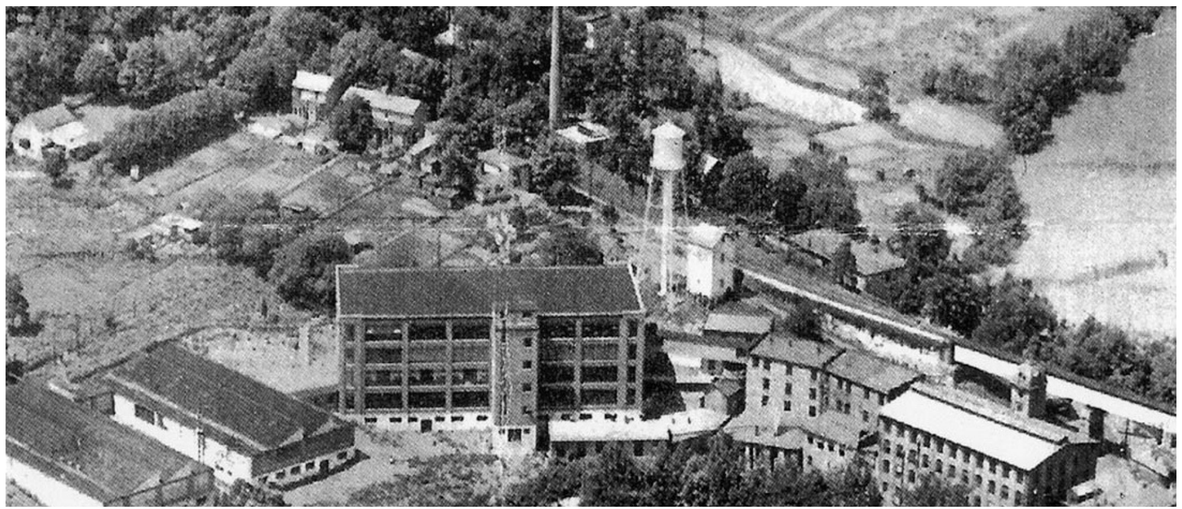
The Rivanna River served as a vital navigation and transportation route throughout the 19th century, helping propel the economy and leading to the establishment of Charlottesville as the county seat. River traffic succumbed to the railroad and by the middle of the twentieth century, with canals and towpaths becoming overgrown. Today only vestiges of the days of river freight remain. (source: Mr. Jefferson's River)

Woolen Mills, or as it was originally known, The Charlottesville Factory , was founded in the early 19th century to take advantage of the waterpower generated by Moores Creek and the Rivanna River. William D. Meriwether, Col. Nicholas D. Meriwether's son bought a gristmill and 500 acres along the river in 1805. The younger Meriwether expanded the mill to weave cotton and wool, grind flour, and saw lumber, and built a wooden toll bridge in 1826. The wool factory was one of several local companies that produced uniforms for the Confederate States of America. Union soldiers burned the mills on March 3, 1865, when the town fell to the Union. Henry Clay Marchant rebuilt the mills three years after the Civil War and renamed it The Charlottesville Woolen Mills. At the time, there were 50 employees working at the mill, but as the company grew so did the surrounding village. Around 1870 the Mills suffered a series of floods and fires until they were destroyed in 1882.

The Woolen Mills Village Historic District is primarily residential, and it still preserves its high degree of architectural integrity across the 80.4 acres where it is located. Many structures in the area have been listed on the National Register of Historic Places. Most of the buildings in the Woolen Mills area were built before 1920. The period of significance for the district spans 1847 through 1962.

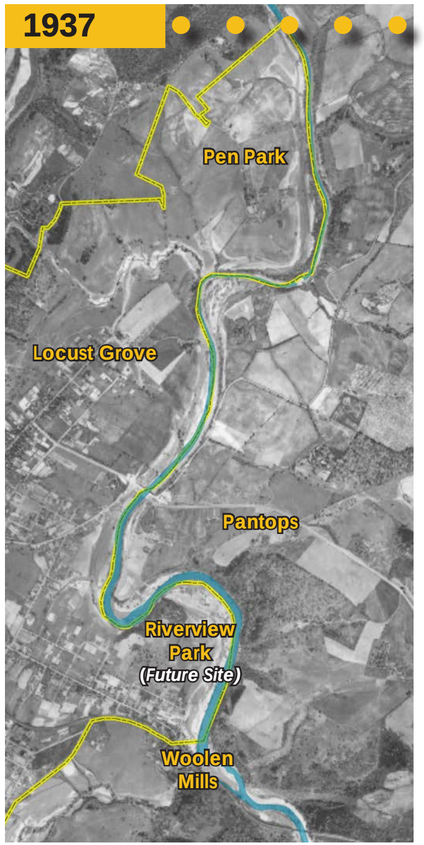
20TH CENTURY

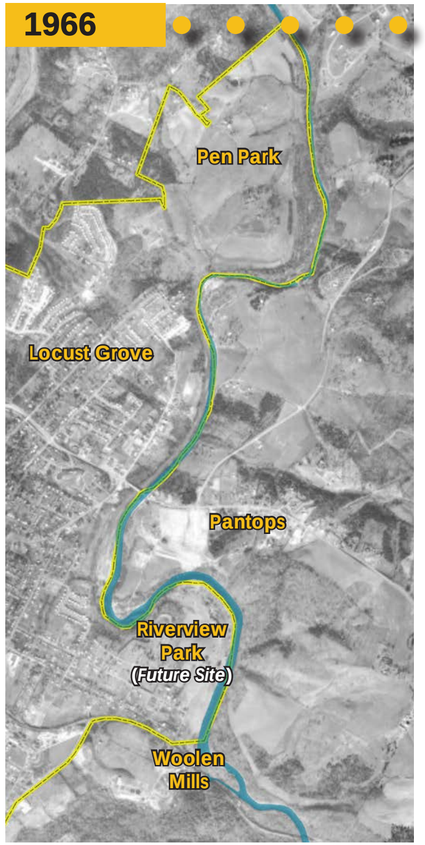
Pen Park, Darden Towe Park, and Riverview Park involve land that is part of the River's history. Pen Park, Dr. George Gilmer's land, became the largest of the City of Charlottesville's parks with 280-acres and is the largest of the City of Charlottesville's parks. It is located on land that gave Park Street its name. In about 1910, the original structure on the plantation burned, and another house was soon built. By 1979, the City of Charlottesville had acquired the land. The 111-acre Darden Towe Park is a joint City-County venture across the River from Pen Park. It was once part of the historic Franklin estate, and, since the 1700s, it had always been open land and in agricultural use. Riverview Park lies on the land near the Woolen Mills. It also is one of the newest additions to the City's parklands. This 26-acre tract of land was a gift from Riverview Cemetery Company (the Jessup family) on October 16, 1974.

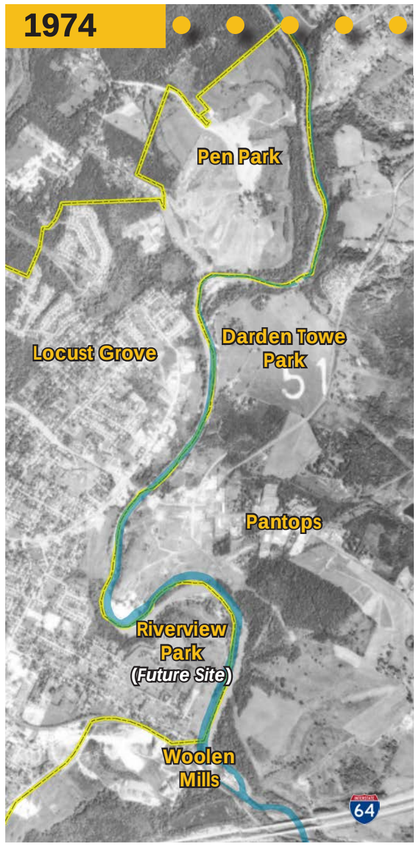


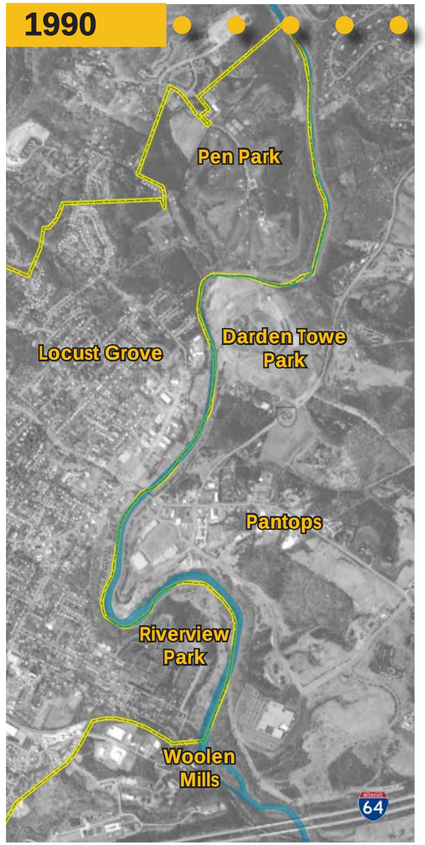
Woolen Mills. Image courtesy of 3north.com

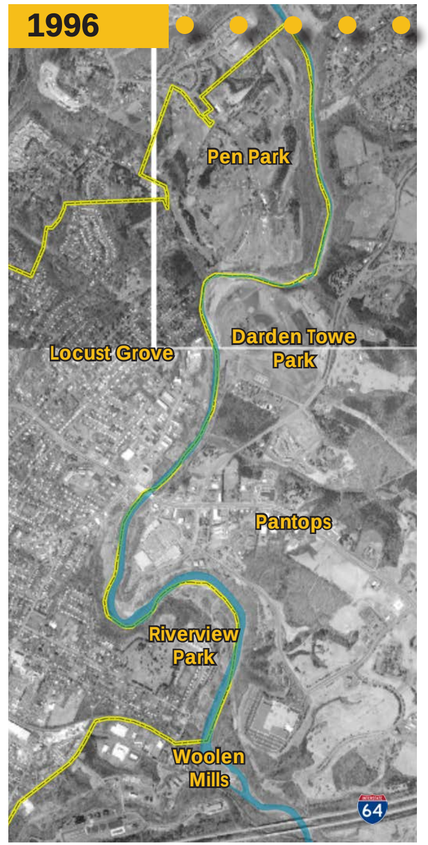
DEVELOPMENT OF THE CORRIDOR OVER TIME

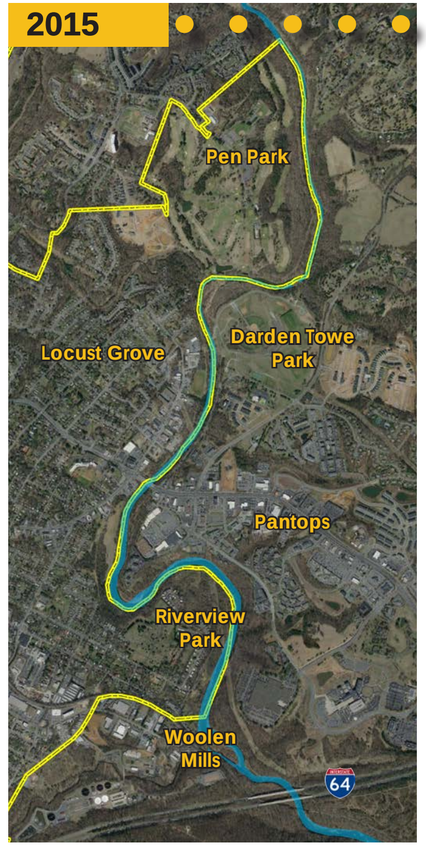














2 | Process Overview

BACKGROUND ON THE PROJECT

The Urban Rivanna River Corridor Plan is part of a multi-phased approach to build a vision and develop an action plan for the urbanized section of the Rivanna River. This coordinated effort between the City of Charlottesville and Albemarle County, along with other stakeholder groups, is the culmination of work that started in 2014.

In the fall of 2014, the Thomas Jefferson Planning District Commission (TJPDC) began facilitating a joint river corridor planning effort. Between 2014 and 2016, the TJPDC convened a stakeholders' group to identify priorities for future river corridor planning efforts. Through a series of nine meetings, this group discussed a variety of topics related to the river and provided a set of recommendations on how to move the planning effort forward. Staff developed a Memorandum of Agreement (MOA) among the City of Charlottesville, Albemarle County, and the TJPDC to execute this initial phase. Both the City and County decided to proceed with the initial phase, signing the MOA in June of 2017. At the suggestion of the working group, the TJPDC proposed a phased planning approach for the Rivanna River. Three phases would be conducted:

- **Phase I:** Collection and inventory of existing conditions
- **Phase II:** Building a vision for the river corridor
- **Phase III:** Developing a master plan to implement the vision

Phase I began in earnest in September 2017. This phase focused on developing the necessary foundation, structure, and information to lay the groundwork for completing an eventual joint area plan for the shared boundaries between Charlottesville and Albemarle County, resulting in a set of maps of the corridor highlighting existing conditions, a project webpage to act as a landing page for stakeholders as well as the public, the formation of a Technical Committee and Steering Committee, a report highlighting findings, and a scope of work for the second phase of the planning process. The following timeline summarizes project milestones during the initial phase.

PHASE I TIMELINE

2017
- Identification of Steering & Technical Committee members

Fall of 2017
- Finalized study area
- Held Technical Committee meeting
- Held meetings with local staff & stakeholders
- Identified mapping themes

Winter 2017|2018
- Collected data & developed maps
- Launched project webpage
- Completed mapping work
- Held regular Technical Committee meetings

Spring & Summer 2018
- Held Technical & Steering Committee meetings
- Drafted Existing Conditions report
- Finalized Existing Conditions report
- Developed visioning phase scope of work

PHASE II

Phase II began in July 2019 by reconvening the Technical Committee to review the anticipated project timeline and provide direction to staff on how best to proceed with the plan. They reviewed the existing conditions maps from Phase I and discussed gaps in the data. A series of drop-in hours was held for City and County staff to mark-up printed maps to identify opportunity sites, new development, park amenities, etc. The input received from the drop-in hours was then entered into ArcGIS. Throughout the summer of 2019, staff created new thematic maps reflecting feedback from July Technical committee meeting and drop-in hours, with routine monthly meetings of the Technical Committee to further plan for the first round of community engagement and further refine the maps. In September 2019, staff conducted a trail walk to identify potential obstacles as well as future opportunities for connections to the corridor. Staff also developed a virtual survey and then held the first Steering Committee to serve as the formal kick-off for Phase II. The first public engagement opportunity occurred at the May 2019 Rivanna Flow River Fest at Darden Towe Park, where the public was invited to take the survey, participate in a scavenger hunt, and review the maps.

Feedback from the survey and comments received from the Flow River Fest were summarized and reviewed by the Technical Committee in October 2019. City and County economic development staff held discussions on how best to approach business and property owners within the corridor. In a separate study that was occurring at the same time, TJPDC staff was working with VDOT consultants on a feasibility study to identify potential alignments for a bike and pedestrian crossing within the study area. Potential alignment options and preliminary cost estimates were developed in the winter of 2019-20. The Bicycle and Pedestrian Coordination Committee, made up of staff from the City of Charlottesville and County of Albemarle, worked with the consultants to provide additional feedback, narrowing down the potential alignment options. The fifth Technical Committee meeting was held in January 2020 to discuss the status of the project and brainstorm next steps. Work continued throughout the spring of 2020, with a renewed focus on drafting the vision statement, guiding principles, and the recommendations. Throughout the summer and fall of 2020, staff refined the guiding principles and recommendations through a series of stakeholder focus groups and two public webinars. Drafting of the Phase II report began in December 2020.



Image courtesy of rivannariver.org

THE COMMITTEES

As in the first phase of this project, two committees - the Technical Committee and the Steering Committee - were formed to help guide the work of staff and provide feedback on the overall vision for the corridor. The Technical Committee was charged with coordinating the more technical aspects of the project, while the Steering Committee helped to guide the overall planning effort and act as advocates for advancing the process. In Phase I, the Technical Committee was made up of locality staff and representatives from the Thomas Jefferson Soil and Conservation District, the Rivanna Conservation Alliance, and the Rivanna Water and Sewer Authority. For Phase II, it was recommended that the Technical Committee be comprised solely of staff from the two localities, with stakeholders representing other interests being invited to topical meetings throughout the process to gain more targeted feedback. The Technical Committee for phase II consisted of staff from the following departments:

- Albemarle County's Community Development Department
- Albemarle's Parks and Recreation Department
- Albemarle's Environmental Programs
- Albemarle and Charlottesville Economic Development Departments
- Charlottesville's Neighborhood Development Services
- Charlottesville's Environmental Sustainability Division
- Charlottesville's Parks and Recreation Department
- Charlottesville City Manager's Office

The newly reformed Technical Committee held its first meeting in June 2019 to review the Phase I report and begin defining the study area for Phase II. The Technical Committee met monthly throughout the fall of 2019 and winter of 2020. The COVID-19 pandemic brought in-person meetings to a halt in March 2020, forcing the committee to meet virtually beginning in April. Throughout the spring of 2020, the Technical Committee developed the Vision Statement for the river, a set of guiding principles to build upon the vision, and recommendations aimed to sustain it. Beginning in the summer of 2020, the Technical Committee began meeting bi-weekly to refine the Vision, Guiding Principles, and recommendations, as well as to plan for the virtual public engagement webinars that would be hosted in the fall. Moving to a bi-weekly meeting schedule helped to propel the project forward and maintain momentum throughout the course of the pandemic.

Throughout November and December 2020, staff held a series of stakeholder focus groups with subject matter experts to further refine the draft Guiding Principles and recommendations. The insight gained from these discussions helped to provide clarity on topics that staff did not have the expertise in, and this step was crucial in formulating recommendations that were actionable and implementable. Focus group topics included the following:

- Historic and cultural resources
- Trails, connections, and access to and within the river corridor
- Public health, safety, and wellness measures
- Economic development potential
- Visual elements of the river experience, such as landscaping and buffering
- Environmental protection

In addition to the Technical Committee, a Steering Committee was formed to guide the overall planning process, build consensus and support for the plan, and review deliverables. The Steering Committee was comprised of elected officials from the two localities, along with two planning commissioners and one citizen appointment for each locality. They held their first meeting in the fall of 2019 to review the project timeline, community outreach plan, and initial mapping efforts to synthesize data not collected during Phase I.

DEFINING THE STUDY AREA

The Technical Committee was instrumental in defining the study areas in both phases of the planning process. The Phase I study area consisted of a 1-mile buffer from the centerline of the river, with South Fork Reservoir as the northern terminus, and the Milton Road Bridge near Shadwell serving as the southern terminus.

For Phase II, the Technical Committee recommended a more concentrated study area to focus efforts specifically on the joint urban corridor shared between the two localities. The new study area consisted of the parcels adjacent to the Rivanna River from Darden Towe Park south to where I-64 crosses over the Rivanna.

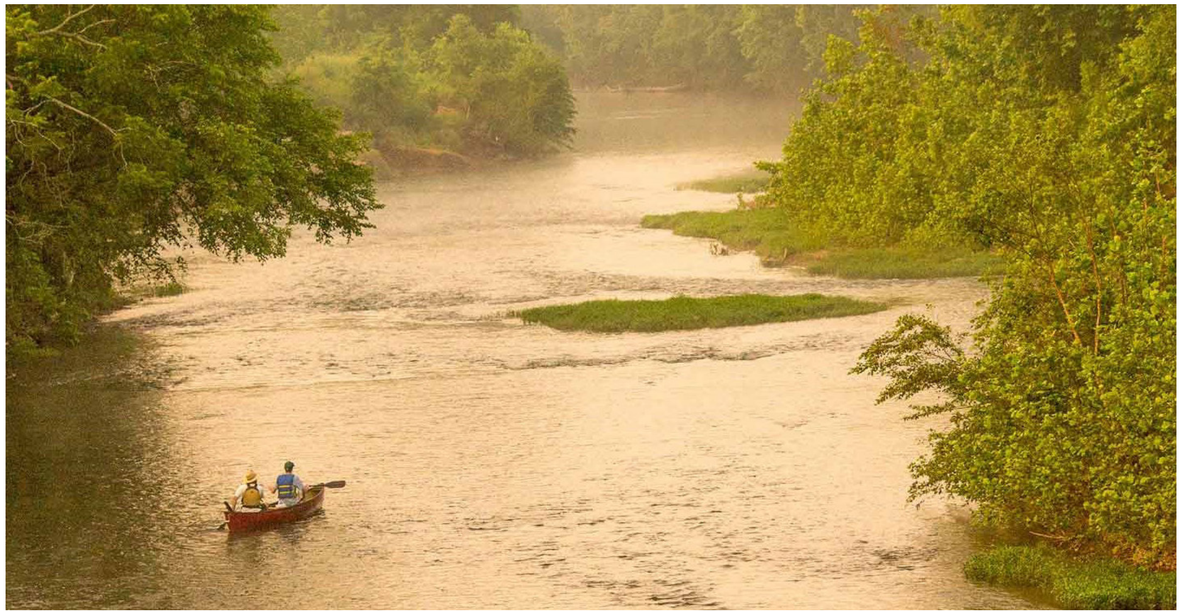
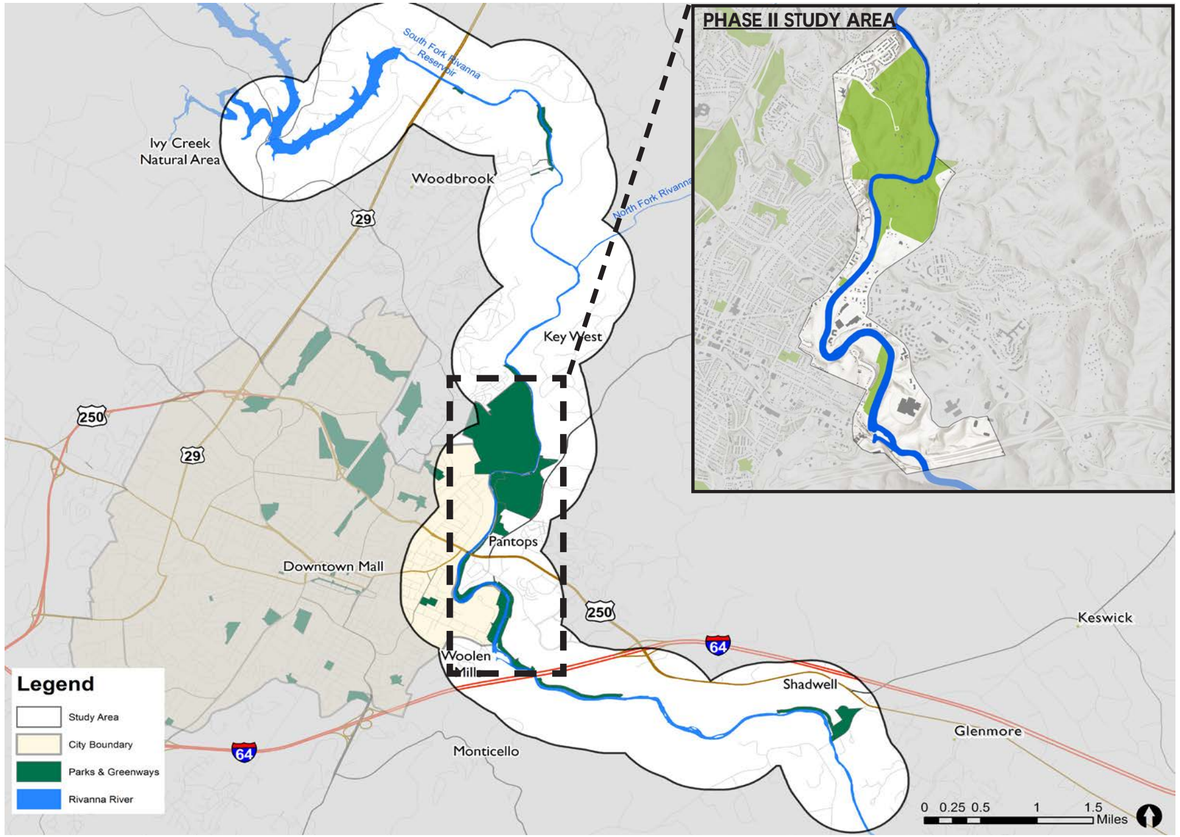


Image courtesy of findyourchesapeake.com

AREA OF FOCUS



3 | Vision



VISION STATEMENT & GUIDING PRINCIPLES

Based on previous planning efforts and discussions with the Technical Committee, an initial draft Vision Statement was produced for the river corridor plan, and several guiding principles were prepared to shape the remainder of the document. The Technical Committee discussed that there was not a singular goal for the development of this portion of the urban Rivanna River Corridor. Whereas other river corridor plans, reviewed as part of this study, were often intended to be redevelopment plans or to support flood mitigation strategies, the goal of this planning process was to produce a plan that would balance many different desires for how this section of the river corridor is used.

Initially, all of the Guiding Principles were considered to be of equal importance. However, after presenting the first draft of the Vision Statement and Guiding Principles to the Steering Committee, it became clear that the primary objective for the future of the river corridor needed to be environmental protection and stewardship, and all of the other Guiding Principles need to be advanced in a balanced, harmonious relationship to this critically important primary objective.

The Technical Committee also discussed the best ways to meaningfully address the approach to equity that would be considered as part of this plan development. The approach the Technical Committee ultimately chose to pursue was to integrate equity considerations into the development of the plan itself. As a result, equity is not a standalone section in this plan, but is woven into the plan content.

Based on feedback from the Steering Committee, as well as additional public input, final versions of the Vision Statement and Guiding Principles were developed:

Vision Statement

The Rivanna River, flowing through Charlottesville and Albemarle County, is one of the community's greatest assets. In and near Free Bridge, Woolen Mills, and the Pantops area, the river corridor is and will be a dynamic place where people can experience a natural environment, healthy outdoor activities and venues, peaceful and serene opportunities, and important historic and cultural points of interest.



Image courtesy of visitcharlottesville.org

GUIDING PRINCIPLES

Guiding Principle: Environmental protection and stewardship of the riparian system shall be paramount to all activities and land uses in the river corridor.

Guiding Principle: Recreational activities in public parks and greenways along the riverfront will be enhanced; commercial recreation that supports use of the river and trail system will be encouraged and promoted with environmental sensitivity.

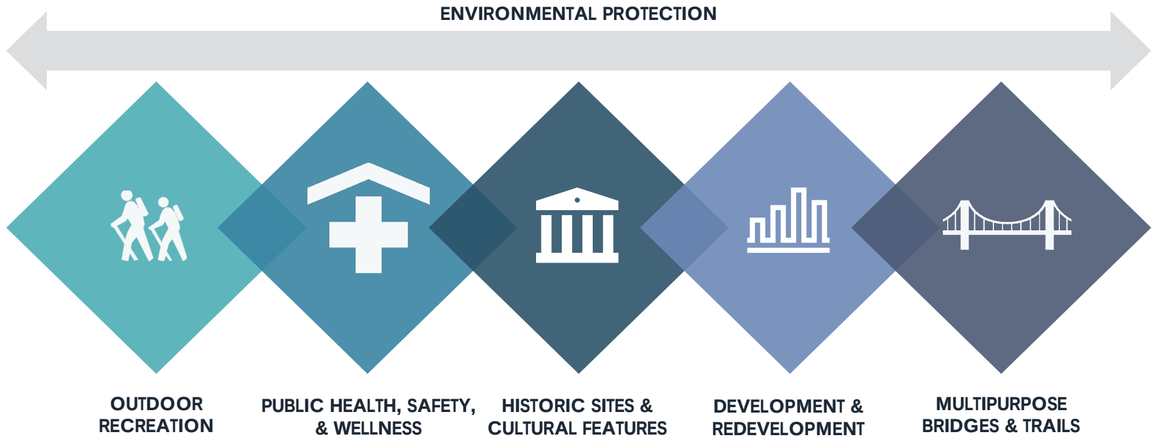
Guiding Principle: Public health, safety, and wellness measures will maximize safety and enjoyability, instill a sense of confidence for users to be able to respond appropriately to public safety and hazardous situations, and protect the integrity of the unused natural areas along the river.

Guiding Principle: New development and redevelopment in appropriate locations will contribute to a mixture of uses in the river corridor. New uses that result in or complement recreational activities will be encouraged; environmental assets such as steep slopes, floodplains, and designated natural heritage sites, as well as historic features, will be protected. **Landscaping and buffering** of existing commercial and industrial activities within the river corridor will enhance the aesthetic experience of being on and along the river.

Guiding Principle: Historic places and cultural features will be identified, protected, and incorporated into the greenway and parks system along the river corridor.

Guiding Principle: Multi-purpose trails and bridges will offer pedestrians and bicyclists opportunities for movement to, through, and within the river corridor.

The diagram below is an illustration of the prioritization of the Guiding Principles. Environmental protection and stewardship, as illustrated by the outer band, is the first and foremost consideration that supersedes all the other priorities. Within the environmental protection principle, all other guiding principles are considered to be of equal importance.



4 | Public Input

FROM THE COMMUNITY

The TJPDC used a wide range of strategies to get public feedback to incorporate into the plan development. Plan progress was documented on the Urban Rivanna River Corridor Plan webpage. An initial round of in-person outreach was conducted in September 2019 during the annual Rivanna River Arts Flow Festival. This first round of feedback was incorporated to develop the first draft of the Vision Statement and Guiding Principles. In March 2020, the COVID-19 pandemic had reached a critical point where public safety measures made it necessary to reduce in-person gatherings. In addition to not being able to utilize special events as a way to conduct outreach, regular meetings for various committees and organizations with whom it would have been helpful to discuss the plan development also ceased to meet. In order to keep the project moving forward, the Technical Committee and TJPDC staff had to develop new outreach strategies.

As the country, including the local Charlottesville/Albemarle area, implemented precautions to slow the transmission of the virus, the river corridor became an even more important community asset. With restaurants, movie theaters, and other indoor recreational space at limited capacity, and many choosing to forgo visits to indoor establishments out of an abundance of caution, outdoor recreational space became even more vital to the mental, physical, and social health of the community.

To leverage engagement with the high numbers of visitors to the river corridor in order to encourage additional public feedback, TJPDC staff placed signs throughout the river corridor to direct users to the project website, where visitors were able to find updated project information and provide input.



One of the signs placed along the Rivanna River Corridor informing users of the planning process and asking for input.

The TJPDC also hosted two webinars to share drafts of the Vision Statement and Guiding Principles for the public to review and discuss, as well as providing an opportunity for general discussions to hear the concerns of and ideas for the river corridor from users, property owners, and business owners. To ensure that everyone that had a vested interest in the corridor had an opportunity to participate, TJPDC staff sent physical mailings out to all property and business owners within the river corridor informing them of the planned webinars and directing them to the project website, as well as including direct contact information. With the help of the Technical Committee, an email list of other organizations that may have interest in the future of the river corridor was also developed, and this stakeholder group was notified of all the planning efforts via email.

While the project staff worked to reach a broad cross-section of the local community to include their thoughts and feedback into the development of this plan, feedback from historically underserved populations was limited. The COVID-19 pandemic limited in-person outreach that could be conducted. Electronic communication and virtual meetings allowed the project to move forward, but also created potential barriers to those that may have been more likely to be engaged through other means.

Also important to note is that outreach efforts were largely focused on those that owned businesses or property in the immediate vicinity and on those that already had awareness about the opportunities to enjoy the river corridor. This urban river corridor is an asset for the entire region, though, and one of the goals of the plan is to improve awareness and enjoyment of the corridor throughout the broader community through improved access, accessibility, and programming.



Rivanna Trail head at Riverview Park

PUBLIC SURVEY

In September 2019, TJPDC staff set up a table at the annual Rivanna River Arts Flow Festival and surveyed attendees. To get additional and a wider range of responses, this survey was later placed on the project webpage.

1.Describe how you primarily use the river area corridor.

Most people primarily use the urban river corridor for walking the trails alone, with pets, or with children. Many users also enjoy water activities, such as swimming, kayaking, and tubing. Simply enjoying nature rounded off the responses. Some surveyed got really specific - they like to birdwatch.

A variety of outdoor recreation that is active or tranquil is how most users seem to use the Rivanna River Corridor area.

2.What aspects of the river corridor are most important for you to maintain?

Access was the most popular answer. Some of those surveyed spoke to increased connectivity to the corridor and within it, while others refrenced

Environmental stewardship was also a very popular answer. Many said that protecting the water from pollution, reducing litter along the corridor, and working to reduce the impacts of increased traffic as priorities.

3.Where does development or redevelopment seem most important?

Most respondents said not to develop, especially if ecology has to be disturbed. The second most popular response was in areas that have already been developed.

Most users are not keen on any development, especially if they believe it may cause environmental harm or pollution.

4.Is it important for you to know or learn about areas along the river corridor?

Most people said yes, and would support informational signs along the river corridor with historical facts.

Many people feel that incorporating the history of the area would be a positive action and enhance the overall experience along the river.

5.Is it important for you to know or learn about ecological areas along the river corridor?

Most people also said yes to this and that informational signs should be along the river corridor.

As with incorporating history, many feel that offering facts about the environment and nature as it pertains to the Rivanna River Corridor would be welcomed.

6.The last question was a write-in response for people to freely share their concerns.

Many people said that traffic congestion on route 250 should be addressed. The need for a pedestrian/bike bridge across route 250 was mentioned frequently and offering an array of access options—bridges, public transportation, widened trails—in general were mentioned. Many people expressed that they would love for everyone to enjoy the river, but attention should be given to ecological protection.

Improving access to the river among alternative modes of transportation was another common theme among respondents

WEBSITE COMMENTS

TJPDC staff utilized a contact form on the project website, as well as providing direct staff contact information to the public for interested persons to provide feedback on their priorities for the future of the river corridor. A majority of the feedback came from those that were directed to the project webpage by signs that were placed along the existing trails throughout the river corridor to raise awareness about the plan development. In total, TJPDC staff received seventy unique comments via direct emails or completed web comment forms.

Comments largely focused on how much users enjoyed having the river as an asset. The COVID-19 pandemic, along with ongoing tension over racial injustice that resulted in widespread protests throughout the nation during the course of this planning process, resulted in a very challenging and turbulent year. Especially during a time where emotions were running high, and people were directed to practice social distancing and avoid gathering together inside, outdoor recreation became a very important escape for the local community. While there were no formal counts made to determine how much visitation increased during the spring and summer of 2020, many of the responses TJPDC staff received included anecdotal accounts of the increases in recreational use of the river corridor.



Rivanna River from Woolen Mills

Eve Capehart, a local resident, shared the following poem highlighting the important role the Rivanna River Corridor has played for the local community:

“Down by the River Before the Heat of the Day”
Eve Capehart

If I turned on the morning news,
I could absorb the sadness,
observe looting madness, watch
how some come together to protest
for social justice. This morning, though,
I need a quiet start to the day. Out
with the bike I have my own struggle
with the uphill, but unlike other struggles,
I know the downhill reward is just over
the crest. And there is the river,
running and ruffling in its soothing
grove. There the heron stands
unmoving. There the black snake
glides into green hiding. Here
I breathe in my good fortune.

IWoolen Mills bike & pedestrian bridge: Image courtesy of cvilleweekly.com

COMMENTS - CONTINUED

The comments were tabulated into broad categories as shown in the table below. Of those broad categories, the ones that were most frequently referenced included environmental protection (23 comments), recreational amenities (22 comments), and proposed bicycle and pedestrian crossings (9 comments).

Table 1. The number of email and web form comments received by TJPDC staff by category. Only categories that were brought up more than once were included in the table.

# OF COMMENTS	CATEGORY
23	Environment
22	Recreational Activities
9	Bicycle & Pedestrian Crossing
5	Public Health & Safety
4	Trail ADA Accessibility
4	Historic & Cultural Assets
2	Trash/Litter

COMMENTS - CONTINUED

Environmental Protection:

Environmental protection concerns covered a wide range of issues, from the impact of artificial lighting on wildlife to water quality to streambank stabilization. Requests to address invasive species and protect wildlife habitats were by far the most commonly cited environmental concerns. The following are examples of comments that were submitted:

"I walk along the Rivanna River Trails and am deeply concerned about the overwhelming amount of invasive species, including vines that are smothering all natives." – Peggy Cornett

"Improving water quality and wildlife habitat (river health) should be the primary focus of river stewardship." – Darren Pace

The comments overwhelmingly revealed that river corridor users care about the inherent importance of being good stewards of the river as an environmental resource, but also acknowledge that protecting the river is an important part of maintaining its popularity as an enjoyable and well-used recreational amenity. Experiencing the sounds of nature, wildlife-watching, and observing wildflowers and other vegetation affords users an opportunity to connect with nature and provides a break from their more urbanized and developed immediate surroundings.

Recreational Facilities:

Closely following the number of comments expressing concerns about the environmental protection of the river was the number of comments referencing recreational uses of the river corridor. Several commenters expressed a desire to expand the trail system, including extending the overall length, finding ways to better accommodate users of different types of modes, and creating a stronger diversity of trail types.

Rip Verkerke made the following comment explaining this last suggestion:

"I would encourage you to make explicit the goal of creating a 'braided' network of bike and pedestrian trails. Rather than simply creating a paved multi-use path on both sides of the river, which is a worthwhile goal, it would be far better to include as well more rustic footpaths parallel to the main trail. These 'braided' facilities would give trail users an opportunity to have a more natural experience in a wooded setting. I firmly believe that the user community will benefit from having a diversity of trail configurations."

While trail amenities were by far the most commonly referenced recreational facilities, there were also three comments regarding boat launches and two regarding fishing. Boat launch sites within the river corridor study area are minimal. Due to the surge in outdoor activity that resulted from the pandemic, facilities that supported inexperienced kayakers and boaters experienced significant capacity issues such as crowded parking areas near boat launch sites and take-out points. While two of the comments about additional boat launch facilities were generally supportive, there was also some concern expressed about potential impacts additional facilities may have on the surrounding community, specifically on the amount of additional noise, traffic, and lighting that could potentially be generated. The development of any additional facilities

would need to involve further public engagement, as well as consideration for how those facilities could be supported with additional infrastructure that may be required.

Two commenters also mentioned their desire for fish to be stocked in the river to further enhance fishing throughout the corridor as a recreational activity.

Bicycle and Pedestrian Crossing:

Discussions about the need for additional bicycle and pedestrian crossings connecting the two sides of the Rivanna River have been ongoing in planning efforts involving this area. Two potential bridge crossing locations (between Darden Towe Park and Pen Park, and then between Woolen Mills and Pantops) were tentatively mentioned in the draft recommendations on the project webpage, and commenters were overwhelmingly supportive of new crossing facilities. Of the nine comments received, three specifically supported an additional connection between Darden Towe Park and Pen Park, and the others were more generally favorable about the concept of new crossing facilities.

There were comments, however, that also expressed concern that a new bridge would attract additional recreational users and additional vehicular traffic, which would further compound a lack of capacity for parking in the vicinity, put additional strain on surrounding neighborhood infrastructure, and produce undesirable impacts to nearby residential properties.

Public Health and Safety:

The use of portions of the river corridor by unsheltered persons and the presence of unleashed dogs as well as concerns about gun safety were all topics that, while falling more broadly under the category of public health and safety, were each only mentioned by one or two commenters each.

Trail ADA Accessibility:

There were four comments that discussed accommodations for people with disabilities or with limited mobility. Two comments discussed how different trail surface types would be preferable depending on an individuals' physical needs. One comment referenced the need for regular seating along the trail to allow for regular breaks, and another comment mentioned the need for regular maintenance of the trail surfaces.

Historic and Cultural Assets:

TJPDC staff also received four comments that specifically discussed the importance of incorporating the local history into the plans for the future of the river corridor. ***"Please expand your plan to include the history of the Rivanna River from its pre-colonial times through the present. In addition to the Native American history, I also suggest that you may wish to discuss the up- and downstream histories so that people may be encouraged to explore further."*** - Kay Slaughter

WEBINARS

The TJPDC held two public webinars (October 24, 2020, and October 29, 2020) to provide opportunities for the public to learn about the project and provide feedback, which forty-four people in total attended. The webinars were recorded and posted on the Urban Rivanna River Corridor Plan website.

During the webinars, attendees were asked to participate in two polls. The first generally asked whether attendees agreed or disagreed with the draft Vision Statement, and the second asked attendees to vote on whether they disagreed or disagreed with each of the draft Guiding Principles that had been prepared by the Technical Committee.

Twenty-five attendees responded to the first poll asking whether they agreed or disagreed with the Vision Statement. Of those twenty-five attendees, twenty-two agreed, and three disagreed. Staff then provided an opportunity for the public to provide feedback on areas of disagreement. Comments from attendees that disagreed included the need for the Vision Statement to more clearly communicate the importance of being active stewards of the river as an environmental resource, as well as pointing out that the Vision Statement both encouraged additional recreational use and expressed a desire to maintain a quiet and peaceful natural escape and that those two goals conflicted with each other.

In total, twenty-one attendees completed the poll asking whether they agreed or disagreed with the Guiding Principles. The results of that poll are shown in the Table 2.

GUIDING PRINCIPLE	% AGREE
Recreational activities in public parks and greenways along the riverfront will be enhanced; commercial recreation will be encouraged and promoted.	85.7
Public safety measures will maximize the safety and enjoyability of using the trails and ensure that undeveloped natural areas along the river are not misused.	100
Historic places and cultural features will be protected, identified, and incorporated into the greenway and parks system along the river corridor.	100
Environmental protection of the riparian system shall be paramount in all new activities and land uses in the river corridor.	95.2
Multi-purpose trails and bridges will offer pedestrians and bicyclists opportunities for movement to, through, and within the river corridor.	90.5
Landscaping and buffering of existing commercial and industrial activities abutting the river corridor will enhance the natural experience of being on and along the river.	90.5
New development and redevelopment in appropriate locations will contribute to a mixture of uses in the river corridor which include residential uses, service sector activities, light industry, offices. It will also result in or complement recreational activities.	71.4

Table 2. Webinar polling results showing public response to draft Guiding Principles

The two Guiding Principles that received the highest level of disagreement were those addressing recreational use of the river corridor and new development and redevelopment. Discussions held during the webinars focused largely on concern that overdevelopment and overuse of the area would have negative environmental impacts. Respondents indicated that they were generally favorable towards businesses that were scaled appropriately and that were intended to have some interaction with the river and the users but were opposed to the language in the Guiding Principle that indicated that light industrial and office building uses would be encouraged within the river corridor area. Attendees also expressed a desire for the language used in the Guiding Principle supporting recreational uses to include some constraints to ensure that environmental protection is considered first and foremost.

DISCUSSIONS WITH STAKEHOLDER GROUPS AND SUBJECT MATTER EXPERTS

The TJPDC also coordinated more focused topical discussions that included members of the Technical Committee as well as other interested parties and subject matter experts where appropriate. The purpose of these discussions was to vet the public feedback that was received and create appropriate recommendations based on this feedback. This included professionals that worked in the City and County but were not actively involved in the plan preparation process, as well as professionals in other organizations whose work integrated with the stated goals of the planning process.

The assistance of those with subject matter expertise was especially helpful for shaping recommendations into statements that supported the overarching strategies of different departments and organizations. It was also important to ensure that the plan recommendations did not contradict or interfere with other initiatives that were working to accomplish similar objectives.

5 | Benchmarking





Rivanna River from Free Bridge

BENCHMARKING INTRODUCTION

Benchmarking is the process of comparing, in this case, the Urban Rivanna River Corridor Study recommendations against recommendations and best practices that have been produced and implemented by other successful river corridor plans. Benchmarking ensures that project recommendations are feasible and that important details and considerations do not get overlooked.

The original scope of work for this phase of the river corridor planning process included the identification of a peer community to study in-depth. However, it quickly became apparent through conversations with the Technical Committee that there was not another peer site that embodied the same unique characteristics as the urban section of the Rivanna River. Instead, TJPDC staff, with the approval of the Technical and Steering Committee members, selected several successful river corridors to inform and guide the Rivanna River planning process.

Greenville, SC, and Richmond, VA both emerged as leaders in discussions among the Technical and Steering Committee members as localities with highly successful river corridor plans. In addition, TJPDC staff also reviewed the river planning efforts in Lynchburg, VA, and Fredericksburg, VA.

RICHMOND RIVERFRONT PLAN/RICHMOND DOWNTOWN PLAN

The Richmond Riverfront Plan was adopted by Richmond City Council in 2012. The need for the riverfront plan was identified during the development of Richmond's 2009 Downtown Plan with the intention of providing detailed design recommendations along an urban section of the riverfront.

The Richmond Riverfront Plan highlights many of the same aspects that make the urban section of the Rivanna River important to the Charlottesville and Albemarle community. Similar to this planning effort, Richmond's plan sought to balance expansion of use and access with environmental protection of the river, respecting and celebrating the diversity of historic, cultural, and ecological resources throughout the plan area.

There are some important distinctions between the Richmond and Rivanna river planning efforts, though. Richmond's Riverfront Plan evolved from its initial downtown planning efforts, where the use of the James River has historically played an active role in shaping the development of the downtown areas. Therefore, the section of the James River included in Richmond's plan is directly integrated with the commercial and industrial downtown development to form the experience of being in downtown Richmond. While there is some commercial and industrial activity along the section of the Rivanna River Corridor, the objective of this planning effort is not to further "urbanize" the experience of being along the Rivanna River Corridor, but to preserve the natural experience through careful consideration of new development and redevelopment that will complement the existing characteristics of the river corridor.

Unlike the Rivanna River Corridor Plan, the Richmond Riverfront Plan focused heavily on design elements, identifying specific projects and including detailed cost estimates for implementation. Should the Urban Rivanna River planning process move to Phase III, the same type of design and master planning work would be completed for the Rivanna River Corridor.



Downtown Richmond: Image courtesy of srmfre.com



Catwalk across the James River: Image courtesy of christopherrcooper.com

REEDY RIVER MASTER PLAN/DOWNTOWN GREENVILLE MASTER PLAN

Greenville, SC adopted the Reedy River Master Plan in 2002. The goals of this plan were similar to the goals of the Urban Rivanna River Corridor Plan, primarily to ensure environmental protection while also creating and enhancing access to the river and providing recreational and development opportunities within the corridor.

The section of the river corridor that was included in the Reedy River Master Plan was 16 miles in length, longer than the section considered in the Urban Rivanna River Corridor Plan. The Reedy River Master Plan focused on three main components: establishing an integrated trail system, identifying sites for recreation and economic development, and developing land use recommendations. Land use recommendations, while discussed in the Rivanna River plan, are not a major component of this planning effort; instead, the Rivanna River Corridor Plan builds on existing land use plans already adopted by the City of Charlottesville and Albemarle County and seeks to further finesse existing land use development goals.

Six key site design principles emerged during the development of the Reedy River Master Plan, as listed on page 48 of the plan:

1. Respect the existing land use and physical characteristics.
2. Facilitate a pedestrian friendly environment.
3. Encourage land use diversity.
4. Increase transportation diversity.
5. Connect the communities to and around the river.
6. Preserve environmentally sensitive areas.

These principles are very similar to what the Rivanna River Corridor Plan also seeks to achieve. The Reedy River Master Plan, like the Richmond Riverfront Plan, goes further than this Rivanna River planning effort to recommend specific projects and design concepts.

The Downtown Greenville Master Plan was completed in 2008. Similar to Richmond's plan, Greenville integrates the Reedy River directly into their downtown plan so that the river is incorporated into the urban setting. The Downtown Greenville Master Plan explains that the creation of Falls Park and supporting the design construction of the Liberty Bridge was in support of its larger goal to revive the downtown and prepare the area for private investment.



Reedy River Master Plan concept: Image courtesy of MKSK



Downtown Greenville: Image courtesy of upcountrysc.com



Reedy River Master Plan concept: Image courtesy of MKSK

LYNCHBURG DOWNTOWN & RIVERFRONT MASTER PLAN 2000

The Downtown & Riverfront Master Plan for Lynchburg, VA was completed in 2000. In the same fashion as Richmond and Greenville, the Lynchburg plan incorporated the development of the riverfront into its downtown plan. While there was already some movement in revitalizing Lynchburg's downtown prior to the adoption of this plan, there were a large number of vacant historic buildings, and critical infrastructure was needed to support further reinvestment into these properties to re-establish a vibrant downtown. Lynchburg's master plan was an effort to leverage the historic and natural aspects of the city's downtown area to promote tourism and economic development, which is a significant difference from this Rivanna River Corridor planning process. While this section of the Rivanna River Corridor is an important asset to attract visitors and support economic development and tourism, it is not the highest or only goal in this planning effort.



LOVEworks Public Art piece located at the trailhead of Percival's Island on the James River Heritage Trail in Lynchburg, VA: Image courtesy of lynchburgvirginia.org



Lower Bluff Walk: Image courtesy of lynchburgvirginia.org



Kayakers on the James River: Image courtesy of downtownlynchburg.com

RIVERFRONT PARK PROJECT – FREDERICKSBURG, VA

Fredericksburg's 2015 Comprehensive Plan included a goal to establish a riverfront park, and in its 2020 Comprehensive Plan, Fredericksburg references the riverfront and its important relationship to the downtown area. The plan specifically mentions that the downtown river is underutilized due to disconnection, being overrun with invasive species, and incompatible land uses. Recommendations to improve the downtown area include strategies to generate greater public interest in and utilization of the riverfront.

Fredericksburg held its first open house to create a vision for its downtown Riverfront Park in early 2014. Unlike the other plans TJPDC staff reviewed, Fredericksburg's planning process resulted in an architectural and design plan versus a planning document that recommended both policies and projects for implementation. However, their process was still based on robust public engagement efforts.

Like the Guiding Principles established for the Rivanna River Corridor Plan, the Fredericksburg public input process revealed that there was a confluence of goals for their Riverfront Park that included enhancing the public's ability to view and enjoy the river, supporting compatible commercial development and enterprises, providing opportunities for users to escape from the urban surroundings, establishing well-connected trail systems, and reflecting the local history. However, this was primarily a planning process for the park and not a river corridor, so some of the outcomes discussed were not as relevant to this planning process.



Construction of Riverfront Park in Fredericksburg: Image courtesy of fredericksburg.com



Concept drawing of Riverfront Park: Image courtesy of fredericksburg.com

COMMON THEMES

There were a few common themes that emerged among all of the river corridor plans reviewed.

Trail Networks and Access:

The first common theme was the importance of establishing a well-connected trail system. Trails are important to provide opportunities for active recreation, but they were also identified as an important way to connect users with their local community. A robust trail system along the river corridor should foster physical connections to and from neighborhoods, between parks and open spaces, to sites with important historic, cultural, and ecological significance, and among local businesses that are situated to promote the use and enjoyment of the river corridor. These physical connections then serve to promote awareness, understanding, and appreciation for the unique assets in the local community.

Richmond's 2009 Downtown Plan discussed creating an interconnected network of trails with existing road and transit systems to ensure connectivity to the river throughout the entire city, as well as modifying existing bridges to develop better pedestrian access across the river. Consideration of network access via various transportation modes and creating loops in the transportation networks promote the accessibility of the riverfront to the largest potential population of the community.

The Downtown Greenville Master Plan includes plans for a "green necklace" of interconnected parks around the downtown area. The goal is for



Green necklace concept from Downtown Greeneville Master Plan: Image Courtesy of greenvillesc.gov

the park system to be accessible from every part of the downtown area and also for the regional park network to be interconnected for recreational users. The goal of achieving network connection involves initiatives beyond the geographical boundaries of the Rivanna River Corridor study area, but it is important to acknowledge that the park is a regional asset, and access has to be considered broadly.

Improving transit access was also a discussion in both the Richmond and Greenville downtown plans. Because the river corridors in these two cities are both incorporated into a vibrant urban area, transit was not discussed specifically in relationship to providing access to the river and surrounding park systems. But similarly to promoting an interconnected regional network that enhances bike and pedestrian access to the park, considering options to incorporate more robust transit system use to access the parks within the corridor is another important factor that should be considered, both to promote greater equity of access and to provide relief to the surface transportation system and area parking constraints.

In addition to addressing connection to the trail network, Lynchburg's plan also includes the recommendation to site bike and boat rentals near the riverfront to enhance recreational use of the river and trail system. Lynchburg's plan also discusses the need for pedestrian connections across the river, making a couple of very specific recommendations to facilitate the placement of new pedestrian crossings in key locations.

Local History:

The importance of incorporating local history also emerged as a common theme among the various river plans. Rivers have historically served important functions in the development and establishment of civilizations. The Rivanna River Corridor was originally home to the Monacan Tribe, and then the river was later utilized to transport wheat and tobacco from regional farms as Europeans settled in the area. A thoughtful planning process should incorporate opportunities to educate users about the historic uses of and activities along the river, preserve important historic sites, and inform the design elements.

Among its recommendations, Richmond's 2009 Downtown Plan included the placement of educational facilities to specifically highlight the historic locks and the maritime history of the river. The Richmond plan also calls for improving wayfinding and accessibility along a historic trail that was used to force the movement of enslaved persons along the James River from where the ships they arrived on were docked to the sites where they were brought to the trading posts to be sold. The Richmond plan reinforces the goals of the Rivanna River plan to ensure that a comprehensive approach to sharing the history of the corridor is taken; there is a wide variety of people groups that have lived rich, interesting, and complex lives throughout the history of this section of the corridor, and all of their stories are important to share. It is equally important, though, not to shy away from the atrocities of the past. As the example in the Richmond plan indicates, there needs to be thoughtful consideration to provide awareness of the past and honor the lives of those that suffered.

Richmond's plan also outlines recommendations to preserve and restore the historic canals and remnants of structures, as well as establishing better public access to them. The history of the people is not separate from the history of the technology – the physical remnants of the past give us a better understanding of what the lives of those that came before us looked like on a day-to-day basis. Helping visitors develop a fuller understanding of

different aspects of people's lives throughout the history of the region will help them establish stronger connections and understanding.

The Downtown Greenville Master Plan outlines the history of the city, starting with the establishment of various mills and trading posts along the banks of the Reedy River, as well as this section of the river serving as a summer resort. Greenville's plan recommends a visitor center located near the riverfront that would share the history of Greenville's evolution from its origination as a site for mills and resorts to the more modern revival of the downtown area. Lynchburg's master plan discusses weaving the local history throughout the entire downtown area, specifically suggesting the placement of interpretive markers and signage along the waterfront. The plan specifically mentions incorporating the history of the canal, canal bridge, train tunnel, and a small boat landing into the design of a riverfront park.

Downtown Lynchburg is also the starting point of the annual James River Batteau Festival, which was first held in 1986. The festival, which lasts eight days as crews traverse the James River from Lynchburg to outside of Richmond on the flat-bottomed batteaux, pays homage to the important role batteaux played in transporting cargo via the James River prior to the construction of canals or development of railroads. While not referenced in Lynchburg's plan itself, this is a great example of how the local history of the riverfront can be incorporated into educational programming that also attracts tourists that will further support the economic development of the local area.

Richmond, Greenville, and Lynchburg plans focus on the time since European settlers arrived and began utilizing the river as a resource. One major distinction for the Urban Rivanna River Corridor Plan is the consideration of history preceding the area's settlement by Europeans.

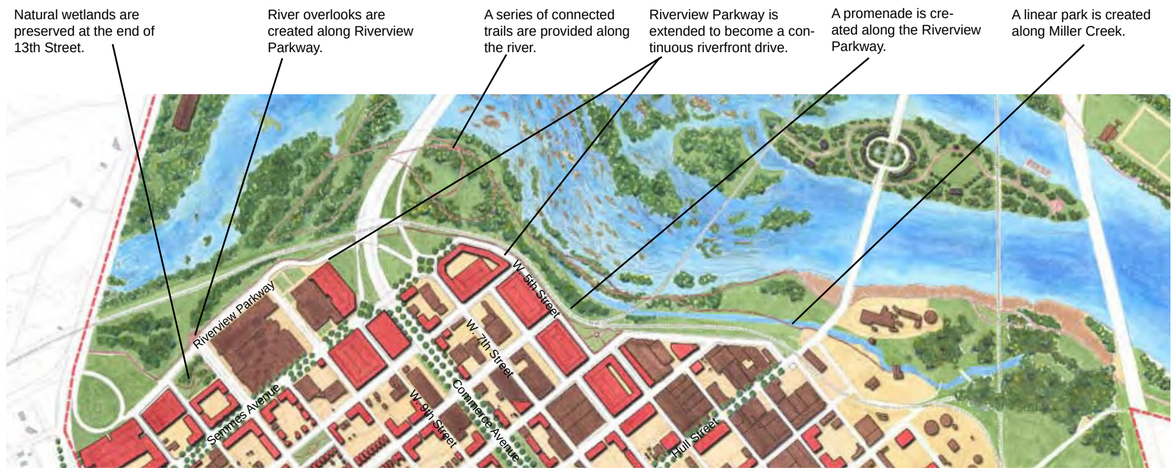


Image of an informational placard on the Richmond Slave Trail: Image courtesy of www.rvariverfront.com

Fostering connections to the water:

Finally, there was a common theme that related to fostering a sense of connection to the water. Maintaining visual connection by protecting viewsheds (the geographical area that is visible from a specific location), encouraging commerce that engages with the river, providing public access points to the water, creating recreational opportunities along the water's edge, and incorporating water features were all examples of protecting and enhancing a user's awareness and appreciation of the river as a valuable community asset.

Richmond's 2009 Downtown Plan included suggestions to create new viewing opportunities to the James River along streets that ran parallel to the river and to terminate streets at river overlooks to encourage visitors to explore open spaces along the river, as well as protecting existing viewsheds to the river.



An image of proposed riverfront improvements from the 2009 Richmond Downtown Plan

The main attraction for the Greenville riverfront is the Liberty Bridge, located downstream from the waterfalls and park in downtown Greenville. It is located at the site of a former six-lane highway bridge. The bridge curves to provide users with a unique viewing experience of the nearby waterfalls and downtown waterfront.

Lynchburg's plans to engage the waterfront involved making use of the hilly terrain to create a new bluff walk overlooking the river and facilitating development along that bluff walk.

Lynchburg's use of the riverfront is much different from what is considered for the Urban Rivanna River Corridor plan. However, it does have some good examples of how the river can be leveraged by local businesses in their site development – by providing potential customers with the ability to enjoy the river as they frequent their establishments, but also by considering opportunities to connect their sites to existing trail systems or river access points. Being able to enjoy the river before, during, and after a visit to a local establishment is part of the attraction for patrons.



Liberty Bridge: Image courtesy of structurae.net



Lower Bluff Walk, Lynchburg VA: Image courtesy of lynchburgva.gov

OTHER IMPORTANT CONSIDERATIONS

In addition to the themes that appeared throughout all of the plans, there were other aspects in the individual plans that stood out as being important considerations to shaping the future of the Urban Rivanna River Corridor.

Accessibility:

One such recommendation emphasized in the Richmond plan relates to the importance of considering accessibility for individuals with various levels of mobility in the planning process. This includes both providing access that meets American with Disabilities Act standards along the river so that visitors with limited mobility are included in the considerations for fostering connections to the water, as well as other considerations that would promote the greater utilization of the river corridor by as many users of all mobility levels as possible. One important consideration in making the trail system (and all the important features to which it connects its users) as welcoming as possible is providing seating at regular intervals along the trails to allow users to stop and rest. Other considerations include trail width, slope, shading, and regular maintenance to reduce underfoot obstacles. While the goal of maintaining a natural, undisturbed environment for visitors to experience is important, it also needs to be balanced with making sure that this important asset can be experienced and appreciated by the entire community.

Wayfinding and navigation:

Wayfinding has been an important part of Lynchburg's riverfront development. Lynchburg's effort has largely been focused on directing visitors among the downtown areas and to main parking areas to access their trails, but the premise could be applied to helping visitors navigate the trail system itself along the Rivanna River Corridor. A strong wayfinding system along the trails themselves, in conjunction with a well-connected trail network and informational signage, will help visitors take advantage of all of the attributes that the corridor has to offer.

In Richmond, a strong series of maps have been developed to help visitors navigate the riverfront area. There are already mapping efforts in place by outside organizations that incorporate the existing trails along the Rivanna River Corridor. Future mapping efforts should integrate with the efforts that are currently being undertaken both for the sake of efficiency as well as building relationships with organizations that are already promoting the use of the Rivanna River Corridor.

Wayfinding provides many other important benefits, in addition to improving the confidence of users that may not be very familiar with the trail system: 1) it assists emergency response personnel with being able to locate individuals in need of assistance; 2) it improves the accessibility of the trail systems and recreational facilities for individuals with disabilities/limited mobility; and 3) it encourages the trail system to be a better-integrated transportation route, contributing to additional patronage of local businesses by recreational users and potentially reducing stress on the surface transportation system.

Environmental considerations:

While it was not a major point of consideration in every plan that was reviewed, concern for environmental factors was an important aspect that was discussed. Greenville's plan had the most comprehensive set of goals concerning the management and protection of environmental features. Greenville's plan strongly emphasized protecting water quality by managing the environmental impacts of development along the river both through partnerships with private property owners/developers (such as controlling runoff and collaborating to find solutions to control flooding) and through direct interventions along the river's edge (utilizing riparian buffers to minimize contaminants entering the river).

Zoning:

The Reedy River Master Plan discussed the possibility of reviewing zoning regulations and using zoning classifications as a tool to implement the land use and design recommendations included in its plan, as well as to consider overlay districts that could be used to promote water quality, reduce flooding, stabilize the river banks, and plan for greater recreational uses. Changes to the local zoning ordinances could take the shape of a carrot (provide incentives), stick (forced compliance), or both to provide a more substantive mechanism to achieve desired development outcomes.

6 | Recommendations





People gathering along the banks of the Rivanna River: Image courtesy of dailyprogress.com

RECOMMENDATIONS INTRODUCTION

The Technical Committee developed recommendations for stewardship of the urban river corridor based on the public engagement and benchmarking research conducted, and in coordination with other related planning documents. The recommendations are intended to balance use and enjoyment of the river corridor with protection of the natural environment.

While recommendations have been categorized into topical areas, they were developed with the intention of creating cohesive guidance that will support the implementation of the Vision Statement and Guiding Principles identified during the development of this plan. The environmental impacts of recreational and commercial activities were considered, and language was included in those recommendation sections to emphasize the importance of prioritizing environmental protection. Well-designed networks of trails and river access points support economic development and awareness of the rich ecological, cultural, and historic resources throughout the corridor. Integrating access to the river corridor with the larger regional transportation network promotes equity of opportunities for diverse segments of the population to engage with the river corridor and take advantage of its many opportunities. Creative and thoughtful programming encourages new visitors from the broader region to explore and experience the corridor, learn about the local history and culture, and enjoy local businesses. Wayfinding and information sharing improves user safety and confidence to plan visits, especially for those with specific accessibility needs. Public health, safety, and wellness initiatives instill a sense of awareness and confidence for users to know that they can navigate the corridor safely.

ENVIRONMENTAL PROTECTION

The Rivanna River is an urban corridor along the City and County border that contains a rich riparian ecosystem, including unique native plant and wildlife communities and habitats. To protect, conserve, and steward this area, the following recommendations are made:

RECOMMENDATIONS

1. Identify and protect the most sensitive biological and ecological areas by limiting access and installing signage and appropriate barriers where possible, avoiding impacts to wildlife movement.
2. Retain and steward natural habitats and systems throughout the river corridor.
3. Identify and implement riparian restoration and mitigation projects, including removal of invasive plant species, incorporation of locally native plant communities, and the stabilization of eroding streambanks in a manner consistent with natural system function.
4. Continue and initiate activities of the City and County to improve water quality in partnership with other organizations.
5. Encourage the use of locally native plants for landscaping at parks and businesses.
6. Promote stewardship, awareness, appreciation, and education of the natural elements through interpretive and informational signage, educational tours, and river system-focused events on public property.
7. Continue to deliver a compliant and effective stormwater management program that meets or exceeds minimum state regulations. Encourage on-site mitigation measures and forest/open space protection.
8. Protect and enhance forests within the river corridor with particular focus on the 100' stream buffer zone.
9. Consider opportunities to reduce mowing and create naturalized grasslands/meadows in existing open areas.
10. Collaborate with other organizations to leverage resources for conservation and mitigation efforts and pursue funding.

Related Plans:

CA-MPO Long Range Transportation Plan
Thomas Jefferson Bicycle and Pedestrian Plan
Charlottesville Comprehensive Plan
Albemarle County Comprehensive Plan
Pantops Master Plan
Charlottesville Bike and Pedestrian Master Plan
Albemarle County Climate Action Plan
Albemarle County Biodiversity Action Plan
TJPDC Regional Natural Hazard Mitigation Plan

Acronyms

ACPR = Parks and Recreation (Albemarle)
CPR = Parks and Recreation (Charlottesville)
FES = Facilities and Environmental Stewardship (Albemarle)
PW = Public Works (Charlottesville)
CDD = Community Development (Albemarle)
NDS = Neighborhood Development Services (Charlottesville)
AED = Economic Development (Albemarle)
CED = Economic Development (Charlottesville)
CAPE = Communications and Public Engagement (Albemarle)
C = Communications (Charlottesville)
ECC = Charlottesville-UVA-Albemarle Emergency Communications Center
ADSS = Department of Social Services (Albemarle)
CHHS = Health and Human Services (Charlottesville)
VDH = Virginia Department of Health

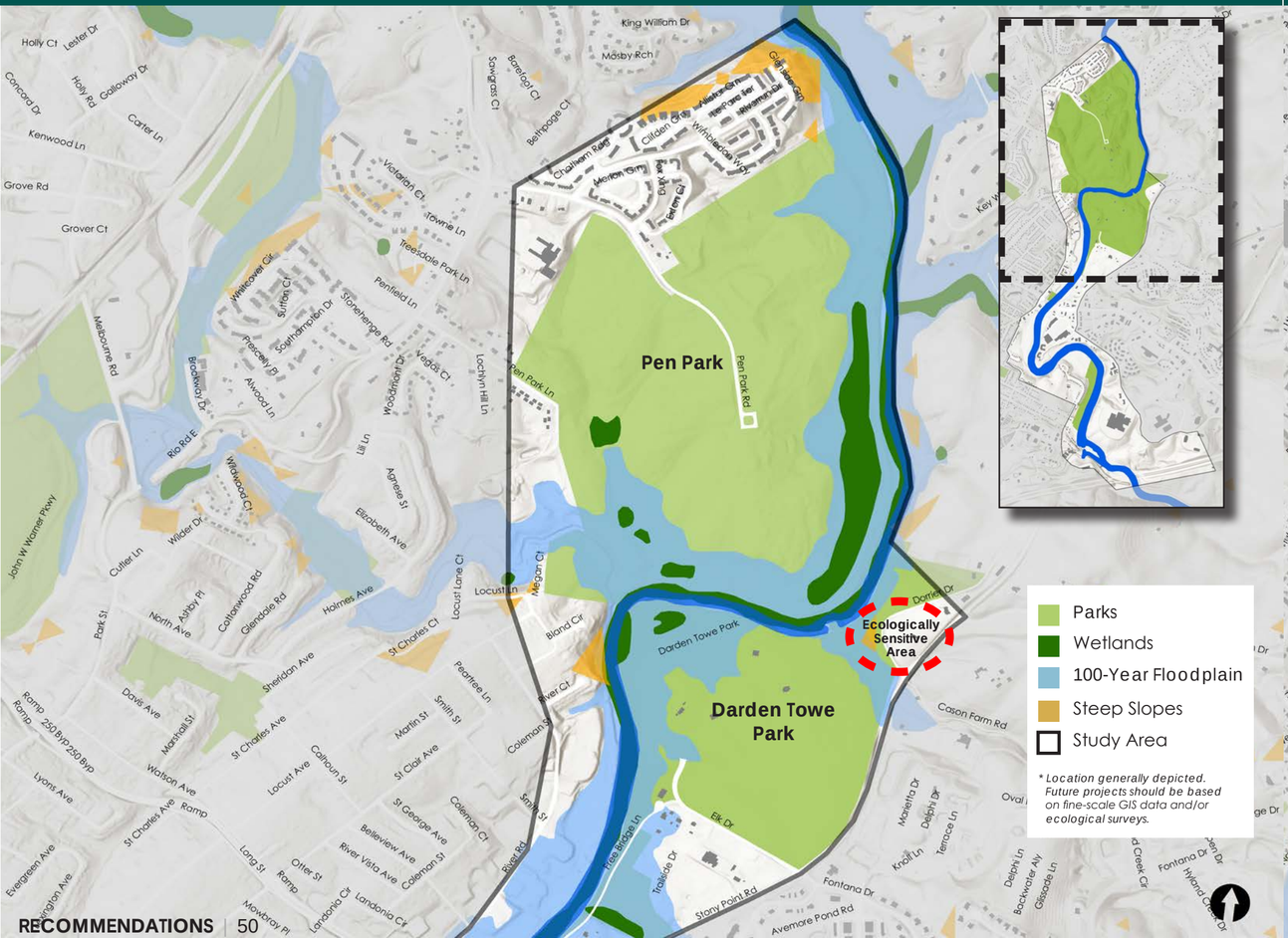
Timeframe

Ongoing
Short-term = 0-5 years
Long-term = 5+ years

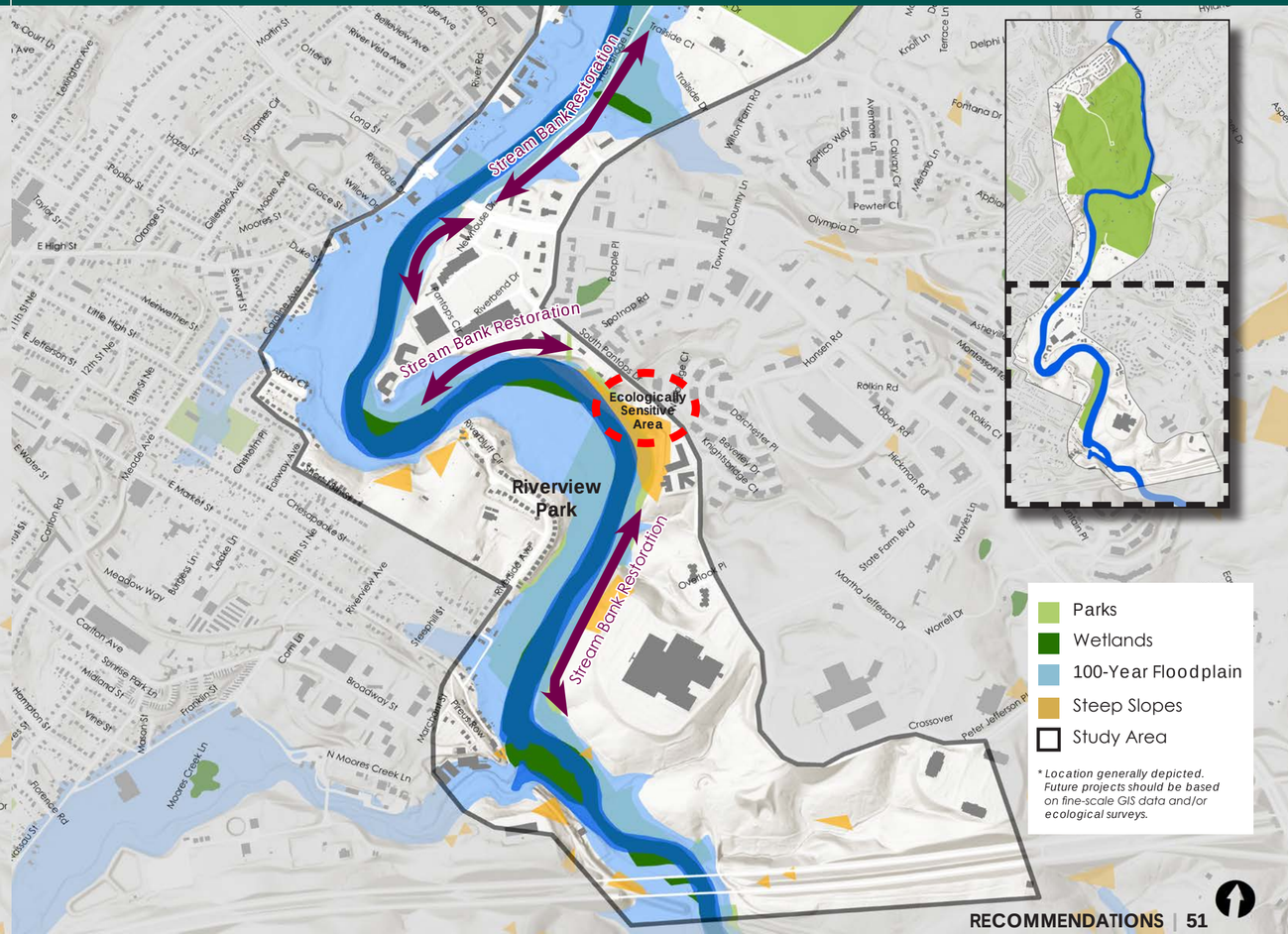
Fiscal Impact

0 = No fiscal impact beyond staff time/minimal direct costs
$ = Small fiscal impact, minimal capital expense
$$ = Moderate fiscal impact, capital expense
$$$ = Large fiscal impact, capital expense

	ENVIRONMENTAL PROTECTION	Category	Responsible Party	Timeframe	Fiscal Impact
1	Identify and protect the most sensitive biological and ecological areas by limiting access and installing signage and appropriate barriers where possible, avoiding impacts to wildlife movement.	Coordination, Outreach	FES, PW	Ongoing	$
2	Retain and steward natural habits and systems throughout the river corridor.	Policy	FES, PW	Ongoing	$
3	Identify and implement riparian restoration and mitigation projects, including removal of invasive plant species, incorporation of locally native plant communities, and the stabilization of eroding streambanks in a manner consistent with natural system function.	Capital	CPR, FES, PW	Ongoing	$$
4	Continue and initiate activities of the City and County to improve water quality in partnership with other organizations.	Operations	ACPR, CPR, FES, PW	Ongoing	0
5	Encourage the use of locally native plants for landscaping at parks and businesses.	Outreach, Operations	ACPR, CPR, FES, PW, AED, CED	Ongoing	0
6	Promote stewardship, awareness, appreciation, and education of the natural elements through interpretive and informational signage, educational tours, and river system-focused events on public property.	Programming	ACPR, CPR, FES, PW	Ongoing	$
7	Continue to deliver a compliant and effective stormwater management program that meets or exceeds minimum state regulations. Encourage on-site mitigation measures and forest/open space protection.	Policy	FES, PW	Ongoing	0
8	Protect and enhance forests within the river corridor with particular focus on the 100' stream buffer zone.	Policy	NDS, CDD, FES, PW	Ongoing	0
9	Consider opportunities to reduce mowing and create naturalized grasslands/meadows in existing open areas.	Operations	ACPR, CPR, FES, PW	Ongoing	0
10	Collaborate with other organizations to leverage resources for conservation and mitigation efforts and pursue funding.	Capital, Coordination, Outreach	FES, PW	Ongoing	0



ENVIRONMENTAL PROTECTION



Darden Towe Park, Riverview Park, and publicly accessible greenways enable free public access to the Rivanna River and waterfront trails. Opportunities exist to expand and enhance these parks and greenways and to develop additional parks and trails. Opportunities also exist to support and promote increased commercial recreation operations and services that enable the public to have safe, enjoyable river and trail experiences. To build on these opportunities in ways that are environmentally sensitive and sustainable, the following recommendations are made:

RECOMMENDATIONS

1. Improve multi-purpose trail connectivity between the corridor and nearby neighborhoods and commercial facilities to provide better recreational access with special consideration for issues of equity and increasing access to recreation destinations for underserved populations.
2. Improve and expand the trail system within the urban river corridor.
3. Improve and expand the park system within the urban river corridor.
4. Increase the number and type of public access points to the river and waterfront for better public use and enjoyment of the water, with special consideration for accessibility for people with limited mobility.
5. Monitor the need and identify opportunities to expand vehicular access for recreational users.
6. Ensure that the planning and development of parks and trails in and through the urban river corridor successfully support the operations of private recreation service providers and help to facilitate increased commercial, recreational use of the river and trails.
7. Pursue strategies that will minimize the accumulation of loose trash along the urban river corridor.
8. Develop and maintain a trail network that incorporates a variety of trail facilities and specifications to accommodate users of all ability levels. Designate more rustic trails as well as wider paved trails.
9. Promote recreational wildlife-watching.
10. Use vegetation as sound barriers to urban/traffic noise to protect the sounds of nature.
11. Promote awareness of the river corridor as a natural and cultural asset throughout the broader region through marketing, programming, and information sharing.

RECREATIONAL ACTIVITIES



Volunteers build new access point along the Rivanna: Image Courtesy of Gabe Silver



Kayakers at Rivanna River Company: Image courtesy of Daily Progress



Volunteer Rivanna River clean-up, fall 2020

RECREATIONAL ACTIVITIES		Category	Responsible Party	Timeframe	Fiscal Impact
1	**Improve multi-purpose trail connectivity between the corridor and nearby neighborhoods and commercial facilities to provide better recreational access with special consideration for issues of equity and increasing access to recreation destinations for underserved populations.**	**Capital**	**ACPR, CPR, CDD, NDS**	**Ongoing**	**$$$**
1.1	Support and advance bike/ped connections identified in the City's and County's Comprehensive plans.	Capital	ACPR, CPR, CDD, NDS	Ongoing	$$$
1.2	Continue to evaluate opportunities for new connections.	Coordination	ACPR, CPR	Ongoing	0
2	**Improve and expand the trail system within the urban river corridor.**	**Capital**	**ACPR, CPR**	**Ongoing**	**$$$**
2.1	Identify and implement needed improvements and other actions within the urban river corridor that are necessary in order to enable the planned extension of the Rivanna Greenway downstream to areas of interest such as Shadwell, the Milton Boat Launch, and the existing riverfront greenway trail in the Village of Rivanna Development Area.	Capital	ACPR	Long-term	$$$
2.2	Identify and improve certain sections of the Old Mills Trail that currently create challenges for access and use due to trail layout, design, and grade.	Capital	ACPR	Long-term	$$$
2.3	Continue efforts to develop a shared-use path along 250 to make a connection between Locust Grove and the urban river corridor.	Capital	CPR, NDS, PW	Long-term	$$$
2.4	Continue to partner with the Rivanna Trails Foundation, Charlottesville Albemarle Mountain Bike Club, and other local, state, and federal organizations and agencies to continue maintaining, improving, and expanding the trail network.	Capital, Programming	ACPR, CPR	Ongoing	$$
3	**Improve and expand the park system within the urban river corridor.**	**Capital**	**ACPR, CPR**	**Long-term**	**$$$**
3.1	Implement high-priority park related projects within the Pantops Master Plan, including the Free Bridge Lane Green Street Conversion project and Rivanna River Bike/Ped Crossing catalyst projects.	Capital	ACPR, CPR	Short-term	$$$
3.2	Continue to work with landowners on opportunities to expand the park system and trail within the urban river corridor.	Outreach, Capital	ACPR, CPR	Ongoing	$$
3.3	Establish additional recreational amenities at the public parks. Examples of potential amenities might include a climbing wall, small amphitheater, exercise stations, fishing access, rapids, space and/or facilities to support equipment rentals, as well as other activities.	Capital	ACPR, CPR	Long-term	$$$
3.4	Ensure that facilities and equipment are sufficiently secured to withstand flooding.	Operations	ACPR, CPR	Short-term	$$

4	**Increase the number and type of public access points to the river and waterfront for better public use and enjoyment of the water, with special consideration for accessibility for people with limited mobility.**	**Capital**	**ACPR, CPR**	**Long-term**	**$$$**
4.1	Plan, fund, and develop new water access facilities and amenities to support enhanced water recreation opportunities and experiences.	Capital	ACPR, CPR	Long-term	$$$
4.2	Develop and implement a recreation and resource management plan for the sediment island at the mouth of Moores Creek to enable safe public access to and sustainable recreational use of the island.	Policy	ACPR	Long-term	$$$
4.3	Strengthen existing partnerships and cultivate new partnerships with private property owners to develop new sites for riverfront access.	Outreach	ACPR, CPR	Ongoing	0
4.4	Improve access and wayfinding signage to support improved connectivity between existing or future transit stops and recreation facilities in the river corridor.	Coordination, Operations	PW, FES	Long-term	$
5	**Monitor the need and identify opportunities to expand vehicular access for recreational users.**	**Coordination**	**ACPR, CPR, CDD, NDS, PW**	**Ongoing**	**0**
5.1	Explore alternative access and parking strategies that could reduce demand for on-premise parking. Examples might include shuttle services to and from off-premise parking locations during high-traffic periods, green or flexible use parking areas, convenient access points for passenger drop-offs from ridesharing services, and others.	Coordination	ACPR, CPR, CDD, NDS, PW, FES	Short-term	0
5.2	Ensure that future enhancement and development of public parks consider and, if needed, incorporates vehicular access and parking	Capital	ACPR, CPR	Long-term	$$$
5.3	Identify potential sites for the development of new vehicular access and trailheads where existing needs have been identified.	Capital	ACPR, CPR	Long-term	$$$
5.4	Identify underused private facilities and create partnerships with private property owners to expand public parking options.	Coordination, Outreach	ACPR, CPR, AED, CED	Short-term	0
5.5	Assess the need for additional parking in proximity of potential pedestrian bridge location.	Coordination	CDD, NDS	Long-term	0
5.6	Consider the need for electric vehicle charging stations for any new parking facilities that may be planned.	Capital	PW, FES	Long-term	$$
6	**Ensure that the planning and development of parks and trails in and through the urban river corridor successfully support the operations of private recreation service providers and help to facilitate increased commercial, recreational use of the river and trails.**	**Coordination**	**ACPR, CPR, AED, CED**	**Ongoing**	**0**

6.1	Support operational and programmatic opportunities for “shuttling” services that reduce logistical challenges for river users and which create opportunities to combine water-based recreation and trails-based recreation in the same outing.	Operations	PR	Ongoing	0
6.2	Where appropriate, incorporate facilities that allow for multi-sport outdoor recreation activities and which support commercial recreation service providers. Examples include bicycle racks, storage lockers for gear and bicycles or watercraft, or other similar amenities and facilities.	Capital	PR	Long-term	$$
6.3	Review local policies regarding the use of the urban river corridor for special events or by mobile vendors.	Policy	CDD, NDS	Short-term	0
7	**Pursue strategies that will minimize the accumulation of loose trash along the urban river corridor.**	**Operations**	**PW, FES**	**Ongoing**	**0**
7.1	Encourage litter clean-up and other pollution reduction efforts for private and public landowners adjacent to and within the urban river corridor.	Outreach	AED, CED, CAPE, C	Ongoing	0
7.2	Evaluate and implement the most effective mitigation strategy for each section of the urban river corridor.	Operations	ACPR, CPR, PW, FES	Long-term	0
7.3	Continue to utilize volunteer clean-up crews and increase coordination with maintenance staff to schedule removal and disposal of waste.	Programming	ACPR, CPR, PW, FES	Ongoing	0
8	**Develop and maintain a trail network that incorporates a variety of trail facilities and specifications to accommodate users of all ability levels. Designate more rustic trails as well as wider paved trails.**	**Capital**	**ACPR, CPR**	**Long-term**	**$$$**
8.1	Provide user information on the types of trails and accessibility through signage and online information sharing.	Outreach	ACPR, CPR	Short-term	$$
8.2	Designate sections where regular seating is provided and communicate accessibility for people with limited mobility through signage and online information sharing.	Capital, Outreach	ACPR, CPR	Long-term	$$
9	**Promote recreational wildlife-watching.**	**Programming**	**ACPR, CPR**	**Ongoing**	**0**
10	**Use vegetation as sound barriers to urban/traffic noise to protect the sounds of nature.**	**Operations**	**ACPR, CPR, PW, FES**	**Long-term**	**$$$**
11	**Promote awareness of the river corridor as a natural and cultural asset throughout the broader region through marketing, programming, and information sharing.**	**Programming**	**ACPR, CPR, CAPE, C**	**Long-term**	**0**
12	**Develop a comprehensive map of recreational activities throughout the corridor to include trails, bloat launches, float routes, swimming areas, and other recreational activities to assist with trip planning and corridor navigation.**	**Coordination**	**ACPR, CPR**	**Short-term**	**0**

At present, there is one bridge across the Rivanna River in the Pantops area that provides for vehicular traffic and pedestrians. While a secondary bridge for vehicular traffic would be beneficial for drivers to, from, and through Charlottesville, it is not proposed with this plan. Instead, to increase non-vehicular connections along and across the river corridor and to improve recreational and commuting connectivity between the City and the County, the following additional opportunities for pedestrian and bicycle travel are recommended:

RECOMMENDATIONS

1. Continue to support new bicycle/pedestrian bridge connections between Woolen Mills and Pantops, Pen Park and Darden Towe Park, and at Free Bridge with consideration for visual impacts, parking impacts, and maintaining the Scenic River designation.

2. Promote use of trails and bridges for commuting traffic.

3. Develop a robust wayfinding system (signs, GIS-based) to direct users throughout the trail system, access points of interest, and provide better accessibility for users with disabilities and first responders.

4. Provide seating areas at regular intervals along trails throughout the corridor to allow users with more limited mobility to comfortably use and enjoy the facilities.

5. Diversify the surfaces of trails to accommodate varying preferences and physical needs for trail users.

6. Consider potential conflicts between users of different modes along trails and, to the extent possible, develop an integrated system that allows some redundancy if the space will not accommodate users of different modes.

7. Promote regional efforts to incorporate this section of the trail into a larger network of greenways/blueways.

8. Support the designation of portions of the Rivanna River Corridor trail system for incorporation into the proposed regional Three Notch'd Trail.

9. Consider opportunities to expand community-wide access to the Rivanna River Corridor through a variety of modes.

10. Consider strategies to improve the safety and comfort of pedestrian and bicycle infrastructure along existing roads that provide access to the river corridor.

MULTI-PURPOSE TRAILS & BRIDGES



Bridge along Rivanna Trail

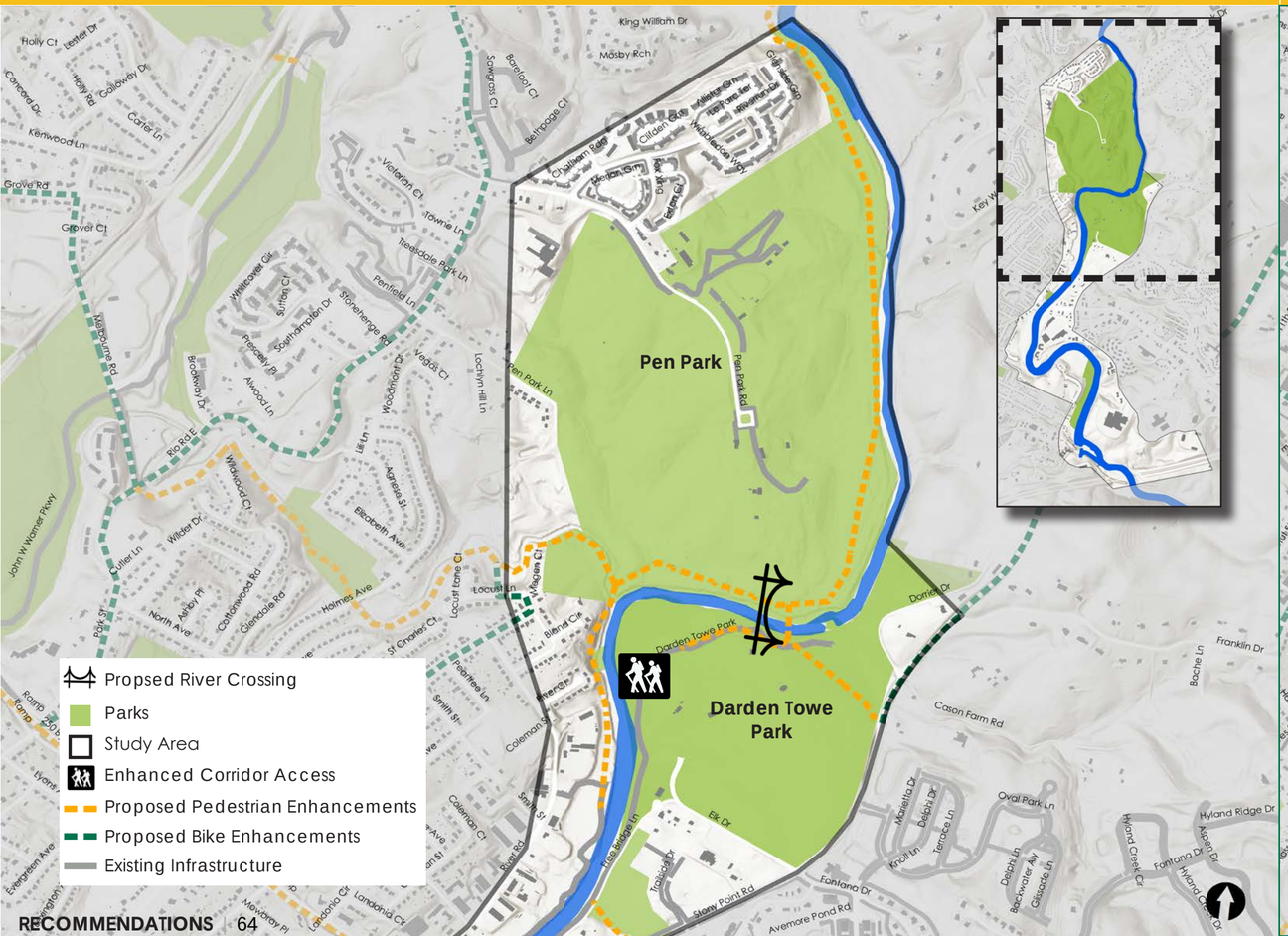


Potential Rivanna River Crossing-VDOT

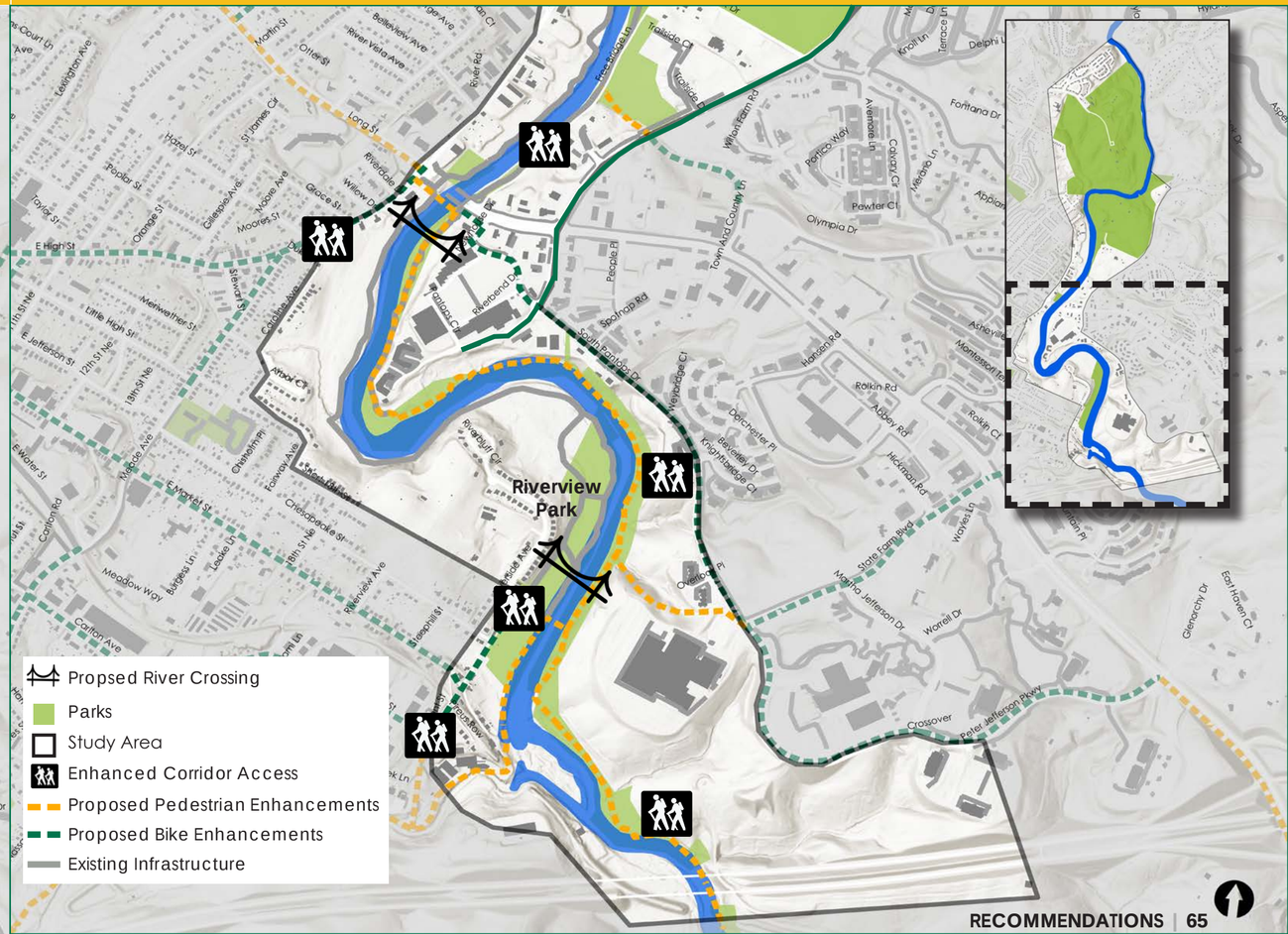


Example of seating along trail

MULTI-PURPOSE TRAILS AND BRIDGES		Category	Responsible Party	Timeframe	Fiscal Impact
1	Continue to support new bicycle/pedestrian bridge connections between Woolen Mills and Pantops, Pen Park and Darden Towe Park, and at Free Bridge with consideration for visual impacts, parking impacts, and maintaining the Scenic River designation.	Capital	CDD, NDS, PW	Long-term	$$$
2	Promote use of trails and bridges for commuting traffic.	Outreach	CDD, NDS, CAPE, C	Ongoing	0
3	Develop a robust wayfinding system (signs, GIS-based) to direct users throughout the trail system, access points of interest, and provide better accessibility for users with disabilities and first responders.	Coordination	ACPR, CPR	Long-term	$
4	Provide seating areas at regular intervals along trails throughout the corridor to allow users with more limited mobility to comfortably use and enjoy the facilities.	Capital	ACPR, CPR	Long-term	$$
5	Diversify the surfaces of trails to accommodate varying preferences and physical needs for trail users.	Capital	ACPR, CPR	Long-term	$$$
6	Consider potential conflicts between users of different modes along trails and, to the extent possible, develop an integrated system that allows some redundancy if the space will not accommodate users of different modes.	Capital	ACPR, CPR	Long-term	$$$
7	Promote regional efforts to incorporate this section of the trail into a larger network of greenways/blueways.	Policy	ACPR, CPR	Long-term	0
8	Support the designation of portions of the Rivanna River Corridor trail system for incorporation into the proposed regional Three Notch'd Trail.	Policy	ACPR, CPR, CDD, NDS	Long-term	0
9	Consider opportunities to expand community-wide access to the Rivanna River Corridor through a variety of modes.	Capital, Operations	ACPR, CPR, CDD, NDS	Long-term	$$$
10	Consider strategies to improve the safety and comfort of pedestrian and bicycle infrastructure along existing roads that provide access to the river corridor.	Capital	ACPR, CPR, CDD, NDS, PW	Ongoing	$$$



RECREATIONAL ACTIVITIES & MULTI-PURPOSE TRAILS & BRIDGES



Recreational use of the river, as well as access to trails and natural areas, is important to residents of and visitors to the City and County. A successful trail network and recreational river experience requires trust in public safety and empowerment of users to be able to respond appropriately to situations that involve elements of risk or hazard. Pedestrians, users of the river itself, and bicyclists should not experience fear when they are in the corridor. Emergency responders need to know where to find users of the river and trails in case of emergency. To help alleviate those concerns the following recommendations are made:

RECOMMENDATIONS

1. Improve coordination between Department of Health and Human Services, Health Department, private property owners, and elected officials to provide assistance to unsheltered persons and find alternatives to the homeless camps near the Rivanna River in Pantops

2. Identify locations where additional safety measures are needed.

3. Inform and equip river corridor users to respond appropriately to a broad range of potential emergency situations.

4. Promote safe and healthy behavior for river corridor users

5. Explore the feasibility of sharing GPS location information from personal cell phones with emergency response personnel to assist in locating individuals in need of emergency response.

6. Develop programming that will increase the visibility of public health, safety and wellness personnel within the river corridor

PUBLIC HEALTH, SAFETY, & WELLNESS MEASURES



Example of trail lighting: Image courtesy of signify.com



Example of 911 location sign: Image courtesy of trwd.com



Example of emergency call box

PUBLIC HEALTH, SAFETY, & WEL+A95:G116SURES		Category	Responsible Party	Timeframe	Fiscal Impact
1	**Identify locations where additional safety measures are needed.**	**Coordination**	**ACPR, CPR, APS, CPS**	**Short-term**	**0**
1.1	Place physical location markers along the trail system to be able to communicate location in case of emergency.	Capital	ACPR, CPR	Long-term	$
1.2	Clearly identify access points for emergency response to trail system users.	Capital	ACPR, CPR	Long-term	$
1.3	Assess the feasibility of installing emergency call boxes in key locations.	Capital	ACPR, CPR, FES, PW	Long-term	$$$
1.4	Install low-level lighting compliant with dark sky principles along portions of the trail.	Capital	ACPR, CPR, FES, PW	Long-term	$$$
2	**Inform and equip river corridor users to respond appropriately to a broad range of potential emergency situations.**	**Programming**	**ACPR, CPR, APS, CPS**	**Ongoing**	**0**
2.1	Providing emergency contact information at each trailhead/parking area (including contact information in case of sanitary sewer overflows).	Outreach	ACPR, CPR	Short-term	$
2.2	Using QR codes along trails to continue to provide access to information along the trails – could be incorporated with location marker signs.	Outreach	ACPR, CPR	Long-term	$
2.3	Providing contact information for users to share information if they see something that is not permitted along trail (examples - fires, drinking/drugs, homelessness, loose dogs, shooting, etc.)	Outreach, Operations	ACPR, CPR	Short-term	$$
2.4	Developing educational materials on how to respond to a variety of emergency situations that could occur along the trail and conduct outreach to raise awareness of the availability of the information.	Outreach	APS, CPS	Long-term	$
3	**Promote safe and healthy behavior for river corridor users.**	**Outreach**	**APS, CPS, CAPE, C**	**Ongoing**	**0**
3.1	Partner with other agencies and organizations to post health advisories at locations where fishing and swimming are popular.	Coordination	ACPR, CPR, VDH	Ongoing	0
3.2	Promote best practices for safe use of the river.	Outreach	ACPR, CPR	Ongoing	0
3.3	Install and maintain rope railings and simple steps for steep banks.	Capital	ACPR, CPR, FES, PW	Short-term	$
4	**Explore the feasibility of sharing GPS location information from personal cell phones with emergency response personnel to assist in locating individuals in need of emergency response.**	**Coordination**	**CDD, NDS, ECC, IT**	**Long-term**	**$$**
4.1	Ensure that public safety responders have updated GIS layers regarding trail system, including locations of landmarks.	Coordination	CDD, NDS, ECC, IT	Ongoing	$

5	**Develop programming that will increase the visibility of public health, safety and wellness personnel within the river corridor.**	**Programming**	**ACPR, CPR, Public Safety, Police**	**Ongoing**	**0**
5.1	Develop an ambassador program for corridor users to interact and develop relationships with public safety and law enforcement personnel on the trail systems.	Programming	ACPR, CPR, Public Safety, Police	Ongoing	0
5.2	Collaborate with Health and Human Services Department personnel to increase awareness of human service needs and response to the homeless populations occupying the areas in and near the corridor.	Coordination	ACPR, CPR, ADSS, CHHS	Ongoing	0
6	**Improve coordination between Department of Health and Human Services, Health Department, private property owners, and elected officials to provide assistance to unsheltered persons and find alternatives to the homeless camps near the Rivanna River in Pantops.**	**Coordination**	**ACPR, CPR, ADSS, CHHS, CAPE, C**	**Ongoing**	**0**
6.1	Educate trail users about how to support individuals experiencing homelessness and how to contact appropriate agencies with concerns.	Outreach	ACPR, CPR, ADSS, CHHS, CAPE, C	Ongoing	0
6.2	Conduct public awareness campaigns to destigmatize the affiliation of homelessness with criminal activity.	Outreach, Programming	ACPR, CPR, ADSS, CHHS, CAPE, C	Ongoing	0
6.3	Develop strategies to mitigate public health impacts that result from the use of the area by unsheltered persons.	Policy	ACPR, CPR, FES, PW	Ongoing	0
7	**Explore opportunities to provide public access to drinking water throughout the corridor.**	**Capital**	**ACPR, CPR, FES, PW**	**Long-term**	**$$$**

New land development and redevelopment of residential and non-residential properties is expected in the river corridor, subject to applicable floodplain restrictions. Expected land uses, including mixed-use areas, are shown on the City and County's respective Future Land Use plans. In places, an urban appearance is expected, and buildings may be multi-storied as already presented in localities' planning documents. In other places, a lower scale, lower impact look and feel will be important. In all cases, development and redevelopment should be planned and designed in context-sensitive ways that respect the Rivanna River's status as a Scenic River – the first river in Virginia to achieve this official designation. In addition, several properties along the river contain businesses that support the economic vitality of the community. Some of these businesses can draw in or help support patrons of the river and trails. Others may provide economic support to the community as a whole. Improving the aesthetics of trailside and riverfront properties can enhance the users' experience. The following recommendations are made:

RECOMMENDATIONS

1. Protect and enhance the natural beauty and ecological functions of the urban river corridor by maximizing the environmental sustainability and context sensitivity of new development, redevelopment, infrastructure, and other improvements.

2. Promote high-quality design and positive visual impact in all new development and redevelopment projects that are visible from within the corridor.

3. Promote development of small service-oriented businesses in previous identified development area, such as restaurants and outdoor recreation-focused businesses, that support visual and/or physical access to and use of the river and trails.

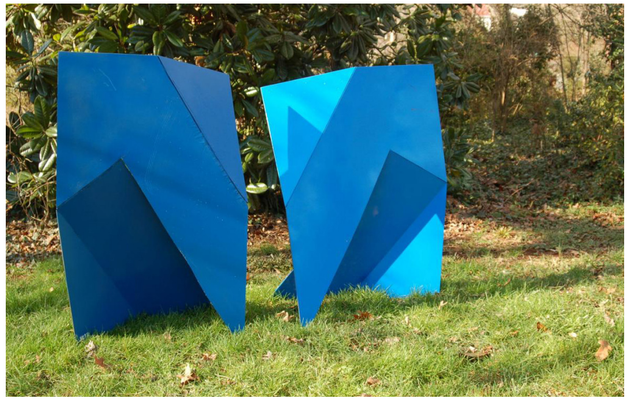
4. Collaborate with private developments and businesses to develop and market businesses along the trail system along both sides of the river and enhance connections across the river.

5. Explore the use of industrial art to beautify existing commercial and industrial sites and add visual interest.

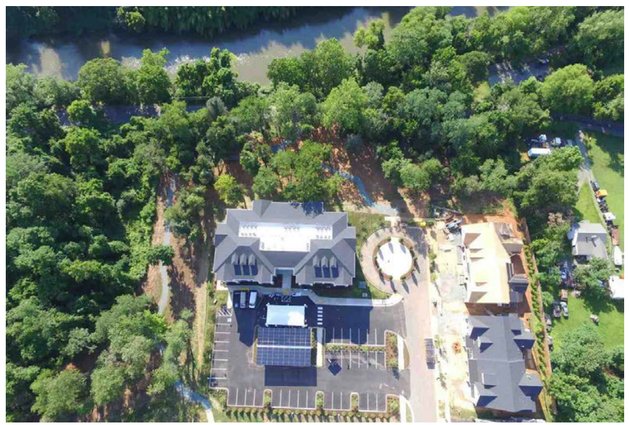
6. Encourage new and existing businesses to utilize landscaping, using locally native plants to the extent possible, to tie visible establishments into the surroundings of the river corridor.

7. Collaborate with private property and business owners to connect the trail system to economic development sites and promote use of the trail system among employees and patrons.

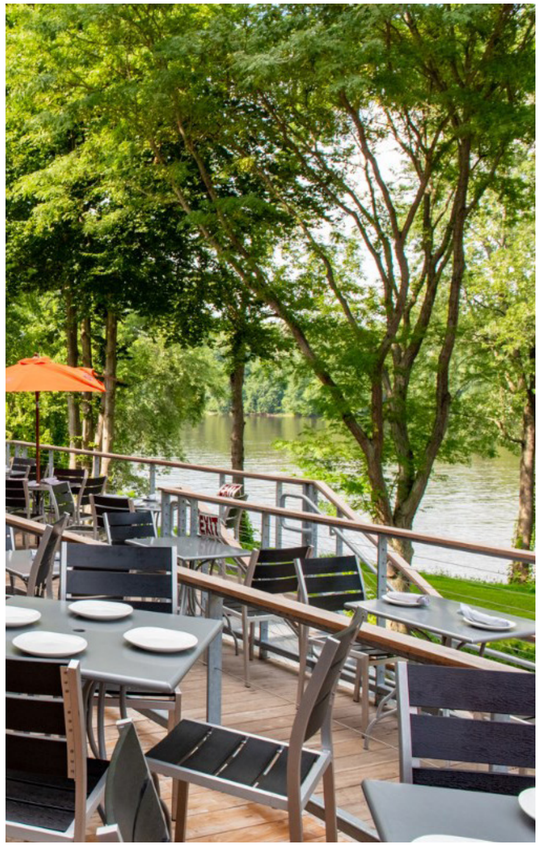
DEVELOPMENT & REDEVELOPMENT



Flow River Fest art instalation- fall 2017: Image courtesy of Daily Progress



Riverside Village along Rivanna River: Image courtesy of realestate-plus.com



Example of orienting towards river: Image courtesy of ctvisit.com

DEVELOPMENT & REDEVELOPMENT		Category	Responsible Party	Timeframe	Fiscal Impact
1	**Protect and enhance the natural beauty and ecological functions of the urban river corridor by maximizing the environmental sustainability and context sensitivity of new development, redevelopment, infrastructure, and other improvements.**	**Policy**	**CDD, NDS, FES, PW**	**Long-term**	**0**
1.1	Encourage new structures and land uses to be carefully sited and appropriately scaled in order to balance visual and physical access to the river corridor with the equally important goal of preventing out-of-scale visual impacts to the Scenic River.	Policy	CDD, NDS, AED, CED	Ongoing	0
1.2	Encourage new structures and land uses to be fully or partially oriented towards the river.	Policy	CDD, NDS, AED, CED	Ongoing	0
1.3	Encourage development and redevelopment projects to incorporate high-quality connections with the river corridor, which are partially or fully accessible to the public through public sites.	Policy	CDD, NDS, AED, CED	Ongoing	0
2	**Promote high-quality design and positive visual impact in all new development and redevelopment projects that are visible from within the river corridor.**	**Policy**	**CDD, NDS**	**Ongoing**	**0**
2.1	Evaluate the impacts of new development and redevelopment on the viewshed from the perspective of river corridor users on the water when reviewing applications for new developments and redevelopments. Establish a consistent design review process (specifically to evaluate potential visual impacts relating to the Scenic River designation) that includes review and recommendations from subject matter experts on staff and/or by appointed officials.	Policy	CDD, NDS	Short-term	0
2.2	Assess the feasibility of establishing a minimum grade of construction standards for new developments and redevelopment to enhance the aesthetic impact of commercial and residential sites visible from within the river corridor (i.e., building material types, color palettes, landscaping, etc.).	Policy	CDD, NDS	Long-term	0
2.3	Conduct further study/review on ways to manage or influence the appearance of buildings within the urban river corridor.	Policy	CDD, NDS	Long-term	0
2.4	Explore the potential opportunity for the locality's Architectural Review Boards as a resource to review proposed development design impacts.	Policy	CDD, NDS	Short-term	0
3	**Promote development of small service-oriented businesses in previous identified development area, such as restaurants and outdoor recreation-focused businesses, that support visual and/or physical access to and use of the river and trails.**	**Policy**	**CDD, NDS, AED, CED**	**Ongoing**	**0**
4	**Collaborate with private developments and businesses to develop and market businesses along the trail system along both sides of the river and enhance connections across the river.**	**Coordination**	**CDD, NDS, AED, CED, ACPR, CPR**	**Short-term**	**0**
5	**Explore the use of industrial art to beautify existing commercial and industrial sites and add visual interest.**	**Coordination, Capital**	**ACPR, CPR**	**Long-term**	**$$**

6	Encourage new and existing businesses to utilize landscaping, using locally native plants to the extent possible, to tie visible establishments into the surroundings of the river corridor.	Coordination	AED, CED, FES, PW	Ongoing	0
7	Collaborate with private property and business owners to connect the trail system to economic development sites and promote use of the trail system among employees and patrons.	Coordination, Capital	AED, CED, ACPR, CPR	Long-term	$$
8	Encourage consolidation, or shared use, of stormwater management facilities supporting adjacent development when possible to minimize visual impacts and physical intrusions into the corridor.	Coordination, Capital	FES, PW	Ongoing	$$
9	Affordable housing is encouraged to be located with close proximity to the river corridor supported by robust transportation system access in conformance with locally adopted land use plans.	Policy	CDD, NDS	Ongoing	

The river corridor contains several historic and culturally significant characteristics and features that are important to the community's shared identity and history. These valuable resources reflect the stories and perspectives of those that depended upon the river corridor dating back to pre-colonial periods. To preserve and enhance access to these features, the following recommendations are made:

RECOMMENDATIONS

1. Create a comprehensive inventory of historic and cultural resources throughout the river corridor to be used for planning purposes.
2. Identify and protect resources that are sensitive and, if necessary, limit public access to those resources.
3. Identify and promote resources that can be accessed by the public.
4. Promote the Lewis and Clark Center as an asset to support awareness and understanding of the river corridor's importance.
5. Develop and conduct educational tours of the Rivanna Trail system; partner with schools and local non-profits to develop inclusive programming and create self-conducted tour modules.
6. Hold historical/culturally-focused events.
7. Partner with Monticello and other local history/cultural resource centers to develop programming and events.
8. Support initiatives of the Monican Indian Nation to improve awareness of their history and current status throughout the region, especially in relationship to the river corridor.
9. Designate and promote the trail as a historic asset. Promote regional efforts to incorporate this section of the trail into a larger network.

HISTORIC PLACES & CULTURAL FEATURES



Lewis & Clark Exploratory Center: Image courtesy of 2rw.com



Participants at the Flow River Arts Fest: Image courtesy of cvilletomorrow.org



Example of informational signage

HISTORIC PLACES AND CULTURAL FEATURES		Category	Responsible Party	Timeframe	Fiscal Impact
1	**Create a comprehensive inventory of historic and cultural resources throughout the river corridor to be used for planning purposes.**	**Policy**	**CDD, NDS**	**Short-term**	**0**
2	**Identify and protect resources that are sensitive and, if necessary, limit public access to those resources.**	**Policy**	**CDD, NDS**	**Long-term**	**$$**
3	**Identify and promote resources that can be accessed by the public.**	**Policy, Outreach**	**CDD, NDS, CAPE, C**	**Ongoing**	**0**
3.1	Consider the full variety of river corridor users and provide opportunities for engagement with historic and cultural resources from a variety of modes.	Coordination	CDD, NDS, ACPR, CPR	Ongoing	0
3.2	Interpret historic and cultural resources using signage or other mediums. Promote high-quality design and positive visual impact in all new development and redevelopment projects that are visible from within the river corridor.	Outreach	CDD, NDS, ACPR, CPR, CAPE, C	Long-term	$
3.3	Develop narratives and use signs to tell interwoven stories of the history and culture of the river that build a deeper understanding of the significant role the river corridor has played throughout its history.	Outreach	CDD, NDS, ACPR, CPR, CAPE, C	Long-term	$$
3.4	Create places of interest that build upon these features for users of the trails.	Capital	CDD, NDS	Long-term	$$$
3.5	Incorporate a wide range of historic and cultural interests, including history of the Monacan Tribe, enslaved persons, settlers, etc., as well as a wide variety of historic topics – plantation economies and labor, local history of energy, dams, and locks, historic use of riverbanks (fishing, shellfish gathering), food culture and history, etc.	Outreach	ACPR, CPR, CAPE, C	Long-term	0
3.6	Create unstaffed information centers at trailheads sharing local history and significance of the river.	Outreach, Capital	ACPR, CPR, CAPE, C	Long-term	$$
3.7	Create a map that shows historic and cultural sites along the trail system and make that available to the public in a variety of ways. These could include topics such as a chronological map that shows history of development of the corridor, the history of navigation on and along the river, etc.	Outreach	CDD, NDS	Long-term	0
3.8	For historic or cultural features that are not easily publicly accessible, explore ways to increase access.	Coordination	ACPR, CPR, CDD, NDS	Long-term	0
4	**Promote the Lewis and Clark Center as an asset to support awareness and understanding of the river corridor's importance.**	**Coordination**	**ACPR, CPR, CAPE, C**	**Ongoing**	**0**

5	**Develop and conduct educational tours of the Rivanna Trail system; partner with schools and local non-profits to develop inclusive programming and create self-conducted tour modules.**	**Programming**	**ACPR, CPR, CAPE, C**	**Ongoing**	**$**
6	**Hold historical/culturally-focused events.**	**Programming**	**ACPR, CPR**	**Ongoing**	**$**
6.1	Market events broadly to improve awareness and engagement throughout the region.	Coordination	ACPR, CPR, CAPE, C	Ongoing	$
7	**Partner with Monticello and other local history/cultural resource centers to develop programming and events.**	**Coordination**	**ACPR, CPR**	**Ongoing**	**$**
8	**Support initiatives of the Monican Indian Nation to improve awareness of their history and current status throughout the region, especially in relationship to the river corridor.**	**Programming, Coordination**	**ACPR, CPR, CAPE, C**	**Ongoing**	**$**
9	**Designate and promote the trail as a historic asset. Promote regional efforts to incorporate this section of the trail into a larger network.**	**Programming, Policy**	**ACPR, CPR, CDD, NDS**	**Long-term**	**0**



7 | Next Steps

NEXT STEPS

Recommendations that have been developed during this planning process fall into different categories:

- Ongoing initiatives that will continue;
- Recommendations that have already been identified in other planning processes as priorities;
- Recommendations that could support future grant or funding applications;
- Recommendations that would support the gathering of additional information to be used for more detailed planning processes; and
- Specific recommendations that could be implemented once prioritized and/or funded.

This section identifies the short-term opportunities to begin implementing the identified recommendations.

PLANNING PRIORITIES

When this project was initially conceived, there was a general expectation that following the development of this Urban Rivanna River Corridor Plan, a Master Plan would be developed to identify specific improvements needed to implement the recommendations. While dedicated funding for a Master Plan is not secured, there are a number of individual activities that can provide better guidance to implement the identified recommendations and also be incorporated into the development of a future Master Plan.

1. Create a comprehensive inventory of the most sensitive biological and ecological areas building off of previous efforts such as the Albemarle County Biodiversity Action Plan which has identified two important ecological areas on the east side of the Rivanna River within this corridor and has more generally identified the Rivanna River Corridor as one of three Conservation Focus Areas.

2. Create a comprehensive inventory of historic and cultural resources throughout the river corridor to be used for planning purposes.

3. Conduct a viewshed analysis both from the perspectives of being on the river and overlooking the river to assess appropriate location and scale of development that will not negatively impact the natural "feel" of being along the river and to identify locations overlooking the river where there are unimpeded views to the river that should be protected.

4. Conduct an architectural analysis/design charrette to identify preferred design standards for development within the urban Rivanna River corridor.

These planning efforts would provide valuable information by themselves, but could also be combined together and with additional data, such as trail networks, to better integrate individual initiatives and create a comprehensive corridor that integrates multiple goals.

GRANT APPLICATION PRIORITIES

Albemarle and Charlottesville, as well as other local and regional stakeholders, should continue to identify and apply for grants to implement recommendations identified as part of this planning process.

1. SMART SCALE, Revenue Sharing, Transportation Alternatives Program, and Recreational Trails Program: Apply for project funding for transportation priorities within the urban Rivanna River Corridor.

2. Environmental Conservation and Mitigation Grants: Pursue funding opportunities in collaboration with local partners such as the Rivanna Conservation Alliance to obtain funding for prioritized environmental mitigation and conservation projects.

3. Flood Prevention: Pursue funding opportunities to plan and implement flood mitigation strategies throughout the river corridor.

4. Historic Preservation: Pursue funding opportunities to protect and preserve identified important cultural and historic assets and sites throughout the urban Rivanna River corridor.

PROJECT PRIORITIES

A number of potential projects were identified that could be implemented once departmental funding is available. This list of priority projects was identified based on their ability to meet an immediate need as well as the ability to be implemented based on short-term resources.

1. Ensure that existing facilities and equipment are sufficiently secured to withstand flooding.

2. Review local zoning ordinances to identify barriers and/or opportunities to support recommendations.

3. Provide user information on the types of trails and accessibility through signage and online information sharing.

4. Identify locations where additional safety measures are needed and implement strategies to mitigate existing risks.

5. Provide emergency contact information at each trailhead/parking area.

6. Install and maintain rope railings and simple steps for steep banks.



Image Courtesy of USGS.gov

NEXT DELIVERABLES

The final phase of this project as originally envisioned is to develop a Master Plan that will consider the priority locations for preservation, capital investments, private investment, and river restoration identified in Phase II and develop specific strategies for implementation. The Master Plan will include detailed Scopes of Work, based on the Unified Vision and Guiding Principles, design and engineering cost estimates, and recommended project phasing to most effectively achieve the desired outcomes.

For Phase III to move forward, both Albemarle County and the City of Charlottesville will need to allocate funding to support the development of this plan. The two localities will need to work collaboratively, potentially with continued involvement from the TJPDC, to develop a Scope of Work, prepare and disseminate an RFP, and identify a consulting firm that will be able to translate the higher level vision and existing recommendations into capital projects with continued public engagement. As part of the development of the Master Plan, both localities will need to continue to commit financial support to implementing the identified capital improvements. The process of developing the Master Plan should identify projects that would be eligible for grant funding to support implementation, as well as additional local resources that would be needed to realize the highest priority projects.