

## **ACKNOWLEDGEMENTS**

We must start this document by acknowledging the River. The Chattahoochee River is a captivating place that holds deep meaning and provide valuable resources to the Metro Atlanta Region. For millennia, the River shaped the landscape and woven together distinct cultures and ecosystems. It has bound them together through a continuous physical fabric of River and land that today spans hundreds of miles and three states. This powerful landscape of the Chattahoochee River impresses a sense of awe and reverence that has persisted through generations.

To those who came before and fought to protect this critical cultural and ecological resource, we thank you and hope to pay homage to your rich legacy of conservation. We praise the tenacity of early community stewardship groups, such as the Friends of the River who in the early 1970s inspired a generation of advocacy and activism. Their courage and legacy lives on today in the work of Chattahoochee Riverkeeper and many others. We have been fortunate to observe this legacy firsthand over the last twenty months. As we look toward the future, we hope the Chattahoochee RiverLands furthers the cause many of you spent decades championing.

The Chattahoochee RiverLands establishes an aspirational vision for the Region developed in collaboration with today's diverse group of stewards, made up of birders, paddlers, anglers, bicyclists, volunteers, citizens, and governments. We cannot thank these passionate stakeholders and community members enough. To all the individuals that donated personal time throughout the course of this past year and a half, we applaud you. Your devotion never wavered. Your passion and commitment have guided and inspired us. It is only through dedication and a shared vision that we can realize the Chattahoochee RiverLands. There is still much work to be done.

The Chattahoochee RiverLands Greenway Study was managed by a joint Project Management Team (PMT) consisting of the **Atlanta Regional Commission** (ARC), the **Trust for Public Land, Cobb County**, and the **City of Atlanta**. The project was designed in collaboration with the Chattahoochee Working Group (CWG), a collection of stakeholders, residents, and political officials working within the study area.

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**DOCUMENT SUBMITTED ON APRIL 2020** 









LEARN MORE ABOUT THE PROJECT AT:

WWW.CHATTAHOOCHEERIVERLANDS.COM

# **TABLE OF CONTENTS**

RIVERLANDS AT A GLANCE	7
The Chattahoochee River	8
The Chattahoochee RiverLands	
Study Timeline	12
Goal: A Safe, Connective Corridor	14
Goal: A Common Ground for All	16
Goal: An Ecological Refuge for the Region	
Goal: A Living Legacy for Future Generations	
Public and Stakeholder Engagement	22
STUDY OVERVIEW	25
Study Overview	
Project Management Team	
Design Team	
Engagement Strategy	
Engaging Online	
Considerations and Limitations	36
THE RIVER OVER TIME	39
The River Over Time	
A Closer Look at the Chattahoochee River National Recreation Area	
Understanding the RiverLands During the Driving Tour	
Historical and Cultural Resources	
A Closer Look at McIntosh Reserve	
A Cosmopolitan Ecosystem	
A Closer Look at Proctor Creek	
A River For All A Closer Look at Moore's Bridge Park	
A closer Look at Moore's Bridge Park	
Defining the Identity of the RiverLands with the Sub-Area Committees	
The RiverLands Identity	
A Closer Look at the Chattahoochee River National Water Trail	
PROJECT GOALS & DESIGN STRATEGIES	71
The RiverLands	72
Refining the Project Goals at the Public Forums	
Goal: A Safe, Connective Corridor	76
Designing For All at the River Ramble	80
Goal: A Common Ground for All	
Exploring the Proctor Creek Greenway	
Goal: An Ecological Refuge for the Region	
Discovering the Chattahoochee at a River Ramble	
Goal: A Living Legacy for Future Generations	
Identifying Policy Recommendations During the In Studio Hours	98
ALIGNING THE RIVERLANDS	101
The Process of Reaching a Preferred Alignment	
The Tools	
Alignment Alternatives	
Defining the Preferred Alignment with the Sub-Area Committees	
Taking the Alignment Alternatives to the Public Forum	
Demonstration Sites, Selection Process	112 11 <i>4</i>
selection the Demonstration sites with the Charlahoochee Working Group	114

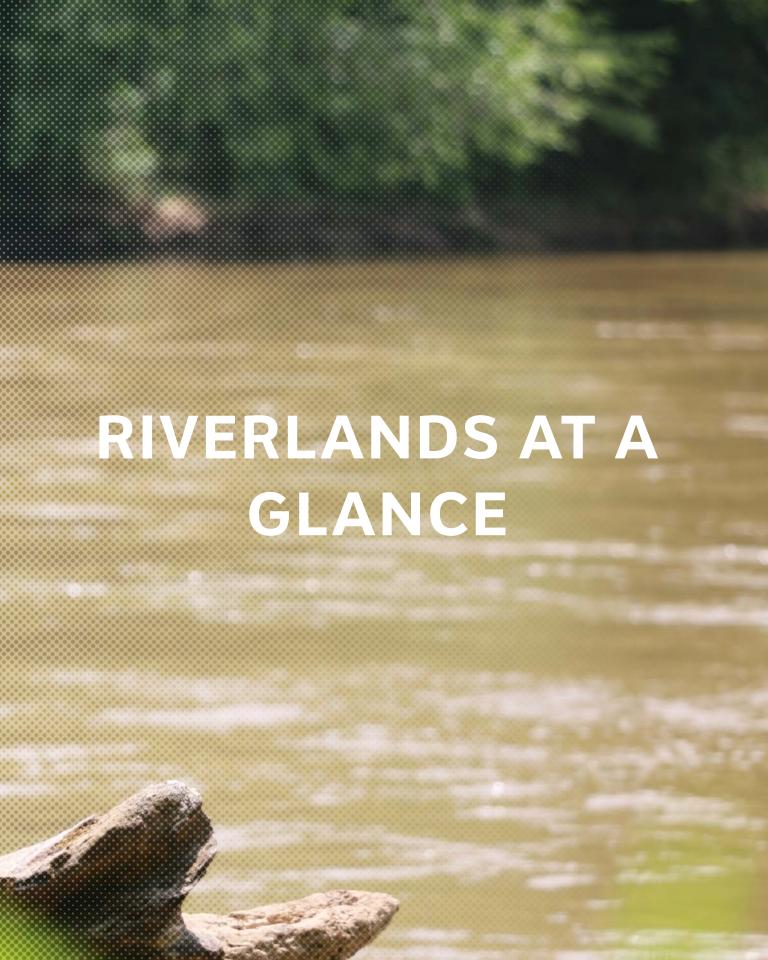


ALONG THE RIVERLANDS	117
The Preferred Alignment	118
Nomenclature	120
Implementing the RiverLands	122
Along the RiverLands	124
Buford Dam to Settles Bridge	126
Sugar Hill Trailhead	
A Closer Look at the Bowmans Island Fish Weir	130
A Closer Look at Crayfish Creek	
Settles Bridge to State Bridge	
State Bridge to Garrard Landing	
Garrard Landing to Island Ford	
Island Ford to Morgan Falls	
Morgan Falls to Cochran Shoals	
Cochran Shoals to Whittier Mill	
Whittier Mill to Sweetwater Creek	
Proctor Creek Trail Extension	
A Closer Look at the Chattahoochee Brick Company	
Sweetwater Creek to Old Campbellton	
Old Campbellton to Capps Ferry	
Capps Ferry to Moore's Bridge	
Chattahoochee Hills RiverLands Park	
Exploring 53 Miles with Chattahoochee Now	
Moore's Bridge to Chattahoochee Bend State Park	
The RiverLands in Numbers	
Accessing the RiverLands	
Accessing the River	180
THE RIVERLANDS PILOT PROJECT	189
The RiverLands Pilot Project	190
Existing Conditions	192
A Closer Look at Johnston's River Line	194
Trail Components	196
Pilot Site Steering Committee	198
The Preferred Alignment	200
RECOMMENDATIONS	213
Ecological Considerations	214
Equity and Access Considerations	
Health and Safety Considerations	
Implementation Considerations	234
Regulatory Considerations	240
AFTERWORD	249
Participating Organizations	250
Glossary of Terms	
Frequently Asked Questions	
Thank You!	
Methodology and Credits	256
APPENDIX A TRACING THE RIVERI ANDS	

**APPENDIX B THE RIVERLANDS IN NUMBERS** 







# THE CHATTAHOOCHEE RIVER

The Chattahoochee River is a shared historic, economic, cultural and ecological resource of extraordinary value for the Metro Atlanta Region and Georgia. Along its course, the River ties the region together, forms numerous county and city boundaries, provides drinking water to millions, and offers countless recreation opportunities.

The Chattahoochee RiverLands Greenway Study reconsiders the region's relationship to the River and proposes a collective vision for the future. From Buford Dam on Lake Lanier to Chattahoochee Bend State Park, the Chattahoochee RiverLands envisions new and equitable investments in parks, trails and water access points along a continuous 100-mile-long public space. For decades, interstates have largely defined Metro Atlanta's growth. The Chattahoochee RiverLands Greenway Study suggests an equally powerful influence on how the region lives, works, plays, and travels.

Yet, despite the Chattahoochee's presence, most people in the region feel disconnected from the River and are unable to enjoy this incredible natural resource. The RiverLands aims to raise awareness of the River and draw people to its edge in hopes to galvanize greater support for its protection and restoration. As the Chattahoochee RiverLands project unfolds and evolves over the coming decades, this planning document will serve as a guide to ensure that the River becomes a common ground for all. In doing so, perhaps more of us will be able to build meaningful relationships with the Chattahoochee River, with nature and with each other.

DOUGLASVILLE

SOUTH FULTON

MARIETTA

ARROLLTON

WHITESBURG

CHATTAHOOCHEE

07

YELLOW DIRT

CHATTAHOOCHEE BEND STATE PARK



# THE CHATTAHOOCHEE RIVERLANDS

The Chattahoochee RiverLands will reunite the River with the Metro Atlanta Region and link suburban, urban, and rural communities into a continuous public realm. The RiverLands proposes a 125-mile uninterrupted multimodal trail running from Buford Dam to Chattahoochee Bend State Park. But, more than a trail, the RiverLands is a linear network of Greenways, Blueways, parks, and the destinations they create, that will bring people to the water's edge, promote stewardship and conservation of the River, and reveal the subtle magic of the Chattahoochee to all.



#### **THE GREENWAY**

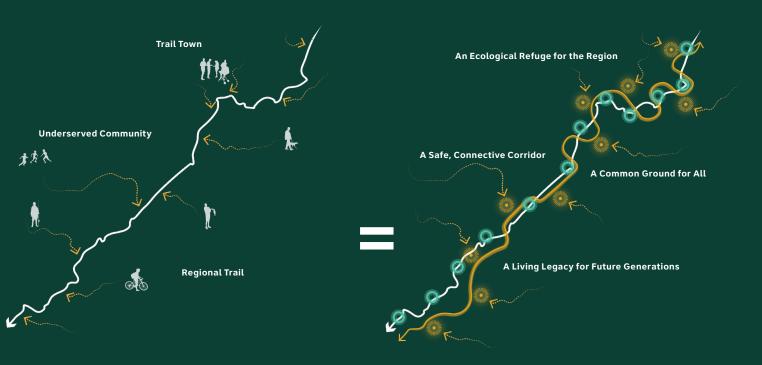
and River Destinations

With 25 new or improved River crossings, the Greenway maximizes connectivity between River parks, River communities, River destinations, and the waterway itself. In its current form, the Greenway is a continuous 125-mile multimodal trail that follows the River and connects 19 cities across seven counties. The RiverLands will be accessible to more than one million residents of the Metro Atlanta Region in only a 15-minute bike ride. With 25 new trailheads proposed along its course, the Greenway has been carefully designed to balance needs for access and conservation.

#### THE BLUEWAY

and River Ecosystems

The 104-mile Blueway unlocks the resources of the waterway and invites people into the Chattahoochee. With 42 water access points (one every two miles on average), the Blueway serves both motorized and non-motorized boating and floating, and reveals new methods of regional water-based movement. Stopping points along the water trail include campsites and picnic areas directly accessible from the water, enabling overnight and seasonal uses of the RiverLands. More than 26 parks are being directly connected by both the Greenway and the Blueway.



#### TRIBUTARY TRAILS

and Wider Communities

Tracing tributaries from regional population centers to the Greenway and Blueway, **Tributary Trails connect neighborhoods and cities to the River**. The RiverLands identified **44 Tributary Trails** that bring together Metro Atlanta communities and link them to the River's edge. Tributary corridors connect residents and visitors alike to transit stops, schools, libraries, activity centers, and cultural assets.

#### THE RIVERLANDS

Four goals structure the approach to the Chattahoochee RiverLands and define a framework for design that equally prioritizes access, equity, ecology, and identity:

A Safe, Connective Corridor A Common Ground for All An Ecological Refuge for the Region A Living Legacy for Future Generations

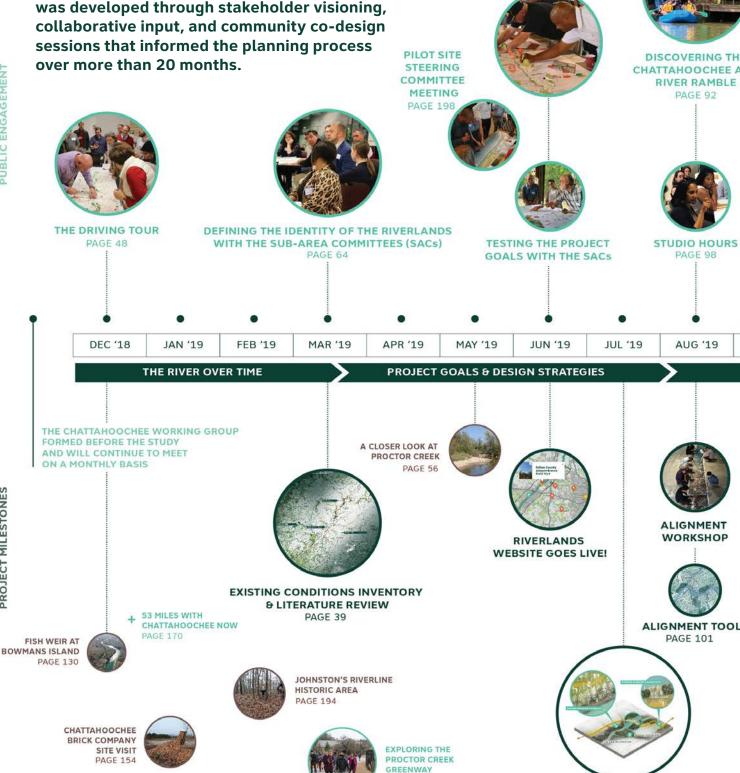
The vision outlined in this document establishes the Chattahoochee RiverLands' identity and defines the framework through which the RiverLands will continue to develop over time.



PROJECT MILESTONES

## STUDY TIMELINE

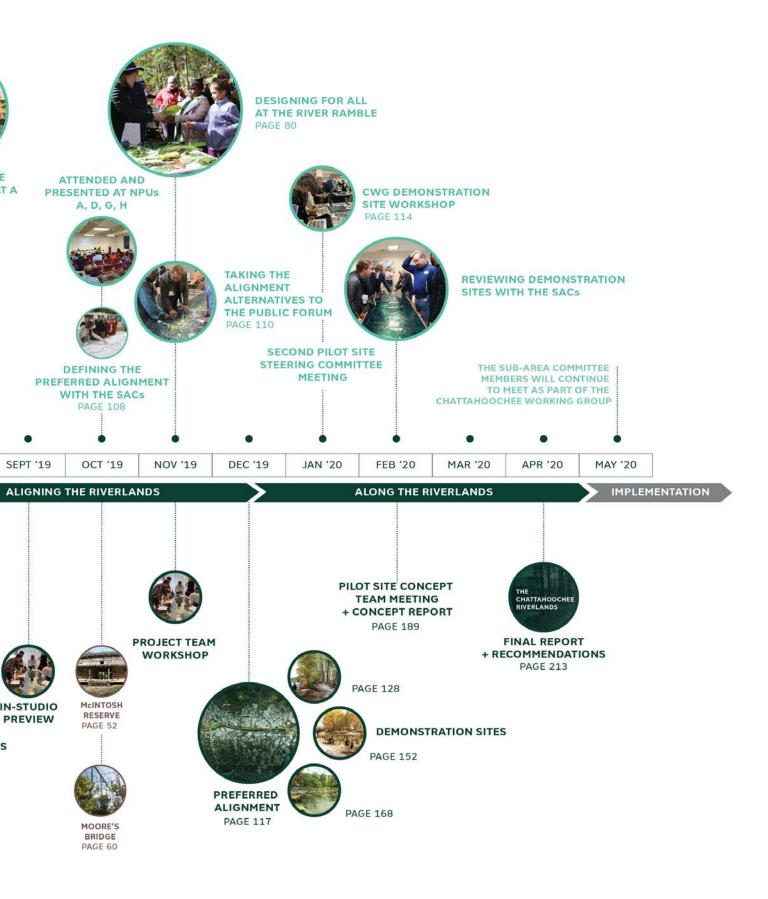
The Chattahoochee RiverLands Greenway Study was developed through stakeholder visioning,



PAGE 86

REVEALING THE RIVERLANDS PAGE 71

REFINING THE PROJECT GOALS AT THE PUBLIC FORUMS PAGE 74





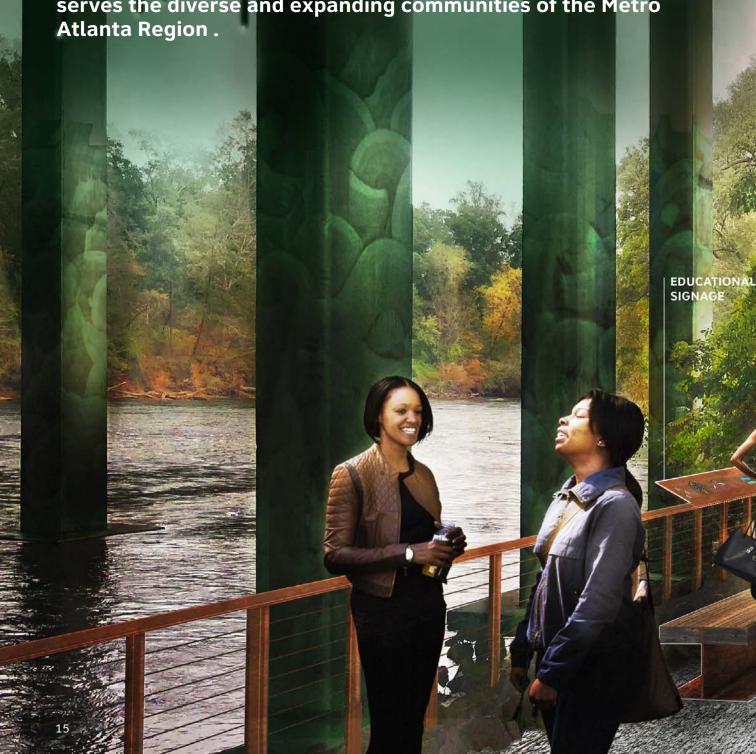
# **GOAL: A SAFE, CONNECTIVE CORRIDOR**

The Chattahoochee RiverLands will connect communities along the River and the Metro Atlanta Region. Connected trails, new parks, and an active public realm will provide opportunities for better health, physical activity, transportation, private reflection, and community cohesion. Thoughtful improvements in existing spaces and new connections will transform park and trail access for all.



# **GOAL: A COMMON GROUND FOR ALL**

The Chattahoochee RiverLands will be accessible to people of all backgrounds, abilities, and ages. The resources of the River must be inviting to the widest possible range of people, creating a common ground for recreation and transportation that equitably serves the diverse and expanding communities of the Metro Atlanta Region .





# GOAL: AN ECOLOGICAL REFUGE FOR THE REGION

The Chattahoochee RiverLands will improve the ecological health of the River basin. Ecological restoration, park acquisition, land conservation, development standards, and other tools will provide strategic and holistic approaches for protecting sensitive species and ecosystems, reducing habitat fragmentation, improving water quality, and promoting the long-term health and biodiversity of ecosystems throughout the River's watershed.

OLIVE MAYFLY Genus Baetis

RAINBOW TROUT
Oncorhynchus mykiss







# PUBLIC AND STAKEHOLDER ENGAGEMENT

The RiverLands study was developed through stakeholder visioning, collaborative input, and community collaborative design sessions.

For decades, the Chattahoochee River has inspired individuals and groups to action and engagement with decisions affecting the River. Listening to and learning from both established advocates and constituent communities was essential to this study. The RiverLands Team continually incorporated public comment and feedback through an equitable and broad outreach process that spanned planning, design, and implementation. Over seventy committed partner organizations and stakeholders have participated in the process to build a new identity and spatial framework for the Chattahoochee River. The planning and design process aimed to engage people across a broad social spectrum and led to the identification of diverse aspirations for the River, including the desire to protect and restore native ecosystems, invite public access, improve safety, increase stewardship, and redefine the River as a beloved local, regional and national asset.

The project was designed in collaboration with the Chattahoochee Working Group (CWG), the three Sub-Area Committees (SACs), and the general public representing diverse perspectives from local stakeholders, residents, government representatives, and advocacy groups working within the study area.

The brief summaries of the meetings and events found in this document represent the comprehensive engagement approach that informed the planning and design process. Complete summaries of meetings and events can also be found on the project website at:

www.chattahoocheeRiverLands.com



WHITESBURG

03/28/19

12/14/18 CHATT, BEND STATE PARK MEETING







The Project Team engaged with over 6,000 community members including:

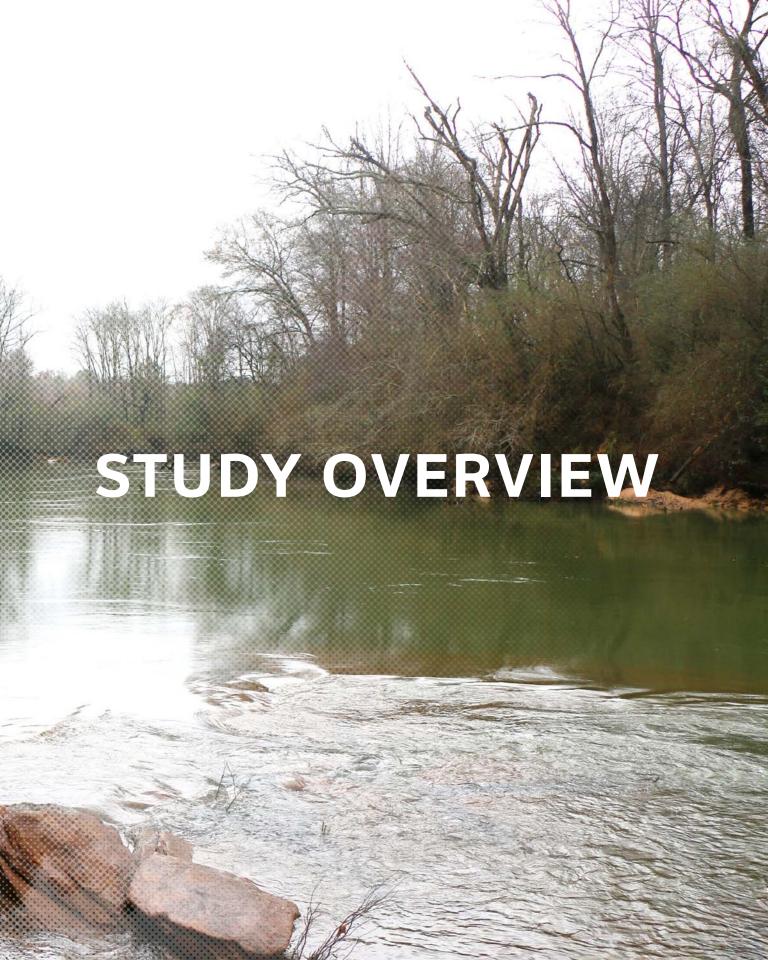
- 120 Members of the Chattahoochee Working Group
- 200 Local Stakeholders
- 350 Members of the Public
- 5,000 Online Platform Visitors

#### The Project Team held:

- 2 River Rambles
- 3 Public Forums
- 9 Sub-Area Committee Meetings
- 82 Individual Stakeholder Meetings







### STUDY OVERVIEW

In September 2018, the Atlanta Regional Commission, The Trust for Public Land, City of Atlanta and Cobb County commissioned a \$1.5 million study to create a new vision for the Chattahoochee River. A Design Team led by SCAPE, a landscape architecture and urban design studio with offices in New York and New Orleans, was selected to conduct the 20 month-long study, which began in October 2018, and concluded in April 2020 with the release of this report.

The Chattahoochee RiverLands Greenway Study involves distinct elements: a greenway plan that establishes a 100-mile vision and plan for the River corridor, with expanded details for sub-areas along the River and a Pilot Project concept that develops a concept plan for a 1.5-mile pilot segment. The greenway plan considers one continuous corridor from Buford Dam to Chattahoochee Bend State Park. The plan serves broadly as a corridor master plan and proposes an inspiring and inclusive vision that identifies potential greenway connections, directs greenspace development, promotes ecological sustainability and conservation, and guides investment within the study area. The plan identifies and explores several catalytic projects within 3 subareas along the length of the corridor as directed by committees and public input. The Pilot Project concept advances a concept-level design for a local trail in Cobb County between Mableton Parkway and Veterans Memorial Highway; identifies potential connections between Cobb County and the City of Atlanta; and demonstrates planning recommendations established in the greenway plan.

The project was designed in collaboration with the Chattahoochee Working Group (CWG) and the Sub-Area Committees (SACs), a collection of stakeholders, residents, government representatives, and advocacy groups working within the study area.

In addition, the study supports the broader "RiverLands" Master Plan effort led by the Trust for Public Land and was structured in seven distinct tasks:

#### Task 1 – Project Management & Stakeholder Engagement Plan

The Design Team created a Project Management Plan (PMP), and a Public and Stakeholder Engagement Plan (PSEP) to establish a schedule and engagement strategy, that identified target communities, institutions, residents, property owners, interested members of the public, and key stakeholders.

# Task 2 – Existing Literature & Conditions Analysis Submitted on May 3, 2019

The Design Team conducted a literature review and existing conditions analysis to investigate the Chattahoochee River's geography, geology, hydrology systems and morphology, ecology and conservation patterns, demographics, land use and development patterns, regulatory boundaries and frameworks, political boundaries, and urban infrastructure. This analysis has been summarized in this document under "The River Over Time" section.

#### Task 3 - Corridor Vision & Concept

Submitted on September 5, 2019

The Design Team synthesized an identity for the Chattahoochee RiverLands Greenway by using visioning, collaborative input, community response, and codesign sessions (in conjunction with Task 7, Public & Stakeholder input). The vision and identity for the RiverLands was presented to the public in the "Revealing the RiverLands" document and have been summarized here under the "Design Strategies" section.

#### Task 4 - Greenway Plan Development

Submitted on January 22, 2020

The Design Team created a corridor Greenway Plan. The plan focused on specific elements of the corridor including connections and alignments, regulatory framework and compliance, park and conservation planning, and implementation strategies. Both the greenway alignment process and the final alignment are presented here under the "Aligning the RiverLands" and "Along the RiverLands" sections.

#### Task 5 - Demonstration Sites

Submitted on April 22, 2020

The Design Team worked with the Project Management Team and the Chattahoochee Working Group to identify three Demonstration Sites for which additional design studies were conducted to demonstrate the translation of the project goals into site design. The vision for each site is presented here under the "Demonstration Sites" section.

#### Task 6 - Pilot Project Conceptual Plan

Submitted on March 27, 2020

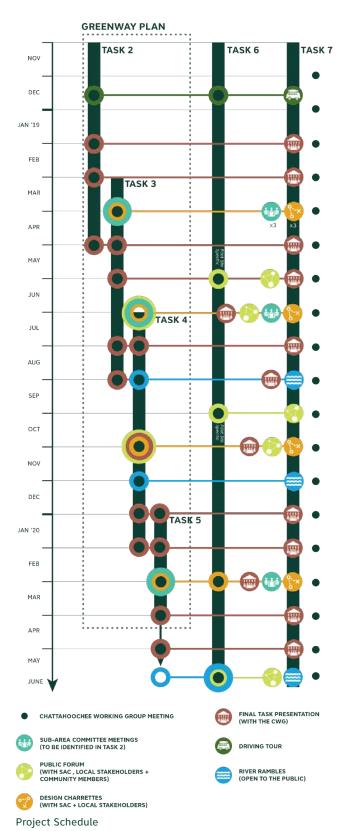
The Design Team developed a conceptual design for a Pilot Project along a length of the Chattahoochee River in Cobb County. The project proposed a Preferred Alignment, developed a conceptual layout and typical sections for a greenway trail segment between Mableton Parkway and Veterans Memorial Highway, with water access points and overlooks. Learn more about the pilot in Cobb County under the "Pilot Project" section.

#### Task 7 - Public & Stakeholder Input

Throughout the Chattahoochee RiverLands Greenway Study, the Design Team worked with the Project Management Team, the Chattahoochee Working Group, and Sub-Area Committees to better understand the needs and wants of each Sub-Area along the River. The Project Team (Project Management Team + Design Team) organized and participated in community meetings, design charrettes, public events, and maintained a public website. The project also included signature participatory events called River Rambles.

Throughout the study, public engagement set expectations for the Greenway Plan, generated useful ideas and concepts that impacted and informed the design. Meetings and events were organized to maximize participation by deploying a variety of activity types, providing a digital platform for engagement and feedback of a wider group of users.

Explore the RiverLands website at: www.chattahoocheeRiverlands.com to learn more about the study, download project deliverables and rediscover the Chattahoochee River through the River Stories.





### PROJECT MANAGEMENT TEAM

The Greenway Study was managed by a joint Project Management Team consisting of the Atlanta Regional Commission, the Trust for Public Land, Cobb County, and the City of Atlanta.

The Atlanta Regional Commission (ARC) has a long history of involvement along the Chattahoochee River. ARC managed the Chattahoochee River Greenway Study administration, participated in plan development, facilitated a regional conversation, and provided oversight and assistance within the agency's transportation and water planning roles.

The Trust for Public Land creates parks and protects land for all people, ensuring healthy, livable communities. Millions of people live near a Trust for Public Land park. Through its Chattahoochee River program, the Trust for Public Land has protected over 18,000 acres and 80 miles of riverfront. This protection played a major role in reversing the devastating effects of uncontrolled growth back when the Chattahoochee was deemed one of the nation's most endangered rivers. The Trust for Public Land and 70+ stakeholder organizations want to reconnect people to the River, physically and psychically.

Cobb County has made trails a top local priority, including a county Greenways and Trails Master Plan that proposes several trails along and near the Chattahoochee River. Currently Cobb County currently has over 85 miles of greenway trails and side path trails. Cobb staff participated in the Chattahoochee River Greenway Study development as well as guided a Pilot Project implementation phase along existing countyowned property and connected to a trail head project on Mableton Parkway and to the Riverview Landing waterfront mixed-use development in Smyrna.

The City of Atlanta is the largest city located along the Chattahoochee River. The Department of City Planning (DCP) staff worked with the Project Team to advance the Chattahoochee RiverLands Greenway Study as an important element of the second phase of Atlanta City Design within a comprehensive regional context. Additionally, this study is being considered as an opportunity to expand the work begun with in DCP's Urban Ecology Framework.









### **DESIGN TEAM**

The Design Team was led by SCAPE, a nationally recognized, award-winning design firm. SCAPE is known for visionary work that unites ecosystems and social environments through the design of regenerative living infrastructure and new forms of public space.

Gresham Smith was a key member of the team, with years of proven collaborative design/engineering experience with SCAPE, and was the team's primary local presence in Atlanta. Gresham Smith brought extensive experience in transportation design and engineering to ensure a seamless transition between visionary thinking and implementable design. Through many projects, including the Greenways and Trails Master Plan with Cobb County, Gresham Smith has invaluable local connections, resources, and relationships that enriched the process.

**Biohabitats** provided a science-driven approach to assess the RiverLands ecological conditions. They developed an ecological suitability analysis for the greenway and identified conservation and restoration opportunities within the study area. Their contribution also incorporated key lessons from the Atlanta Urban Ecology Framework, one of the first comprehensive urban ecology strategies in the country.

The Chattahoochee is also a social ecosystem, connecting diverse communities while revealing environmental justice and equity issues along its path. Dr. Na'Taki Osborne Jelks (Environmental Health Scientist - Spelman College) and Dr. Richard Milligan (Geographer - Georgia State University) are academics deeply embedded in some of the most vulnerable communities along the Chattahoochee and made sure that the planning process employed tools and techniques that provide a meaningful platform for identifying, listening, and responding to the many voices along the River.

**New South Associates** and **Edwards-Pitman** rounded out the core team with their innovative capabilities in historic and cultural resources preservation, surveying and permitting experience, and established relationships with local municipalities.







DR. NA'TAKI OSBORNE JELKS, MPH

DR. RICHARD MILLIGAN







# ENGAGEMENT STRATEGY

The Chattahoochee RiverLands
Greenway Study engagement strategy
was conceived to both invite new
participants to the table and to
build upon the strong and engaged
communities already working along
the River. Communities that have
experienced historic disinvestment
were especially important in examining
the project through the lens of
environmental justice and equity.

Working Groups, Committees & Sub-Committees



The Chattahoochee Working Group is a stakeholder group convened to engage with each other on a regular basis to better understand Chattahoochee-related topics, agendas, and initiatives. This group will continue to meet to work towards implementing the Study's vision and proposals.



The corridor was divided into smaller Sub-Area Committees (SACs), as identified based on jurisdictional boundaries, land use character, environmental constraints, and other factors that influence plan implementation. The SACs served as focus groups for the Sub-Areas and met regularly to give feedback and participate in charrettes.



In addition to SACs, the Design Team held public forums and design charrettes with a larger group of Local Stakeholders in each Sub-Area. Local Stakeholders included small land owners, non-profits, local representatives, local agencies, etc.



Community Members are participants from the public who engaged with the project, participating in River Rambles, Public Forums, or using the online platform.





#### **Types Of Events**



The full Design Team conducted a multiday "Driving Tour" along the banks of the full 100-mile River corridor. The team conducted on-the-ground site explorations, photography, and face-to-face interviews that informed the project and forged an authentic identity for the Chattahoochee RiverLands Greenway.



To engage the broadest possible constituency, engagement must be fun. The Design Team worked with local non-profit community groups to organize unique participatory events at the River, named "River Rambles," where the team advanced storytelling and immersive experiences that built participation in the Greenway planning process.



Design Charrettes were a participatory design method for guided problem solving. Charrettes were an opportunity to empower stakeholders as active participants in the design process and allowed the Design Team to listen and respond to the needs and desires of locals.



Public Forums were designed to be informational and accessible with science-fair style stations led collaboratively by members of the SACs and the Design Team. These events were open to all members of the public.

#### **Public Outreach Tools**



The RiverLands website provides visitors exciting and compelling insight into the master plan to bring to all area residents greater access to and deeper understanding of the River's wealth of social, ecological, and recreational assets and uses.



A kit of materials, "Meeting-in-a-Box" includes maps, project reports, pamphlets and other items that can be used for tabling at neighborhood events or future community engagement work related to the Greenway is available for download on the website:

www.chattahoocheeRiverLands.com





# **ENGAGING ONLINE**

The Chattahoochee RiverLands website and online platform provides visitors exciting and compelling insight into the Study, it brings greater access and deeper understanding of the River's wealth of social, ecological, and recreational assets and uses to all. This platform was designed to engage a broad spectrum of people, including people who may not yet have a relationship with the River. This communication tool served as the cornerstone of the engagement strategy, supplemented with alternative outreach to communities without telephone or internet access.

The goal of the online platform was to provide timely news and project updates on the Chattahoochee RiverLands as well as provide a means for interaction with the planning process and Design Team. The online portal informed community members of opportunities to participate in project related events like the River Rambles or Public Forums. The online portal was also linked to social media accounts and external websites for Chattahoochee Working Group members.

The website is considered a part of the Living Legacy of the project and will evolve with the RiverLands. At the conclusion of the study, the RiverLands website included more than 30 unique River Stories, downloads of all the reports and deliverables created throughout the study, interactive maps explaining the history of the River, a portal to contact the Project Team, information about public events, and ways to stay engaged!

AS THE RIVERLANDS TAKE SHAPE IN THE FUTURE. VISIT THE WEBSITE TO STAY INFORMED:

WWW.CHATTAHOOCHEERIVERLANDS.COM

#### **Existing Conditions**

The Design Team concluded the existing conditions inventory with series of takeaways and a living document of ongoing initiatives. vision for the Riverlands builds on this existing conditions analysis represents the beginning of a longer process to develop a plan for



ECOLOGICAL RESOURCES



CONNECTIONS & ACCESS



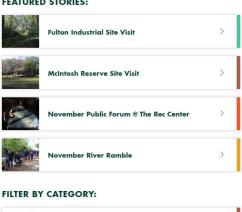
DEMOGRAPHICS



#### **RIVER STORIES**

Once hidden and disconnected, the Chattahoochee River is emerging as Metro Atlanta's greatest natural assets. The River holds many untold stories that trace a shared historic, economic, cultural, and ecological identity. Navigate our River Stories on the map by zooming in and out or click on a story that interests you.

#### **FEATURED STORIES:**



HISTORY & CULTURE

#### vealing The Riverlands

attahoochee RiverLands will re-unite the river with Metro Atlanta, k suburban, urban, and rural communities into a continuous 100iblic realm. More than a single trail, the RiverLands is a linear k of greenways and blueways that will bring people to the water's promote stewardship and conservation of the river, and reveal the magic of the Chattahoochee to all.





A SAFE, CONNECTIVE CORRIDOR



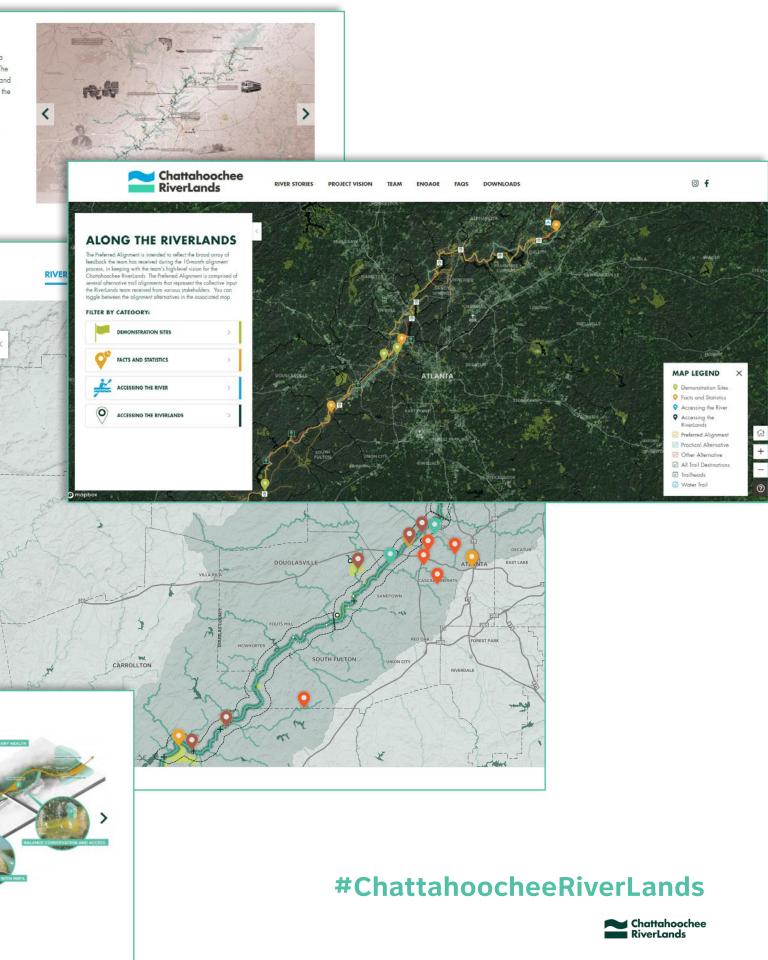
A COMMON GROUND FOR ALL



AN ECOLOGICAL REFUGE



A LIVING LEGACY FOR FUTURE GENERATIONS



### **CONSIDERATIONS AND LIMITATIONS**

The Chattahoochee RiverLands Study represents an aspirational vision based on the best available data, stakeholder input, and current local situations. This plan supports regional efforts but is not binding upon any local governments or partner agencies. This document does not constitute a standard specification or regulation.

# Support Public Access and Protect a Valuable Ecosystem

The riparian corridor and tributary connections of the Chattahoochee River provide valuable green space for people and support the plants and wildlife that are the foundation of its ecological health. Protecting those assets in light of increasing development and population growth is a core task of this study, and a charge that builds on the rich history of conservation and stewardship in the region. Beginning with passionate community members – including the Friends of the River – over 40 years ago, the Chattahoochee River has inspired advocacy and activism. This was recognized in 1978 by President Jimmy Carter through the creation of the Chattahoochee River National Recreation Area. Since 1973, the Metropolitan River Protection Act has provided a framework for balancing ecological integrity and protection with improved access. Its successful implementation has protected habitats for a variety of species whose interactions define the urban ecology of the Metropolitan Atlanta Region.

As the implementation of RiverLands begins and evolves, balancing recreation with protection will be a key consideration in both greenway design and public engagement. Protection and enhancement of this ecological resource is critical to the RiverLands Study, and its living character should be carefully considered in planning and design decisions such as material selection, alignment, and proximity to the water's edge. In the future, the RiverLands should promote methods to enhance responsible use and appreciation through educational programs, environmental signage, and maintenance and stewardship programs that will complement the physical route of the greenway.

Opportunities to link the RiverLands Study with ongoing restoration plans should be considered, including the warm-water native shoal bass restoration plan, restoration projects for water quality improvement and

sedimentation management strategies considered for the cold-water trout fishery in the upper portion of the Study area.

#### A Network of Significant Sites

The Study area benefits from a high density of cultural resources already open to public access in the form of parks and historic sites including those of significance to indigenous communities, remnants from the Industrial Revolution and Civil War, relics from various transportation eras, and a National Recreation Area (15 park units covering 6,000 acres). The Greenway offers the opportunity to connect these valuable cultural resources to one another and to the River in a way that reveals the changing human relationship with the Chattahoochee. This is an invaluable opportunity to reimagine the role of these resources – not as a series of isolated sites of historical significance, but as a network of historic and cultural destinations. While numerous resources have been identified within the area of the RiverLands Study, there are undoubtably resources yet to be found. The significance of potentially undiscovered resources can impact planning processes, and the location of identified resources can inform the planning process as a whole. At moments, the Greenway may intentionally bypass or buffer highly sensitive sites to protect these valuable resources. The RiverLands Study offers flexible strategies to accommodate and integrate new resource discoveries that might occur throughout project development.

#### **Engaging Early and Often**

The RiverLands Study's Public Engagement Strategy and Stakeholder Plan places emphasis on equity and inclusion by prioritizing communication with and strategies for communities that demonstrate high social vulnerability. By engaging vulnerable communities early and often, by creating safe access to the Greenway, and providing additional programmatic elements where they are the most needed, the RiverLands will provide co-benefits to its most underserved residents. The RiverLands Study identifies areas where environmental justice issues can be actively addressed - for example, the identification of contaminated sites where remediation can occur, or zones of the River where ecological restoration opportunities can overlap with a re-development project or the need for public access to the River.





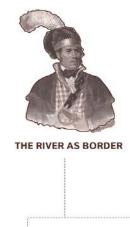


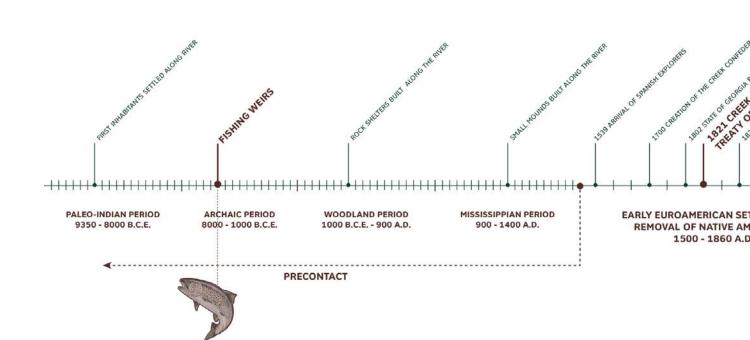
## THE RIVER OVER TIME

The Chattahoochee River is a shared historic, economic, cultural, and ecological resource of extraordinary value for the Metro Atlanta Region and the state of Georgia. Communities are drawn to water. It is no accident that farms, cities, towns, parks, roads, railroads, and industries are found along rivers.

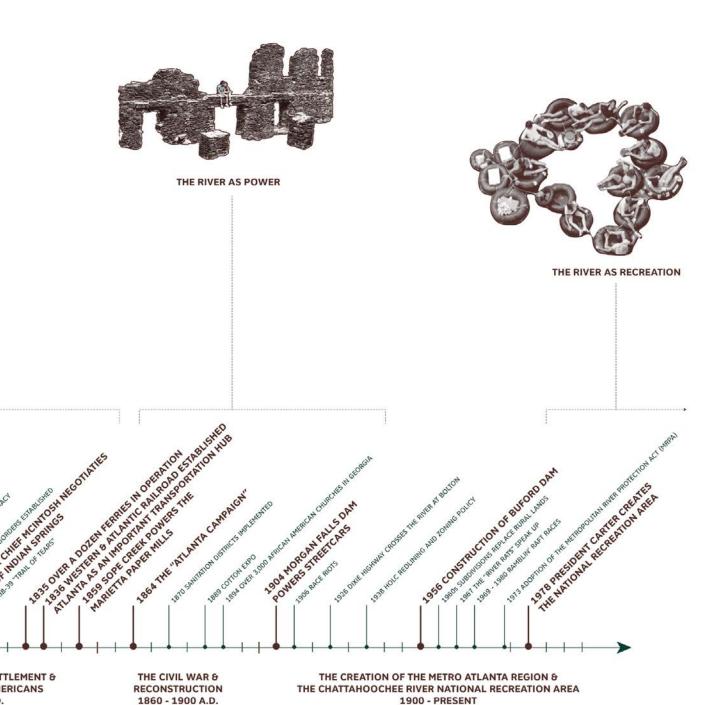
Rivers provide water to drink, fertile alluvial soils for crops, cut paths through mountains, creating shortcuts for roads and rails, take us places both upstream and down, and are places where people seek revitalization, relaxation, and even spiritual connections. Along the Chattahoochee River, human settlement began more than 10,000 years ago. These years of continuous occupation have left layers of history that can be read in the archaeological and historic sites and landscapes lining the River banks.

This section provides an overview of the historic and cultural narratives of the Chattahoochee River. From the earliest inhabitants of the Paleoindian period, to the Archaic, Woodland, and Mississippian periods and to Europeans and Euroamericans settlers, and later, the forced removal of native people, the River has borne witness to it all.

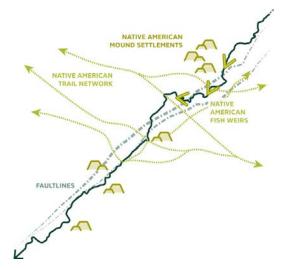




THE RIVER AS BOUNTY



## THE RIVER OVER TIME







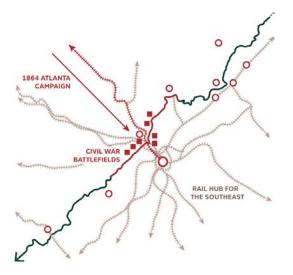
The Chattahoochee loosely follows the Brevard Fault, a geological formation also expressed at the human scale in the form of shoals and rock outcroppings. Prior to European settlement, shoals and riverbanks were central to indigenous life. This relationship is still visible in the remnants of fish weirs. The Creek and Cherokee enjoyed the abundant warm water fishery and the region's expansive forest cover, and created settlements, trails, and access points oriented to the River as a source of life and sustenance.





**1800 - 1860** The River As A Driver Of Industry

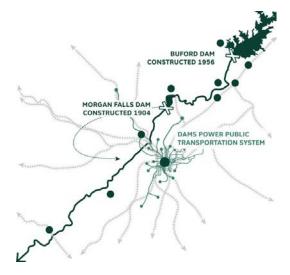
Following colonization, the expansion of Euro-American settlers throughout Georgia, and the forced removal of the Creek and Cherokee peoples, an era of settler development focused on utilizing hydraulic power to drive local industry. Grist and paper mills powered by the River and its tributaries drove the development of new River towns, creating a need for ferries to move people from bank to bank. Ferry crossings aligned with the earlier Native American trails and shoals.







As the pressure of settlement increased in the 19th century, the River became a dividing line between communities and a barrier to movement. Rail surpassed water as the primary method for transporting freight, and bridges further aided the growth of the region. The River corridor itself was used as a strategic barrier in the Civil War, with relics of wartime remaining today in the form of earthworks, or shoupades. During the Reconstruction Era, the rail network expanded rapidly and solidified the prominence of the city of Atlanta as a regional economic hub.



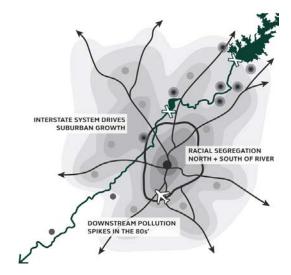


**1900 - 1950** The River As A Regional Utility

The advent of electric power catalyzed the use of hydroelectric dams along the River. The first of these large-scale structures along the Chattahoochee was Morgan Falls Dam, which was completed in 1904 to supply electric power to Atlanta's expanding streetcar network in addition to ensuring a consistent supply of drinking water for the Metro Atlanta Region . The uses of the River expanded throughout the 20th century, with the River receiving treated and untreated wastewater, providing water resources to the region, and continuing to provide electric power.



## THE RIVER OVER TIME







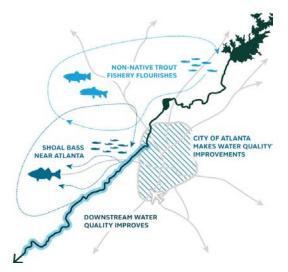
Interstates and highways constructed in the second half of the twentieth century further cleared the way for sprawling subdivisions where once there were forests and farmland. As the regional population increased, so did downstream pollution from industrial and residential wastewater, peaking in the 1980s. Simultaneously, the River was used as a barrier to racial mobility during segregation and the Civil Rights movement. While school segregation ended in 1961, the legacy of racial politics remains embedded in the physical fabric and majority Black communities throughout the corridor today.





**1970 - 1990** The River As A Catalyst For Activism

Concerned about the flow of pollution into the Chattahoochee River, passionate community members began advocating for water quality improvements in the late 1960s. This spirit of advocacy and activism surrounding the River was recognized in 1978 by President Jimmy Carter through the creation of the Chattahoochee River National Recreation Area and, later, the first National Water Trail in 2012. This era of planning and community advocacy set up protections that are enforced today, including the Metropolitan River Protection Act (MRPA), which regulates development along the River corridor.





## **1990 - Present** The River In Recovery

Today the River is cleaner than it has been in a century, due to citizen efforts led by Chattahoochee Riverkeeper since 1994, and infrastructure initiatives that reduce sewage overflow and contamination. The River supports a thriving recreational fishing economy and healthy populations of native and introduced species, including one of the most popular trout fisheries in the south. While the River still suffers from upstream urban population impacts and much work remains to be done, the trend of improving River health has inspired an emerging network of greenspaces and water access points along the Chattahoochee. Diversity in the region is increasing with regional population growth, but racial disparities in access to greenspace persist and shape the public dialogue around the future of the River.





## It's Time To Reconnect With The River

The Chattahoochee RiverLands aims to bring people back to the River and create an equitable regional destination for the growing and increasingly diverse populations of Metro Atlanta. The project marks a new era in the River's history, aiming to restore social and physical connections to the River, conserve and restore natural resources, and craft a living legacy for future generations.



### A CLOSER LOOK AT THE CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA

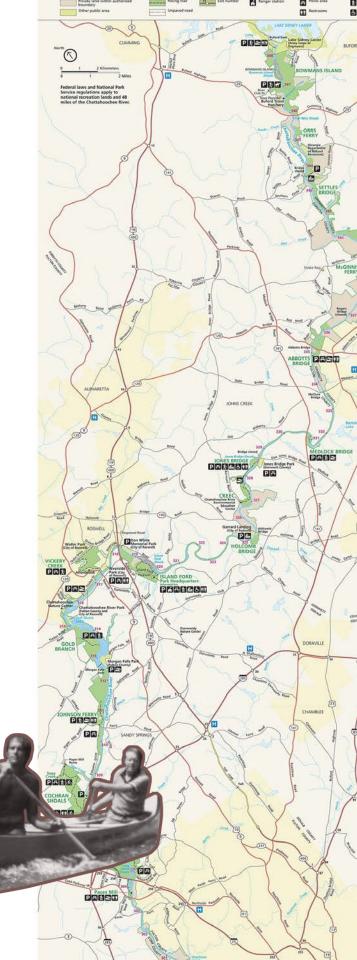
The Chattahoochee RiverLands will connect 26 existing parks, one of which is the Chattahoochee River National Recreation Area, which includes 20 miles of the Greenway and 48 miles of the Blueway within or along its 15 park units.

Established in 1978, the Chattahoochee River National Recreation Area (CRNRA) encompasses the upper half of the Chattahoochee RiverLands corridor, including 48 miles of the River and nearly 7,000 acres of land in fifteen units along the River. The CRNRA was established largely due to the efforts of a small group of dedicated citizens who had the foresight to see how quickly the Metro Atlanta Region would develop in the 1970s and '80s and that the River and its adjacent lands needed to be protected. They successfully advocated the passage of legislation creating the park for "preservation and public enjoyment," which was signed into law by President Jimmy Carter, a Georgia native and noted conservationist. Representing twenty percent of all the public greenspace in the 10-county ARC region, the CRNRA also includes the first designated National Water Trail.

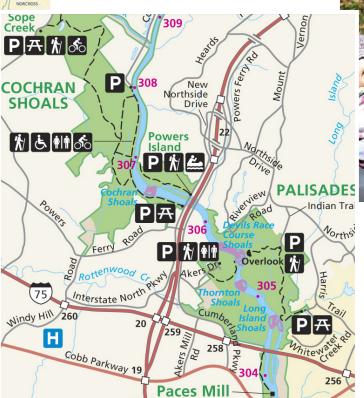
Today, the park attracts millions of visitors every year for land- and water-based recreation. More than eighty miles of trails in the park units are available for hikers, runners and bikers, and the River within the national park ranks as one of "America's 100 Best Trout Streams," according to Trout Unlimited. According to the National Park Service, in 2019, the park units received over 3.4 million visitors, and, in 2018, had a cumulative benefit to the local economy of \$179 million that supported about 2,000 jobs in the local area.

Visit: www.nps.gov/chat

President Jimmy Carter Canoes the Chattahoochee River in 1972









Jerry Hightower, a Park Ranger with the National Park Service, led the programming for both River Rambles for the Chattahoochee RiverLands Study.

# UNDERSTANDING THE RIVERLANDS DURING THE DRIVING TOUR

The Chattahoochee RiverLands Greenway Study Project Team kicked off the project by touring the River for five days to explore its history, high-water views, aquatic and riparian ecology, past and present industries, parks and recreation sites, and the enormous efforts of many citizens, officials, and naturalist groups to restore, preserve, and protect the Chattahoochee River.

While the RiverLands Greenway project marks a new era in the River's history, the Study stands on the shoulders of those who have come before. During the driving tour, the Project Team visited riverside communities and held a series of introductory workshops at the Chattahoochee Nature Center, the Atlanta City Studio, and Serenbe Farms on December 11th, 12th and 13th 2018, respectively, to learn about the existing assets and partnerships along the River. Participants in these workshops emphasized the importance of both recent activism for a healthy River and a legacy of stewardship dating back to the Paleo-Indian period (9350 - 8000 B.C.E.).

The stories, historic documents, and new visions for the River that stakeholders shared are compiled in the Existing Conditions Document Appendix B and serve as the foundation for this Study. The document explores themes of ecology, history and culture, connections and access, and demographics. The findings informed the project and forged an identity for the Chattahoochee RiverLands Greenway.

The Chattahoochee Crawfish was the first stakeholder that the Design Team learned from on the Tour. The Chattahoochee Crawfish are an indicator species for healthy riverine systems in the region. To learn more about the ecology of the River, see page 54





## HISTORICAL AND CULTURAL RESOURCES

The Chattahoochee River has played dual roles as both a source of bounty and as a border. The RiverLands Study is an opportunity to bring people back to the water's edge and reconnect communities across the iconic water body.

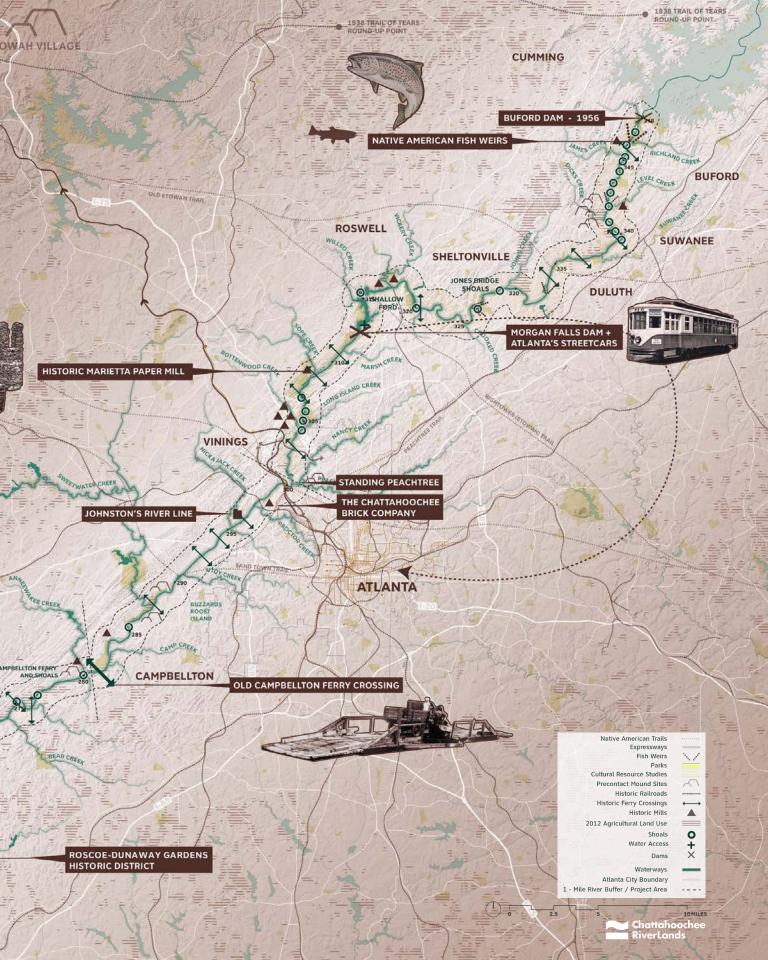
#### The River as Bounty

Fish weirs and prehistoric sites from the Woodland Period and later represent the bounty the River produced in the form of fertile, arable land and an aquatic food source. This bounty was later recognized in agriculture of historic period settlers with the production of cotton and other cash crops. The River and its creeks provided a means to power mills and was later harnessed to provide power to Atlanta's growing streetcar system at Morgan Falls Dam. Goods, like cotton, were poled down the River along short distances, linking historic plantations to railroads. Today the River's bounty continues to serve its surrounding population as a recreational retreat, abundant fishery, and a critical piece of the Metro Atlanta Region water supply.

#### The River as Border

While shoals and fords along the River are historic points of confluence once used by Indigenous people, the River has also been a dividing line throughout various historical moments within the region. As the pressure of European settlement increased in the 19th century, the River served as a border between native and European lands. The construction of infrastructure like railroad trestles, essential in the growth of the region, were needed to span the River to connect to areas north of Atlanta. Ferries and railroad crossings gave way to the expansion of roads tailored to the automobile in the early 20th Century. The Chattahoochee would later be the front for racial lines drawn during late 20th century. Currently, given the uneven distribution of crossings and access points along the Chattahoochee, the River still represents a border for many communities.





# A CLOSER LOOK AT MCINTOSH RESERVE

McIntosh Reserve Park is a 527-acre park along the Chattahoochee River in Carroll County, about 35 miles southwest of Atlanta. The site is named after Chief William McIntosh Jr. (1778 – 1825) and includes the site of Chief McIntosh's plantation, Lackchau Talofau (Acorn Bluff).

Chief William McIntosh was a chief of the Lower Creeks in the early nineteenth century. He was born in 1778 in Coweta to a Creek mother, Senoya, and Scottish father, Captain William McIntosh of Savannah. McIntosh was a controversial figure: he generally supported the United States' efforts to obtain cessions of Creek territory and efforts to "civilize" the Creeks and other native peoples.

In 1821, McIntosh negotiated the Treaty of Indian Springs. The talks were held at McIntosh's plantation, where he acted as the Creeks' spokesman during negotiations over land distribution. However, McIntosh acted in his own interests and gave away large portions of the Creeks' land to the state of Georgia. In return, McIntosh received 1,000 acres of land at Indian Springs and another 640 acres on the Ocmulgee River. Four years later, a group of mostly Lower Creeks led by McIntosh ceded the remaining Creek lands in the area of present-day Georgia. The 1825 Treaty of Indian Springs led to division amongst the Creeks and the eventual execution of McIntosh by a contingent of Upper Creeks, who opposed ceding the remaining Creek land to the United States government.

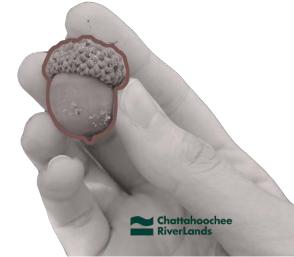
Today, visitors can read historical markers near Chief McIntosh's gravestone, view a historic house similar to the one that stood at Acorn Bluff, and enjoy trails, a splash water park, pavilions, and sweeping frontage on the Chattahoochee River. McIntosh Reserve Park is a favorite among of hikers and equestrian riders. The Friends of McIntosh Reserve, the non-profit group that supports the park, were instrumental in the process of aligning the RiverLands through McIntosh Reserve, and continue to champion the implementation of the Greenway.







The name "Chattahoochee" is thought to have come from a Muskogean words - chato (rock) and huchi (marked). It is thought that thousands of years of grinding acorns at the granite outcroppings of the River's edge led to name it has today



# A COSMOPOLITAN ECOSYSTEM

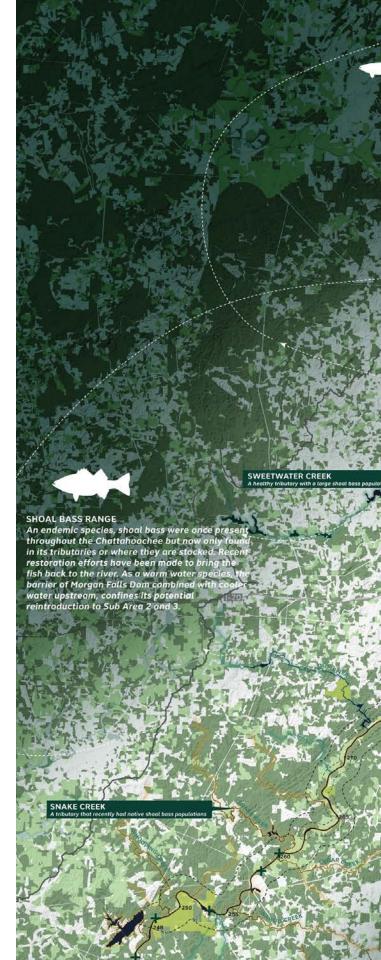
The Chattahoochee River corridor supports ecological functions such as flood regulation, water filtration, habitat provision, and carbon sequestration. Protecting these assets is a charge that builds on the rich history of conservation and stewardship throughout the region.

#### **Enhance Ecological Connectivity**

The Chattahoochee River connects both people and wildlife, allowing for movement of aquatic and terrestrial species and enabling them to withstand disturbance. In fragmented landscapes, natural systems lose key components and their attendant values, a process accelerated by climate change. Where vegetative buffers and forest cover exist, the RiverLands should aim to protect these key resources and reduce fragmentation of contiguous vegetated areas. Where forest cover is lacking, particularly in the more urban portions of the study area, trail planning could reestablish green connections between isolated ecological communities. In this way, the Chattahoochee RiverLands represents an opportunity to restore landscape connectivity.

#### **Aquatic Health**

The Chattahoochee is a valuable resource. Even though it is a relatively small watercourse supporting a large population, the River and Lake Lanier provide about 70% of Metropolitan Atlanta's drinking water. Although the Chattahoochee continues to be negatively impacted by urbanization, including reduced water quality, sedimentation, and modified water flows, the water quality has been improving due to changes in development practices and investments in the City of Atlanta and other communities' water management infrastructure. Many tributaries, which are important to the health of the main River, are still classified as impaired and face development pressure in their watersheds. Opportunities to improve tributary conditions are found throughout the Study area.



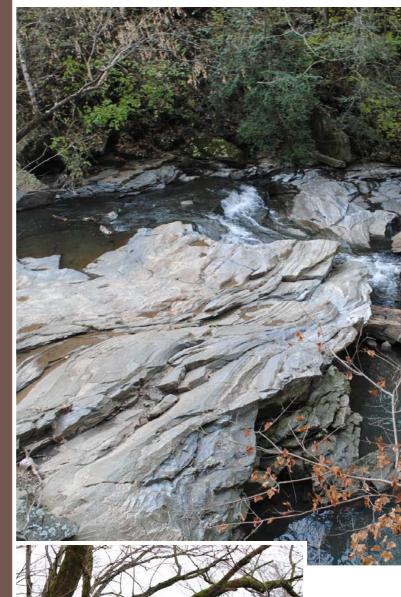


# A CLOSER LOOK AT PROCTOR CREEK

Proctor Creek connects 38 Atlanta
neighborhoods to the Chattahoochee River. As it
flows west, it reaches an industrial area before
flowing into the Chattahoochee River. The North
Avenue sub-watershed is highly urbanized, and
large areas of impervious surface are in close
proximity to the creek. The creek is currently
classified as impaired, but attention from
community groups such as the Proctor Creek
Stewardship Council, West Atlanta Watershed
Alliance, and Atlanta's Department of Watershed
Management are contributing to improve this
important tributary.

The section of the creek near Bankhead MARTA Station is a hard-working urban stream that reveals the legacy of years of pollution, erosion, and high bacteria levels from untreated stormwater flooding, sewage overflow, and illegal dumping. Nevertheless, the creek's granite boulders, rapids, and dense tree cover hint at its potential to be an appealing neighborhood amenity. A long history of environmental justice activism in the area continues to be a vehicle for addressing the health of Proctor Creek and all its residents, and conditions have improved.

Trails along tributaries like Proctor Creek are an opportunity to build on a legacy of activism, to educate trail users and foster a culture of stewardship, not just for the River as an isolated recreational asset but for an interrelated system of waterbodies and communities that form the urban watershed of the Chattahoochee River.





"At West Atlanta Watershed Alliance, we seek to build capacity and stewardship within our urban watershed - educating communities about important environmental issues and mobilizing local residents to not only conserve areas, but maintain and recreate in them. We are excited to participate in multi-cultural programs and features at the Chattahoochee RiverLands, that celebrate the experiences of Indigenous, European and African decent peoples in this area."

Darryl Haddock West Atlanta Watershed Alliance August, 2019



## A RIVER FOR ALL

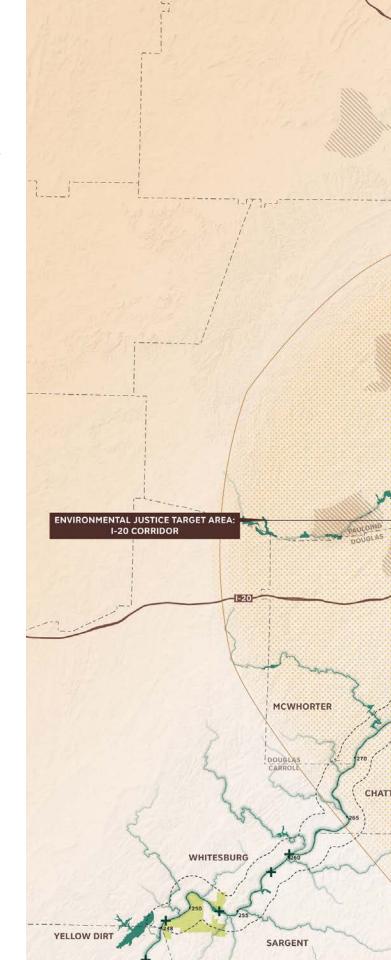
The RiverLands Study area is home to particularly vulnerable communities, racial disparities in access to greenspace, as well as both racial and linguistic disparities in proximity to pollution sources. The RiverLands Study will strive to make the Chattahoochee River corridor an inclusive public realm where all are invited to live, work, and play.

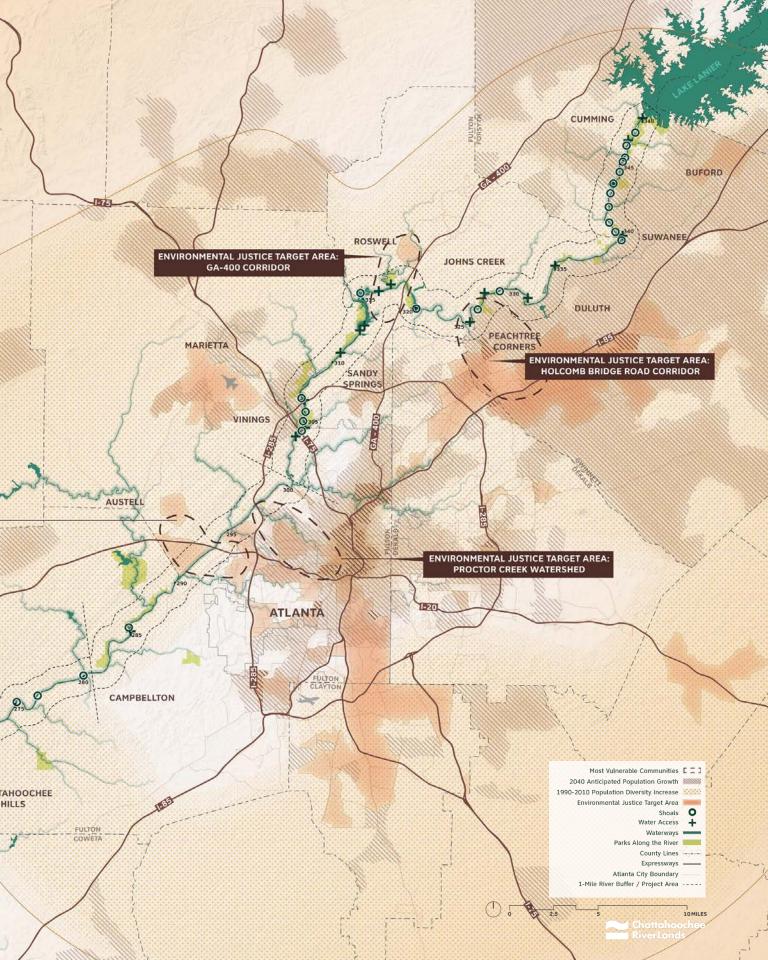
#### **Anticipating Growth**

Atlanta's metro population has been booming for decades and that growth is expected to continue. The Atlanta Regional Commission projects a population growth of approximately 2.5 million people by 2040. Such growth is expected to lead to more dense urban and suburban areas and an ever growing demand for urban green space. In the face of increasing development, the challenge for the region will be to accommodate the increased density while reducing the impacts of this growing population on riparian habitats and streamflow. The study will strive to make the Chattahoochee River corridor an inclusive public realm where all are invited to live, work, and play while reducing pressure on natural resources.

#### **Benefiting The Most Vulnerable**

The Metro Atlanta Region is home to particularly vulnerable communities, racial disparities in access to greenspace, as well as both racial and linguistic disparities in proximity to pollution. Besides greater exposures to environmental pollution, environmental injustice has manifested as a lack of inclusion of people of color in environmental projects and decision-making. As the region as a whole becomes increasingly more diverse, it is critical to address existing and historical inequalities.





# A CLOSER LOOK AT MOORE'S BRIDGE PARK

Located south of Atlanta in the agricultural countryside of Sub-Area 3, Moore's Bridge Park is 485-acre property extending along 1.4 miles of the Chattahoochee River which historically served as an access point to Carroll County. The park commemorates, Horace King, a man of African descent who was born into slavery in 1807 yet became a prominent design professional and business partner of the white man who owned the property.

King, purchased his freedom in 1846, was a prolific architect and engineer in the Deep South and among the most respected master bridge builders in the area in the mid-nineteenth century. Among his achievements was the Moore's Bridge, a covered wooden bridge over the Chattahoochee River. Horace King's original bridge was burned prior to the Battle of Atlanta, and replaced by a second covered bridge that was eventually replaced by a steel frame bridge in 1916, the remains of which can still be seen today.

Moore's Bridge Park includes the James Moore House, an historic home dating back to before the Civil War. The house is likely a "Carolina Cottage" built by King. It fits the exact floor plan and measurements of the Carolina Cottages that King was known for designing, with a porch directing the breeze through the structure.

In the future, Moore's Bridge Park is envisioned to be a tremendous asset to the southern portion of the RiverLands trail, revealing the peoples and histories of the Chattahoochee River. Carroll County and the Trust for Public Land are planning to bring life back to this historic destination with new picnic areas, camping areas, park trails, parking, and education and historic programming around the James Moore House.





# ACCESSING THE RIVER

Access to and connectivity between parks is limited, and the RiverLands Study offers the opportunity to physically connect public resources into a continuous public realm. The RiverLands should link to key regional trail initiatives that prioritize bicycle and pedestrian connectivity, and respond to the need for safer alternative routes for crossing the River.

#### **Greenspace & Water Access**

Almost 40% of the land within one mile of the River is greenspace (including the nearly 6,000 acres contained in 15 park units of the CRNRA), suggesting a wealth of opportunities for Greenway planning. However, parks, greenspace, and water access points are not equally distributed throughout the corridor, with greater opportunities for recreation and direct water access concentrated in the north. Conversely, the southern portion of the corridor presents several challenges to direct river access and public park space, including lack of River crossings, and limited water access points. The RiverLands offer the opportunity to physically connect these resources into a continuous public realm.

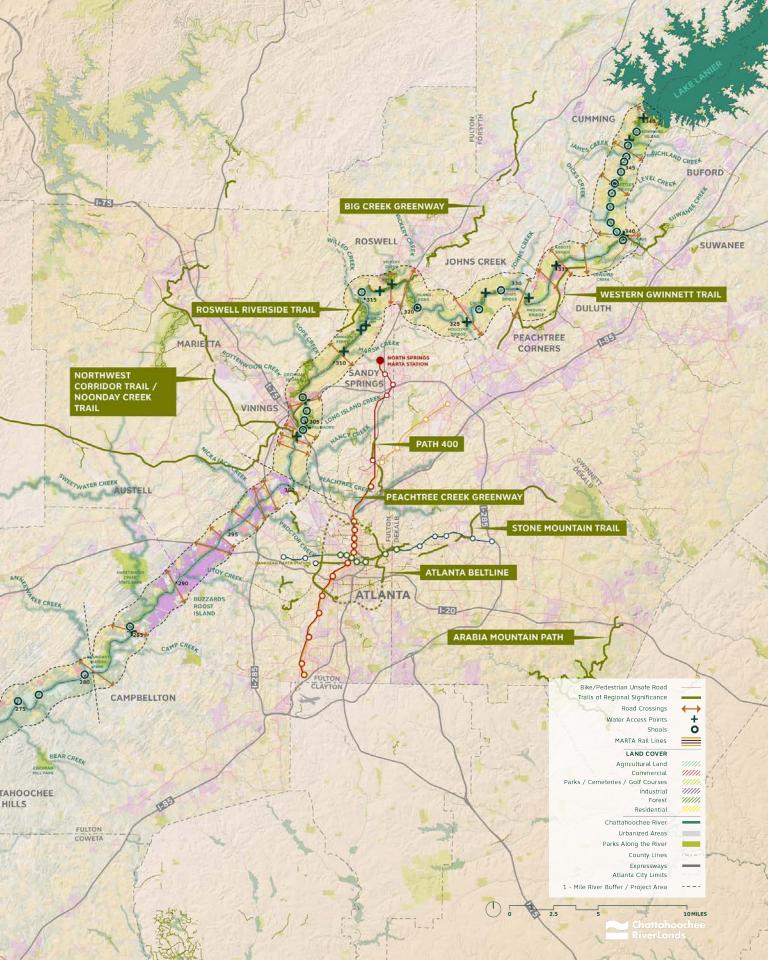
#### **Transit, Connectivity & Access**

The RiverLands Study must identify how people get to the River corridor using public and private transportation as well as expand the number and density of access points to equitably serve the region. Providing direct and comfortable connections to transit stops and stations would enable the Metro Atlanta population to reach the River without needing a personal vehicle.

#### Safety

Opportunities to cross the River are relatively few and far between. Many of the roadways that cross the Chattahoochee River exhibit high risk for pedestrian safety. Off-street greenways and trails, and dedicated bicycle/pedestrian crossings may provide safer, more comfortable alternatives for people seeking to travel along and across the Chattahoochee RiverLands on foot or on bike.





# DEFINING THE IDENTITY OF THE RIVERLANDS WITH THE SUB-AREA COMMITTEES

The Chattahoochee RiverLands Project Area includes suburbs, rural areas, and the city of Atlanta itself. Three Sub-Areas were selected to represent different landscape characters and identities within the Project Area: the Suburban Parklands, the Urban Core, and the Agricultural Countryside. The Sub-Area Committees (SACs), which met regularly throughout the study period, were small focus groups composed of representatives of local agencies, businesses, institutions, schools, and community-based organizations in each of these three sub-areas. While the vision for the River is corridor-wide, the Sub-Area Committees were able to ground those visions in local knowledge and partnerships through a collaborative design process that kicked off in March 2019.

At the Sub-Area Committee Design Workshops, participants shared knowledge of the area and grounded and helped reveal the story of the River over time, from historic bounty to neglected resource, and finally to the RiverLands today. Across the Sub-Areas, participants agreed that the Greenway should be a continuous linear public path along the River that connects to communities along the way. In the Suburban Parklands, there was excitement about connecting the existing CRNRA units that dot the River's edges. In the Urban Core, there was interest in new access to the River for communities that have historically been disconnected from nature. In the Agricultural Countryside, ongoing initiatives seek to put the River on the map in a way that reflects the character of the area. This feedback helped to refine the project goals and vision over the next phase of study.





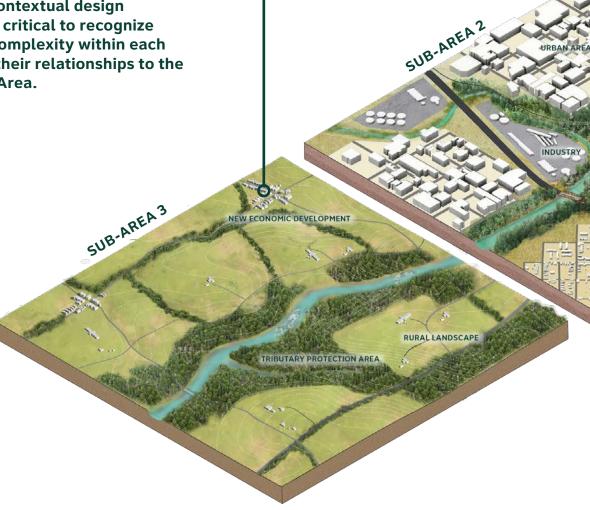


## THE RIVERLANDS IDENTITY

Along its 100 miles, the Chattahoochee RiverLands Study area spans suburbs, the urban core of Atlanta, and rural areas. Three Sub-Areas were identified representing different landscape characters and identities within the project area: the Agricultural Countryside, the Urban Core, and the Suburban Parklands. Sub-Area identification was shaped by jurisdictional boundaries, land use characteristics, environmental and topographical constraints, and demographic data. While this approach helps focus the analysis and develop nuanced and contextual design strategies, it is critical to recognize diversity and complexity within each Sub-Area and their relationships to the larger Project Area.

## THE AGRICULTURAL COUNTRYSIDE

The Agricultural Countryside (Sub-Area 3) is characterized by large tracts of private land where agriculture and forests are most prevalent. This portion of the River is the least developed and has the lowest population density. Anticipated challenges to the Greenway here include lack of River access and lack of public transit alternatives.



## THE SUBURBAN PARKLANDS

The Suburban Parklands (Sub-Area 1) includes 15 park units within the Chattahoochee River National Recreation Area (CRNRA), a large number of city and county parks, and the largest number of public River access points. Land use patterns reveal large areas of lowdensity residential land use, forests, and the largest area of publicly accessible open space.

### THE URBAN CORE

SUBURBAN AREA

SUB-AREA 1

EXISTING NATIONAL PARK

UNDERSERVED COMMUNITY

This segment of River runs along the western edge of the city of Atlanta, the eastern edge of Cobb County and through vast tracts of industrial land on the Fulton County side. The Urban Core (Sub-Area 2) is defined by industrial land uses. Utility easements could be used to facilitate Greenway alignments along the River's edge, mitigating the current lack of public access to the riverside. Residential communities, even those close to the water, typically lack access to the River and its resources.

NATURAL ATTRACTION

KEY DEVELOPMENT AREA



# A CLOSER LOOK AT THE CHATTAHOOCHEE RIVER NATIONAL WATER TRAIL

The Chattahoochee River National Water
Trail was the first designated National Water
Trail in the country. Running from Buford Dam
to Peachtree Creek, the 48-mile Water Trail
connects the 15 park units. The exposed bedrock
shoals and rapids featured along the Trail are at
the heart of the visual and physical experience
of the Chattahoochee River, creating the rock
speckled watery panoramas coveted by River
rafters, birders, and local residents looking for a
quick dip.

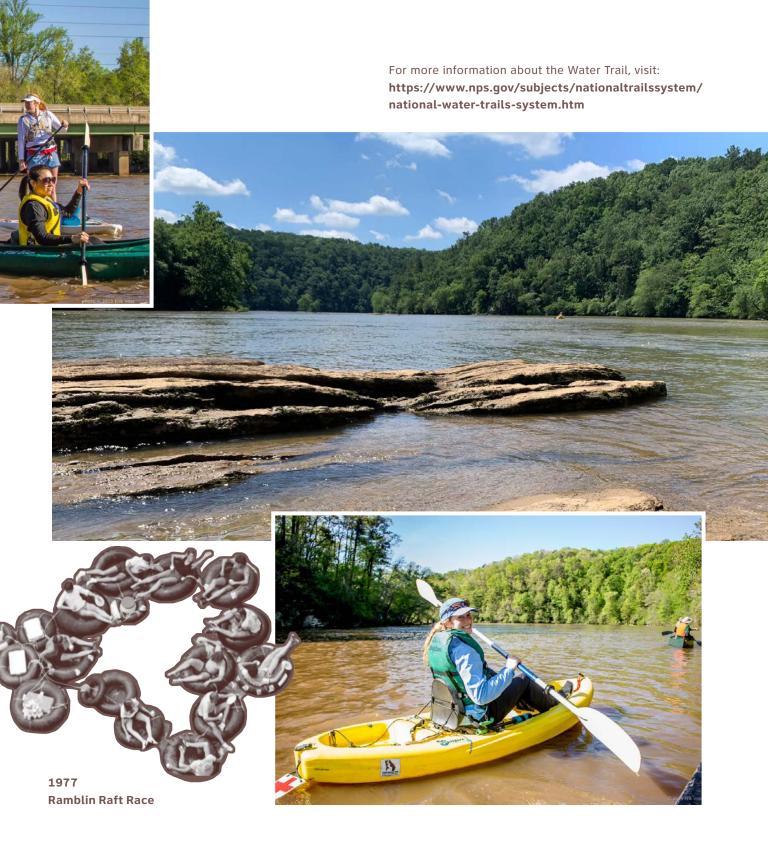
The Water Trail is available for raft, canoe, kayak, and motorboat use year round. The trail offers cold water for trout fishing, class I/II shoals, and many accessible boat ramps to plan any length float. The National Park Service currently maintains 12 boat ramps along the water trail. Six more are maintained by the cities of Duluth, Roswell, and Sandy Springs; U.S. Army Corps of Engineers; and Georgia Department of Natural Resources.

Floating down the River in the summer is a popular weekend activity, with some people floating down the River in giant flamingos and others renting kayaks from outfitters. In the mid-1960s, tubing, kayaking, and canoeing down River, or "Shooting the 'Hooch" became a popular summer pastime.

The Blueway proposed by RiverLands builds on the existing 48 miles of the Water Trail by extending it another 53 miles south to Chattahoochee Bend State Park. In order for the RiverLands to achieve the stated goal of reuniting the Metro Atlanta Region with the River through development of a network of trails and water access points, it is critical to accommodate a wide range of users in a safe and comfortable way. Making sure that users have information available on water and weather conditions at access points can help to limit risk in engaging with the River.







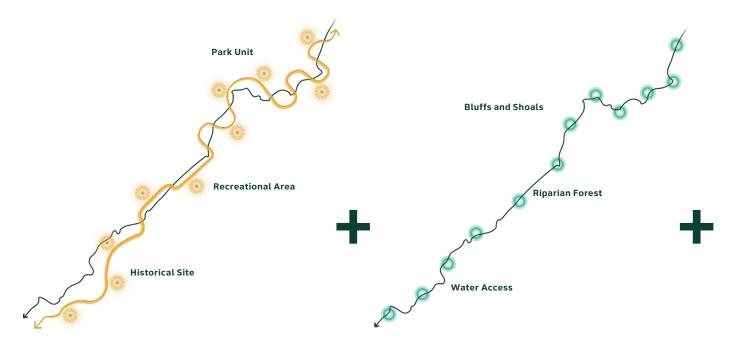






### THE RIVERLANDS

The Chattahoochee RiverLands will reunite the River with the Metro Atlanta Region, and link suburban, urban, and rural communities into a continuous 100-mile public realm. More than a trail, the RiverLands is a linear network of Greenways, Blueways, parks, and the destinations it creates, that will bring people to the water's edge, promote stewardship and conservation of the River, and reveal the subtle magic of the Chattahoochee to all.



#### **THE GREENWAY**

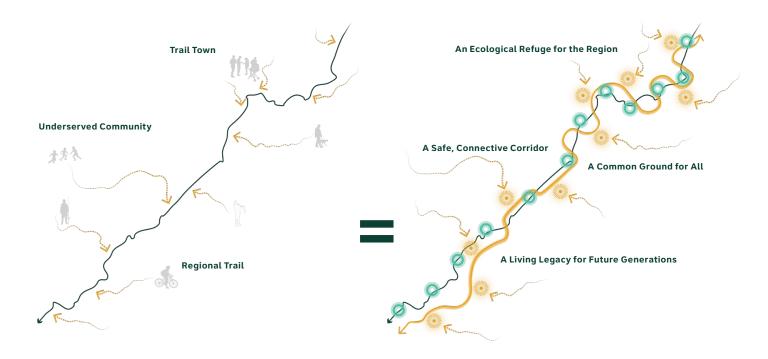
and River Destinations

The Greenway maximizes connectivity among River parks, River communities, River destinations, and the waterway itself by creating a multi-use, multimodal trail that follows the River. It provides an immediate connection to the Chattahoochee, guiding people along its course and, at moments, invite people to its banks and shoals. The Greenway is carefully designed to balance needs of access and conservation, as its path will intersect riparian forests, wetlands, parks, and neighborhoods. The Greenway is the regional spine of the Chattahoochee RiverLands and all other RiverLands trails link back to this system.

#### THE BLUEWAY

and River Ecosystems

The Blueway unlocks the resources of the waterway and invites people into the Chattahoochee. Serving motorized and non-motorized boating and floating, the Blueway reveals new methods of regional water-based movement. Stopping points along the water trail include campsites and picnic areas directly accessible from the water, enabling overnight and seasonal uses of the RiverLands. The Greenway and Blueway intersect along the River, offering direct water access and boat launches accessible to all users. These intersections are important nodes in the system and are distributed to serve the regional population and create opportunities for half day, full day, and overnight trips.



### TRIBUTARY TRAILS

and Wider Communities

Tributary Trails link the wider community to the RiverLands. Tracing corridors from regional population centers to the Greenway and Blueway, Tributary Trails connect neighborhoods and cities with the resources of the River. Tributary corridors are ideal opportunities for Tributary Trails, and many trails are already being planned by municipalities as local initiatives. Tributary Trails do not need to be aligned along water bodies: they can simply connect population centers to the Greenway and Blueway. Tributary Trails will be developed over time and are excellent opportunities for creative implementation partnerships.

### THE RIVERLANDS

Four goals structure the approach to the Chattahoochee RiverLands and define a framework for design that equally prioritizes access, equity, ecology, and identity:

A Safe, Connective Corridor

A Common Ground for All

An Ecological Refuge for the Region

A Living Legacy for Future Generations



## REFINING THE PROJECT GOALS AT THE PUBLIC FORUMS

The study's public engagement strategy was designed both to build upon the strong and engaged communities already working along the River and to invite new participants to the table. Public forums were a chance for the Design Team, as well as for agency and organizational representatives to engage the public on project status and goals, and to create an accessible platform for hearing concerns and ideas from community members.

The two public forums held in June 2019 were the first of a series of events where the public had the opportunity to provide feedback and local insight on the project. They were held over a weekend to reach the broadest audience possible, at the Northwest Library at Scott's Crossing in Atlanta and at the Chattahoochee River Environmental Education Center in Johns Creek.

At the Public Forum in Atlanta, the public expressed both overwhelming support for the project and concern regarding the potential for displacement, recalling the effect of the Atlanta BeltLine. This feedback was used to refine the goal of a "Common Ground for All" underlining the importance of equitable growth strategies and acknowledging the potential of the RiverLands to precipitate gentrification and displacement if preventive planning tools are not put in place.

At the Public Forum further north, in Johns Creek, many attendees expressed the importance of safety along the land and water trails. For the Blueway, attendees emphasized the need for safe water access given the dynamic water level and speeds near the Buford dam. For the Greenway, attendees were interested in separating bike and pedestrian users to ensure safety. This feedback led to the creation of an additional design strategy that details how the RiverLands can "promote health and safety on land and on water" which falls under the goal: "a Safe, Connective Corridor".









### **GOAL: A SAFE, CONNECTIVE CORRIDOR**

The Chattahoochee RiverLands will use different types of trails to connect communities along the River and across the Metro Atlanta Region. The Greenway will be a multiuse path that serves active transportation and recreation by creating a safe, accessible, and connected route along the River. The Blueway will link River communities and encourage boating, floating, swimming, and responsible use of the Chattahoochee's waters. Tributary Trails will provide safe routes of passage between the River and its surrounding communities, towns, and region. Public transportation will strategically connect to the RiverLands, enabling access and use of the Greenway as a resource for all residents of the Metro Atlanta Region.



CREATE A CONTINUOUS



### A SAFE, CONNECTIVE CORRIDOR

### **DESIGN STRATEGIES**



### **Design a Multimodal Trail**

The Greenway will be a multi-use path that serves active transportation and recreation by creating a safe, accessible, and connected route along the River. The Blueway will link River communities and destinations, and encourage boating, floating, swimming, and responsible use of the Chattahoochee's waters.



### **Connect to Public Transportation**

The RiverLands aims to provide direct and comfortable connections to public transportation, enabling residents of the Metro Atlanta Region to reach the River without a personal vehicle.



### **Increase Water Access**

The RiverLands imagines a linear water trail that has boat launches, resting spots, and camp sites accessible from the water, enabling a range of water-based River trips that range from hours to days.



### **Plan for Accessibility**

People of all ages and abilities will be invited to move along the RiverLands Greenway freely and comfortably. Access from the land and water must be designed for all ages and mobility levels, inviting the widest possible range of users.

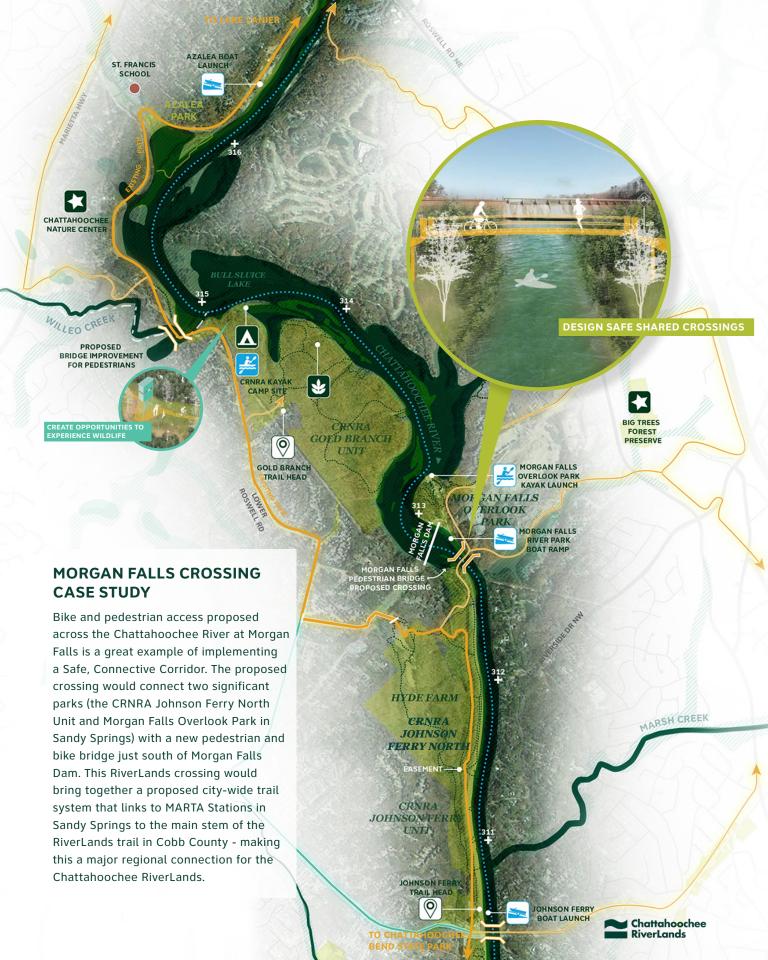


### Promote Health and Safety on Land and on Water

A primary function of the Chattahoochee RiverLands is to provide safe and protected routes for cyclists and pedestrians with regional connections to larger non-motorized transportation networks. By working with River managers to publicize or broadcast River conditions the RiverLands will promote safe and responsible activities on the River.



Diagrammatic distribution of new and proposed trailheads and water access points.



### DESIGNING FOR ALL AT THE RIVER RAMBLE

The Accessibility River Ramble at Rottenwood Creek was not only a chance to get out to the River's edge on a beautiful day, but also was a unique opportunity to hear from a group of youth and adult attendees living with disabilities about how to create more accessible, rewarding outdoor experiences.

Activities at the River Ramble were designed for a range of trail users with diverse abilities.

Anticipating people who have visual impairments and users who are blind, Atlanta Audubon Society led the group on a bird listening tour, and Nature for All and the National Park Service set up sensory stations. The Aimee Copeland Foundation also provided wheelchairs to the participants and facilitated a discussion around accessible trail and water access design.

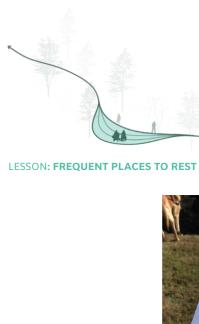
These sensory-rich experiences are made possible with inclusive design strategies that should be embedded early in a trail design process. Everything from accessible information online to frequent rest-stops along trails should be designed to exceed accessibility standards, so that people of all abilities can experience natural settings. For example, Braille trails with sensory signage boxes connected by rope handrails can be incorporated into otherwise standard designs for trails.

The River Ramble was organized in partnership with Nature for All, an Atlanta-based organization dedicated to making nature accessible for people living with disabilities, and the Chattahoochee Parks Conservancy. This event built on previous programs organized by Nature for All for people living with visual impairments, which brought together a large network of organizations including the Georgia Council of the Blind, Center for the Visually Impaired, Shepard Spinal Center, the Aimee Copeland Foundation, and Friends of Disabled Adults and Children (FODAC). The River Ramble took place on November 9th, 2019, at the Rottenwood Creek Trail at the Paces Mill Unit of the Chattahoochee River National Recreation Area.









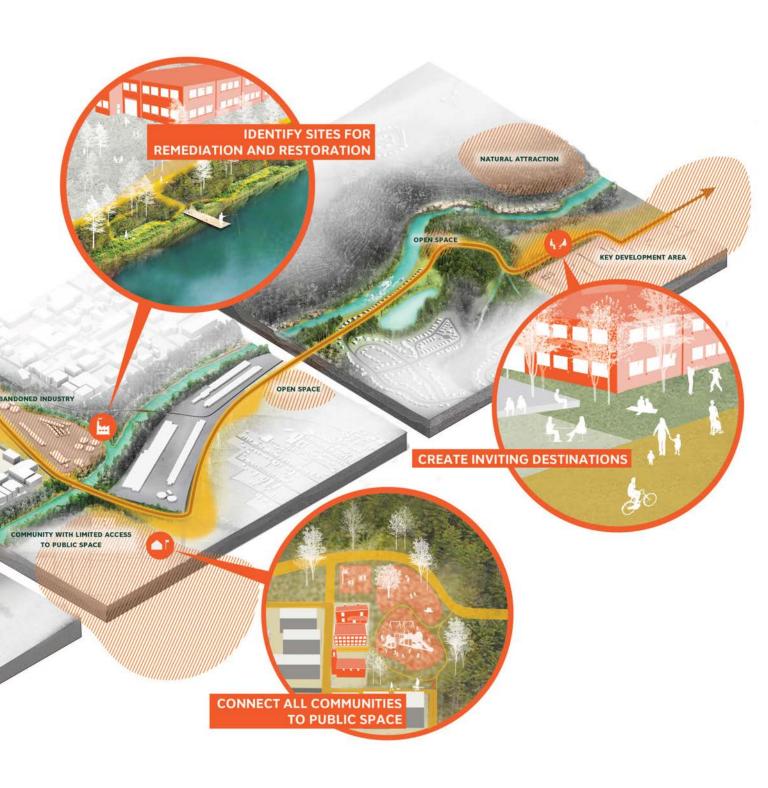






### **GOAL: A COMMON GROUND FOR ALL**

The Chattahoochee RiverLands will be accessible to people of all backgrounds, abilities and ages. The resources of the RiverLands will be inviting to the widest possible range of users, creating a common ground for recreation and transportation that equitably serves the diverse and expanding communities of the Metro Atlanta Region. Historically underserved neighborhoods will be connected to the RiverLands, opening opportunities for new public space creation and park designation that provide access for those who need them most. Communities will be engaged in the process, with their voices shaping and co-designing spaces that serve their community. In addition to the promise of improved quality of life benefits for said neighborhoods, this vision also acknowledges an awareness and concern about the potential for the RiverLands to precipitate gentrification and displacement if care is not taken to consider and proactively plan with low-income and marginalized communities in mind. **IDENTIFY OPPORTUNITIES** FOR ECONOMIC DEVELOPMENT KEY DEVELOPMENT AREA TRIBUTARY PROTECTION AREA





### A COMMON GROUND FOR ALL

### **DESIGN STRATEGIES**



### **Connect All Communities to Public Space**

The Chattahoochee RiverLands represents an opportunity to link historically underserved communities to new and existing community resources along the River. Connections to new gathering spaces and public amenities will provide these communities with greater direct access to the River and unite diverse populations with one another to build a more robust social infrastructure that traces the Chattahoochee.



### **Create Inviting Destinations**

The RiverLands will establish a new public realm along the Chattahoochee by connecting existing park spaces and catalyzing the creation of new park spaces. These spaces not only promote ecological stewardship by allowing trail users to gather and recreate near the River, but they also provide important stop-over points for people moving along the Greenway.



### **Identify Opportunities for Economic Development**

The RiverLands is a regional recreational amenity that will catalyze local economic development. Given the region's rapid population growth, it is critical to think long-term and strategically about how the Greenway will support low-impact activation of the River in ways that can co-exist within a functional ecosystem. The trail itself will also generate tourism-based economic development opportunities.



### **Identify Sites for Remediation and Restoration**

Soil and water contamination pose ongoing threats to the health of the River and those who recreate in and along it. The RiverLands will focus on identifying environmental justice challenges along the River corridor and will propose projects along the Greenway that remediate and restore spaces and make them healthy and accessible to all.



Diagrammatic distribution of areas identified for economic development in relation to proposed tributary trails and environmental justice areas.



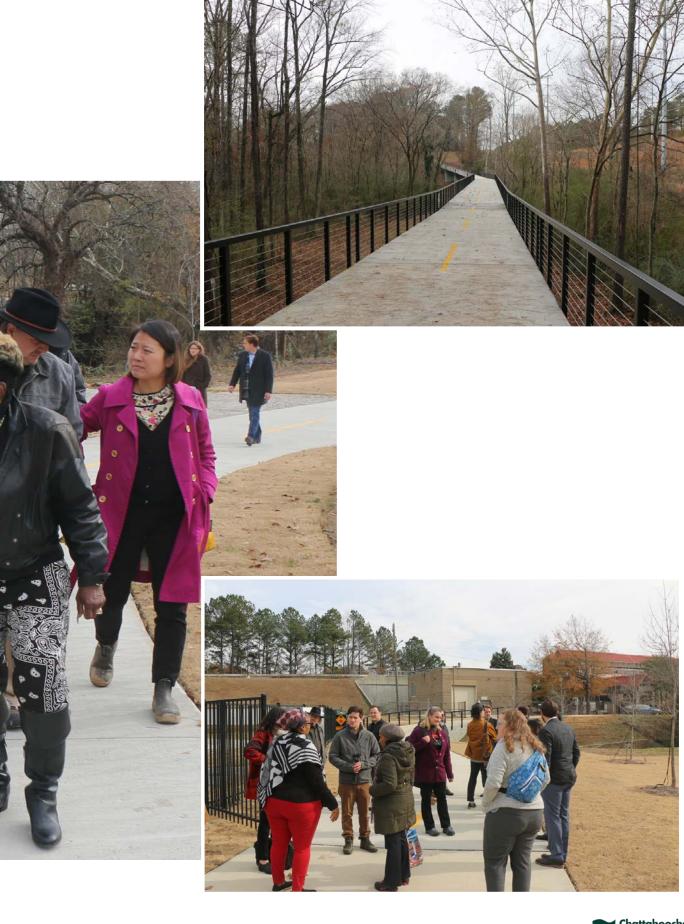
## EXPLORING THE PROCTOR CREEK GREENWAY

The Proctor Creek Greenway, beginning at the Bankhead MARTA Station at Donald Lee Hollowell Parkway follows the Proctor Creek along Westside Park and will eventually connect to the Chattahoochee RiverLands at the confluence with the River. The first phase of the Proctor Creek Greenway opened in December 2018, and stakeholders from the area, including members of the Proctor Creek Stewardship Council, West Atlanta Watershed Alliance, Groundwork Atlanta, Atlanta City Council Member Dustin Hillis, Riverwalk Atlanta, and Grove Park Residents shared their experience living, working, and advocating for equitable development in the area.

Residents and advocates look forward to restoring Proctor Creek to its once natural course. Juanita Wallace, a long-time resident of the area, grew up catching crawfish in the creek. Today, she closely monitors the quality of the water, collecting water samples and sending them to the Chattahoochee Riverkeeper once a week for testing. The industrial structures built along Fulton Industrial Boulevard act as a wall, separating neighborhoods like Monroe Heights, Riverside, Bolton, and Collier Heights from the Chattahoochee River and the once abundant natural resources in the area. Several organizations, including Riverkeeper and the Proctor Creek Stewardship Council, are dedicated to protecting the people, land, and water from the impacts of adjacent industrial land-use and are working to make sure that the development of the Greenway benefits the long-time residents of the area. In a similar vein, Riverwalk Atlanta and Groundwork Atlanta envision many of the area's brownfields being decontaminated and turned over to the community as parks and other educational facilities, reconnecting the community to the ecology of the Proctor Creek watershed.

Continued engagement with local stakeholder groups informed the design of the Proctor Creek Trail Extension Demonstration Site. (see page 152)





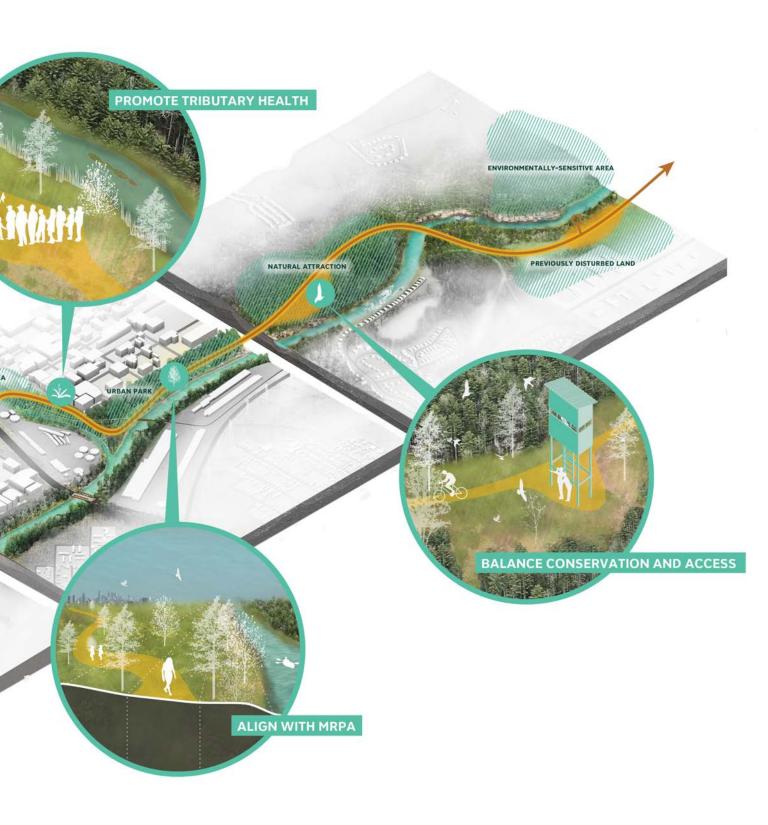


# GOAL: AN ECOLOGICAL REFUGE FOR THE REGION

The Chattahoochee RiverLands will improve the ecological health of the River basin and build upon generations of support and stewardship for the health of both land and water. As the Metro Atlanta population grows and the climate changes, ecological connectivity along the River is essential for biodiversity, species movement, and the long-term health of our environment and region.

The Greenway will be carefully designed to protect floodplains and sensitive native ecosystems, restore riparian edges and buffer zones, and enhance ecological connectivity. The RiverLands' trails and parks will create further opportunities for ecological advocacy and citizen science along the banks of the Chattahoochee. The Chattahoochee RiverLands will act as an ecological refuge for an expanding and changing region.







AN ECOLOGICAL REFUGE FOR THE

**REGION** 

### **DESIGN STRATEGIES**



### **Enhance Ecological Connectivity**

The Chattahoochee River corridor is a critical ecological resource for people and wildlife, enabling movement for aquatic and terrestrial species and creating space for migration and adaptation to future conditions.



### **Balance Conservation and Access**

The RiverLands Greenway will bypass sensitive habitats and avoid negative impacts on ecosystems throughout the River corridor. Forest cover will be protected or restored along trails, and programmatic elements and access points will be designed to minimize ecological footprints and to include habitat enhancements. The RiverLands must balance access and conservation, preserving today's ecological resource for the future.



### **Promote Tributary Health**

Tributaries are the lifeblood of the Chattahoochee River. The RiverLands will create opportunities for the improvement of tributary health and to raise awareness of regional water systems and their quality. Tributary Trails offer places for people to connect with the ecological resources "in their backyard," but must avoid impacts to riparian systems that contribute to River health.



### Align with the Metropolitan River Protection Act (MRPA)

The standards defined in the 1972 Metropolitan River Protection Act (MRPA) are critical for protecting the River corridor as an ecological resource. To continue this legacy of protection, the design of the RiverLands will respect the buffers, setbacks, and protection zones established by MRPA. The Greenway presents opportunities to further enhance protection along the River for future generations.



Diagrammatic distribution of identified restoration sites in relation to creeks and existing greenspace.



### **DISCOVERING THE CHATTAHOOCHEE AT A RIVER RAMBLE**

North of Atlanta, the Chattahoochee River and environs are nationally recognized for their beauty, recreational value, and ecological function for the region. But further south, the "forgotten River" is hardly visible. The River Rambles were events designed to immerse local groups in the River's environment and history through fun and hands-on activities. The first River Ramble, on Island Ford, was organized in partnership with the National Park Service and Atlanta's Agape Youth and Family Center, an after-school program within walking distance of the River in northwest Atlanta. While many of the students live, learn or work with the River virtually in their backyards, they seldom see it: most experience the Chattahoochee River only from the window of a car on one of the expressway bridges that cross the River.

The RiverLands Greenway proposes to create new access points, revealing the Chattahoochee to a much larger and more diverse group of people, creating a common ground for all. In order to design for future trail users, the goal of the River Ramble was to bring students from Atlanta to the Chattahoochee National Recreation Area and hear from them about what they would envision for the RiverLands. The Ramble included and exploration of reptiles and other life in the ponds and creeks who depend on a healthy watershed, and a raft trip from the CRNRA Island Ford Unit to Riverside Park in Roswell, viewing the shoals prized by anglers and birds alike.

As the Chattahoochee RiverLands moves forward, balancing recreational access and educational programming with protection will ensure that the living character of the River is not only preserved but enhanced by a new generation of stewards.







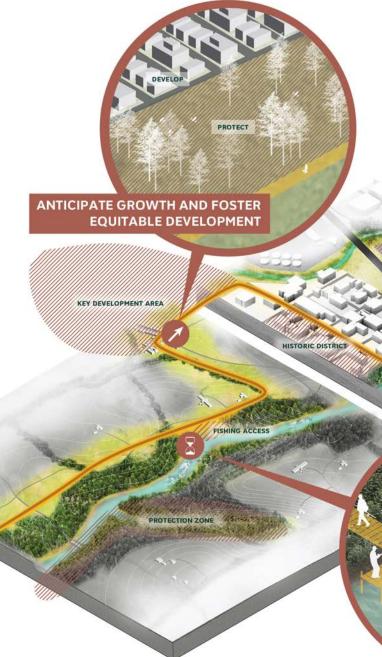


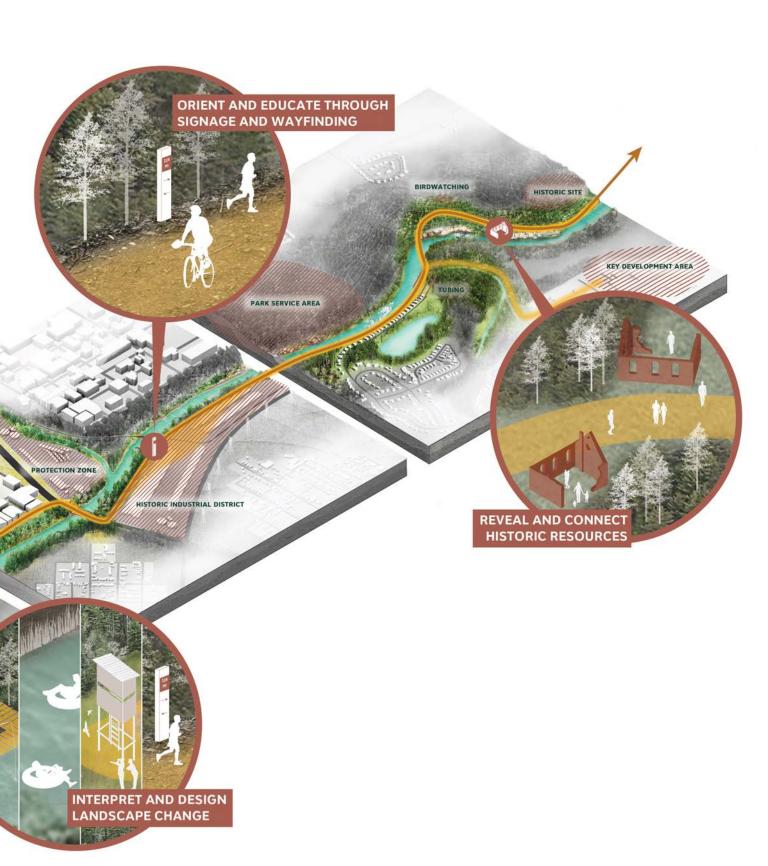




# GOAL: A LIVING LEGACY FOR FUTURE GENERATIONS

The Chattahoochee RiverLands is a generational project and will unfold and evolve over many decades. The Greenway will interpret the rich cultural and ecological history of the Chattahoochee and set up a new adaptive template that guides regional growth, conservation, and stewardship. The region holds immense cultural and historic resources that reveal centuries of human history; the RiverLands will carefully facilitate opportunities for communities and neighbors to interpret and link these sites into a spatial storytelling network that can evolve as the region grows. Signage and wayfinding will unite the RiverLands and create inviting and accessible spaces that serve the diverse population of the Metro Atlanta Region . The RiverLands will promote responsible urban development that reduces impacts to the River and encourages stewardship and engagement with ecological resources for populations young and old. The Chattahoochee RiverLands is a living legacy that will evolve and grow over multiple generations.







A LIVING LEGACY FOR FUTURE GENERATIONS

### **DESIGN STRATEGIES**



### Anticipate Growth and Foster Economic Development

As the Metro Atlanta population increases, the Chattahoochee RiverLands will provide a template for future conservation efforts while preparing the region for growth. The project will propose best practices for development by bringing trails to areas suitable for growth while establishing tributary buffers and stormwater management strategies.



### Orient and Educate through Signage and Wayfinding

Investments in continuous legible signage and other wayfinding strategies along the RiverLands Greenway will provide multiple benefits in terms of safety and responsible use. Consistent co-branding, including mile markers and trail head signage, will guide people through multiple jurisdictions while articulating a consistent identity for the RiverLands.



### Reveal and Connect Historic Resources

The RiverLands will connect a large number of historic and cultural resources that line the River corridor, revealing the evolving human relationship with the Chattahoochee River. As more historic sites are inevitably identified, the trail must propose flexible strategies to accommodate, creatively interpret, and integrate these into the identity of the Greenway.

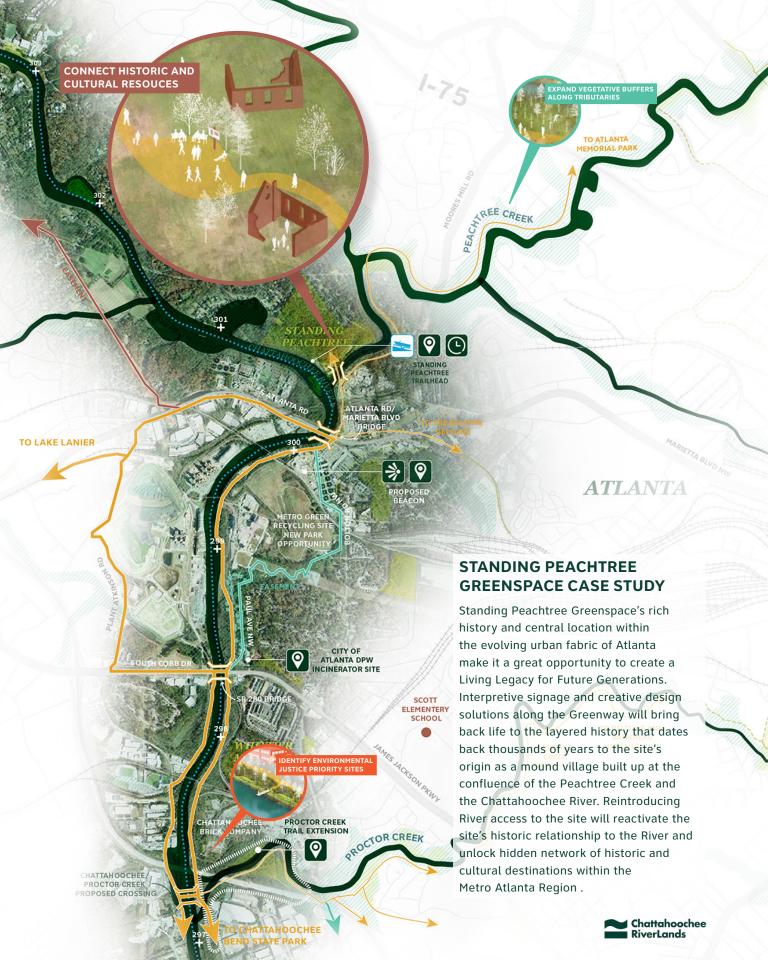


### Interpret and Design Landscape Change

The RiverLands is a year-round destination meant to expose people to the majesty and dynamism of the Georgia Piedmont landscape. Seasonally specific activities, like summer float trips, fall hawk-watches, and spring wildflower tours are important aspects of the project.



Diagrammatic distribution of historical sites, information centers and areas forecasted for growth



# IDENTIFYING POLICY RECOMMENDATIONS DURING THE IN STUDIO HOURS

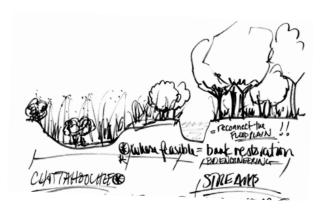
The implementation of the RiverLands is a generational project that involves more than just the realization of a line on a map. Studio Hours were opportunities to step back and reflect on the best approaches to equity, ecology, health, safety, and accessibility. The sessions were small focus groups composed of invited experts from various fields. While the discussions were robust, they marked only the start of longer-term stakeholder and community engagement on these topics.

The Equity Studio Hours, led by distinguished Atlanta scholars and social justice advocates, underlined the importance of frequent public engagement with underserved communities to better understand their concerns and set up partnerships with local affordable housing and job centers early on in the Chattahoochee RiverLands implementation process. The Ecology Studio Hours discussion focused on identifying restoration sites and unpacked the methodology behind the environmental experts' trail suitability analysis. The Safety and Health Studio Hours discussion addressed metrics for evaluating health outcomes resulting from the new recreational space and how to ensure that the crossings will be safe for all users when implemented.





















### **ALIGNING THE RIVERLANDS**

### THE PROCESS OF REACHING A PREFERRED ALIGNMENT

The Project Team developed various Greenway Alignment Alternatives. The approach to the alignment process was shaped through an iterative process grounded in geospatial analysis. Over a vast geographic region, the team labored to "thread the needle" through various opportunities and constraints to achieve the Project Goals. The final Preferred Alignment is the result of a collaborative effort, developed with regional professionals and experts, as well as input from the general public.

#### **Alignment Workshop**

In August 2019, the Project Team met at the Atlanta City Studio for the Alternatives Alignment Workshop to draw the first draft of three alternative trail alignments over the entire 100-mile project area. Before drawing on each 5-mile map segment, the team consulted the supplemental data from the Existing Conditions Analysis report, consulted the Trail Suitability and Connectivity Analysis, and reviewed feedback from past engagement with stakeholders.

#### **Feedback on Alignment Alternatives**

Based on input over 10 months, the Team identified three theoretical alignments based on broad goals for the corridor's 100 miles. Each of these was guided by a different, major underlying assumption.

- 1. What would a trail alignment look like if we accessed public rights-of-way and easements, avoided or minimally navigated private property lines, and took advantage of natural topography and conditions (least resistance)?
- 2. What would a trail alignment look like if it maximized its protection of ecologically sensitive areas (least ecological impact)?
- 3. What would a trail alignment look like if it maximized connections between local and regional points of interest (network of destinations)?

In the fall of 2019, the team solicited comments on the three different alternatives from the Chattahoochee Working Group (CWG), the three Sub-Area Committees, and members of the public during a Public Forum. Additionally, the Project Team hosted two In-Studio

Previews during which Chattahoochee Working Group and Sub-Area Committee members were invited to mark up the in-progress alignment drawings.

#### **Sub-Area Committee Meetings**

The major takeaways and preferences for the RiverLands trail alignment varied by Sub-Area. In Sub-Area 1, for example, while there was no strong preference for one option over another, there was wide-spread support for a simple, connected path close to the River. In Sub-Areas 2 and 3, more emphasis was placed on the need for off-road connectors between greenspaces and a desire for private landowners to acquire land / assist with trail development.

#### **Public Forum**

At the November Public Forum, the team was able to present the alignment alternatives to a new group of stakeholders, many of whom were learning about the RiverLands project for the first time. At this event, there was generally positive feedback on the alignment options generated. Many attendees emphasized their desire to connect existing parks, and community assets with bike trails and soft-surface or pedestrian-only trails through existing park units of the Chattahoochee River National Recreation Area (CRNRA). Other attendees were concerned about proximity of the trail to private property, yet most had a positive outlook after speaking with members of the team.

### **Preferred Alignment Determination**

The Design Team and Project Management Team met to process the comments from the SACs, CWG and Public Forum and review the goals for the preferred alignment. In addition to reconciling critical segments identified during the comment period, the team sought to fine-tune tributary trails, water access points, key destinations, and potential locations for trail-oriented amenities.

This section reflects the alignment process and milestones that informed the determination and selection process.



### ALIGNING THE RIVERLANDS

### THE TOOLS

The Project Team brought a set of core characteristics of the study area to each of the three Alignment Alternatives, and additional maps and analytical tools were tailored to the underlying assumptions behind the creation of the three Alignment Alternatives.

#### Basemap

The basemap contained compiled data related to topography, land use, and key destinations as well as existing and planned transportation networks.

#### Slope analysis

The Slope Analysis was generated from 1-meter contour intervals from LIDAR data of the Metro Atlanta Region . A slope analysis is distinct from an elevation map as it shows the change in elevation versus the average elevation. Areas in red where there is a high change in elevation and therefore, steep slopes that would be difficult for users to traverse on a greenway, may require greater disturbance to implement a trail, and may have greater risk of erosion.

#### · Other general tools

Each of the alternatives incorporated data from the lens of public engagement, safety and equity, drawing on spatial, census, and other data such as

- Population density and population growth
- June public engagement aspirations
- Pedestrian & bike safety
- Pedestrian & bridge crossings
- Pedestrian & bike crashes
- Vehicular access
- Atlanta gentrification risk map
- Environmental justice tools
- Obesity prevalence

#### PATH OF LEAST RESISTANCE

Finding the alignment that accessed public land, avoided private property lines, and took advantage of natural topography and conditions meant bringing the following data to the forefront of the consideration.

- Land Ownership
- Easements
- Land use
- Recreational resources

#### LEAST ECOLOGICAL IMPACT

Viewing the alignment through an ecological lens, the design team considered MRPA classification and created two tools for the workshop, a Train Suitability Analysis and a Linear Ecological Analysis.

### • Ecological trail suitability analysis

This map identified areas that were most a most ecologically suitable for the greenway based on preserving ecological processes and minimizing environmental impacts. The fundamental analysis was an index that drew from the concept of the original MRPA categories and combined the following eleven factors:

- High Conservation Priority Species Presence
- Interior Forest
- Wetlands and impaired streams
- Forest Proximity to Streams
- Floodplains
- Soil Erodibility
- Slope
- Vertical Habitat Diversity
- Forest Patch Size
- Interior Forest Connectivity
- High Water Infiltration Areas

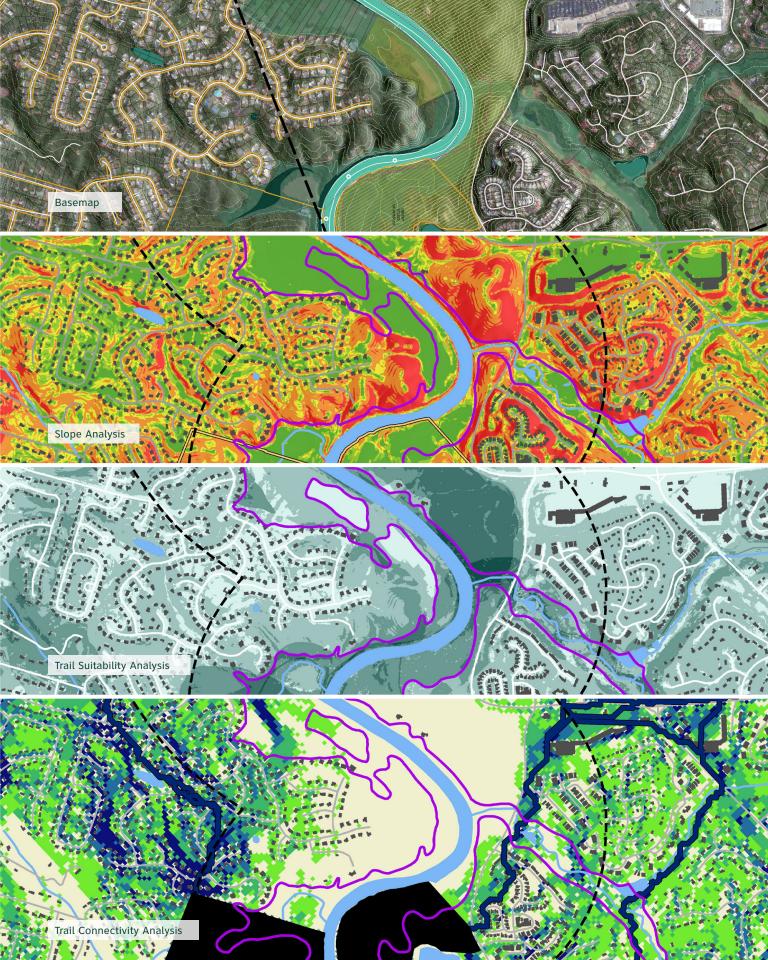
Lighter areas on the map denote areas that are less ecologically sensitive, like existing roadways. Darker areas on the map denotes areas that are more ecologically sensitive and should be avoided.

The Design Team then developed a sister map, the Linear Ecological Analysis, which used the suitability scores as a level of resistance to movement. The model draws a least cost path along the entire study area on each side of the River, connecting existing water access points and selected parks along the way. The resulting blue least cost path line represents the path of fewest ecological impacts, passing through the fewest ecological obstacles.

#### **NETWORK OF DESTINATIONS**

To reveal the connections among points of interest, the third alignment relied heavily on datasets describing:

- Public transit
- Historical resources
- Community facilities & amenities
- Ongoing planning initiatives



### ALIGNING THE RIVERLANDS

### **ALIGNMENT ALTERNATIVES**

The alignment methodology used a framework for aligning three alternative trails along both banks of the Chattahoochee River within the 100-mile Study area.

#### · Path of Least Resistance

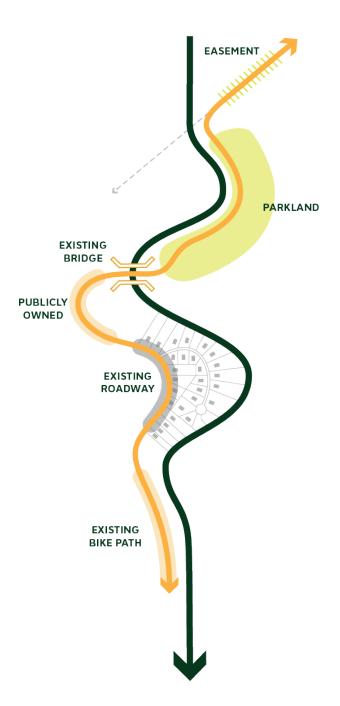
This trail alignment prioritizes the ownership pattern (publicly owned land, easements, public right-of-way), the topography, and the connection to existing trails.

#### • Path of Least Ecological Impacts

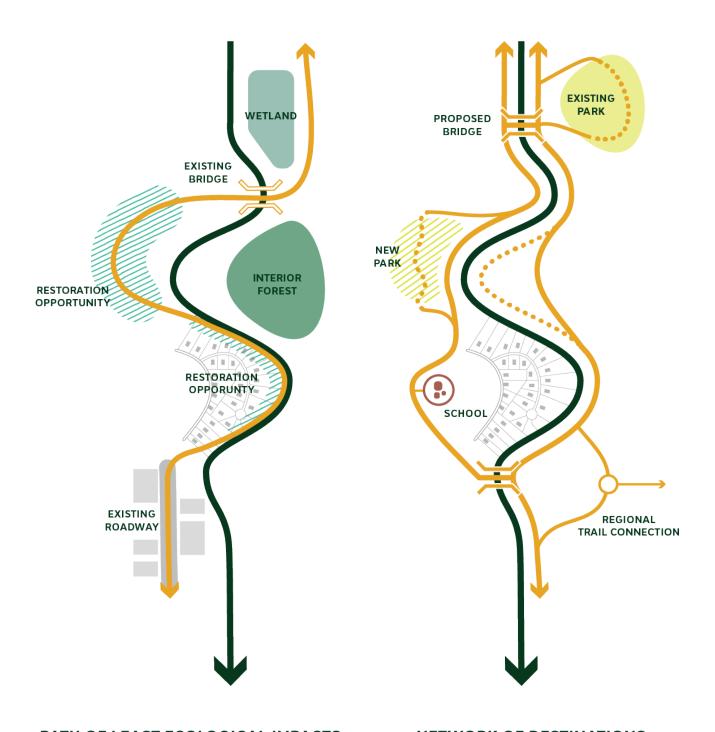
This trail minimizes impacts to ecologically-sensitive areas, minimizes landscape fragmentation and avoids areas prone to flooding.

#### A Network of Destinations

This trail alignment creates a network of priority destinations or nodes. For example, the trail alignment would connect an historic mill, an existing park, neighborhood library, and nearby MARTA stop. This alignment might be more "urban in nature" and further away from the River's edge. This alignment would prioritize access to all communities along the River.



**PATH OF LEAST RESISTANCE** 



PATH OF LEAST ECOLOGICAL IMPACTS

**NETWORK OF DESTINATIONS** 



# DEFINING THE PREFERRED ALIGNMENT WITH THE SUB-AREA COMMITTEES

The Design Team met with the Sub-Area Committees to share three potential alignment alternatives for the Greenways, Blueway, and Tributary Trails for the Chattahoochee RiverLands. Each one of the alignments was guided by a different underlying assumption, as described on previous pages. The meetings took place on October 22nd and 23rd at the Sugar Hill City Hall in the north and the Sweetwater Creek State Park in the south.

The Sub-Area Committee stakeholders suggested developing a hybrid of the three alignments depending on local conditions. Some changes were made to the location of trailheads, water access points and Tributary Trails. In the Suburban Parklands, stakeholders proposed moving the north entrance to the RiverLands from Buford Dam down to SR-20 Trailhead. In the Urban Core. stakeholders from the Collier Heights Association drew trails connecting the RiverLands to Utoy Creek and the Lionel Hampton Trail. In the Agricultural Countryside, stakeholders focused on how existing state parks like Sweetwater Creek and Chattahoochee Bend could tie into the RiverLands network. This hybrid alignment ultimately became the Preferred Alignment for the Chattahoochee RiverLands.









#### TAKING THE ALIGNMENT ALTERNATIVES TO THE PUBLIC FORUM

The public had the opportunity to provide feedback on the three Alignment Alternatives and provide local insight on the project. The Chattahoochee RiverLands Public Forum was an informational event with science-fair-style stations highlighting the work compiled thus far, the alternative alignments, and program options for the Pilot Site. The Public Forum took place on Saturday, November 2nd, 2019 at the C.T. Martin Natatorium and Recreation Center in Atlanta. More than 65 people of diverse backgrounds and locations within the project area attended, and most stayed for over an hour.

Overall, the public was supportive of the alignment options presented and very positive on the amount of information created to support the RiverLands Study. In the Suburban Parklands, the public expressed interest in connecting some existing park units with multi-use trails while bypassing others, such as the CRNRA Gold Branch Unit. Some attendees from Johns Creek were concerned with proximity of trail to private property and discussed with the Design Team potential solutions like removing the Simpsonwood Tributary Trail.

In the Urban Core (Sub-Area 2), the public expressed interest in connecting regional trails, tributaries in need of restoration, public transit hubs, and existing community assets like parks, schools and libraries to the River, utilizing loops along Proctor Creek, Sandy Creek, and Utoy Creek. Participants saw the RiverLands as an opportunity to reunite those areas with each other and the River.

In the Agricultural Countryside group (Sub-Area 3), the public supported connecting existing tracts of parkland with trails and the possible re-creation of a historic ferry crossing between Chattahoochee Bend State Park and McIntosh Reserve Park.







### **DEMONSTRATION SITES**

#### SELECTION PROCESS

It can be hard to imagine a 100-mile greenway trail and even harder to anticipate the transformative potential of such a huge project. To help put the Greenway in context, this study explored several Demonstration Sites. For these specific locations, the Design Team provided conceptual designs in order to better understand, illustrate, and explain how the RiverLands greenway and its associated programs fit into the regional landscape, reflect the core RiverLands goals, and engage with local communities.

Based on Project Team conversations over the course of the Study, numerous potential Demonstration Sites were identified. Due to time and resource constraints, three sites were selected for more detailed studies. In order to choose the Demonstration Sites, the team developed evaluation criteria based on how well each site supports the RiverLands' four project goals: to create a Safe, Connective Corridor; establish an Ecological Refuge; ensure a Common Ground for All; and provide a Living Legacy for the region.

Using the evaluation criteria, the Chattahoochee Working Group members were asked to evaluate the considered sites, and were tasked to help determine which sites could best demonstrate the Study's goals and objectives. Ultimately, in collaboration with the Chattahoochee Working Group and stakeholders, additional design studies were conducted by the Project Team.

The Demonstration Sites are meant to be places where the RiverLands will become tangible and will establish models for the greenway development while showing the full breadth of the RiverLands' vision.

#### **Role of Demonstration Sites**

The Demonstration Sites act as key destinations that bring people not only to the River's edge but allow them to understand the identity of the RiverLands. These sites reveal the potential of the Chattahoochee RiverLands vision and represent typical conditions throughout the 100-mile corridor.

#### **Geographic distribution**

The selected Demonstration Sites are distributed evenly between the three Sub-Areas and act as examples for how to respond to typical conditions within the northern Suburban Parklands, central Urban Core of Atlanta and Cobb County, and the southern Agricultural Countryside.

#### Level of design

The Demonstration Sites have been designed through collaboration with the Chattahoochee Working Group, Sub-Area Committees, and stakeholder input. The sites have been drawn to a conceptual level of design - suggesting programmatic overlays and key design elements of the RiverLands such as trailheads, water access points, tributary trails, and parks.

#### **Demonstration Sites considered:**

- Sugar Hill Trailhead (selected)
- RC Akers
- · Abbott's Bridge
- Settles Bridge
- · Peachtree Industrial Boulevard
- · Paddle Camp At Jones Bridge Unit
- Paddle Camp At Gold Branch Unit
- Trailhead At Big Creek
- Morgan Falls Overlook Park Extension
- Standing Peachtree Park
- South Cobb Drive Property
- · Mcdonough-Atkinson Brownfield
- Atlanta RiverLands Park
- Proctor Creek Trail Extension (selected)
- Fulton Charlie Brown Airport
- Mableton Parkway Trailhead
- Fulton Industrial River Trail
- Fulton RiverLands Park
- Chattahoochee Hills RiverLands Park (selected)
- Moore's Bridge Park
- Mcintosh Crossing

SAFE, CONNECTIVE CORRIDOR

Does it have a multimodal component?

Does it connect communities?

Does it connect to public transportation?

Does it increase water access?

Is it accessible to all people?

COMMON GROUND FOR ALL Is the site inviting to all? Does it have the potential to be a destination?

Does it serve underserved communities?

Is it supported by local communities?

Is there potential for displacement of adjacent communities, and if so, could it be

addressed/mitigated within the site boundary? (ie affordable housing, etc.)

Does it connect communities to new public space?

Does it have the potential for economic development and jobs creation?

Does it have opportunity for remediation or restoration? (+ addressing environmental justice issues?)

ECOLOGICAL REFUGE FOR THE REGION Does it enhance ecological connectivity?

Does the site offer opportunities to support ecosystem services?

Does it improve water quality/promote tributary health?

Does the site offer an opportunity to balance access with ecological impacts?

Does it offer an opportunity for habitat restoration?

Does it promote tributary health?

Does it align to MRPA?

LIVING LEGACY FOR FUTURE GENERATIONS

Does it anticipate growth?

Does it have the potential to interpret social and ecological history and hold points of interest?

Is it a significant historical and ecological site?

Does it have the potential to establish an identity for the RiverLands?

Does it have potential to be transformative?

Is it implementable? (ownership, politics)

Does it align with partners and funding mechanisms?

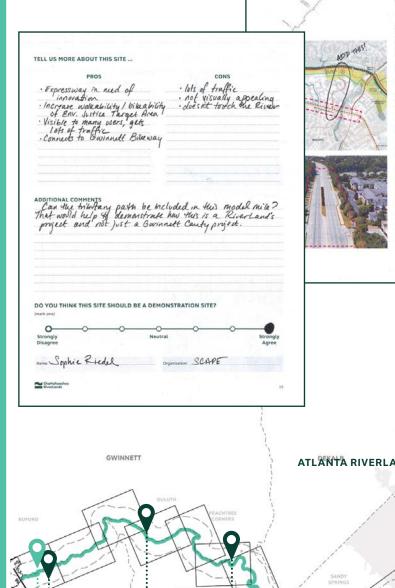
Does it allow for stewardship?



# SELECTING THE DEMONSTRATION SITES WITH THE CHATTAHOOCHEE WORKING GROUP

The Chattahoochee Working Group was crucial in determining which sites were selected to best demonstrate a conceptual vision of the RiverLands in situ. Members of the Working Group evaluated each location and narrowed the selection to three sites: the Sugar Hill Trailhead, the Proctor Creek Trail Extension, and the Chattahoochee Hills RiverLands Park.

In December 2019, three Stakeholder Groups consisting of landowners and technical advisors were established to provide background information and review concepts for the Demonstration Sites. Feedback indicated the placement and types of program best suited for the Demonstration Site based on local knowledge and existing plans for the sites. For the Trailhead at SR-20, stakeholders expressed interest in connecting back to the Sugar Loop Greenway that is in development and plans for mountain biking in the area. For the Proctor Creek Trail Extension, stakeholders who have been looking closely at the development of the Proctor Creek Greenway were excited by the prospect of bringing new energy to existing plans with the introduction of nature-based educational programming along the creek. For the Chattahoochee Hills RiverLands Park, stakeholders recommended utilizing higher ground that is less ecologically sensitive, and connecting the Greenway to the rest of the large park with a visitor's center and boating outfitter located to the west and small primitive campsites scattered in the wetlands to the east.



FULTON

TRAILHEAD AT

BIG CREEK
PADDLE CAMP AT
GOLD BRANCH UNIT

PADDLE CAMP AT JONES

BRIDGE UNIT

PEACHTREE INDUSTRIAL BLVD

PORSYTH

RC AKERS

SUGAR HILL

TRAILHEAD

**PEACHTREE INDUSTRI** 



SITE FACTS

Map tile: 103 Sub-Area: 1 Size: 1 mile

#### SCORE CARD











## ALONG THE RIVERLANDS

## THE PREFERRED ALIGNMENT

The Preferred Alignment presented in this document is intended to reflect the broad array of feedback the team has received during the 10-month alignment process, in keeping with the team's high-level vision for the Chattahoochee RiverLands.

Guided by an aspirational vision covered in the "Design Strategies" section of this document, four goal statements, and strategies (presented in the Revealing the RiverLands vision document) developed through stakeholder visioning, collaborative input, and community co-design sessions, the Project Management Team, Design Team, Sub-Area Committees, and Chattahoochee Working Group, arrived at a flexible and adaptable Preferred Alignment.

The Preferred Alignment is comprised of several alternative trail alignments that represent the collective input the RiverLands team received from various stakeholders. The current Preferred Alignment reflects what the team knew at the moment, but is meant to evolve over time and intended to be adaptable. This alignment represents what is thought to be the most preferable path for a greenway trail given various considerations related to land ownership, ecology, and existing planning initiatives; it is not always the most practical or the easiest to implement. The Project Team recognizes that in some areas, this preferred option may not be readily implementable; therefore, the team has also identified both a practical, and in some cases, other alternatives.





## ALONG THE RIVERLANDS

#### **NOMENCLATURE**

#### **The Preferred Alignment**

This Preferred Alternative serves as a framework for aligning the Greenway, Blueway, and Tributary Trails in order to create a seamless network of public spaces and access points along the 100-mile corridor.

#### **The Practical Alternative**

The Practical Alternative alignment represents what is understood as a Practical Alternative to the Preferred Alignment in places where the preferred option may prove infeasible. The Practical alternative may be thought of as an alignment that is easier to implement, though not necessarily the more enjoyable experientially. This alignment takes advantage of existing trail infrastructure, easements, or publicly owned land where hurdles to trail implementation are comparatively lower.

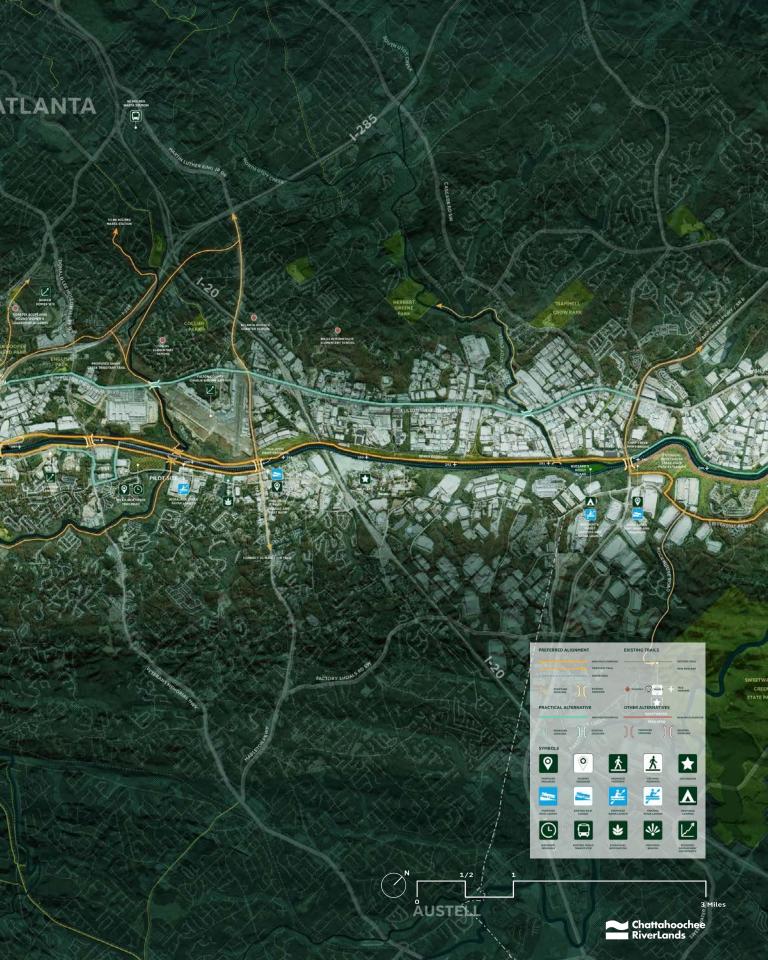
#### Other Alternatives

Other Alternatives were developed with the understanding that in some cases there may be an option that is even more preferable to the Preferred Alignment, but which would be more complicated to implement. This often represents an aspirational option that the team determined is important to document for future consideration. These Other Alternatives can ultimately be thought of as longer-term options or even later phases of the RiverLands project.

#### **Tributary Trails**

In addition to the Preferred Alignment, the RiverLands includes Tributary Trails – trail segments that feed into or connect to the RiverLands alignments. These may, but do not necessarily follow tributaries of the River; they are often existing, planned, or in some cases, proposed trails or bike paths that provide connections between local destinations, regional trail facilities and the RiverLands to create a cohesive network or integrated system.





## IMPLEMENTING THE RIVERLANDS

#### IMPLEMENTATION AND PHASING STRATEGY

The implementation of the RiverLands vision will likely be a combination of opportunistic and strategic projects. Agencies should be prepared to take advantage of opportunities that arise as a result of individual county or city-level trail plans or master plans.

For example, as redevelopment of key properties along the RiverLands alignment occurs, there may be opportunities for local governments to require those projects to dedicate land or easements, or even potentially to construct segments of the RiverLands trails or access points along their property. At the same time, RiverLands champions should look for so-called 'low-hanging fruit' or segments of the RiverLands Preferred Alignment and Practical Alternatives that are more readily or easily able to be implemented and drive the move toward development of those projects. In order to maintain a consistent RiverLands identity, this Study recommends the development of design guidelines, so that all partners create seamless and consistent RiverLands segments.

In terms of implementation and phasing, the **Preferred Alignment** represents what is thought to be the most realistic path for a Greenway given various considerations related to land ownership, ecology, and existing planning initiatives; it is not always the most practical or the easiest to implement. The **Practical Alternative** represents options worth considering in places where the preferred option may prove infeasible. The practical alternative may be thought of as an alignment that is easier to implement, though not necessarily the more enjoyable experientially.

In Sub-Area 1, the Preferred Alignment proposes development of a new main line trail along the River and provides connections into CRNRA park units. In some locations, there will be opportunities to use existing roadways and trails like Roswell's Riverwalk and the sidepath trail along Lower Roswell Road in Cobb County. In addition, there are also existing trails through some of the CRNRA park units that can more easily be incorporated into the RiverLands by being improved to shared use standards. Farther south, the Preferred

Alignment coincides with the existing Akers Mill Trail and Rottenwood Creek Trail. It is likely that improvements to or connections to existing infrastructure may prove easier in the short-term compared to entirely new segments of trail.

In Sub-Area 2, the Preferred Alignment includes several projects that are already in various planning stages, including the Chattahoochee RiverLands Pilot Project as well as Riverwalk Atlanta. Connections to and from these projects may be better suited to nearer-term implementation. Likewise, this Sub-Area includes the Chattahoochee Hill Country Greenway Trail currently in development by Douglas County as well as a Practical Alternative connection inside Sweetwater Creek State Park along the River.

In Sub-Area 3, the Preferred Alignment largely includes new trail segments that follow the River, connecting Sweetwater Creek State Park to Boundary Waters Park. Farther south, the trail moves to existing roadways before shifting back closer to the River.

Where possible, the implementation strategy should strive for advancing and developing the Preferred Alignment; however, it should be noted that in some cases, that alignment may not be doable given land ownership, ecology, or other challenges. In those cases, the implementation strategy should revisit any other alignment options suggested herein.

As a high-level planning study, it should be noted that additional conceptual design, preliminary engineering, and final design work will be needed for most segments in order to fully implement each segment. Working corroboratively with partner jurisdictions, this process may be done as a series of individual trail concepts or with some contiguous or adjacent segments grouped together under an umbrella project.

Examples of likely short-term projects include the Demonstration Sites and the Pilot Site in Cobb County. As part of the planning study, the Project Team is exploring potential conceptual design options for trail access and amenities at each of the three Demonstration

Sites. This is has been done in consultation with local stakeholders who have provided input on existing conditions, opportunities, constraints and their hopes for what could happen at these locations. Ultimately, the planning study resulted in rendered site plans for each of the Demonstration Sites illustrating the potential use of space and programming. The Pilot Project has been spearheaded by Cobb County, which allocated \$1 million in SPLOST funding for the first phase of design and implementation. The County hopes to leverage that funding and secure additional funding needed to construct the Pilot Project.

Other examples include projects already under way that will either construct or connect proposed segments of the Chattahoochee RiverLands, such as Douglas County's Chattahoochee Hill Country Greenway Trail or the joint project between the City of Roswell and Cobb County to replace the existing bridge over Willeo Creek along Willeo Road near the intersection with Lower Roswell Road and Timber Ridge Road. Projects such as these represent early opportunities to collaborate with local stakeholders to define how these locally driven projects can be designed to fit into or exemplify the visual identity, look, and feel of the RiverLands to create a cohesive system.

#### **Defining The RiverLands Identity**

As the Chattahoochee RiverLands project advances, it will be important to establish a framework to guide how an overall identity and how local jurisdictions and partner agencies, such as the National Park Service, counties, and cities, align with or tap into that identity. This may take the form of smaller-scale elements such as adding on to existing infrastructure by incorporating consistent wayfinding and signage or tactical urbanism strategies. New trail segments, public spaces, or water access points should ultimately be designed to the recommended design guidelines (yet to be developed in a future scope of work) in order to ensure consistency in design, look, and feel of the RiverLands. It will be important for locally-driven RiverLands segments to strike a balance between retaining elements of local branding and identity while also incorporating elements of the RiverLands. There are a number of ways in which this can be accomplished, such as through the use of signature materials, and signage.

Signage is a critical element of successful greenway and trail systems. Not only does it help users recognize trails through branding, but it also helps people navigate the system, access nearby destinations, and establish proper etiquette. Consistency in signage should ideally be throughout the entire RiverLands system. However, it is understood that individual branding already exists for some individual, local trail systems and it will be important for these segments to reflect and acknowledge both brands.

In terms of materials, as the recommended material palette is further developed in the future, it will be important to consider not only the look and feel of those materials, but also the accessibility and the cost and time of maintenance for those materials. There will likely be opportunities for previously built or existing infrastructure to incorporate some materials and elements that will help establish these projects as part of the RiverLands after the fact.



## **ALONG THE RIVERLANDS**

The birds' eye renderings presented in this section provide an area-specific look at how the Preferred Alignment will interact with communities throughout the RiverLands.

Each of the 12 views in this section focuses on an area along the 100-mile corridor considered critical to the implementation of the RiverLands. The map to the right serves as a key for navigating these drawings, which are organized in this document beginning at Buford Dam in the north and continuing to Chattahoochee Bend State Park in the south. The arrows located on each of the page boundaries indicates the direction of the view.

Dividing the Preferred Alignment in this way allows project stakeholders and RiverLands champions to take the following pages to their individual constituencies in order to garner further support for specific segments of the trail.

In addition to the proposed alignments, this section also presents the conceptual design developed for the three **Demonstration Sites:** 

- Sugar Hill Trailhead in Sub-Area 1
- Proctor Creek Trail Extension in Sub-Area 2
- Chattahoochee Hills RiverLands Park in Sub-Area 3

Here, the Demonstration Sites are intertwined with views of the alignments and demonstrate how the RiverLands will take shape on the ground.

WHITESBURG

SOUTH FULTON

CHATTAHOOCHEE HILLS RIVERLANDS PARK CHATTAHOOCHEE HILLS, FULTON COUNTY

MARIETTA

50 NILL TO SWEETWATER CF

CHATTAHOOCHEE HILLS

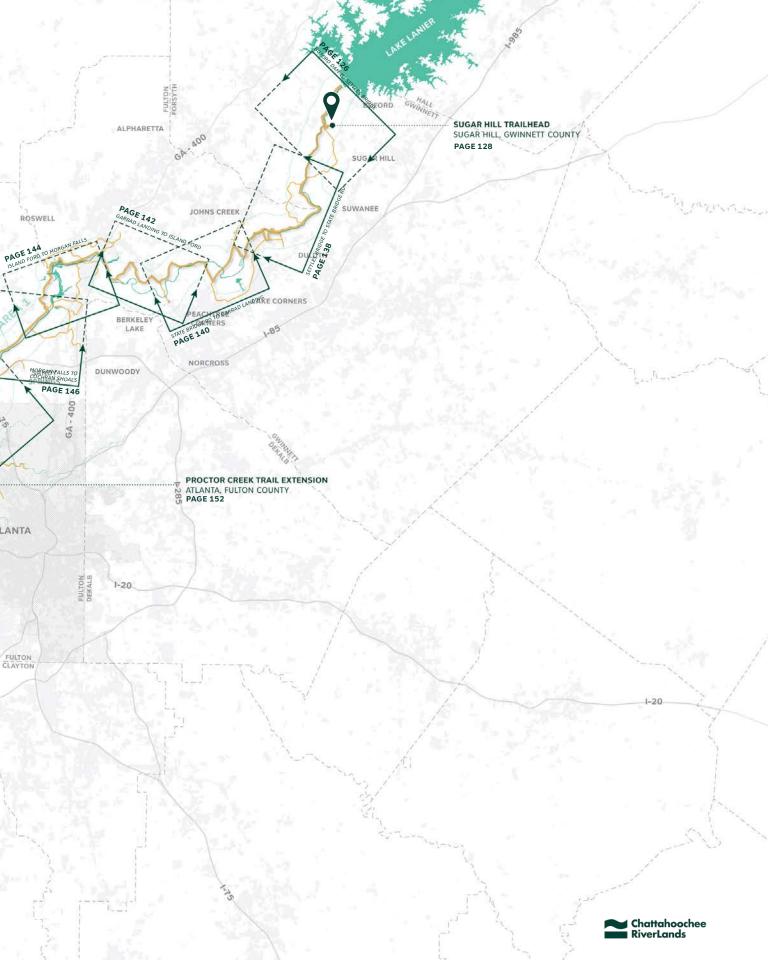
FULTON

PAULDING

PAGE 164

CHATTAHOOCHEE RIVERLANDS GREENWAY STUDY

123



## **BUFORD DAM TO SETTLES BRIDGE**



Beginning at Buford Dam at Lake Lanier, a small trailhead for the Greenway will be located at the existing Army Corps of Engineers parking lot below the dam.

The proposed multimodal RiverLands trail will loosely follow existing trails and former roadbed on the west side of the River. Because this is a more sensitive unit of the CRNRA, only a relatively narrow, soft-surface path would be considered by the National Park Service (NPS). This trail will connect the Lake Lanier Trailhead to the main RiverLands Trailhead on the east side of the park. The Greenway will cross the River via a new proposed bridge that runs parallel to the existing Cumming Highway Bridge.

While the Preferred Alignment on the west side of the River will cross in front of the fish hatchery to allow for proximity to the River, a practical alternative to this alignment will cross behind the hatchery, reconnecting with the Preferred Alignment immediately south of the hatchery.

The main trail will be supplemented by a foot path on the east side of Bowmans island, creating a loop from the main RiverLands Trailhead.

Located along State Route 20, the main RiverLands Trailhead, also known as the Sugar Hills Trailhead, is one of the selected Demonstration Sites. The proposal for this site includes a series of trail-related amenities as well as a new boat ramp located on the west side of the River.

From the Sugar Hill Trailhead, the RiverLands trail will follow a sewer easement through land owned by both Gwinnett County (Settles Bridge Park) and the National Park Service (Orrs Ferry and Settles Bridge Units) along the River. Within the Settles Bridge Unit, the trail will mainly follow existing paths, and a thin strip of land along the River.

To avoid NPS property, a practical alternative could follow Suwanee Dam Road and Johnson Road, reconnecting with the Preferred Alignment to the south of Settles Bridge Park.



#### **DEMONSTRATION SITE**

## **SUGAR HILL TRAILHEAD**

#### THE GATEWAY TO THE RIVERLANDS

The Sugar Hill Trailhead will be the northernmost entrance to the RiverLands and represents a unique opportunity to develop trail amenities that will be iconic throughout the region.

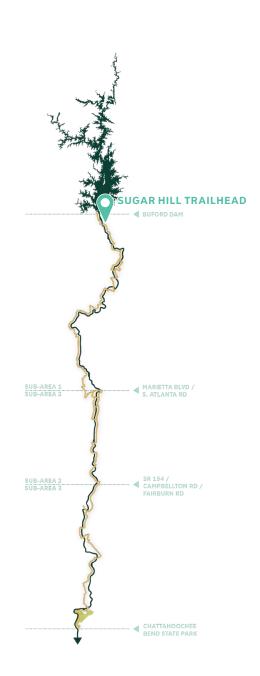
The site for the Sugar Hill Trailhead is situated next to State Route 20 (Cumming Highway), making it a highly visible location for trail-related amenities.

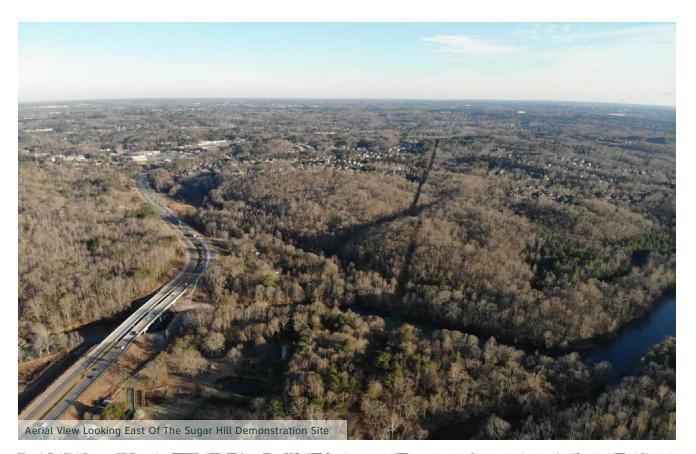
Nestled among some of the northern most areas of the Chattahoochee River National Recreation Area, it also offers opportunities to support ecological restoration alongside the trail. This site's proximity to a variety of destinations, including the planned Sugar Hill Greenway, Lake Lanier, and a historic fish weir, is also considered an asset.

The design goals for the Sugar Hill Trailhead center around a desire to provide trail access to a wide range of users, while also providing amenities that can be replicated throughout the project area. In order to achieve this, the Design Team discussed potential site features including parking, a new boat ramp and wayfinding elements, extensively with a committee of stakeholders.

Based on those conversations, the programmatic amenities reflected in the design for this site include:

- A new boat ramp, kayak storage, and Blueway specific parking on the west side of the River, directly north of the SR-20 Bridge
- A new pedestrian and cyclist specific bridge across the Chattahoochee in order to bypass heavy traffic on SR-20
- Areas and overlooks along the River to observe and learn about the historic fish weir at Bowmans Island
- An expansion of the existing parking lot along SR-20 with a nook dedicated to orienting visitors to the trail
- An interpretive pavilion and associated parking specific to cyclists and pedestrians
- The Crayfish Creek Restoration Project, an effort led by the Chattahoochee National Park Conservancy and Upper Chattahoochee Trout Unlimited, will help mitigate the hydrologic effects of Buford Dam operations and local stormwater management









#### A CLOSER LOOK AT THE BOWMANS ISLAND FISH WEIR

Just south of Buford Dam, a historic fish weir ripples the surface of the Chattahoochee River in a distinctive "V" shape, channeling fish and water towards the center of the River. It's thought that the Cherokee who used to live on the land near the River built these fish weirs from stones hundreds of years ago. At the bottom of the V, a wooden basket would be placed to catch the fish flowing through.

Such hidden Native American sites will be woven into the planning and design of the Chattahoochee RiverLands Greenway. Knowledge of these practices enriches the River experience for visitors, expands our understanding of the River and the land before it was called Georgia, and finally, reminds us that we are part of a continuum of human cultures that have stewarded the RiverLands.

## A CLOSER LOOK AT CRAYFISH CREEK

Throughout its units, the Chattahoochee River National Recreation Area protects floodplain, riparian, and adjacent lands using a science-based approach to management and restoration needs. The downstream portion of the Sugar Hill Trailhead includes Crayfish Creek, where the CRNRA is working with key stakeholders such as Trout Unlimited and University of Georgia to restore a degraded stream.

A recent monitoring report on CRNRA's wadeable streams found that Crayfish Creek, with its natural load of woody debris, provides some rich habitat for small aquatic organisms. However, the mouth of the creek has been reconfigured by land use and the pulsing release of water from Buford Dam. Today the stream is eroding and becoming more deeply entrenched in the earth. Working with a broad range of partners, the National Park Service participates in a variety of stream and upland restoration projects in the Study area every year, from removing invasive plants to reversing some of the impairments of its tributary streams.

TODAY, RESTORATION EFFORTS INCLUDE HABITAT IMPROVEMENTS FOR SHOAL BASS, WHICH ARE NO LONGER COMMON IN THE STUDY AREA.





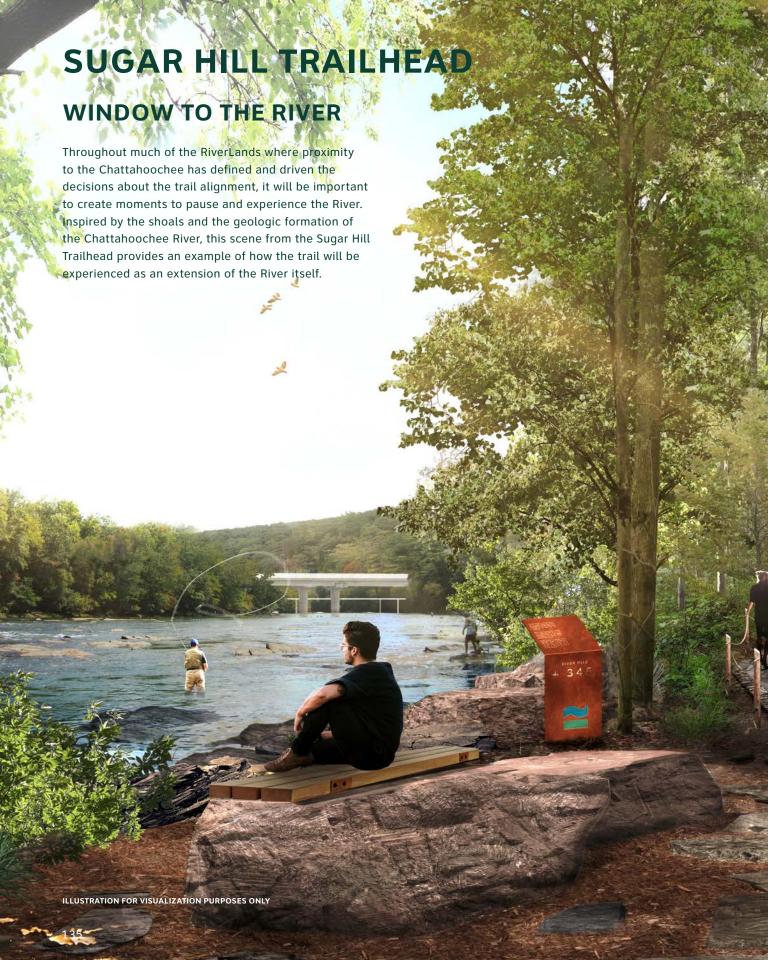














## SETTLES BRIDGE TO STATE BRIDGE





TRIBUARY TRAIL
CONNECTION TO
NEIGHBORHOOD

Chattahooch Pointe Par CHATTAHOOCHEE POINTE PARK KAYAK LAUNCH

LANIER

SUWANEE CREEK CAMPING AND KAYAK LAUNCH

PROPOSED

EE TRAIL

ELEMENTA SCHOOL

Soccer Complex

Gweinnet County

> MCGINNIS FERRY RD

MCGINNIS FERRY BOAT RAMP

CRNRA McGinnis Ferru Unit

PEACHTREE INDUSTRIAL BLVD

GWINNETT COUNTY

## STATE BRIDGE TO GARRARD LANDING



## ULTON COUNTY

AUTREY MILL MIDDLE SCHOOL

STATE BRIDGE RO

**MEDLOCK BRIDGE ELEMENTARY SCHOOL** 

**WILSON CREEK ELEMENTARY SCHOOL** 

> JOHNS CREEK HIGH SCHOOL

NORTHVIEW HIGH SCHOOL

TO LAKE LANIER

ludgens

SIMPSON ELEMENTARY SCHOOL

dge Unit

MEDLOCK BRIDGE BOAT RAMP

TATE BRIDGE ROAD BRIDGE

PEACHTREE CORNERS TOWN CENTER

BERKELEY LAKE

Berkeley Lake Nature Preserve

WESLEYAN SCHOOL

SPALDING OF

**NORCROSS** HIGH SCHOOL

PEACHTREE INDUSTRIAL BLVD

PEACHTREE INDUSTRIAL BLVD

TRIBUTARY TRAIL TO ABBOTT'S BRIDGE

PINCKNEYVILLE PARK AND SOCCER COMPLEX

GWINNETT COUNTY

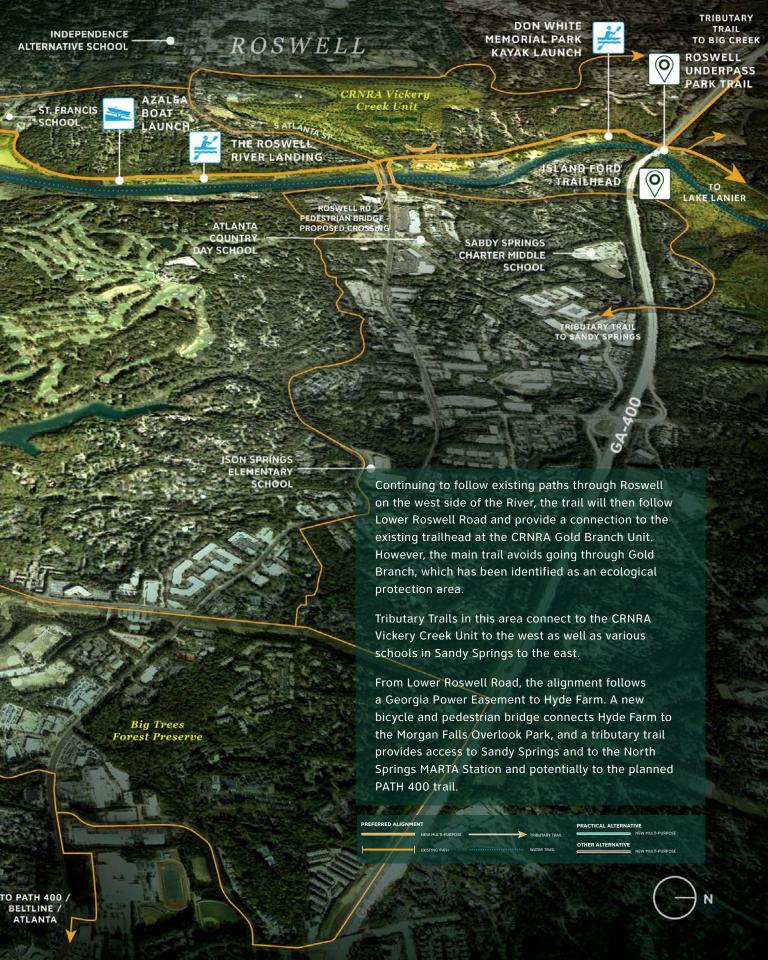


**GARRARD LANDING TO ISLAND FORD** ROSWELL **WEST TO CONNECT** TO BIG CREEK Big Creek GREENWAY Park TO VICKERY CREEK E CROSSVILLE RD SWIFT SCHOOL Roswel ROSWELL Recreation UNDERPASS PARK TRAIL Center TO CHATTAHOOCHEE RIVER EVES BEND STATE Roswell **ELEMENTARY SCHOOL** PARK EVES ROAD KAYAK LAUNCH NRA Island Ford Unit ISLAND FORD KAYAK LAUNCH CRNRA Island Ford Unit TRIBUTARY TRAIL
TO SANDY SPRINGS

FULTON COUNTY







## MORGAN FALLS TO COCHRAN SHOALS

From Roswell, the trail loosely follows the alignment of existing dirt footpaths along the River through the CRNRA Johnson Ferry North Unit connecting to an existing boat ramp and trailhead in the unit.

Within the CRNRA Johnson Ferry Unit, the trail will follow an existing sewer easement ultimately connecting to Columns Drive and to the CRNRA Cochran Shoals Unit. Existing footpaths tying into the main alignment will provide connectivity to the Sope Creek Paper Mill Ruins in the CRNRA Cochran Shoals Unit.

Trail users will have the opportunity to use the extensive foot path network within the CRNRA Cochran Shoals Unit, while paddlers would benefit from the existing boat ramp and outfitter at Powers Island Unit.

A Tributary Trail along I-285 crossing over to the east side of the River will provide connectivity to a series of schools and destinations in Sandy Springs.

COLUMNS DRIVE

CRNRA Cochran Shoals Unit

Shoals Un

CUMBERLAND

Island Unit

SOPE CREEK

PAPER MILL RUIN

COCHRAN SHOALS
TRAILHEAD

0

POWERS FERR

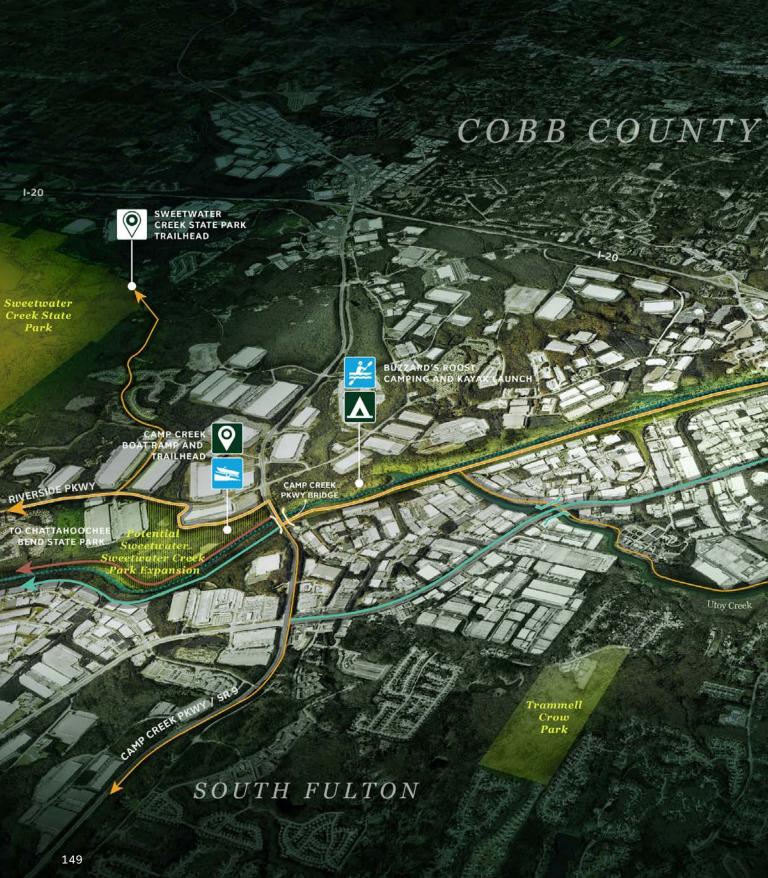
TO CHATTAHOCCHEE
BEND STATE PARK



### **COCHRAN SHOALS TO WHITTIER MILL** COBBCOUNTYCONNECT TO SILVER COMET TRAIL RIVERWALK ATLANTA TRAILHEAD AND BEACON CHATTAHOOCHEE 1-285 BEND STATE PARK MANER RD WHITTIER MILL PARK TRAILHEAD RIVERWALK TROLLEY TUNNEL STANDING ATLANTA TRAILHEAD PEACHTREE **BOAT RAMP** AND BEACON KAYAK LAUNCH AND TRAILHEAD Riverwalk Atlanta PRPOSED Riverside Whittier BOLTON RD NW WHETSTONE Atlanta RM Clayton Her Reclamation Plant CREEK TRAIL Spink-Collins ATLANTA TO ATLANTA BELTLINE 147



## WHITTIER MILL TO SWEETWATER CREEK







## FULTON GOUNT

The RiverLands trail will follow the Chattahoochee on both sides of the River going through the Riverview Landing Development and the Pilot Site on the Cobb County side and following a sewer easement on the Fulton County side. A new trailhead and boat ramp at Mableton Parkway will provide access to the Pilot Site and will be an opportunity to connect to planned bike infrastructure further west on Mableton Parkway.

On the Fulton side, a series of loops and tributary trails connect communities to the River's edge, while also linking the main trail alignment to the Proctor Creek Greenway and the Bankhead MARTA station.

The extension of the Proctor Creek Greenway to the RiverLands is one of the Demonstration Sites developed for the Study. See page 152.

From the new trailhead at Mableton Parkway, the trail crosses the River and runs exclusively on the east side of the Chattahoochee following a sewer easement on the back side of the Fulton industrial area.

The main trail will continue along Riverside Parkway, leaving the more industrial stretch of the River and crossing over briefly to the east side at a proposed expansion of Sweetwater Creek State Park to take advantage of an existing easement.

PREFERRED ALIGNMENT

NEW MULTI-PURPOSE TRIBUTAR

EXISTING PATH WATER TO

PRACTICAL ALTERNATIVE

NEW MULTI-PURPOS

OTHER ALTERNATIVE NEW MULTI-PI



### PROCTOR CREEK TRAIL EXTENSION

#### CONNECTING COMMUNITIES TO THE CHATTAHOOCHEE

The extension of the Proctor Creek Trail to the Chattahoochee River represents an important opportunity to bring historically underserved communities to the River and provide amenities for community gatherings, ecological stewardship and environmental education. This site is also an opportunity for communities from Cobb County and Atlanta to share the River as common ground.

The site selected for the Proctor Creek Trail Extension is surrounded by industrial land uses including the former Chattahoochee Brick Site as a site of historical significance. The portion of this site bordering the Chattahoochee, including the mouth of Proctor Creek, is considered a sensitive ecological area that is subject to frequent flooding.

The design goals for the Proctor Creek Trail Extension represent a desire to extend the Proctor Creek Greenway to the Chattahoochee River in a way that protects ecologically sensitive areas while educating visitors about the importance of waterway health. In order to achieve this, the Design Team discussed potential site features including outdoor classrooms, overlooks and moments for historical interpretation, extensively with a committee of stakeholders.

Based on those conversations, the programmatic amenities reflected in the design for this site include:

- An Interpretive Pavilion with amenities geared specifically toward environmental education and inspiring stewardship of the creek
- An interpretive historical walk to recognize the stories of the Chattahoochee Brick site as the creek passes along the property edges
- A new dedicated bridge for walking and biking across the Chattahoochee, that provides connectivity between Cobb County and the City of Atlanta
- Pedestrian paths and dedicated spaces along the River to observe seasonal changes to the natural context









# A CLOSER LOOK AT THE CHATTAHOOCHEE BRICK COMPANY

On the banks of the Chattahoochee River, a short walk north of where Proctor Creek tucks under I-285, lies the site of the recently abandoned factory of the Chattahoochee Brick Company. Now a brownfield full of brick shards, cement slaps, and wild re-growth, the site is poised for redevelopment but haunted by an ugly past. The Chattahoochee Brick Company had, until the 1920s, a history of using Leased Convict Labor, paying the State of Georgia for mostly African-American convicts, who produced thousands of hand-made bricks a day under brutal work conditions with high mortality rates.

The company was purchased in 1878 by Captain James English, who owned a conglomerate of construction businesses all built on convict labor. After becoming Mayor of Atlanta in 1881, Captain English mandated that all city streets be paved with brick, and as police commissioner, he was able to control the source of labor at virtually no cost for enterprises like his own. Recently, the descendants of Avery Bate (1857 – 1887), a man who may have worked at the factory, placed a grave marker at his burial site after they connected with Richard Becherer and with Pulitzer Prize winning author of "Slavery By Another Name" Douglas Blackmon.

While the future of the site is unclear, residents of the area hope that part of it will become a space to reflect and honor those that lost their lives working at the factory. The Proctor Creek Greenway Extension Demonstration Site includes an interpretive historical walk to recognize their stories as the creek passes along the property edges. The Chattahoochee Brick site represents a great opportunity for a future park space along the River's edge for Atlantans and RiverLands users alike.





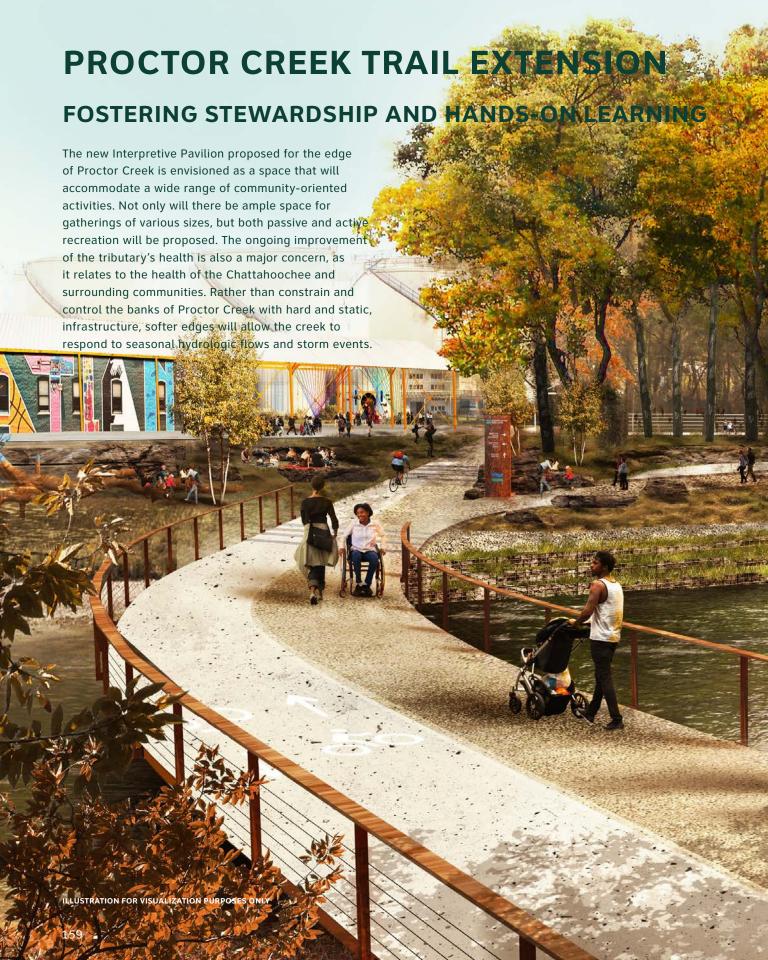




## PROCTOR CREEK TRAIL EXTENSION









# SWEETWATER CREEK TO OLD CAMPBELLTON

From Riverside Parkway, the Preferred Alignment will cross the River again to follow an existing easement on the east side of the Chattahoochee, but will cross back over to the west side at the existing Fairburn Road bridge to connect to Douglas County's Boundary Waters Park.

Tributary Trails in this segment connect to Atlanta's Hartsfield Jackson International Airport and to the Aerotropolis project proposed nearby, as well as to Factory Shoals Middle School, creating a local loop that enhances connectivity.

Moving south through Boundary Water Park, the trail crosses over the Campbellton bridge to connect to Old Campbellton and Campbellton Park. Campbellton will be a major trail town for the RiverLands with opportunities for a new trailhead and campsites to supplement the existing boat ramp. A Tributary Trail also ties into the RiverLands trail on the Campbellton side connecting the Silk Sheets trail to the main alignment and formalizing this route as part of the RiverLands.

Assuming that permission of a private landowner can be arranged, the trail will cross from Old Campbellton Road into and through Chattahoochee Hills Eventing. A new kayak launch is also proposed for this destination.

NEW MANCHESTER HIGH SCHOOL

### DOUGLASVILLA

OLD CAMPBELLTON TRAILHEAD, BOAT RAMP AND CAMPING



AMPBELLTON

TONY STARKS'S CABIN

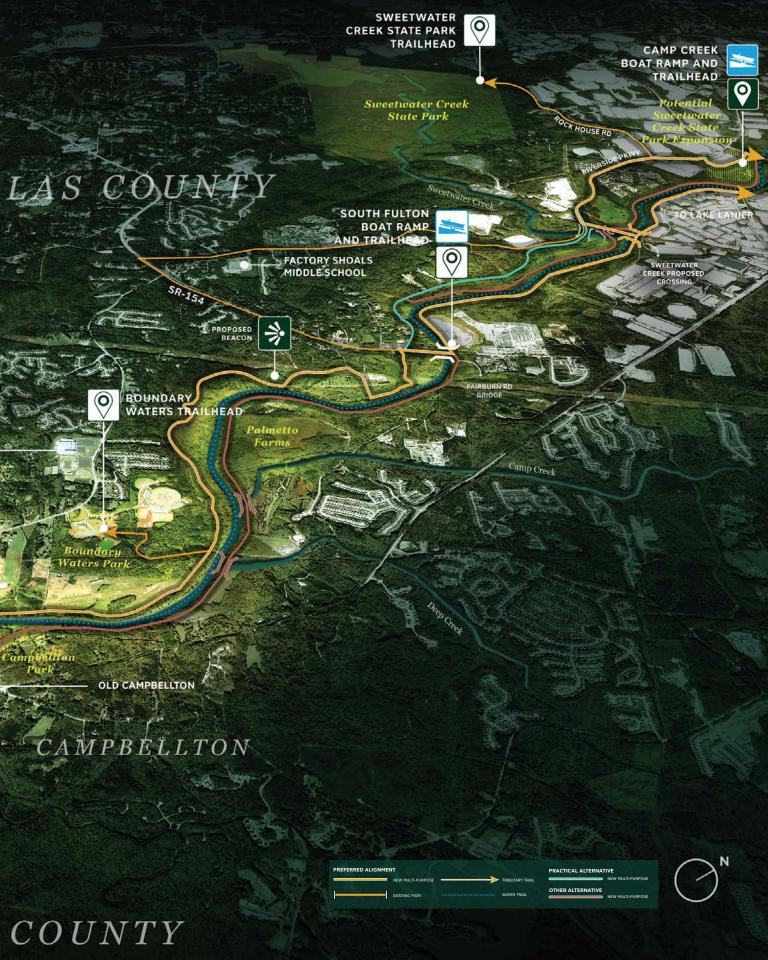
CHATTAHOOCHEE BEND STATE PARK

TO SILK SHEETS

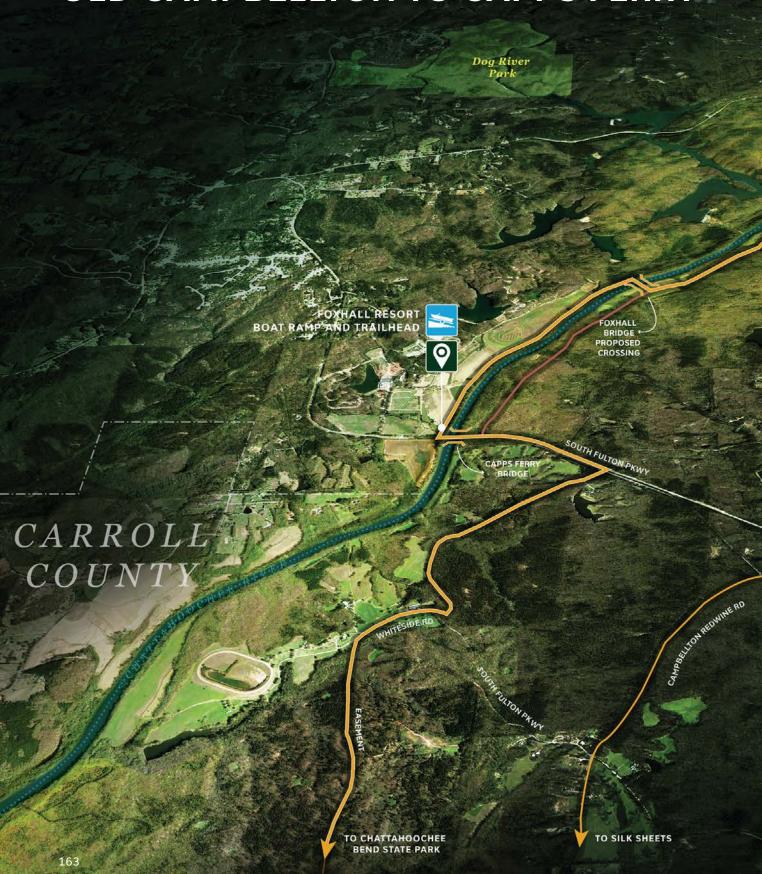
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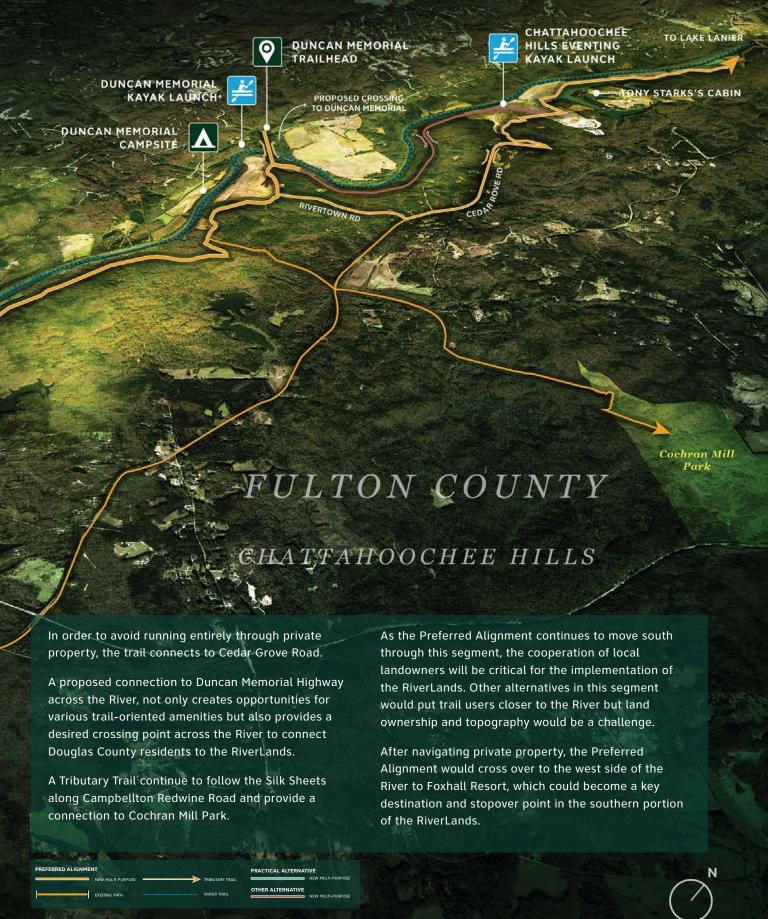
FULTON

161



## OLD CAMPBELLTON TO CAPPS FERRY





## CAPPS FERRY TO MOORE'S BRIDGE

WHITESBURG

TO CHATTAHOOCHEE BEND STATE PARK

TO HISTORIC BANNING MILLS

> HISTORIC MOORE'S BRIDGÉ



SNAKE RIVER

MOORE'S BRIDGE BOAT RAMP AND CAMPGROUND



Moore's Bridge Park



COWETA COUNTY
RIVERSIDE PARK BOAT RAMP

COWETA COUNTY

EASEMENT



#### **DEMONSTRATION SITE**

## CHATTAHOOCHEE HILLS RIVERLANDS PARK

#### A PROPOSED NEW 260-ACRE REGIONAL PARK

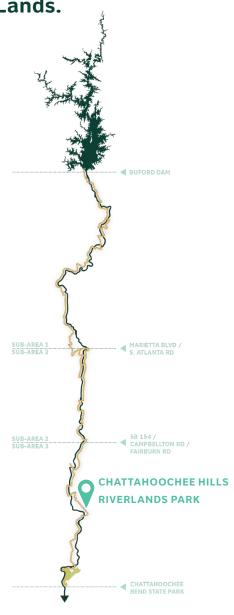
In an area dominated by agricultural land and private property, the Chattahoochee Hills RiverLands Park represents an opportunity to add a large recreational asset to the region that can serve as a model for other park spaces throughout the RiverLands.

The majority of the site is a low-lying wetland that experiences occasional flooding and is best suited for conservation and protection of habitat. However, given the size of the site and its extensive River frontage, many stakeholders felt that there were also significant opportunities for water access points, camping and event spaces.

The design goals for the Chattahoochee RiverLands Park reflect a desire to create a large public gathering space with a wide variety of outdoor recreation activities. After extensive discussion with a committee of stakeholders, opportunities for camping, play, and community events were identified as priorities for the site. An area that prioritized River access was also considered a necessity.

Based on stakeholder conversations, the programmatic amenities reflected in the design for this site include:

- A Water Hub at the confluence of White Oak Creek and the Chattahoochee River with a boat ramp, outfitter and parking lot dedicated to boat access
- A Beacon (elevated structure providing vistas to the River and supporting visual access and orientation along the riverfront; consider activation that may include rock climbing and bird watching, as well as art installations and education) and overlooks that allow visitors to get up high and view the River from above
- An area for potential commercial development, namely food and beverage vendors
- Primitive campsites that visitors can hike or backpack to, including tent platforms, charcoal grills, and dry toilets.
- An event space and Nature Center that bring people together and highlight the ecology of the region









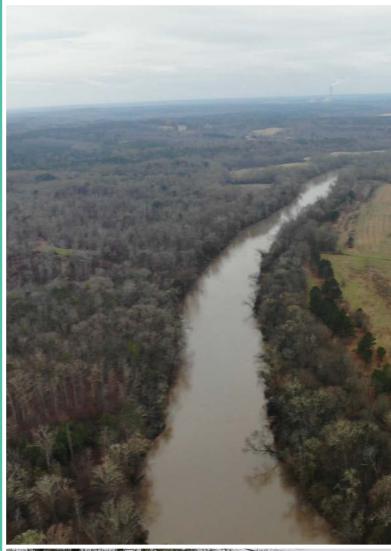
# EXPLORING 53 MILES WITH CHATTAHOOCHEE NOW

The southern section of the Chattahoochee RiverLands Greenway Study consists of 53 miles of River, from Peachtree Creek to Chattahoochee Bend State Park, as it winds through a wide variety of urban, suburban, and rural transects. Chattahoochee NOW, a non-profit organization dedicated to coordinating community efforts to reach the riverfront's greatest potential, while sustaining the River's health, gave the Project Team a tour of the southern section and an introduction to their 2016 Vision 53 report, presenting opportunities for those 53 miles.

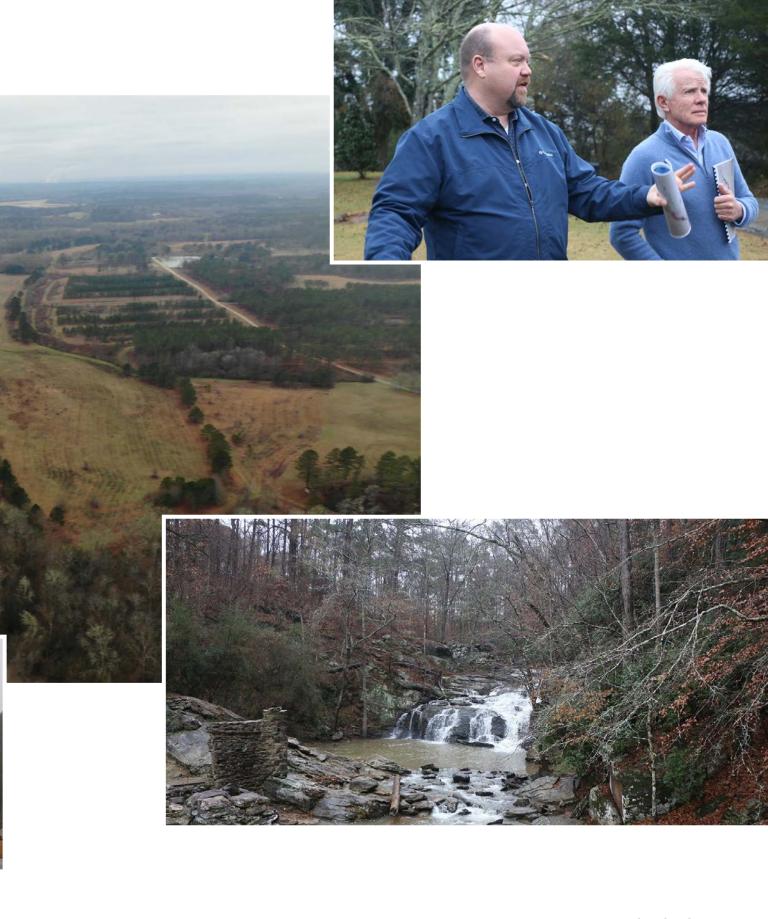
The tour included an introduction to the rural heritage of the southern portion of the site and the goals of Chattahoochee NOW. Board member Steve Nygren pointed out that while the northern portion of the River includes access points on average every 3-to-5 miles, in the southern 53 miles, access is sparse. Chattahoochee NOW sees the potential for a contiguous greenway along the River that would increase access and recreational opportunities along the Chattahoochee. Nygren pointed to Chattahoochee Hills' use of Transfer Development Rights (TDR) as an important legal tool to preserve large tracts of open space.

Current parks in the area include Moore's Bridge Park, Chattahoochee Hills Park, McIntosh Reserve, Cochran Mill Park, Dog River Park, Boundary Waters Park, Sweetwater Creek State Park, and Chattahoochee Bend State Park. The RiverLands Greenway presents the opportunity to seamlessly connect all the parks and create a regional destination in the southern-most portion of the study area.

The Chattahoochee Hills RiverLands Park
Demonstration Site offers the potential to build
both a new relationship between Chattahoochee
Hills and the River while acting as the link to the
agricultural history to the south and connections to
Old Campbellton to the north.





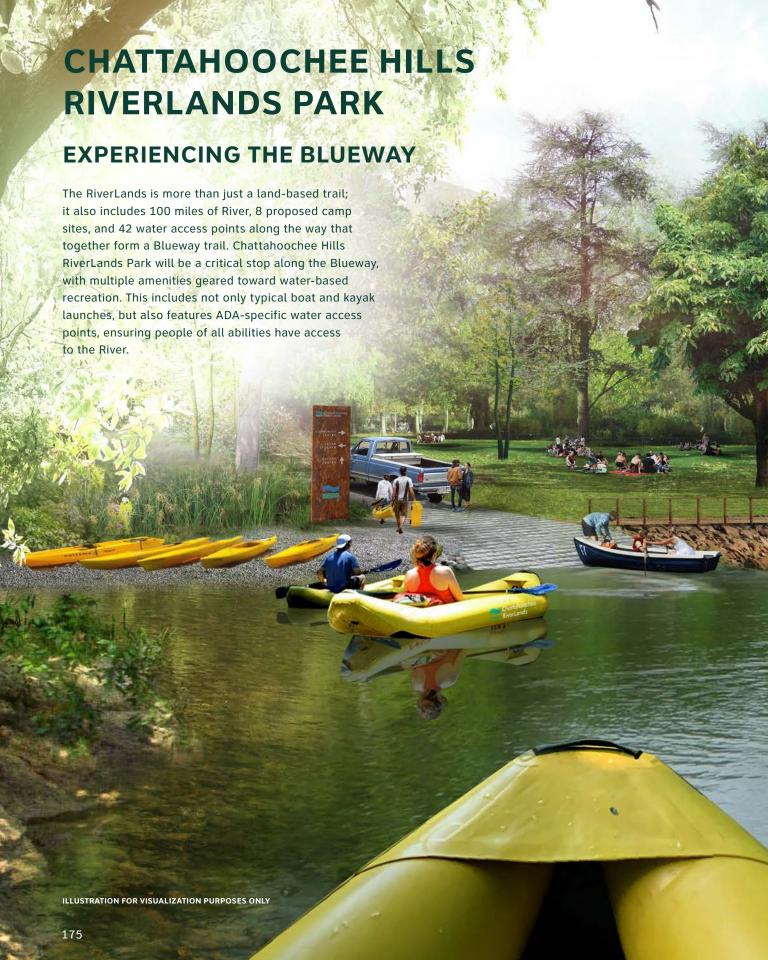
















MCINTOSH RESERVE



LIBERTY HILL PARK TRAILHEAD

**GASEMENT** 



CHATTAHOOCHEE BEND STATE PARK RIVERSIDE TRAIL TRAILHEAD AND BOAT RAMP



CHATTAHOOCHEE BEND STATE PARK RIVERSIDE CAMPSITE

> Chaitahoochee Bend State Park





COWETA COUNTY



### THE RIVERLANDS IN NUMBERS

The Chattahoochee RiverLands Greenway spans 125 miles from Buford Dam to Chattahoochee Bend State Park.

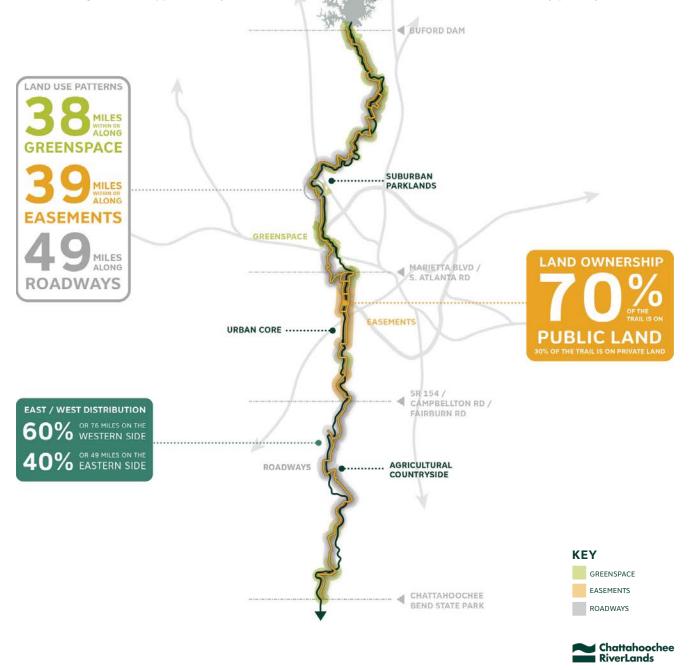
Most of the Greenway hugs the River's edge, with two-thirds of the Preferred Alignment within a 10-minute walk of the River and the entire Greenway within a 15-minute bike ride of the River's edge. The Preferred Alignment crosses the River 25 times, an average of 5 miles between River crossings. 60% of the Preferred Alignment runs on the west side of the Chattahoochee while 40% or 49 miles are being proposed on the east side. The RiverLands proposes 44 tributary trails connecting communities to the River and to one-another. Alternative alignments include the Practical Alternative spanning 140 miles, and a suite of other alternatives spanning 154 miles in length.



## **LAND USE PATTERNS**

The Preferred Alignment for the Chattahoochee RiverLands Greenway weaves together existing and new infrastructure to create a continuous public realm.

The existing infrastructure includes parks and greenspace, roads, easements, public land and minimal use of private land. The trail connects east and west banks of the River, and sometimes runs on both sides, with a slight preference to the western banks in the Agricultural Countryside and a slight preference to the eastern banks in the Suburban Parklands. The Preferred Alignment takes advantage of existing bike infrastructure and runs along 49 miles of roadways while 39 miles are along existing easements and 38 miles along parks and greenspace. 20 miles of the Preferred Alignment are along or within the Chattahoochee River National Recreation Area boundaries. 70% of the Preferred Alignment, or approximately 87 miles of the trail, is aligned within land that is currently publicly owned.



### A CONTINUOUS PUBLIC REALM

The Chattahoochee RiverLands proposes to use existing and new access points to the River with 25 trailheads and 42 new water access points total.

The trailheads, located every 5 miles on average, will connect 40 existing parks along its length, half of which are part of the Chattahoochee River National Recreation Area. By connecting these resources, the Greenway boasts approximately 32 miles of restoration potential with 16 sites identified as in need of remediation and/or restoration and 16 impaired stream crossings. The increase in water access points to a total of 42, located every 2 miles along the River on average, will provide RiverLands visitors greater access to the Chattahoochee for boating, floating and fishing.



### A COMMON GROUND FOR ALL

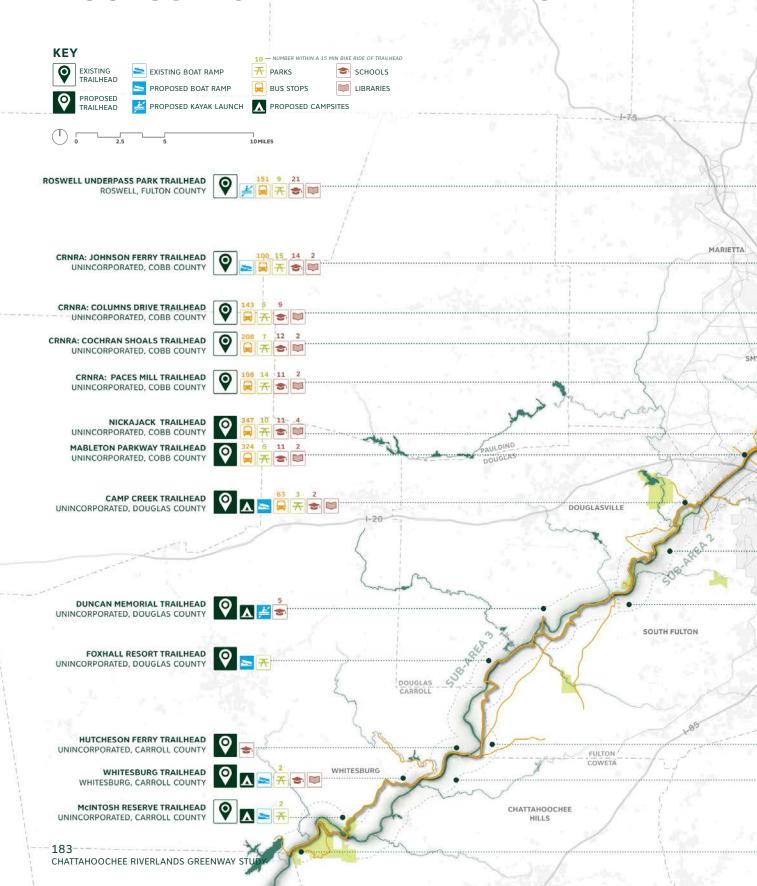
The Chattahoochee RiverLands Greenway represents an opportunity to anticipate metropolitan growth and provide equitable access to greenspace and recreational opportunities to all.

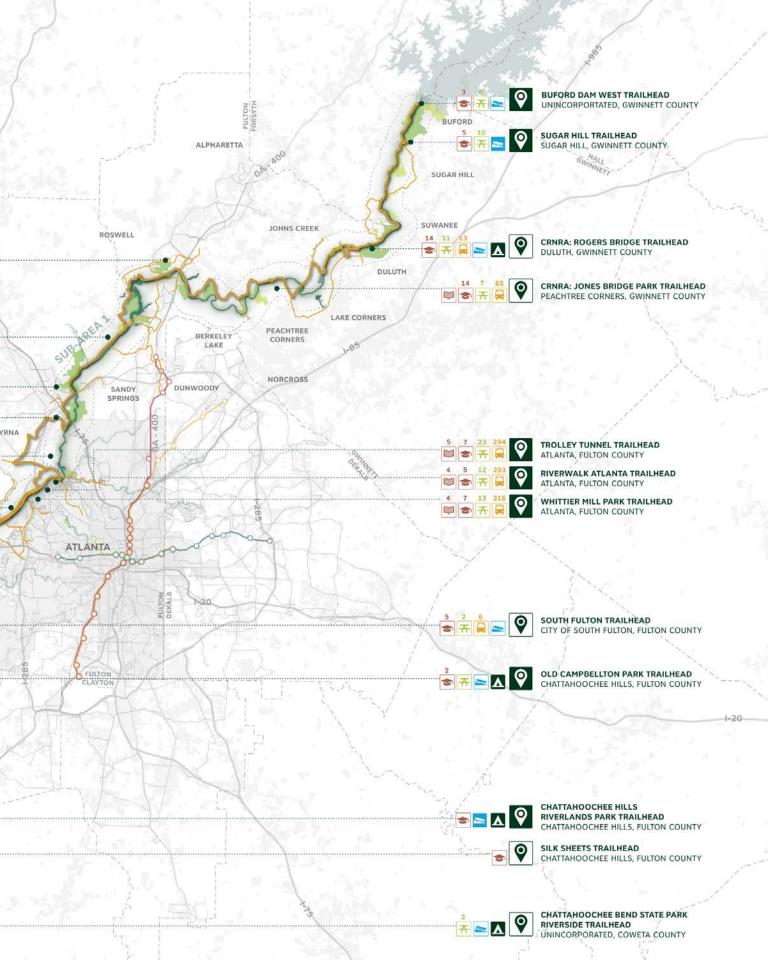
As the Metro Atlanta Region continues to grow, about 1 million people will live within a 15-minute bike ride of the proposed RiverLands Greenway. This regional resource will connect directly 19 cities by building upon a robust social infrastructure network.

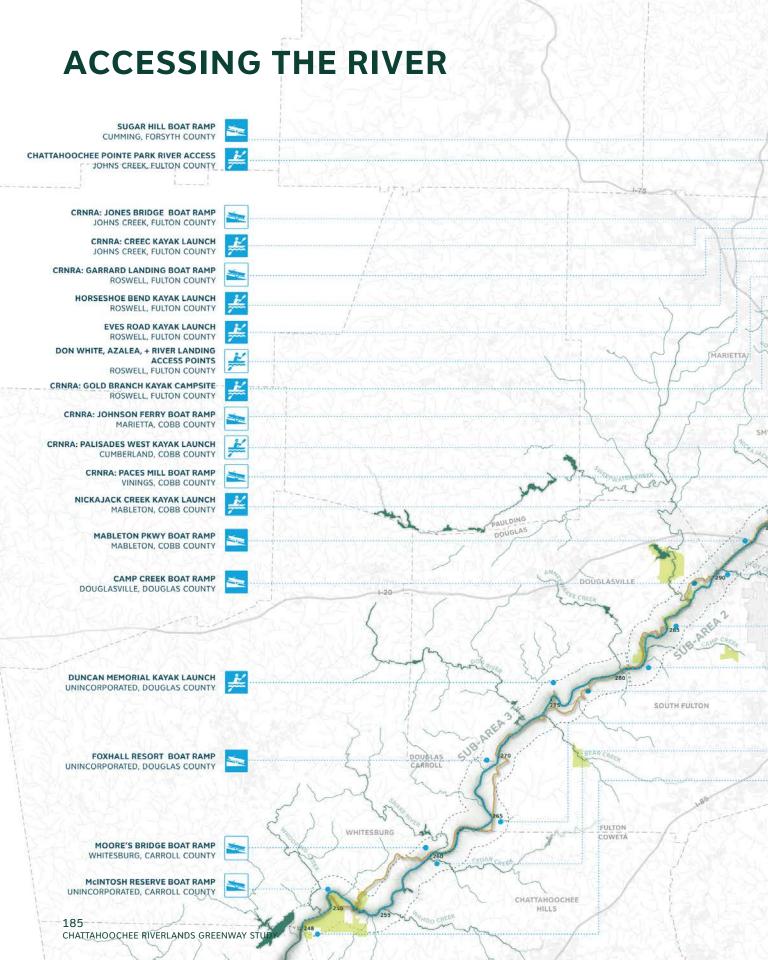


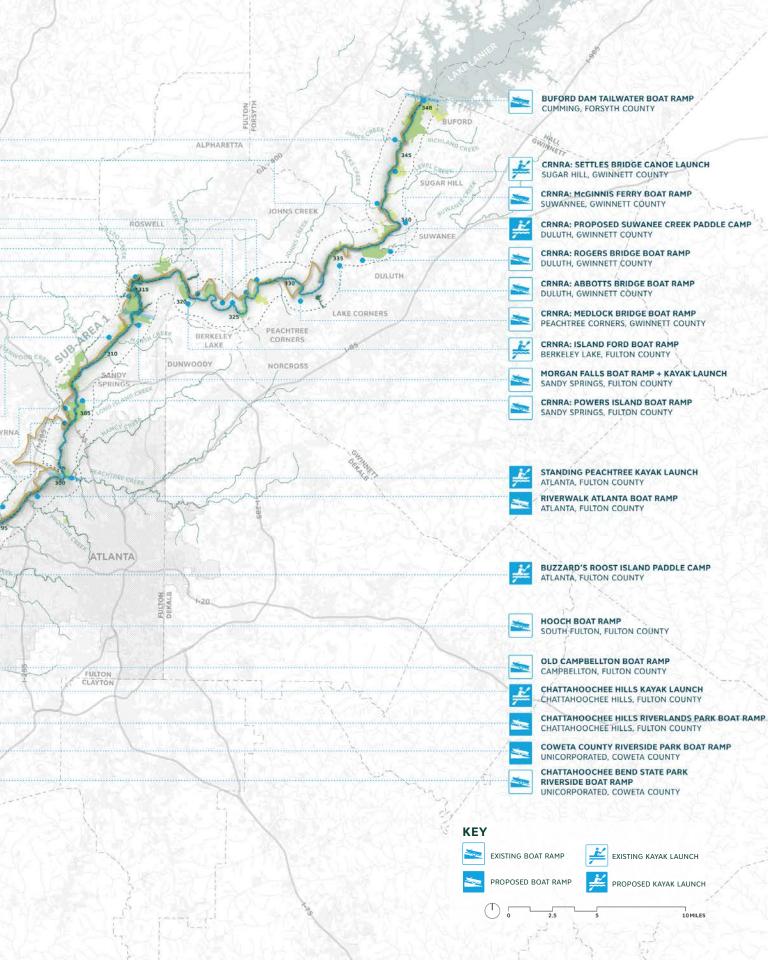


# **ACCESSING THE RIVERLANDS**













### RIVERLANDS PILOT PROJECT

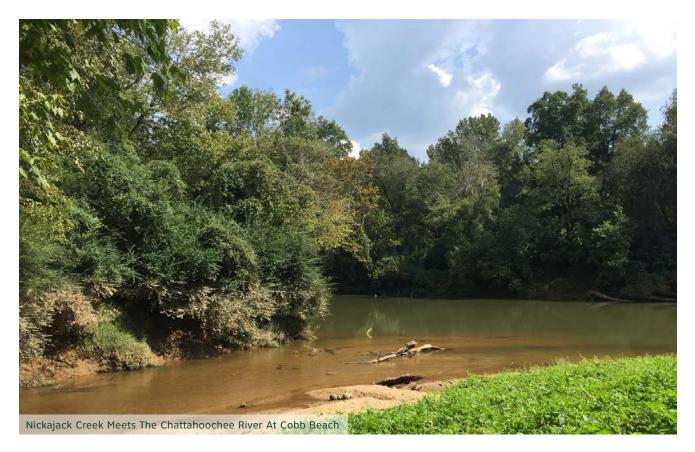
The RiverLands Pilot Project is rooted in the vision and goals of the RiverLands. It will test and demonstrate design strategies to be employed over the entire 100-mile Study area, while showcasing the rich cultural landscape and ecologically dynamic riparian system of the immediate locale. It will provide unprecedented access to this portion of the River, bringing people together and serving as a model for implementation of future RiverLands segments.

The RiverLands Pilot Project is a concept for a multimodal trail on Cobb County-owned land along the west bank of the River, between Mableton Parkway and Veterans Memorial Highway. It will serve to test and demonstrate goals, design strategies, and material applications developed for the broader Greenway Study. While grounded in local context, the Pilot Project is also being developed as a regional destination which will showcase the potential of the entire RiverLands Greenway.

Designed for all ages, abilities, and users, the RiverLands Pilot Project relies on intuitive design that responds to human behavior. It will forge human connections to the River and local ecologies, and evoke a sense of history, community, and stewardship through opportunities for direct access and engagement with the water and other site features. It is also an opportunity to demonstrate inter-agency collaboration by exploring and working with utilities, County agencies, and the Metropolitan River Protection Act to determine how to provide high quality public space and improve ecological conditions while working within the bounds of the regulatory landscape.

The RiverLands Pilot Project will provide unprecedented access to this portion of the River, giving people the opportunity to see, interact with, and experience this diverse landscape in unique ways. This concept also sets the stage for future connectivity for the RiverLands by connecting to future tributary trails along Mableton Parkway and Nickajack Creek.









## **EXISTING CONDITIONS**

The diversity of topographical, ecological, and cultural resources along and within the Pilot Site present many challenges and opportunities for a greenway trail. One of the fundamental challenges of the Pilot Project, which is representative of the entire Chattahoochee RiverLands, is finding the right balance between increasing or enhancing access and preserving and conserving natural features, ecological habitat, and cultural resources. The Pilot Site falls within an ecologically dynamic riparian system and represents the kind of riverside ecology that has emerged as critical to preserving habitat and ecological functions in urban and urbanizing landscapes across the country.

A significant portion of the Pilot Site is within the floodway and much of the northwestern portion of the Pilot Site is jurisdictional wetland. The site is also characterized by several stormwater outfalls. Fortunately, the presence of a former roadbed and cleared utility easements provide opportunities to align the pilot trail while minimizing impacts to ecological and cultural resources, and can help to avoid issues with steep slopes and topography while also providing opportunities to improve the site ecology through restoration techniques like regenerative stormwater conveyance or seepage wetlands.

THE WAVERLY

JETT LAKE

1864 SIEGE OF ATLANTA ARCHAEOLOGICAL SITE

WETLAND

FUTURE TRAILHEAD

SANDY CREEK

FULTON COUNTY AIRPORT CHARLIE BROWN FIELD



# A CLOSER LOOK AT JOHNSTON'S RIVER LINE

Johnston's River Line was created by the Confederate Army under General Joseph E. Johnston during the Atlanta Campaign and was later described by Union General Sherman as 'the most impressive field fortification' he had ever seen. Roberta Cook from the River Line Historic Area gave the Design Team a tour and explained the history of the site.

In 1832, the land lottery divided the previously open Cherokee land into 40-acre parcels and distributed them to settlers. In 1845, the first and only state owned railroad in Georgia, the Western & Atlantic Railroad, began operations between Atlanta and Marietta with a sub-division connecting Marietta to Chattanooga, TN. During the Civil War, the railroad served as a direct line to Atlanta with the River as the last natural barrier protecting the heart of the city. Defensive Shoupade fortifications, named after Confederate Brigadier General Francis A. Shoup, were built along a ridge parallel to the banks of the River, and connected by an 8 mile trench, known as Johnston's River Line. Of the 36 forts constructed, eight remain as earthworks today.

While the Pilot Site is rooted in the vision and themes established within the Chattahoochee RiverLands study, the proximity to this historic area positions the Pilot Site as a base for exploration and interpretation of the history of this rich River landscape.











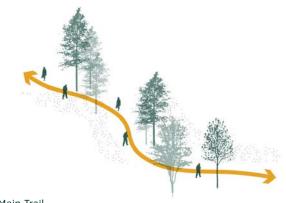


## TRAIL COMPONENTS

Developing the Pilot Project concept allowed the Design Team to evaluate site-level characteristics and think about trail components that can be knit together to form a cohesive system. This site-level exploration also enabled the team to consider placement and design of features and amenities, trail and water access points, resting areas, trailheads, and overlooks.

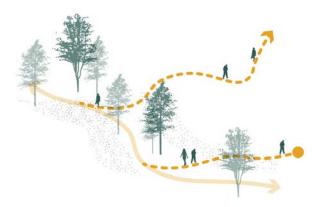
The RiverLands is comprised of a Preferred Alignment, Tributary Trails, water access points, and trailheads throughout the 100-mile corridor. The main trail, or Preferred Alignment, is the primary spine of the RiverLands. The tributaries provide key connections to nearby hubs of activity and destinations. Some are proposed to follow creeks, like Nickajack Creek, while others follow routes to public transportation, schools, and other destinations. The Preferred Alignment and Tributary Trails are multimodal for people to use while biking, walking, and traveling via other wheeled modes, such as a wheelchair or stroller. The pedestrianoriented rambles are envisioned as natural surface trails that meander to provide a more rustic experience, opportunities for quiet exploration, and to bring people closer to wooded areas and vegetation.

Within specific sites along the main trail, there are opportunities for pedestrian-oriented rambles and sitespecific nooks, which serve as places to stop and rest, pull off to the side of the trail, take a drink of water, or catch up with friends. Nooks may take many different forms depending on the context; they offer places for either passive or active recreation, exploration, gathering, learning, and recuperating.

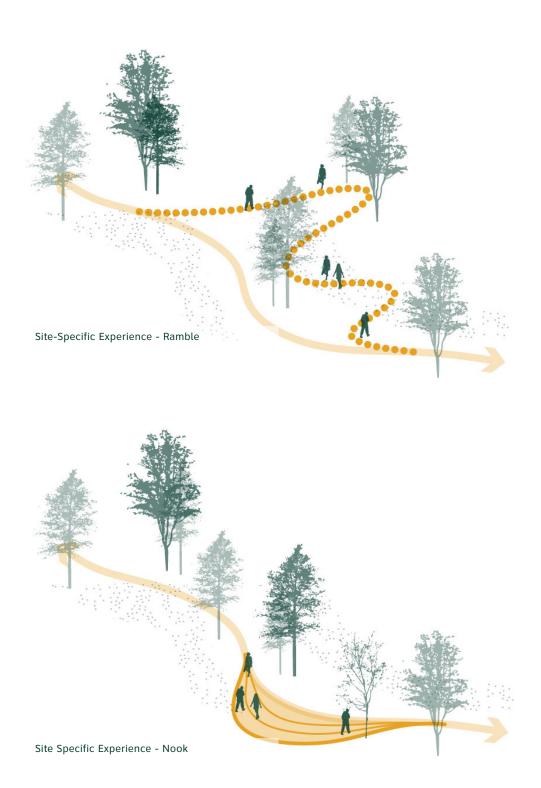


Main Trail





Tributary Trails + Connectors





# PILOT SITE STEERING COMMITTEE

The Pilot Site Steering Committee was a small focus group comprising local government agencies, businesses, institutions, and community-based organizations that was convened by Cobb County to provide input on development of the concept. The Committee was asked to provide input on the development of a 2.4-mile Pilot Project along a length of the Chattahoochee River between Mableton Parkway and Veterans Memorial Highway. The group provided input on an overall vision, goals, a conceptual layout, and typical sections.

The Committee expressed the desire to prioritize direct access to the River, but to keep the "Walk in the Woods" feel, enabling people to go on family outings to the site while respecting the wide range of natural features on the site. Members identified on the precedent images that best represented their vision for the Pilot Site, leaning towards more low-impact, natural-feeling precedents. The group identified "Cobb Beach" at the confluence of Nickajack Creek and the Chattahoochee River as an emerging social hub for the site.





## PREFERRED ALIGNMENT

The RiverLands Pilot Project will construct approximately 2.4 miles of trail within Cobb County-owned land between Mableton Parkway and Veterans Memorial Highway. The trail begins at the southern end of the forthcoming Mableton Parkway Trail, south of Discovery Boulevard and continues past a former pump station, crosses Nickajack Creek, and meanders through wetlands upstream of the creek. It terminates at the northern boundary of the County-owned property, setting the stage for future connectivity to the north and west.

The Pilot Project consists of approximately 1.7 miles of paved multimodal trail and 0.7 miles of unpaved pedestrian-only rambles. It provides a direct connection to the Cobb County's Park along Discovery Boulevard, which will provide access to nearly one mile of additional footpaths, a small parking lot, two bus parking spaces, and a rustic restroom.

14'

BRIDGE

The trails are proposed as a combination of six-foot-wide paved and unpaved paths for pedestrians, eight-foot wide paved bicycle paths and fourteen-foot-wide multi-use trail for bicyclists and pedestrians. In some locations the multi-use path splits to minimize clearing impacts and avoid utility manholes, with six-foot paths for pedestrians and eight-foot paths for bicyclists. Several segments of boardwalk will facilitate movement over wetlands and in areas where reoccurring ponding water is likely, as well as over constructed wetland or stormwater improvements. Bridges are proposed across Nickajack Creek and over a smaller creek located in the southern portion of the site.

Stormwater outfalls, especially those that are visible from the trail or causing erosion, will be enhanced with nature-based stormwater Best Management Practices that allow infiltration and improve water quality, of the types described in the Georgia Stormwater Management Manual, Version 2.

ENTRANCE
TO TRAIL

PAVED
BIKE
PATH

BOARDWALK

CHATTAHOOCHEE BIVER

PAVED
PEDESTRIAN
PATH

RECREATION
NOOK

FULTON COUNTY AIRPORT CHARLIE BROWN FIELD

TO CHATTAHOOCHEE BEND STATE PARK







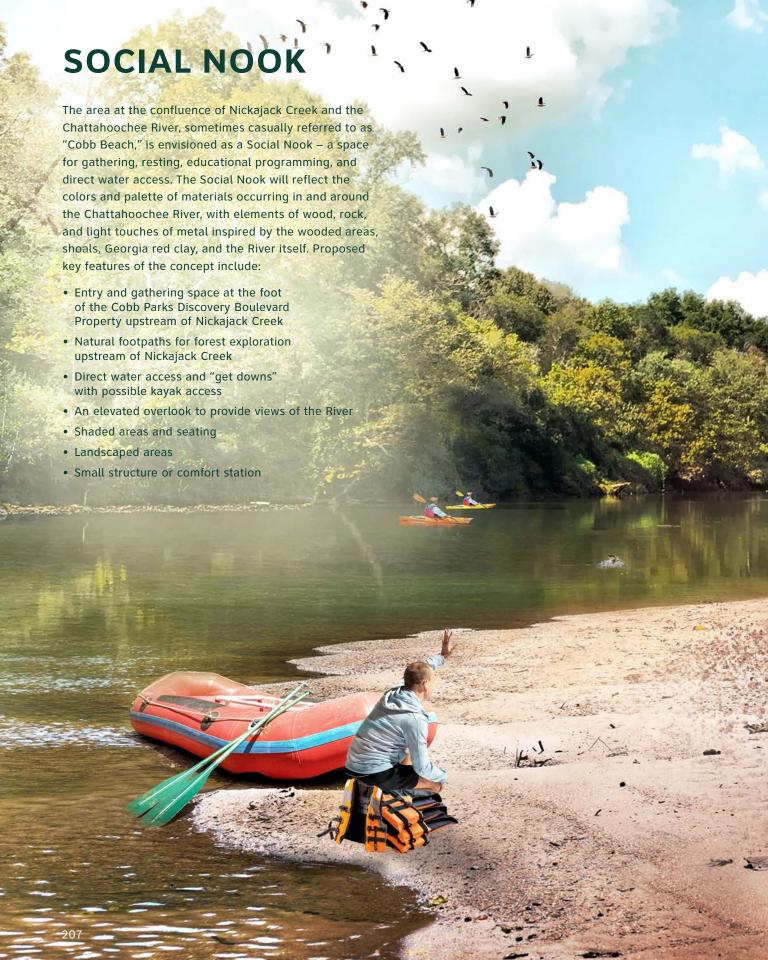
BIKE PATH EDGE MOWN EDGE





















### **ECOLOGICAL CONSIDERATIONS**

#### **Regional Conservation Challenges**

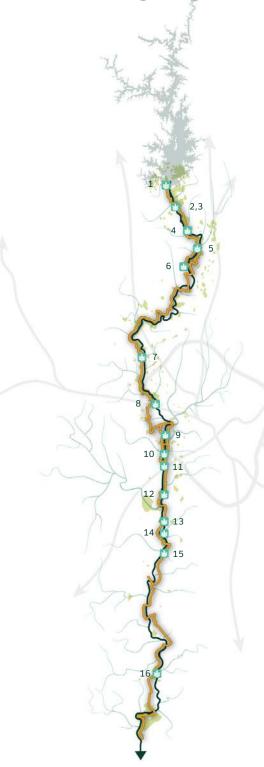
Designing the RiverLands is an opportunity to preserve ecosystem services and plan for intensifying ecological threats. Habitat fragmentation, declining water quality, and changes to water management are the three threats most relevant to the RiverLands Design.

Most contiguous forest in the Atlanta Metro Region is along waterways. Intact tracts of interior forest, which support migrating birds and meso-predators such as bobcats, are threatened by development pressures that fragment them into small patches. Therefore, a key driver in the Greenway alignment process was skirting rather than bisecting interior forest. Restoration efforts such as reconnecting forest patches or managing trailside areas for native plants are another way design can address the threat of fragmentation.

Because of Buford Dam and the cold, clear water that it releases, the portion of the Chattahoochee River that runs through the RiverLands begins with high water quality, but pollution and nutrient loads intensify downstream. Looking ahead, we expect to see development continue to produce stormwater runoff that could bring contaminants in rapid pulses of warm water to the riparian system. The RiverLands can mitigate these threats in several ways. Good stormwater management along the greenway, enhancing the vegetative buffer that protects streams and waterways, retrofitting outfalls, and incorporating opportunities for filtration of stormwater runoff from neighboring developments are also design priorities for project sites.

### **Sites of Ecological + Restoration Priority**

In developing the trail alignment, we avoided ecologically-sensitive areas identified by experts and through a custom mapping tool that brought together species distributions, sensitive plant communities, slope, vulnerable wetland and floodplain habitats and other factors. Although there are many locally important sites along the proposed Preferred Alignment, the following list identifies sixteen sites along the RiverLands that have special ecological significance, either because the trail was unable to avoid a sensitive habitat or because the site has particular restoration potential.



#### **KEY**

numbers refer to table at right

🕹 Sites of Ecological Significance



	Site	Rationale
1	Richland Creek and Haw Creek	Alignment crosses impaired streams with nearby forest characterized by high sensitivity scores
2	Just north of Cumming Hwy (20)	Site where alignment crosses large section with high sensitivity scores
3	Level Creek and Settle's Bridge Unit of CRNRA	Impaired stream with high sensitivity scores
4	Johns Creek, Georgia 30024	Across from Brushy creek, stream crossings in highly sensitive areas
5	Abbot's Bridge Unit upstream of Abbot's bridge road	Identified as regionally important habitat
6	Below Morgan Falls	Interior forest, with high sensitivity scores
7	Proctor creek	Impaired waterway with nearby high sensitivity scores; Brick Yard partial restoration to restore connectivity to Whittier Mill Park
8	Fulton Industrial near MLK	Across MLK from the airport, a severely degraded stream with little buffer runs alongside the preferred alignment
9	Hooch Boat Ramp	Nearby softball fields offer restoration potential
10	Camp Creek Wastewater Plant	Opportunity to reforest floodplain habitat
11	Sandy Creek	Medium (40-60%) forest cover along impaired stream
12	Fulton Industrial & Utoy Creek	Opportunity for grassland restoration in industrial zone; Utoy is an impaired stream with medium forest cover
13	South of Mill Branch, near Big Lake	Alignment runs alongside low cover stream (not impaired) — might be showing up as low cover because of the lake
14	Rottenwood Creek	Alignment repeatedly crosses impaired stream with high sensitivity scores
15	Boat Ramp at 166	Overgrown road with willow thicket and some wet forest. Has potential for restoration, perhaps demonstration of grassland restoration managed as bird habitat in conjunction with the boat ramp
16	Moore's Bridge Park	Meadow restoration opportunity



# PROTECTING THE ECOLOGICAL RESOURCES

#### **Forest Resources**

To protect forest resources throughout the RiverLands:

- Place trails in previously open areas when possible and generally minimize removal of trees or the creation of new openings in the forest canopy.
- Avoid bisecting interior forest patches; instead use forest edges and small forest fragments that are less ecologically sensitive.
- Protect older forest stands and areas with higher diversity of tree species.
- Manage forest edges to control invasive species spread

   through removal and replacement with native trees.
- Plant native trees where forested buffers can be increased around sensitive areas, in unforested stream buffer areas, and where habitat connectivity can be increased between large forest patches.

#### **Wetlands Resources**

To protect existing wetlands throughout the RiverLands:

- Avoid extensive wetland impacts.
- · Avoid bisecting intact wetlands.
- When trail does engage with wetlands, use boardwalks to limit impacts, and to provide opportunities to see and hear species.
- Model design on appropriate local examples of managed wetlands such as the Chattahoochee Nature Center.

#### **Meadow / Grassland Resources**

To protect and enhance meadows and grasslands throughout the RiverLands:

- Areas that do not support native forest, such as former or recent farmlands, can be managed as meadows that support wildflowers and are preferred by grassland birds.
- The timing and frequency of mowing can be adjusted for flowering seasons and phenology of groundnesting birds, while controlling woody growth.
- Power easements and right-of-way, where tree canopy is restricted by regulation, are important opportunities to protect and enhance meadow habitats.
- Additional meadow management opportunities include former industrial sites where the soils would be unlikely to support mature forest in the mid-term.





## **Aquatic Resources**

#### Chattahoochee River Buffer, Crossings, & Access

The River itself is the heart of the RiverLands and its seasons and fluctuations drive myriad ecological processes. The primary ecological values the River offers are largely in its aquatic resources and vistas and therefore outside the management potential of the RiverLands project, but water quality and the inputs from its tributary streams determine its suitability for fishing, swimming, and other recreation. The following recommendations are offered to preserve an ecological buffer to either side of the Chattahoochee River while enhancing River crossing and access:

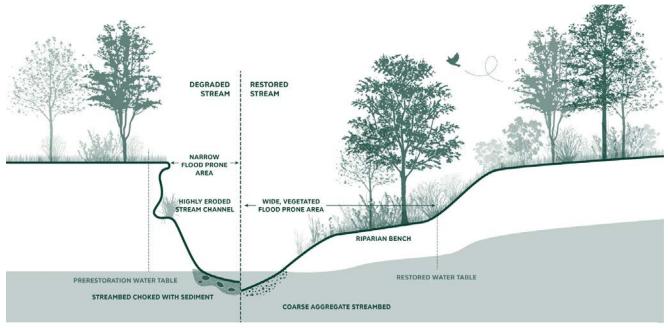
- Minimize new trails paralleling the River within 150'.
- Consider trail flooding resilience measures (materials, maintenance, access).
- Where feasible, look for opportunities to perform bank restoration (bioengineering).
- Reconnect the floodplain where possible or seek to enhance water retention and storage in the landscape.

#### Stream Buffers, Crossings, & Access

The Chattahoochee mainstem is profoundly altered by Buford and Morgan Falls Dams, but tributary streams increase the dynamism of the hydrology downstream in the RiverLands. Managing their inputs and ecological integrity is key to the system's function. Tributaries are also an intense focus for water quality improvement, which will continue in coming years.

Water quality can be augmented by controlling stormwater runoff and restoring streams that have been carved deep into the earth by fast, uncontrolled water runoff from impervious surfaces. Small dams and other impediments to natural hydrologic processes may be removed. The most important opportunities to protect and restore streams throughout the RiverLands can be accomplished by fortifying the tributary stream buffers with native plants and designing trail crossings so that streams can pass undisturbed, while also being able to swell and recede during storm events. In order to further protect critical tributaries to the Chattahoochee:

- Find opportunities to use existing stream crossings.
- Use bridges instead of culverts to reduce road and trail impacts.
- · Locate primary trails outside of riparian buffers.
- Avoid alignments that parallel streams in close proximity, in accordance with the intent of MRPA setbacks.
- Minimize the number of times that streams are crossed.
- · Avoid crossing at stream confluences.
- Consider trail flooding resilience measures (materials, maintenance, access).
- Look for stream buffer reforestation and revegetation opportunities.
- Reconnect the floodplain where possible or seek to enhance storage in the landscape.
- Where feasible, identify opportunities to perform bank restoration (bioengineering).



Restored Streams Improve Water Quality, Offer Better Flood Control, and Provide Rich Habitat for Aquatic and Terrestrial Species

## **Balancing Access and Impact**

The Design Team recognizes that multimodal trails can have detrimental effects on ecosystem services. Clearing for trail construction increases habitat fragmentation and creates edge habitat, where conditions such as light levels and soil moisture are prone to colonization of invasive species. The trail itself can be a barrier to wildlife dispersal and movement for less mobile species, such as salamanders. Highly used areas also create a barrier for animals deterred by the noise and motion of human users and their four-legged friends. Finally, the construction of the trail system will add impervious surface to the corridor that will shed stormwater and create runoff. Such negative impacts at the site level can also be reduced by thoughtful trail planning and design guidelines that attend to the specific vulnerabilities of the natural resources under our stewardship, as summarized below.

## **Mechanisms of Preservation**

#### **General Resource Protection**

- Infrastructure should be placed in accordance with MRPA guidelines that provide a 150' setback for impervious surfaces, a 50' vegetative buffer, and a 35' buffer along tributary streams.
- Wherever possible, trails should be placed along or beside existing edges and human-created disturbed areas such as former roads and utility easements instead of creating new disturbance or edge habitat.
- Because wildlife can be disturbed by trail noise, smells, and pets for some distance beyond trail edges, buffers should be provided near streams and sensitive areas, such as rare or endangered species habitat.
- 4. Sensitive areas can be viewed from boardwalks or other structures that do not allow direct access; spur trails that branch off the main throughway and experience less traffic can be used in more sensitive areas.
- Areas that must be managed in a particular way (e.g. rights-of-way or areas for emergency access) can preserve a diversity of habitats.
- Trails and new edge conditions along sensitive areas can provide paths for invasive species introduction.
   Where necessary, this impact can be mitigated through invasive species management.
- 7. If trail segments provide diverse experiences, trail users are less inclined to create their own trails.

#### Water Quality and Monitoring

- Although the opportunities to substantially maintain the exceptionally high water quality of the water just below Buford Dam are limited in this project, opportunities should be taken to improve stormwater management and outfalls that drain directly to the River.
- 2. Incorporate professional or citizen science water quality monitoring during and after construction.
- 3. Bioretention, swales, and other green infrastructure practices outlined in the Georgia Stormwater Management Manual, Version 2, can be important design elements along tributaries and the mainstem River integrated into all new development.
- Use stormwater best management practices (BMPs), such as bioswales, to reduce the impacts of impervious surface runoff.

#### **Trail Design Considerations**

- Prioritize trail placement in locations where people are already creating informal trails and access points.
- Design to minimize erosion avoiding steep slopes and erodible soils.
- Use proper grading and vegetation establishment.
- Follow topographic contours, as possible, when aligning trail.
- Use permeable paving for paved secondary trails and footpaths where appropriate. Utilize trail materials that do not promote erosion.
- Reduce width of new paths and cleared native vegetation in more sensitive areas.
- Boardwalks and railings can reduce human impacts

   although they provide other impacts (blocking sunlight) in sensitive zones like wetlands.
- Provide dog-related destinations away from sensitive habitats and enforce leash laws.

# Recommendations for an Ecological Refuge

These recommendations summarize the core strategies to create an Ecological Refuge for the Region. By adhering to these principles, projects can align with the vision defined by MRPA and widen the shared sense of stewardship for the Chattahoochee River.

- Targeted restoration sites and new trails bordered by vegetation that connect parks and greenspace will enhance ecological connectivity
- Improved water management and green infrastructure will promote aquatic health
- Thoughtful trail siting and design can respond to the ecological sensitivity of the landscape



# **EQUITY & ACCESS CONSIDERATIONS**

This section outlines the potential risk of increased gentrification that can result from developing and implementing a new multimodal greenway project. In order to address this risk as it relates to the RiverLands, the Project Team is suggesting several actionable, pragmatic mechanisms and requirements to guide the implementation of the RiverLands over time. Each recommendation in this section aims to mitigate the displacement of the most vulnerable communities, while also allowing access to the RiverLands to all.

Throughout this Report, the Project Team has identified several vulnerable and historically underserved communities that live throughout the 100-mile corridor. Many of these communities also have limited access to the Chattahoochee River and its riparian corridor. Members of these communities live in neighborhoods located along I-20, GA-400, and Holcomb Bridge Road Corridors; as well as neighborhoods within the Proctor Creek Watershed in West Atlanta.

In order to sustain these diverse and vibrant communities throughout the Atlanta Metropolitan Region, we hope the recommendations put forth here can provide further impetus for the participatory planning work that will be critical to better understanding and addressing this issue of crucial importance. We envision the implementation of the RiverLands as a catalyst for equitable community development for the entire metro region; an opportunity to benefit all underserved communities along the 100-mile corridor.

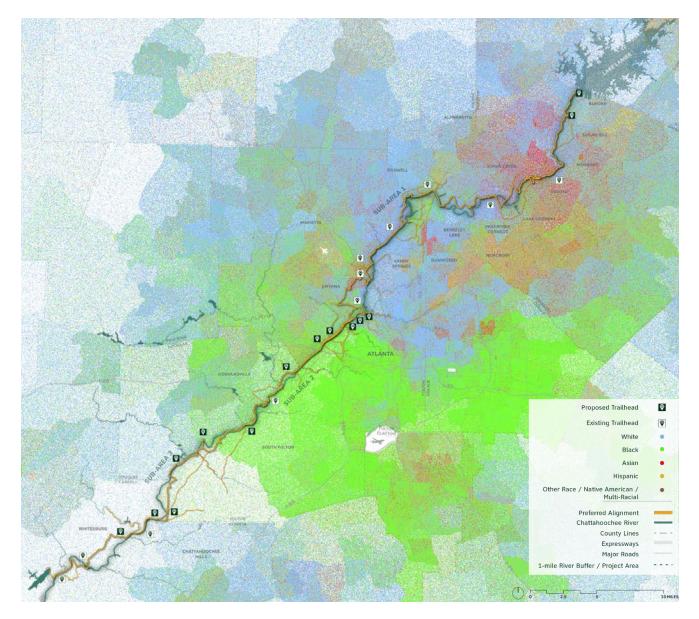
The Project Team must also acknowledge the limitations of this initial planning study in regard to such a nuanced and complex issue. It is important to note that there is no single indicator or data set to identify communities at risk nor is there a single mean by which to address gentrification, social and racial inequity, and environmental justice in communities. As part of the Team's approach, it was decided to focus on a single site and further explore the Proctor Creek Watershed Area as a Case Study.

#### A Common Ground for All

Increasingly, published research has demonstrated both the health benefits associated with access to quality parks and greenspace and negative health outcomes associated with a lack of access. Studies have demonstrated that urban populations with access to parks and greenspace have lower risk of poor health outcomes, such as obesity, cardiovascular disease, diminished mental health and other health-related concerns. An analysis by Dajun Dai (2011)¹ identified pronounced disparities in access to greenspace among different racial/ethnic and socioeconomic groups in the Metro Atlanta Region , with Black residents exhibiting a profound deprivation of access.

Health disparities in the Metro Atlanta Region follow both geographic and color lines. The United States Small-Area Life Expectancy Estimates Project (USALEEP) includes a study of five core counties in the Metro Atlanta Region conducted by the National Center for Health Statistics, the National Association for Public Health Statistics and Information Systems, along with the Robert Wood Johnson Foundation. This study, highlighted in the Atlanta Journal Constitution, shows a nearly 25-year difference in average life expectancy between residents in neighborhoods with the highest average and those with the lowest. Vinings is ranked as the neighborhood with the highest average life expectancy at 87.6 years, and Bankhead, on Atlanta's west side, has the lowest at 63.6 years. The state and national averages are 77.4 years and 78.6 respectively (Brasch & Peebles, 2019).2 From a public health perspective, the lack of access to greenspace but also the consequences of gentrification, including higher effective poverty due to rising rents and disruption of community safety nets through displacement, can exacerbate such profound discrepancies in lifespans along the Chattahoochee River corridor.

As the Project Team sought to identify multiple alternatives and, eventually, a preferred alignment, several factors were considered to address problems of equity, access, and gentrification. Example strategies include using existing equity analysis tools to identify vulnerable populations in the study area, as defined by concentration of racial and ethnic minorities, low-



income populations, and geographic locations facing gentrification risk (see "Existing Conditions Inventory" developed in Task 2 for more information). Use of these tools, including the Atlanta Regional Commission's Environmental Justice Model and the City of Atlanta Gentrification Vulnerability Map Tool, reveal significant populations and areas of vulnerability within Sub-Area 2 of the RiverLands Study area. This portion of the study area is known as the Urban Core, and therein the River runs along the western edge of the City of Atlanta, the eastern edge of Cobb County and through vast tracts of industrial land on the Fulton County side. Mapping

River access within the Study area also revealed that the location of many vulnerable populations also overlaps with populations that have disproportionately less access to the River corridor than other residents living within and near the study area. In addition to these analyses, the team hosted an Equity Studio Hours session in which local equity experts and champions were convened to suggest approaches and strategies to explore how the RiverLands can incorporate, plan for, and design for equity to ensure that the RiverLands study genuinely develops a "Common Ground for All."



#### Race and Access

In order for the RiverLands to be a project "For All," future greenway planning efforts should incorporate an equitable planning and development framework that:

- Acknowledges the history of racism and structural inequality that has shaped which populations have had access to the River, quality parks, greenspace, and public open space
- Recognizes current racial and economic disparities in access to the River, as well as current and proposed greenspace
- Acknowledges that providing underserved communities with access to the RiverLands is one part of an approach to addressing equity, but it, alone, is not enough
- Prioritizes outcomes that benefit underserved communities
- Actively addresses the real and present risks of gentrification and displacement.
- Provides viable public transportation alternatives that link proposed trailheads with regional transportation networks

There is a pronounced tension between the goal of providing equitable access and the risk of contributing to gentrification and displacement. These inherent tensions must be carefully considered and balanced in any public works project.

### **Gentrification Risk**

The problem of gentrification in the Metro Atlanta Region is widely known. According to the Atlanta Regional Commission Environmental Justice Model,<sup>3</sup> there is an area of high social vulnerability adjacent to the Greenway particularly on the westside of downtown Atlanta.

According to a model based on a study by the City of Atlanta, Neighborhood Nexus: City of Atlanta Gentrification Vulnerability Map Tool,<sup>4</sup> the area comprising the Proctor Creek and Sandy Creek watersheds already exhibits a high degree of gentrification risk. In addition to this gentrification risk based on economic analysis, multiple recent, indevelopment, or planned park and public green space developments can potentially further exacerbate this risk. These include Cook Park, the Atlanta BeltLine, Westside Park, Proctor Creek Greenway, Mercedes Benz Stadium, and the Gulch. While other vulnerable

populations, particularly areas near Sandy Springs and Roswell, are identified in the study area by the ARC Environmental Justice Model, West Atlanta is the largest contiguous space of both high vulnerability and high gentrification risk. This is further exacerbated by a long list of recent and in-progress development projects.

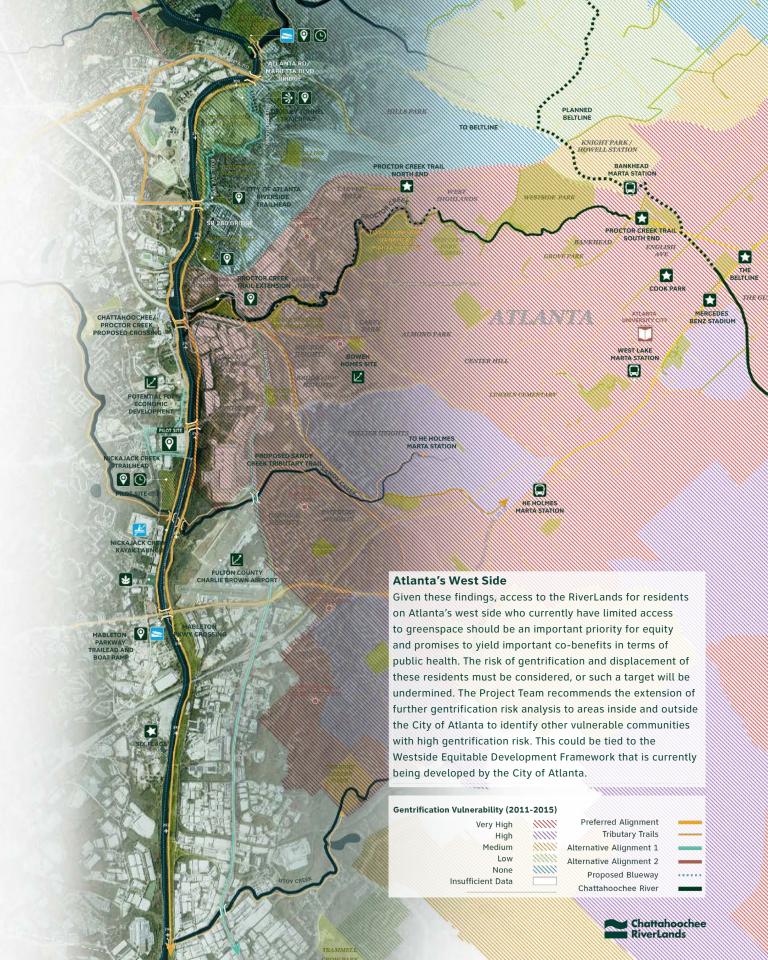
According to the City of Atlanta's "One Atlanta: Housing Affordability Action Plan," from 2000 to 2017,5"Atlanta's median income increased by 48 percent., but the median rent increased by over 70 percent." With nearly half of the city's census tracts currently gentrifying, recent news reports on research by Davin Reed indicate that Atlanta is the fourth most rapidly gentrifying city in the US. Rent in the city is rising three times faster than the national median, and Atlanta has the third highest eviction rate with over 400 evictions per month (Lartey 2018).6

#### **Green Gentrification**

Some sites with the most rapid gentrification in Atlanta are tied to investments in environmental improvements, a process that scholars examine in terms of green or environmental gentrification. For example, environmental sociologists Kenneth Gould and Tammy Lewis explore the phenomenon of gentrification precipitated by investments in greenspace and environmental restoration through five parks along the waterfront in Brooklyn (2017).7 A 2018 collection of case studies titled "Just Green Enough" and edited by geographers Winifred Curran and Trina Hamilton, further documents the ties between environmental investment and the displacement of low-income and minority residents of historic urban communities.8 Urban scholars in the past decade have clearly identified how the convergence of environmental investments and speculative real estate investments routinely produces the displacement of the urban poor by affluent residents (Checker 2011).9

### **Lessons Learned from The Atlanta BeltLine**

Working toward an equitable development plan requires not only learning from promising practices locally, regionally, and nationally, but also learning from planning efforts that have fallen short. Particularly key for the RiverLands is to understand the shortcomings of efforts to preserve affordable housing in previous large-scale greenspace development in the Atlanta area, such as the Atlanta BeltLine. While the BeltLine planning process included efforts to address affordable



housing, communities and research demonstrate that those efforts were insufficient to stem the tide of green gentrification. These efforts did not happen early enough in the overall planning context. Recent research has identified a specific example of green gentrification in Atlanta arising from the city's investment in the BeltLine. Immergluck and Balan (2018) document rising rents and home values associated with BeltLine development in Atlanta between 2011 and 2015. Specific home values within half a mile of the Atlanta BeltLine rose from 17.9 to 26.6 percent faster for homes near this development.<sup>10</sup>

## **Anti-Displacement Precedents**

Given the growing recognition of the challenges of green gentrification, Atlanta and cities across the US are working to incorporate anti-displacement tools in green development.

Lindsay Street (2015) and Kathryn Johnston Memorial (2019) Parks are two of three Atlanta-based "Parks with Purpose" developments.11 A national program of The Conservation Fund (TCF), Parks with Purpose are equitable park development projects that employ a collaborative, community-centered approach in which residents of vulnerable, underserved neighborhoods work with a diverse set of partners to transform and restore blighted urban spaces into parks that deliver triple bottom-line benefits for local communities. These community-driven projects included key onthe-ground community partners such as West Atlanta Watershed Alliance and the Proctor Creek Stewardship Council and leadership from Park Pride, a local parks advocacy organization. Both park development projects included early and consistent community engagement, community voice in park design, as well as hyperlocal community workforce development initiatives and employment at a small scale to help build out the parks and green infrastructure. Kathryn Johnston Memorial Park was one of four 2016 recipients of the American Planning Association (APA) and the National Recreation and Park Association's Great Urban Parks Campaign grants. This joint initiative "aims to improve environmental and social outcomes in underserved communities through green infrastructure projects in local parks."12 While the geographic scale and impact of these two projects are significantly smaller than the scale of the RiverLands, their promising practices, particularly hyper-local workforce development training and employment to build park infrastructure, are approaches that can be learned from, built upon, and scaled up to help advance equity in the context of the RiverLands implementation.

Two reports in particular make recommendations with applicability across U.S. cities. First, a study conducted by researchers from the University of Utah and UCLA examined 27 large park development projects in marginalized neighborhoods of 19 cities to develop a list of parks-related anti-displacement strategies (PRADS). Second, in 2019, LA Thrives and the Los Angeles Regional Open Space and Affordable Housing (LA ROSAH) collaborative published a report with recommendations to address "the nexus between urban greening and affordable housing for equitable, sustainable growth".13

More specific examples of concrete implementations of equitable greenspace can be seen in recent developments in cities across the country. In Washington, D.C., the 11th Street Bridge Project serves as a robust example of park planning that has focused on equity through workforce training, the development of a land trust to preserve affordable housing, and numerous additional efforts to promote equity broadly through greenspace development. In Baltimore, the Middle Branch 11-mile loop along the shoreline is constrained by a community benefits agreement requiring the hire of local contractors and intended to increase wages for local residents. The project has faced criticism, however, that the efforts to guarantee affordable housing are insufficient. In San Francisco, an affordable housing crisis has led to the emergence of housing nonprofits including land trusts that can augment policy efforts to mitigate gentrification and displacement.

This trend has continued in greenspace development of cities in the southeast. In Raleigh, North Carolina, city officials have engaged more than 65,000 people in visioning for Dorothea Dix Park in work toward an equitable development plan that will involve workforce development and affordable housing policy to prevent gentrification and displacement of communities adjacent to the proposed park. The 60-acre Unity Park, scheduled to open in 2021 in Greenville, South Carolina, features an effort to guarantee affordable housing and avoid displacement through an equitable development model included in the core of the park development concept.

Moving forward, the RiverLands should pursue similar strategies as have been developed, implemented, and applauded in these projects across the country. Equitable development in the Chattahoochee RiverLands context must go beyond new and improved access to the River for vulnerable and underserved communities. If the RiverLands is to truly benefit all, a suite of policy tools and intentional actions must be implemented prior to and alongside Greenway development. Waiting until after the greenways or other parks and greenspaces break ground is a failed strategy. Beyond the policies addressed by the One Atlanta Housing Affordability Plan, Greenway projects should include more active measures to address the risk that RiverLands-related projects, particularly those in communities that have lacked greenspace and River access, can bring by displacing the very residents identified for more equitable inclusion.

## **Principles of Equitable Development**

Using principles of equitable development as a frame through which planning efforts are executed is critical to ensuring that all impacted residents, "... regardless of race, economic status, ability or the neighborhood in which they live have access to essential ingredients for environmental, economic, social, and cultural well-being including: living wage jobs, entrepreneurial opportunities, viable housing choices, public transportation, good schools, strong social networks, safe and walkable streets, services, parks, and access to healthy food," (PolicyLink, 2016).<sup>14</sup>

Below are a list of equitable development principles principles: (adapted from multiple sources):

- Equitable community engagement practices for new development require evidence that local community members most affected, especially low-wealth people, people of color, neighborhood groups, community organizations, people living with disabilities, and new immigrants are involved in the development project.
- Equitable land use practices require evidence that the overall vision, plan, and implementation of development projects includes local community's assets, aspirations, potential, and preferences with the intention of retaining current residents and developing projects that promote people's health, well-being and prosperity.
- Equitable Economic Development practices require that policies and programs work to prioritize community based financial intelligence,

- sustainable wealth creation, and high quality job opportunities that prevent unwanted displacement of residents and small businesses from low-income communities and communities of color.
- Equitable Housing practices require evidence that families at all income levels have access to housing that costs no more than 30% of their household income.
- Equitable Transportation practices require evidence that public transit is integrated into walkable, livable, and affordable land use practices to enhance healthy living. Additionally, transit oriented development must include affordable, multi-modal and public alternatives for low-income communities and communities of color.

# Recommendations for a Common Ground for All

- Prioritize communities that are identified as vulnerable by the ARC EJ Model and that lack access to the Chattahoochee River and greenspace more broadly
- Engage communities at risk of gentrification to develop anti-displacement strategies at the very beginning and throughout Greenway project planning
- Educate and inform planning agencies and partners on the risks of green gentrification
- Develop collaborative entities that bring both affordable housing and green space advocates to Greenway planning decisions
- Combine the creation and preservation of affordable housing with initiatives to create better-paying jobs for local residents to tackle gentrification threats from two different angles: increasing income and making housing affordable
- Integrate a requirement for displacement avoidance strategies into policies, laws, and park funding implementation at multiple jurisdictional levels
- Measure, evaluate, and report the gentrification and displacement effects of any greenway developments; engage third-party independent researchers to measure outcomes in terms of gentrification and displacement; publicly share data, results, and lessons learned



# **HEALTH AND SAFETY CONSIDERATIONS**

A key component of the RiverLands vision is safety and comfort for all users. A public amenity such as the RiverLands can play a critical role in creating safe outdoor recreation opportunities that can positively affect human health, both mental and physical. To reach the stated goal of re-uniting the Metro Atlanta Region with the River through development of a network of trails on land and on water, these systems and access points must accommodate a wide range of users in a safe and comfortable manner. Providing access from the diverse neighborhoods surrounding the corridor is a challenge that must be met with innovation. The solutions must blend transportation and placemaking to create a welcoming, comfortable experience for users of all ages, abilities, and backgrounds. All of this requires working creatively with local governments, public agencies, and other landowning entities to improve mobility, health, and connectivity. This section helps articulate how the RiverLands can promote health and safety and provides high-level recommendations to quide future implementation.

# **Linking Active Transportation, Health, and Safety**

In the Metro Atlanta Region, fewer than two percent of all trips are currently taken on bike or foot, the primary modes of transportation that will be served by the RiverLands network. Both are examples of active transportation, which includes any self-propelled, human-powered mode of transportation. Local communities have a strong interest in increasing active transportation as a viable mode of transportation. By designing thoughtfully and intuitively, the RiverLands Team can help ensure that active transportation is an option for a wide range of RiverLands users and can help contribute to the overall goals of changing transportation habits.

Active transportation also plays a critical role in overall human health because it helps people control their weight, strengthens muscles and bones, and can improve mental health and mood, as well as increase a person's chances of living longer. In addition, simply being outside can help improve memory, combat depression, and lower a person's blood pressure.



The Physical Activity Guidelines for Americans recommend that adults get at least 150 minutes of moderate-intensity physical activity or 75 minutes of vigorous physical activity each week. Less than half of all adults get the recommended amount of physical activity. Biking, walking, jogging, strolling, and skating are all forms of physical activity. Improving access to outdoor recreational facilities such as parks, trails, and greenspaces makes it easier for people to incorporate such activities into their daily lives.

#### The Importance of a Safe Connective Corridor

Safety is a critical factor in overall mobility. Many people view bicycling and walking as unsafe or at least uncomfortable due to concerns about heavy traffic, vehicle speeds, lack of sidewalk, crosswalk, and dedicated bicycle facilities. Designing for safety and comfort along the RiverLands will encourage more active transportation on a more regular basis and demonstrate how fun and enjoyable well designed multimodal infrastructure can be.

This effort is timely in 2020, as the regional population continues to increase, and more people realize how important it is to provide safe, reliable and healthy options for transportation. This is especially true in a system where overcrowding of our corridors by single occupancy vehicles and the cost prohibitive nature of right-of-way impacts meet.

Bicycle and pedestrian fatalities represent a disproportionate percentage of traffic fatalities. In the past decade, the number of people struck and killed while walking increased by 35% in the U.S., Georgia now ranks as the sixth most dangerous state for people walking.

While much of the Preferred Alignment for the Chattahoochee RiverLands avoids major arterials, some portions of the Greenway fall within roadway rights-of-way. Off-road, physically separated facilities are likely to be safer and more comfortable for all users; however, intuitive design can encourage safer use along roadways. The range of active and passive mechanisms documented by ITE and AASHTO can help create more intuitive intersections, calm vehicular traffic and lower speeds, reduce potential conflict points, and minimize speed differential between vehicles and cyclists or walkers. Similar treatments can be employed on multiuse paths to reduce the speed differential and minimize potential conflicts between people biking and walking adjacent to one another.

The RiverLands Greenway will support more active movement throughout the region and sets up a system that can accept more connections to adjacent roadways and the communities that feed users into this protected space. Traffic calming features should be employed on tributaries and other approaches to the RiverLands to prepare users to engage safely with all other users within the RiverLands system.

#### **Factors for Consideration**

#### Obesity

According to the Centers for Disease Control and Prevention (CDC), the adult obesity rate in Georgia in 2018 was up one percent over 2017 levels and now stands at 32.5 percent, compared to 28 percent in 2011. Furthermore, Georgia continues to have higher obesity rates than the national average (30.9 percent). Being overweight or obese increases the risk for multiple chronic diseases, including heart disease, stroke, hypertension, type 2 diabetes, osteoarthritis, and certain cancers.

#### Access to Recreation

Data from the Research and Analytics Division of the Atlanta Regional Commission illustrating density of population under 18 years old and the locations of parks and greenspace indicate that some residents within the RiverLands study area lack access to park and recreation facilities compared to other parts of the study area. Availability and conditions of existing facilities are positively associated with higher levels of physical activity. By providing a seamless, connected network, the RiverLands will improve access to opportunities for physical activity, making them easier to incorporate into daily routines.

#### Social Isolation and Vulnerability

Social vulnerability refers to the socioeconomic and demographic factors that affect the resilience of communities. Vulnerable people are less likely to benefit from response efforts in disasters and may not benefit from strong social or safety nets. Socially vulnerable people often suffer from isolation, making them more at-risk for other conditions. Recreational facilities and public spaces such as parks and trails can be opportunities for informal gathering, connecting with others, and strengthening social relationships, as well as improving mental and physical health. Older adults are also at higher risk of social isolation because they tend to be more limited in their mobility and are more likely to live alone. The population of adults 65 and older in the Metro Atlanta Region is now more than 11 percent, compared to just 9.5 percent in 2013. As the share of older adults increases, it will be increasingly more important to consider their needs in the design and implementation of the RiverLands.



#### **Living with Disabilities**

In Georgia, more than one quarter (27.2 percent) of adults live with some type of disability. This overarching category is comprised of people with mobility impairments, cognition impairments, hearing loss, and vision loss, among others. Within the RiverLands Study area, some census tracts have between 19 and 30 percent of the population living with a disability. People living with disabilities are typically less able to get around independently and face challenges navigating the built environment. As a result of these and many other factors, they are more likely to be inactive, have high blood pressure, be obese, and smoke. In each of these categories, the percentages for adults in Georgia are slightly higher than for adults in the U.S. as a whole.<sup>18</sup>

#### **Multimodal Safety**

The number of pedestrians and bicyclists killed on roadways in Georgia has increased over the past several years, even as more people are biking and walking. From 2011 to 2015, more than 17,000 vehicle-pedestrian crashes occurred in the state of Georgia with pedestrian fatalities accounting for an average of 14 percent of all traffic fatalities in the state. Most vehicle-pedestrian crashes occurred on arterial roadways in urbanized areas, with several recognizable patterns: speed limits greater than 40 miles per hour; infrequent pedestrian crossing opportunities; five lanes or more; and the presence of transit stops. <sup>19</sup> That said, historic crash patterns do not tell the whole safety story. Roadway design elements and characteristics play a significant role in safety risk.

ARC's Safe Streets for Walking & Bicycling plan developed a crash risk index based on factors like number of lanes, crashes per 10 miles of roadway, demand for active travel and other factors. Many of the roads that cross the Chattahoochee exhibit moderate to high levels of risk for people walking, suggesting that alternative crossings connected to an off-street Greenway could be a safer alternative based on the previous work documented in Bike and Pedestrian Safety Risk Map generated by ARC as well as the FHWA Scalable Risk Assessment Methods for Pedestrians and Bicyclists.<sup>20</sup> Similarly, there are safety concerns other than crash risk, such as personal security and water access, which must also be addressed.

## **Best Practices for Health and Safety**

To entice more people to engage in active transportation, the RiverLands must do two things: it should create facilities that allow people to enjoy themselves and eliminate safety concerns. Universal design, planning resources, and consistent guidelines can work in concert to achieve the latter.

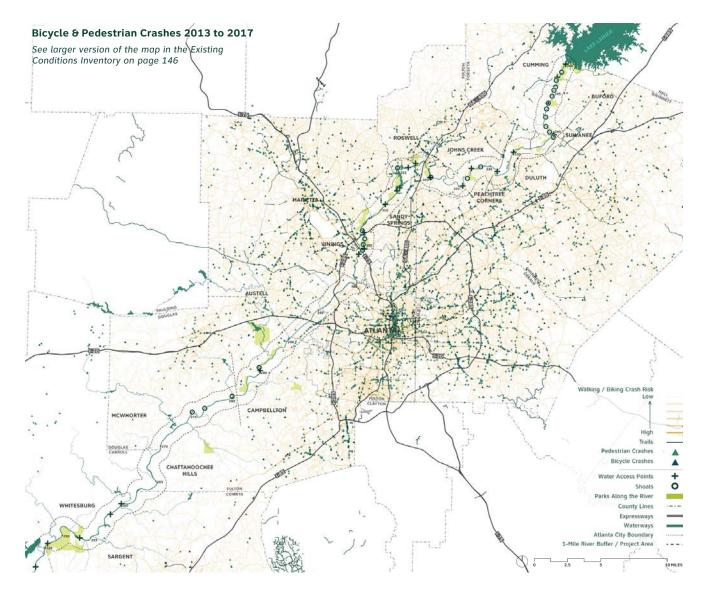
To create facilities that people want to use, the RiverLands should employ universal design that clearly defines each space (e.g., for walking, for cycling, for resting) and creates an environment that people can intuitively use. Elements of this design should include well defined edge conditions and tactile surfaces, which help people understand the space they are in, while also limiting further impacts to environmentally sensitive areas.

Other key elements of inviting facilities include designing accessible trailheads and rest areas that provide space for people to pull off and relax while taking in the scenery.

Future implementation of the RiverLands should include trip-planning resources to make it easier for everyone to get to/from the RiverLands.

Reducing fatalities and injuries among multimodal users is a function of keeping them visible, of reducing speed differential between them and larger, faster moving vehicles and of creating an overall transportation network that is continuous and predictable. Multimodal trails are designed to be shared space. This can be positively reinforced through a combination of creative trail surface finishes to clearly delineate spaces for each mode of travel, geometry that provides adequate sight distance and reduces potential conflicts, advance warning signs and flashing beacons at key roadway crossings, and lighting and/or security cameras.

Water access introduces a different set of concerns; however, making sure that users have information available on water and weather conditions at access points can help to limit risk. It important to be specific about the type of recreation that may occur and when and where. For example, high or low flows may create safety and access challenges as water levels fluctuate. New technology for intuitive and easy-to-understand online and on-site warning systems should be considered at key locations where applicable to inform



users about local conditions. Site design should also consider direct water access and ways to prevent bank erosion and support a safe visitor experience. Access for safety personnel and equipment should also be considered.

River visitors consider factors such as safety and security, amenities offered, distance from parking to water access, and River conditions when choosing where to go. A variety of design approaches are needed to address each of these within the specific context of access points, all while adhering to the overall RiverLands vision.

To accomplish both the health and safety goals for this project, the Project Team is recommending a combination of existing guidelines along with more flexible design options. Typical sections should meet recommended greenway and shared-use path criteria identified by FHWA with a minimum of 10' widths. Although, 10' widths is considered to be a minimum in tight areas, the Project Team suggests 14' as a goal with some areas needing 16' or 18' in width to safely avoid user conflicts that could result in injury.<sup>21</sup>

At intersections with roadways, following the criteria contained in the FHWA recommended approach also establishes best practices for intersections of the Greenway and existing streets.



# **Crossing + Parallel Roadway Guidelines**

There are a number of guidelines to help establish best practices for signage locations along greenways. While the FHWA, Manual on Uniform Traffic Control Devices (MUTCD) is the standard for most transportation projects, the Design Team recommends establishing RiverLands specific guidelines that incorporate the brand and context of this newly formed corridor.

# Criteria and Considerations for Evaluating Risk at Intersections with Roadways

Along with the inclusions of flexibility, the Design Team believes that including direction for future crossings is important to maintain the look, feel, and functionality of the Greenway for years to come. Basic parameters such as posted speed limit, number of lanes for crossing and the average daily traffic can start to better define the approach to greenway intersections with roadways, to outline effective counter-measures based on the context of potential crossings.

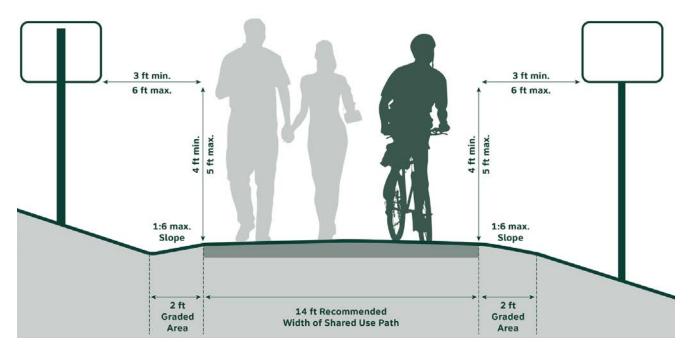
# Criteria and Considerations for Evaluating Parallel Running Roadway / Multi-Use Paths

Some sections of the Greenway share a right-of-way with existing roadways, which introduces potential safety and comfort dilemmas. Meaningful separation and protection for the most vulnerable users comes in two main forms – separation distance and protection types.

It is also important to include features that fit the context of an environmentally-sensitive Greenway with visually pleasing and softer features than what is typically used in guardrail scenarios. To accomplish this, crash rated, wood guardrail is recommended where possible.

The table below shows some general guidelines that can help create a comfortable and safe setting that will enable a wide range of people to engage with the Greenway:

RECOMMENDED TYPICAL SECTION CONSIDERATIONS	POSTED SPEED LIMIT		
	≤ 30MPH	35 MPH	≥ 40 MPH
RECOMMENDED MINIMUM SEPARATION OF PATH / ROAD	4′	6′	10' OR CLEAR ZONE
RECOMMENDED PROTECTION	GRADED SEPARATION	DITCH, GUARDRAIL	DITCH, GUARDRAIL



#### **Additional Amenities**

Amenities such as trailheads and water access points will help to draw people into the RiverLands system and provide parking, bike repair stations, water refills and restrooms. The Project Team recommends establishing two standard types of trailhead – one geared toward pedestrian access, and one geared toward vehicular access. Each should identify preferred features that suit the RiverLands and local context such

as gateway markers, information kiosks, vehicularand/or pedestrian-scale entry signs, directional signage, interpretive signs, seating (formal and/or informal), shade structures or trees, parking at major trailheads, and where appropriate, comfort stations with plumbing. Where direct water access is provided, safety information should be displayed and techniques employed to facilitate safe access and prevent erosion.







Potential Trailhead Designs as Exemplified by the RiverLands Demonstration Sites

# How These Design Principles Help to Address Health Issues

The RiverLands will support walking, jogging and biking, which can directly combat health issues, provide respite from our daily lives, and pave a way to better mental health and better awareness of our social connections across the community.

- Bicyclists have been shown to have longer life expectancy when compared to individuals who do not ride. Spending one hour a day on a bike can reduce your risk of death by 18%.
   Adding an extra half an hour to your routine can drop your risk of death by nearly 28%.<sup>22</sup>
- People who are active have healthier hearts as well.
   A 2000 study documented that choosing to walk or bike can have drastic reductions in heart disease.<sup>23</sup>
- Walking or biking to work or as part of a normal exercise regimen is also a simple way to reduce the chance of being impacted by type II diabetes. One study found that people who bike for at least 30 minutes a day are 40% less likely to develop diabetes.<sup>24</sup>
- People who choose to walk or bike tend to suffer less from depression, anxiety, and other mental health issues.<sup>25</sup>

Providing direct connections and access between neighborhoods and nearby destinations is a great way to make it easy and convenient for people to access trails and greenways. By incorporating access points, overlooks, nodes or resting areas along the alignment, the RiverLands can help make the immersive nature experience more readily available or accessible to people of all abilities, including those with limited mobility.

#### **Social and Economic Benefits**

Communities that have embraced biking and walking are more prone to being happier, healthier, better educated, and economically more stable.<sup>26</sup> Biking and walking also help to foster a community spirit and unity.

There are several documented examples of cities embracing the power of biking and walking what it has meant in terms of economic benefits. Portland, OR is a great example of how a city investing in active transportation can thrive. Their booming economy is, in part, attributed to the city's willingness to embrace alternative transportation.<sup>27</sup>

#### **Resources for More Information**

National Complete Streets Coalition – This organization is dedicated to the creation of regulatory framework and ordinances that can better define how to interface with multimodal transportation networks and give local municipalities guidance on how to better manage these implementation processes.

**AARP** – This organization has a stated mission to "empower people to choose how they live as they age." It has produced documentation on the benefits associated with being active and utilizing active transportation as well as guidance on how to better accommodate older adults on multimodal facilities.

American Association of State Highway and Transportation Officials (AASHTO) – This nonprofit organization represents highway and transportation officials and departments across the U.S. It has produced several resources pertaining to bicycle and pedestrian facilities that help guide engineers and planners, all of which have been closely examined and well documented.

#### Chattahoochee River National Recreation Area -

The CRNRA provides a wealth of trip-planning and safety resources on its website, including water safety information related to personal flotation devices, hypothermia, water quality and release schedules, water flow rates, and flooding.

**Federal Highway Administration (FHWA)** – This organization helps to set the standards and direction for our national policy and helps to document guidelines and best practices based on research which focuses on the safe passage of users on our transportation systems.

National Institute of Mental Health (NIMH) – This organization has developed numerous resources on a variety of health topics, including the benefits of physical activity and outdoor recreation.

#### **National Highway Traffic Safety Administration**

(NHTSA) – This organization helps to establish guidelines focused on safety for all users of our transportation networks. Recently they have been establishing guidelines for new technology being employed in public space. The NHTSA website includes resources, tips, and facts on pedestrian and bicycle safety.

The **River Access Planning Guide** provides step-by-step guidance for planning for river access with a focus on recreational users. Developed by a partnership between the National Park Service (NPS), American Whitewater, and the River Management Society, the guide is a practical resource for planners, River managers, and others.

The United States Access Board is a federal agency that promotes equality for people with disabilities through leadership in accessible design and the development of accessibility guidelines and standards for the built environment, transportation, communication, medical equipment and information technology. Among other resources, they provide ADA and ABA Accessibility Guidelines that focus on facilities on sites as well as for sidewalks, curb ramps, and other public rights-of-way.

**World Health Organization (WHO)** – This organization provides a variety of resources and publications on physical activity, including making walking safe.

# Recommendations for a Safe Connective Corridor

Recognizing the implementation of the RiverLands will be a somewhat opportunistic as well as a strategic, piecemeal process involving multiple jurisdictions, there are a few high-level recommendations that will help promote health and safety.

- Standardize best practices for interfacing with the RiverLands: develop design guidelines for the RiverLands so that partner jurisdictions understand what it means to create and implement segments of the RiverLands. This should include guidelines for what happens at roadway crossings and key trail intersections.
- Design for the full spectrum of users in terms of age, speed, and mode of travel (walking, bicycling, skating, rolling in a wheelchair).
- Where possible, avoid placing trails alongside high-speed, high volume roadways.
- Where trails are alongside roadways, provide adequate separation between travel lanes and the path/trail.
- Provide dedicated space for cyclists and pedestrians at intersections or roadway trail crossings. Minimize potential conflicts and provide adequate sight distance and visibility.



# IMPLEMENTATION CONSIDERATIONS

The RiverLands is a generational project and this section provides a high level overview of potential paths forward toward implementation which is centered on champions, potential funding sources and possible land acquisition strategies.

# **RiverLands Champions**

The RiverLands is a large-scale collaborative initiative that hinges upon support and active participation from key stakeholders as well as the general public. A project of this scale and magnitude would not be possible without public support and involvement. Throughout the duration of the Chattahoochee RiverLands Greenway Study, the Design Team has developed a number of tools, strategies, and mechanisms for engaging the public. The RiverLands website has served as a platform for documenting the process of developing the Greenway and collecting stories about the River from around the region. It listed upcoming events and activities and served as a direct portal for providing feedback to the Team. Continuing to grow and develop the website is one way to ensure there continues to be a robust community of informed advocates, keeping people up-to-date with implementation efforts and providing information about how to get more involved.

#### **Public Engagement**

The process has also included a series of public forums and events. In the future, as various trail segments are further refined and developed, project champions and stakeholder groups should consider taking more ownership of these segments facilitating similar public forums to present information and get feedback about design and implementation. Fun, engaging events that take place at or along the River have proven critical for keeping the public engaged with implementation progress. These may be organized by partner organizations or, as appropriate, facilitated as part of the implementation process by local governments.

Implementation of the RiverLands will be a generational project for the Metro Atlanta Region and will require cooperation and collaboration across the seven counties, the nineteen municipalities, and the philanthropic community. Significant public outreach and engagement will be necessary going forward in

order to build support and momentum for implementing the Chattahoochee RiverLands. A concerted effort will be needed, above and beyond what has been done as part of the Greenway Study, In order to ensure that all audiences are informed, heard, and engaged during the vision's implementation.

## **Keepers of the Vision: Potential Partners**

Many involved with the Chattahoochee RiverLands process see the value of creating a non-profit partner, perhaps a conservancy, that can ensure a consistent experience throughout the length of the RiverLands, regardless of the capacity of the local jurisdiction. Such an entity could help shepherd the RiverLands vision, engaging local partners along the way with support from Project Management Team members, local partner agencies, and the philanthropic community. Funded and focused organizations can be incredibly successful and powerful in implementing large-scale projects and initiatives. The precise path for how such a group would function relative to the current project partners (Trust for Public Land, Chattahoochee Working Group, Chattahoochee Now, Chattahoochee National Park Conservancy, Atlanta Regional Commission, local government, etc.) is still to be determined and is a key piece of the implementation phase. A group that serves as the "keeper of the vision" despite turnover at government agencies and in local elected officials can be invaluable in steering the RiverLands forward and keeping it on track. Such a model has been the hallmark of many successful projects in communities across the country.

Project Management Team: It is anticipated that representatives of the Project Management Team (PMT) will continue to support ongoing development and implementation of the RiverLands project throughout its duration. The ARC will continue to be a regional champion, coordinator, and funder. Cobb County and the City of Atlanta will oversee initiatives within their boundaries and participate in regional discussions. The Trust for Public Land will be a champion, fundraiser, and host for public and private discussions.

Chattahoochee Working Group: The Chattahoochee Working Group (CWG) is an established stakeholder group convened by the Trust for Public Land to engage with each other on Chattahoochee River-related topics. It is anticipated that municipalities, counties, congressional districts, and non-profit organizations who have a mission focused on the Chattahoochee River will meet on a regular basis to better understand stakeholder agendas and initiatives. This group has served as the sounding board and advisory committee throughout the course of the Chattahoochee RiverLands Greenway Study and has strengthened the project's collective impact. It is anticipated that the CWG will continue to meet beyond the planning study to help facilitate implementation of the RiverLands Greenway, Blueway, and Tributary Trails, through disseminating information, gathering input, and partnering with other groups as needed.

Local Governments and Other Partners: Many organizations are already involved in or spearheading efforts to establish trails and access points within the RiverLands study area. Organizations such as the National Park Service (NPS), PATH Foundation, and local governments are actively working to plan, design, and build out segments of trail that will ultimately be part of the RiverLands or serve as connectors or tributary trails.

Examples of these key partners include:

- National Park Service Within the Chattahoochee River National Recreation Area (CRNRA), the National Park Service is actively working on trail management plans and trail improvement plans for certain park units, such as the Johnson Ferry North Unit of the CRNRA.
- Douglas County In partnership with the Georgia Department of Transportation, Douglas County is currently working to implement Phase I of the Chattahoochee Hill Country Greenway Trail through property associated with Boundary Waters Park and land owned by Sweetwater Creek State Park (PI No. 0012877).
- RiverLands Community Partners These groups include, but are not limited to: PATH Foundation, cities and counties along the 100mile corridor, Chattahoochee Now, Chattahoochee Riverkeeper, and Riverwalk Atlanta.

These groups can help support implementation of planned and programmed projects that tie into the RiverLands; they will shepherd through important tributary trail projects such as the Proctor Creek Greenway and work to support projects that align with RiverLands greenway segments or tributary trails. These groups and agencies can help recognize and facilitate implementation opportunities for various segments of the greenway in order to begin forming a cohesive trail network.

Significant additional outreach and engagement is needed to build support and momentum for implementing the Chattahoochee RiverLands. This can be achieved through individual efforts seeking to implement segments of the RiverLands or associated projects as well as through efforts spearheaded by key partners in the RiverLands. A combination of online and fun, convenient in-person activities is needed to maximize exposure to the widest range of people and to engage people in meaningful ways. This project has set the stage through consistent engagement of the Chattahoochee Working Group and development of a project website that will live on beyond the life of this planning process. While this process engaged hundreds of people through public forums, Sub-Area Committees, and targeted River Ramble events, a more robust effort will be needed in the future to truly engage a broad and representative spectrum of the Metro Atlanta population.

# Potential Funding Sources and Other Forms of Support

Private funding: the bold vision laid out by the RiverLands Greenway Study coupled with the proven productivity and collegiality of the Chattahoochee Working Group will be a major draw for potential donors of all types – corporate, institutional and individual. One future strategy would be for the Project Management Team and the CWG to work with a consultant to conduct a private philanthropy Feasibility Study (currently underway) to assess donors' appetite for a potential first five-year phase budget of \$50M to cover all hard and soft costs associated with the priority projects.

The Chattahoochee RiverLands campaign led by the Trust for Public Land, would not be the first time TPL has raised significant funds to support the program. In the mid-1990s and early 2000s, TPL and its partners raised \$50M in private funds and over \$100M in public funds to act as a revolving fund to acquire over 18,000 acres of land along the Chattahoochee River. Additionally, in the



early 2000s, TPL and its partners raised nearly \$10M in public and private funds to purchase the Hardman Farm, which became a Chattahoochee program project.

Public funding: will be essential to successfully implement the RiverLands vision, particularly for the many stakeholder partners that will be overseeing build-out of their own projects that "nest" within the RiverLands vision. There are a variety of public funding sources for greenway, trail, and public space projects. Throughout the region, local governments and nonprofit partners have succeeded in securing public funding for trail projects from federal, state, and local levels. Below is a brief summary of select potential funding sources that may be used in planning, design, and construction of greenspace, trails, and public greenspaces. This is not an exhaustive list: it is meant to provide a representative sample of possible options.

## **Examples of Possible Funding Sources**

## Funding Profile: Recreational Trails Program<sup>28</sup>

The Recreational Trails Program (RTP) is an assistance program of the U.S. Department of Transportation's Federal Highway Administration (FHWA). The RTP provides funds from the Highway Trust Fund (motor fuel excise tax) to states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trails. In Fiscal Year (FY) 2018, the Federal government authorized more than \$82 million for the RTP. This level of funding has been fairly consistent over the past five years (in 2014 just over \$80 million was authorized). The obligation rate of all RTP funding since 1993 is about 85% and in 2018, nearly \$73 million of the authorized \$82 million was obligated.

States are required to use 40% of their RTP funds for diverse recreational trail use, 30% for motorized recreation, and 30% for nonmotorized recreation. Each state develops and manages its own program of project selection and grant management. In Georgia, the 2019-2020 grant cycle estimated a total of \$3 million in available funds. In 2018, RTP funded 19 projects for a total of \$2.7 million. In total, since 1993, Georgia has developed 354 projects with \$33 million in RTP funds, which were leveraged to raise an additional \$29 million through project sponsors. Local examples include the Heritage Trail Accessibility Enhancement Program in Rome-Floyd County, Georgia; the Carrollton Greenbelt-

Southside Spur; the City of Smyrna Mountain Bike Park at North Cooper Lake Park-Phase I; and the City of Milton Trails at Providence Park.

- Projects in Georgia must provide or maintain recreational trails and trail-related facilities identified in or that further a specific goal of the Statewide Comprehensive Outdoor Recreation Plan (SCORP).
- Eligible applicants include qualified local governments, authorized commissions, and state and federal agencies.
- The typical application cycle includes a preapplication window in the fall, notification of firstround success in April, a second level application in the spring, and final approval in the following Fall.
- There is no minimum grant amount. For single use and diverse use trail grants, the maximum funding assistance is \$200,000; for motorized use trail grant applications, there is no maximum funding assistance limit.
- There are eight categories of permissible uses for RTP funds:
  - Trail maintenance and restoration
  - Trailside and trailhead facilities
  - Equipment for construction and maintenance
  - Construction of new recreational trails
  - Acquisition of trail corridors
  - Assessment of trail corridors
  - Education for safety and environmental protection
  - Administration

## Conserve Georgia - Georgia Outdoor Stewardship Program (GOSP)<sup>29</sup>

In 2018, the Georgia Outdoor Stewardship Act passed with overwhelming voter support. It created a new grant program to provide dedicated funding to support parks and trails and protect and acquire lands critical to wildlife, clean water, and outdoor recreation across the state. The Act dedicated 40% of existing sales and use taxes on outdoor sporting goods to fund stewardship projects. Each year's official funding amount will be announced shortly before the funding cycle begins.

- Applicants may apply for Conserve Georgia grants and loans through GOSP. Eligible proposals include projects that support state parks and trails as well as those that support local parks and trails of state and regional significance, among others. GOSP is a competitive program. The application process involves a pre-application which serves as the basis for selecting which projects advance toward approval.
- The maximum Conserve Georgia grant amount is \$3 million for local parks and trails and there is no maximum for state projects. A 25% match is required. The grant term is two years.

 Three types of projects are eligible for GOSP funding: local parks and trails of regional significance; state stewardship; and state land acquisition. Local parks and trails of regional significance funding opportunities are reserved for local governments, constituted recreation authorities, and nongovernmental entities to acquire and/or improve local parks, trails, and conservation lands.

#### **Grant Programs**

- Congestion Mitigation and Air Quality Program (CMAQ)
  - These funds are jointly administered by the FHWA and Federal Transit Authority (FTA). CMAQ funds are granted for projects that improve air quality, including pedestrian facilities and non-recreational bicycle transportation infrastructure that support a reduction in single occupancy vehicles. CMAQ funds are generally channeled through state departments of transportation, metropolitan planning organizations, and transit agencies.
- Federal Lands Access Program (FLAP)
  - FLAP focuses on improving access to federal lands on infrastructure owned by state or local governments. These funds are generally only eligible to Federal Land Management Agencies (FLMAs): National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, and Bureau of Land Management. Other agencies may receive these funds, but only at the request of one of these FLMAs.
- Nonpoint Source Management Program (Clean Water Act Section 319)
  - Established through 1987 amendments to the Clean Water Act. The Nonpoint Source Management Program Section 319 addresses the need for greater federal leadership to help focus state and local nonpoint source management efforts.
  - Eligible applicants include public entities such as city or county governments with Qualified Local Government status; regional and State agencies, authorities that operate public service or delivery programs, such as sewer or water; regional commissions; resource conservation councils; county extensions; and local school systems and State colleges and universities.
  - States, territories and tribes receive grant funding to support a variety of activities including technical assistance, financial assistance, education, training, technology, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects.<sup>30</sup>
  - In 2017, a total of nearly \$168 million was available for this program. The grant's costshare policy requires a maximum of 60% Federal funding and a minimum of 40% non-federal cash

- or in-kind matching contributions toward the total project cost. In FY 2018, the maximum Federal award for any individual project was \$400,000.
- Federal Brownfields Program
  - Since 1995, the United States Environmental Protection Agency (EPA) Brownfields Program provides grants and technical assistance to eligible individual and coalitions of communities, states, tribes and non-profit organizations to help assess, remediate and reuse contaminated properties. A brownfield is a property, land and/ or buildings, where expansion, redevelopment or reuse may be complicated by known or potential contamination of petroleum or hazardous substances. Over 450,000 brownfields are suspected in the United States and common brownfields are former industrial sites, rail corridors, gas stations and dry cleaners.
  - The federal 2002 Small Business Liability
    Relief and Brownfields Revitalization Act and
    2018 Brownfields Utilization, Investment and
    Local Development (BUILD) Act authorize and
    establish the policies and practices for EPA's
    Brownfields Program. Grants are for assessment,
    cleanup and capitalizing revolving loan funds
    for cleanup. Grants are competitive but several
    communities in the Atlanta Region, including
    Atlanta, DeKalb County, College Park, East Point
    and Doraville, have successfully used the grants.
    The Atlanta BeltLine and PATH Foundation
    East Decatur Greenway are two local examples
    where EPA's Brownfield grants have been used.
  - In 2019, U.S. EPA awarded 149 Communities \$64.6 million for brownfield assessments and cleanups. Grant amounts are limited to \$200,000 to assess individual sites; \$300,000 to assess multiple sites in a community; \$600,000 to assess sites across multiple communities of a coalition; \$500,000 to cleanup individual sites; and, \$1 million to capitalize a revolving loan fund for cleanup. Cleanup grants and revolving loan fund grants require a 20% cost share. Multipurpose grants for assessment and cleanup have a \$40,000 cost share.
     Assessment grants do not require a cost share.
  - Georgia Environmental Protection Division Land Protection Branch works very closely with U.S.
     EPA Brownfields Program and its grantees during assessments and cleanups. This close working relationship between federal and state agencies is a significant benefit for tackling brownfield challenges along the Chattahoochee River. More information and grant solicitations for U.S. EPA's Brownfields Program can be found at https:// www.epa.gov/brownfields. And, information about Georgia's brownfield assistance can be found at https://epd.georgia.gov/landprotection-branch/hazardous-waste/brownfield.



#### **Assistance Programs**

- National Recreation Trails (NRT)
  - NRT is a designation that recognizes exemplary existing trails. Securing this designation can provide access to technical assistance and listing in a database. NRT designation may be taken into consideration by some funding sources.
- Rivers, Trails, and Conservation Assistance Program (RCTA)
  - This program is an arm of the National Park Service and can provide access to technical assistance to develop trail and open space plans.

### **Local Funding**

- SPLOST and T-SPLOST
  - Special Purpose Local Option Sales Taxes –
     Several local governments in Metro Atlanta have utilized these funds for capital improvements for transportation facilities, technology, public safety, education, and public services.
- Bonds
  - Bond programs allow local governments to borrow funds for capital projects. They are typically backed by reliable income sources, such as property taxes, and repaid over a specified period of time. The interest income earned from municipal bonds is exempt from federal taxes, making this funding mechanism an attractive option for local governments. Bonds are often used for acquisition of parks and open space and could potentially also incorporate trails/greenways.

# **Land Acquisition and Access**

One challenge to greenway and trail projects is the need to acquire available right-of-way or easements. Right-of-way and land acquisition account for a substantial portion of total project costs. Projects that require acquisition of rights-of-way or property are more complex than those that do not and in cases where federal funding is used, federal guidelines must be followed. For projects that are funded locally or through the State of Georgia, but are not on a state highway system, the local agency may use its own acquisition policies and procedures, often making the process faster.

In some cases, greenway and trail projects can fit largely within public rights-of-way, but in some situations, there may be a need to acquire land or easements to complete trails and provide good connectivity to existing development. For example, this has not necessarily been the experience in Cobb County, where significant amounts of right-of-way have been needed to facilitate trail development, adding to the project timeline and

cost. There are many options for property acquisition and mechanisms to manage greenway development. Acquisition strategies differ widely depending upon the context, surrounding land uses, and zoning regulations. In some cases, trail development strategies may focus more on encouraging construction of trail segments as part of ongoing development projects or securing easements in conjunction with these projects or as communities grow. Other options may include land banking or conservation easements. In more built-up areas, acquisition strategies may focus more on purchase of property or easement agreements that provide access.

The following section briefly summarizes some key strategies that can assist with acquisition and assemblage of land to be used for trails, greenways, and public access points. It will be essential that, moving forward, the Chattahoochee RiverLands strives to minimize displacement and gentrification through appropriate planning tools and strategies in order to ensure that this generational project will truly be a "common ground for all."

## **Tools and Strategies**

- Overlay Zoning
  - Overlay zoning districts can be applied on top of an existing zoning category to add requirements in order to maintain the character of an area. In the case of trails and greenways, an overlay zone may be applied along a planned trail corridor, and as property is either developed or significantly altered, the property owner is required to allow the agency to construct the specified facility. This sort of control also allows dimension and material standards to be applied such that the trail, no matter when segments are constructed, will have a unified and cohesive design, look and feel.
- Conservation Zoning and Conservation Easements
  - Conservation zoning focuses on protecting environmentally vulnerable areas such as wetlands, stream corridors, and flood plains.
     While these zones typically prohibit or restrict development, they present opportunities for allowing sensitive construction of trails and greenways within them.
  - Conservation easements protect natural resources from disturbance by new development. The easements themselves function as a form of spatial "placeholder" that restricts development or other specific uses and may not include areas needed for construction. These easements can also help protect valuable lands, farmland, waterways, and scenic views.

- · Agreements for Easements or Dedications of Land
  - Easements allow landowners to convey to another entity, such as a County, the rights to use land for public purposes, such as a greenway or trail, and maintain it without giving up ownership of the land itself. Easements are useful tools, particularly for riparian or greenway trails.
  - In many cases, public or quasi-public utilities such as Georgia Power, the Atlanta Department of Watershed Management, or the Cobb County Water System - hold easements on land that allow for the installation, operation, and maintenance of utility infrastructure such as power lines or water mains. Power lines and pipelines often run through cities and neighborhoods leaving strips of cleared, unused green space below or above these utilities providing corridors ideal for trail networks. Some utilities make it standard practice to allow public access, such as in the form of trails, within these corridors. Others do not have standards for such access. but may be open to considering agreements to allow use of their easements, so long as it does not interfere with maintenance of the utilities.
- MOUs/MOAs to work with existing public lands
  - Memoranda of Agreement or of Understanding (MOA or MOU) may be developed between public land owners and local governments or nonprofit organizations to allow use of public lands for specific and expressly allowed uses.
     Such agreements may help facilitate maintenance or hosting of programmed activities.
- Fee Simple Purchase
  - This is the outright purchase of land, including the entire bundle or rights associated with it. Some local governments prefer to purchase land as opposed to enter into agreements for easement because of the permanence of the purchase.
- Land Banks and Land Trusts
  - Land banking is a long-term strategy for land purchase in areas where land values are lower. This strategy may pair with the creation of a community land trust. Land banking is often associated with preservation of key agricultural tracts or green belts in more undeveloped parts of communities.
  - Land trusts are local, regional, or statewide organizations that work to preserve important land resources for public benefit. Often, they conserve and protect parklands, wetlands, farmlands, forests, wildlife habitats, significant residential properties, and other areas that provide value to the surrounding community. Land trusts work cooperatively with landowners to complete real estate transactions, either obtaining conservation easements, acquiring land through donations, or purchasing property interests.
     Others facilitate conservation and preservation

through stewardship of lands or easements.

- Transfer of Development Rights
  - Transfer of Development Rights (TDR) is a zoning or land use strategy to conserve land by redirecting development that would otherwise occur on one piece of land (the "sending area") to another area that might be more suitable for denser or more intense development (the "receiving area"), thereby protecting the land from future development while still enabling development to happen in another location. TDR is done in such a way that the land owners in the "sending area" are financially compensated for their transferred development rights. TDR is often used to protect lands with conservation values, such as open spaces, wetlands, groundwater recharge areas, flood plains, ecologically sensitive areas, or farmlands, and others.
  - This strategy has been around for decades and has been used successfully across the U.S, including in the Metro Atlanta Region. Within the RiverLands Study area, several local jurisdictions have TDR programs in place, enabled through their codes of ordinances. These include, but are not limited to, the Cities of Atlanta, Milton, and Chattahoochee Hills, as well as Fulton County.

# Recommendations for Implementing a Living Legacy

As a large-scale collaborative and generational project, it will be essential to ensure active support and participation from key stakeholders in order to facilitate implementation RiverLands vision.

- The ARC, Cobb County, the City of Atlanta, and the Trust for Public Land will each continue to play an important role in coordinating, facilitating, and funding implementation of the RiverLands.
- Given the length and breadth of the RiverLands corridor and the number of jurisdictions it crosses, the RiverLands will take shape piece by piece, project by project, through champions and partnerships.
- Support and active participation from a broad range of partners will make the RiverLands possible. Active engagement of numerous groups, local governments, and advocacy organizations, along with the general public will be critical in guiding the implementation process and seeing through future concept development and design phases of segments of the RiverLands.
- The RiverLands will draw upon a variety of funding sources, both public and private.
- The approach to land acquisition will not be the same for all implementation projects and segments of the RiverLands.



# REGULATORY CONSIDERATIONS

The purpose of this section is to provide an overview of the various applicable regulations and overseeing agencies that should be considered as implementation progresses. The goal is to help local governments and partners identify regulations that they should be aware of as they move forward and to help anticipate what kinds of coordination might be needed. The following sections provide high-level overviews of various regulations at the federal, state, and local level. This section is not an exhaustive review of all applicable regulations, but an overview of some regulations that should be considered as segments of the RiverLands are being implemented.

Both state and federal governments play a role in environmental and other regulations pertaining to trail development. To a large degree, the applicable regulations depend upon the source of funding for the project.

## **National Environmental Policy Act**

Federally funded projects are subject to the applicable regulations in the National Environmental Policy Act (NEPA).<sup>31</sup> NEPA will also apply to RiverLands projects in the Chattahoochee River National Recreation Area. NEPA provides the basic national charter for protection of the environment and is intended to ensure that information about the environmental impacts of an agency's proposed project or action are considered and made available to decision makers and the public. The primary goals are to inform and involve the public in decision-making and to consider alternatives to a proposed action and the effects that may occur. It requires federal agencies to incorporate environmental considerations in planning and decision making and specifically, to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions or projects.

NEPA considers the impact of a federal action in matters of all natural resources (soils, geology, water quality, wetlands, air quality, cultural resources, endangered species, etc). There are several components to the process and the review results in an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Categorical exclusions (CE) are classes of

actions that do not individually or cumulatively have a significant impact on the environment and do not require preparation of EAs or EISs. An EA determines whether or not a federal action has the potential to cause significant environmental effects. Each federal agency has its own NEPA procedures for preparing EAs and thus projects undergoing NEPA review are subject to federal regulations including but not limited to the Endangered Species Act, Fish and Wildlife Act, North American Wetlands Conservation Act, Clean Water Act, National Historic Preservation Act and more. Ultimately, based on the EA, the agency can find that the project will not have significant impacts and issue a Finding of No Significant Impact (FONSI) or it can find that the environmental impacts of the proposed project will be significant, in which case an EIS is prepared. In general, the NEPA process takes longer than the process for state and locally-funded projects.

# **Georgia Environmental Policy Act**

In Georgia, state projects and local projects with either 50% or more than \$250,000 in state funding may be subject to the Georgia Environmental Policy Act (GEPA).32,33 GEPA includes any proposed governmental action by any department, board, bureau, commission, authority, or other agency of the state. However, if a project is subject to and complies with NEPA, then no further action is needed under GEPA. When applicable, GEPA principally provides for the disclosure of the environmental effects of certain proposed state and state-funded projects or actions. A proposed government action refers to proposed land-disturbing activity funded by a government agency (state) or funded by a grant from a government agency; any proposed sale or exchange of more than five acres of state-owned land; or any proposed harvesting of five acres or more of trees of more than two inches in diameter.34 The Director of the Environmental Protection Division of the Georgia Department of Natural Resources plays a consultative role on GEPA and receives any required environmental effects reports.

Some governmental agencies and project sponsors try to follow the full federal process and tap into federal funding, whereas others prefer not to use federal funding, often in order to expedite the implementation process.

# **FEMA and Local Flood Regulations**

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program, which aims to reduce the impact of flooding on private and public structures. This happens, in part, by working with local jurisdictions to develop Flood Insurance Rate Maps (FIRMs) that identify the 100-year floodplain. Additionally, local jurisdictions have adopted local floodplain management ordinances that regulate the use of flood hazard areas to prevent flood damage, and some of these local ordinances impose additional restrictions on development in or near the 100-year floodplain. Floodplain regulations may impact the development of RiverLands projects. Project designs that are within the 100-year floodplain and/or impact the FEMA floodplain elevations, floodway elevations, or floodway widths may require a FIRM revision that will be part of the required permits for the project. All projects should coordinate with the local jurisdiction and FEMA to ensure all floodplain management plan requirements are met.

## Clean Water Act, Section 404

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into Waters of the U.S., including wetlands. Activities regulated include fill for development, water resource projects (dams, levees), and infrastructure development. At a basic level, no discharge of dredged or fill material may be permitted if: a) a practicable alternative exists that is less harmful; or b) the nation's waters would be significantly degraded.<sup>35</sup>

Dredging and filling is subject to permits and approval by the U.S. Army Corps of Engineers (USACE), and the US Environmental Protection Agency (EPA) and US Fish and Wildlife Service (USFWS) also play important roles in the permitting process.<sup>36</sup>

For discharges with only minimal adverse effects, a general permit may be appropriate. These are issued on a nationwide, regional, or state basis for certain categories of activity. An individual, or standard permit,

is issued when projects have more than minimal individual or cumulative impacts, are evaluated using additional environmental criteria, and involve a more comprehensive public interest review. Obtaining individual permits usually takes much longer and costs much more than obtaining a nationwide permit.

Rivers and Harbors Act Section 408: For any trail work immediately downstream of Buford Dam, compliance with Section 408 of the Rivers and Harbors Act may be required. USACE Section 408 policy sets forth the process USACE uses to review requests by other entities, which could be any public or private entity, to alter a USACE Civil Works project.37 Example reasons to alter a Civil Works project include: a community wanting to increase recreational opportunities; a local project sponsor wanting to improve flood risk management; or a business or utility company seeking to run power lines or pipelines over or through a Civil Works project (also referred to as a USACE project). The purpose of a USACE Section 408 review is to ensure that the congressionally authorized benefits of a project are protected and maintained (e.g., flood risk management, coastal storm damage reduction, navigation) and to ensure the proposed alteration is not injurious to the public interest.

# **Georgia Erosion and Sedimentation Act**

Water resource regulations are contained within the Official Code of Georgia Annotated (OCGA), Title 12. State Waters are defined by the Section 12-7-1 and protected by the Georgia Erosion and Sedimentation Act (12-7-1). It requires a 25-foot vegetated buffer along all state waters and a 50-foot vegetated buffer along all state-designated trout streams. The Chattahoochee River is a designated trout stream from Buford Dam to the mouth of Peachtree Creek. The buffer is intended to help protect state waters from surface runoff, which can help prevent or minimize water pollution, erosion and soil loss, and loss of wildlife habitat. The required vegetative buffer also helps to improve bank stability and overall water quality. Variances may be obtained under certain circumstances with applications to the Georgia Environmental Protection Division. Stream crossings for water or sewer lines at certain angles; drainage structures and roadway structures within the buffer area of non-trout streams; and public water system reservoirs are examples of activities that may not require variances.



## **Metropolitan River Protection Act**

The Metropolitan River Protection Act (MRPA) was enacted in 1973 to protect a 48-mile stretch of the Chattahoochee River between Buford Dam and Peachtree Creek amid growing concerns and debate about the River's health and its future. The Act created the Chattahoochee Corridor, which extends 2,000-foot along both sides of the River and its impoundments. The Act was amended in 1998 to extend the corridor an additional 36 miles to the downstream limits of Fulton and Douglas counties.

The Act also authorized the Atlanta Regional Commission (ARC) to develop a plan to protect the Corridor. The resulting Chattahoochee Corridor Plan includes three sets of standards that must be met by the corridor to be consistent with the Plan: Vulnerability Standards, which limit land disturbance and impervious surface based on existing natural factors such as soil erodibility, vegetation, hydrology, and slope; Buffer Standards which include a 50-foot undisturbed vegetative buffer and a 150-foot impervious surface setback along the River as well as a 35-foot undisturbed vegetative buffer along designated tributary streams within the Corridor; and Floodplain Standards, which include requirements specific to the River's 100-year and 500-year floodplains.

The Chattahoochee RiverLands aims to support connections and access while being respectful of these and other regulations. The Corridor Plan provides for direct water access, certain transportation projects, and other exceptions. Further, historic uses, and both pre-existing land disturbances and impervious surfaces are considered in proposed projects. For example, in contemplating potential alignments, the team considered areas where aerial photography indicates that roads or other impervious surfaces existed in the project area prior to MRPA enactment or where visible impervious surfaces such as utility easements are present. When working through potential alignments of the Pilot Project in Cobb County, the team looked at historic aerial photography to understand the types and likely amounts of land disturbance and impervious surfaces present within the site at the time MRPA took effect.

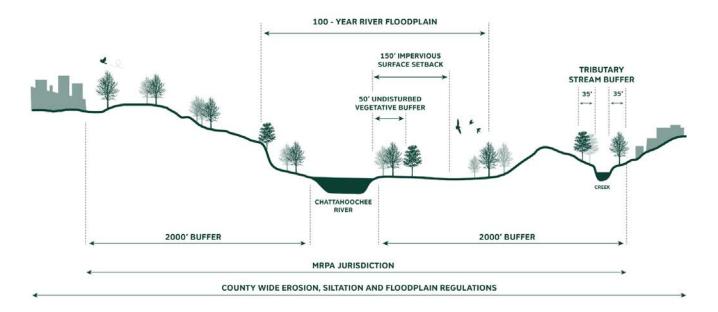
#### **Local Stream Buffer Ordinances**

Local jurisdictions have adopted stream buffer ordinances that, at a minimum, require a 50-foot undisturbed stream buffer and an additional 25 foot setback in which impervious cover is prohibited. These ordinances maintain the integrity of streams, protect water quality, support base flow, minimize erosion and sedimentation, and preserve habitat. Examples of local regulations are provided below.

- The City of Atlanta requirements define a 75-foot stream buffer that applies to any developed site.
   The full text of this example can be found in § 74-303 of the City of Atlanta Code of Ordinances.
- Cobb County establishes minimum requirements for erosion and sedimentation control and requires the use of best management practices for all land disturbing activity. The ordinance maintains that land disturbing activity shall not be conducted within: 25 feet of the banks of state waters not defined on the county stream buffer map; or 50, 75, or 100 feet of the banks of any stream in the county as defined on the stream buffer map, depending on the watershed area intercepted. Cobb County also regulates land disturbance within proximity of certain waterways, such as Nickajack Creek and perennial streams tributary to the Chattahoochee River.<sup>38</sup>
- Fulton County established buffers and setback criteria for unincorporated north Fulton County and south Fulton County separately. Streams in all watersheds in north Fulton are protected by a 50-foot undisturbed buffer whereas streams in South Fulton are protected by at 75-foot undisturbed buffer. An additional 25-foot setback is required adjacent to the undisturbed buffer in which all impervious surfaces are prohibited. Stormwater retention or detention facilities are also prohibited within the stream channel.<sup>39</sup>

# Georgia Planning Act & Regionally Important Resources

The Georgia Planning Act authorizes the Department of Community Affairs to establish specific rules and procedures for identifying Regionally Important Resources as well as for development of plans for protection and management of these resources and review of activities potentially impacting these resources. The rule requires that Regional Commissions prepare comprehensive Regional Resource Plans which must include Regionally Important Resource Maps and Guidance for Appropriate Development Practices. As such, ARC has prepared a Regional Resource Plan as part of the Atlanta Region's Plan, which identifies the Chattahoochee River as a Regionally



Summary of several examples of applicable regulations within the River corridor.

REGULATION	LOCATION	GUIDANCE
FEMA Floodplain	Floodway	Zero rise in flood elevation, modeling required for permit
	100-year floodplain	Modeling required for permit
	500-year floodplain	Not regulated
Section 404 / 401: Clean Water Act	Wetland and Streams	Permits required for unavoidable impacts to jurisdictional wetlands and streams
Georgia Erosion & Sedimentation Act	Within 25 feet of state waters (those that cross property lines) and 50 feet for trout streams*	Undisturbed vegetative buffer
Metropolitan River Protection Act (MRPA)	Within 50 feet of the Chattahoochee	Undisturbed vegetative buffer
	Within 150 feet of the Chattahoochee	Impervious setback buffer
	Within 35 feet of tributary streams	Undisturbed vegetative buffer
	100-year floodplain	No reduction of flood storage volume, balance cut & fill, no blocking flood flow
	500-year floodplain	35-foot building height limit
	Within each vulnerability category (A-F)	Limits land disturbance (scraping, clearing, grading, excavating, filling, etc.) and impervious surface (paved, hardened or structural, driveways, parking, decks, streets, etc.)

 $<sup>{}^{\</sup>star}$ The Chattahoochee River is a designated trout stream from Buford Dam to the mouth of Peachtree Creek



Important Resource. It may be that development of the Chattahoochee RiverLands plan would impact the Regionally Important Resource Plan for the Chattahoochee River. Changes to this plan would then trigger review and coordination with local governments as well as encouragement of protection measures, policies and enhancement activities that promote protection of the Chattahoochee River.

# **Local and Regional Land Use Regulations**

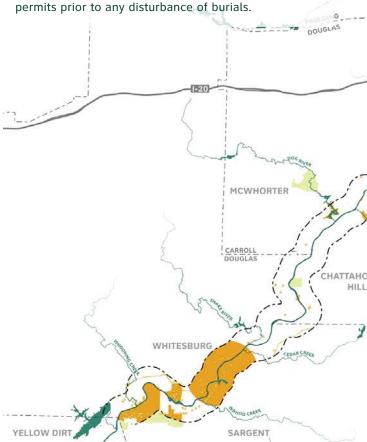
In Georgia, zoning, development, and land use are controlled at the local level (e.g., by counties and municipalities) and individual regulations should be consulted for projects within each county and/or incorporated cities. Each local government establishes its own zoning and land use policies and codes, which vary widely from place to place. In order to make implementation of the Chattahoochee RiverLands a reality, it is likely that changes and amendments to local zoning and land use regulations will be needed.

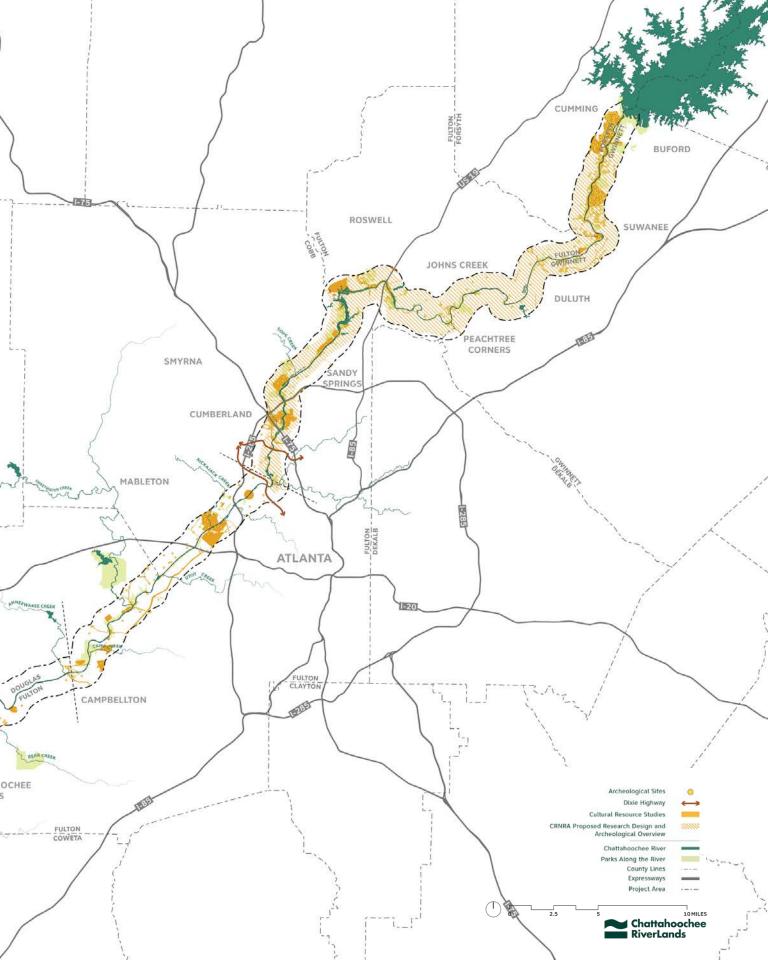
Ultimately, an inventory of zoning regulations and development standards could help identify inconsistencies and areas where changes might be needed to facilitate implementation of the Chattahoochee RiverLands. For example, communities where development and land use are not yet conducive to comfortable biking and walking could encourage or mandate better patterns through siting of developments, creating connected street grids, connected sidewalks. Jurisdictions within the RiverLands Study area should also strive for consistency in setting clear expectations for how new development or redevelopment projects can support or facilitate implementation of the Chattahoochee RiverLands vision and trail segments. For example, they might consider requiring dedication of land and/or construction of trail segments where projects are within the RiverLands alignments as part of a standard development practice. Another example of how local land use policies can advance implementation is by establishing design standards for the areas where the Chattahoochee RiverLands Preferred Alignment segments are proposed to be located. These recommendations could be codified in the form of an overlay district with standards consistent with the future RiverLands design guidelines or adoption of the RiverLands plan.

# **Local Cemetery Preservation Regulations**

City and county governments are responsible for enforcing state laws and local regulations regarding historic cemeteries in Georgia. The Historic Preservation Division of the Georgia Department of Natural Resources provides information and suggestions about whom should be contact regarding cemeteries. Other potential resources include local development permitting office, board of planning and zoning, the code enforcement office, the county commission or city council, and/or the city or county attorney. Development around a historic cemetery is not prohibited by state law. Likewise, legislation does not establish required buffers between the development and a cemetery. Georgia laws primarily protect the burials from disturbance (listed below).

- Council on American Indian Concerns (1992, 2002);
   44-12-280 et seq. Creates a Council on American Indian Concerns to advise on repatriation issues.
- Grave Protection and Repatriation (1992); 44-12-260/264; 12-3-620 et seq.; 31-21-6; 31-21-44 et seq. Establishes policies for burials, skeletal material and funerary objects regarding archaeological research, public display, buying/selling artifacts and repatriation.
- Abandoned Cemeteries and Burial Grounds (1991);
   36-72-1 et seq. Strengthens cemetery protection laws by authorizing local governments to preserve and protect abandoned cemeteries, and to issue permits prior to any disturbance of burials.





# Georgia Endangered Wildlife Act

The Georgia Endangered Wildlife Act prohibits the capture, killing, or selling of protected species and protects the habitat of these species on public lands. Georgia's Wildflower Preservation Act of 1973 provides for designation of and protection of plant species that are rare, unusual, or in danger of extinction. Typically, in an ecology screening report, done during the conceptual design phase of a project, state protected species that have known occurrences within three miles of the project area are expected to be considered.

The Chattahoochee RiverLands, through consideration of ecological impacts and restoration opportunities, as well as inclusion of an Ecological Suitability Analysis in determining potential trail alignments, is taking into account ways in which the project can limit negative impacts on species as well as to improve habitats for them where possible. The Suitability Analysis considered more than ten factors to help identify those areas within the study corridor that are more or less ecologically vulnerable and therefore which areas are more or less suitable for development of a greenway trail. Additional details are provided in a separate memo on ecology considerations.

As an example of screening-level work to identify protected species, the table below lists several protected, threatened, and endangered species that were identified during development of the RiverLands Pilot Site in Cobb County:

# National Park Service Rules and Regulations

The Chattahoochee RiverLands study area encompasses the Chattahoochee River National Recreation Area (CRNRA), whose 15 park units draw visitors from the Metro Atlanta Region and beyond. These units are governed by policies and regulations, as well as design standards for features and elements within parks. Policies are established by the Director of the National Park Service (NPS) and Secretary of the Interior. These are designed to improve management of NPS and cover topics such as content and design of park brochures. Additional details are available through NPS' Office of Policy. Regulations are mechanisms for implementing laws and enforcing established policies and have the force of law. Regulations are published in title 36 of the Code of Federal Regulations. These cover topics such as the use of personal flotation devices, visiting hours, wildlife protection, sanitation, permits and reservations for use of facilities, bicycles, parking fees and many more.

Where the Chattahoochee RiverLands Preferred Alignment falls inside CRNRA units, any proposed improvements are subject to the policies, regulations, and laws of the NPS and CRNRA. Any implementation of the RiverLands will need to be coordinated closely with CRNRA staff to ensure alignment with NPS priorities, mission, and procedures. Proposed improvements will need to be reviewed and approved by park management and Regional Director, at a minimum and will need to follow NPS protocols and policies. Projects with construction budgets in excess of \$500,000 will need to follow the NPS Partnership Process. For more information visit: http://nps.gov/partnerships/

Common Name	Scientific Name	Federal Rank*	State Rank*
Little Amphianthus	Amphianthus pusillus	Т	Т
Rusty-patched bumblebee	Bombus affinis	E	
Chattahoochee crayfish	Cambarus howardi		Т
Bluestripe shiner	Cyprinella callitaenia		R
Pink ladyslipper	Cypripedium acaule		U
Cherokee darter	Etheostoma scotti	Т	Т
Gulf moccasinshell	Medionidus penicillatus	E	E
Northern long-eared bat	Myotis septentrionalis	Т	Т
Bachman's sparrow	Peucaea aestivalis		R
Bay star-vine	Schisandra glabra		Т
White fringeless orchid	Platanthera integrilabia	T	Т
Georgia aster	Symphyotrichum georgianum		Т
Michaux's sumac	Rhus michauxii	E	E

<sup>\*</sup>Key: E - Endangered; T - Threatened; R - Rare; U - Unusual

# **Roadway Regulations**

The Georgia Department of Transportation (GDOT) plans, designs, constructs, maintains, and improves the state's roads and bridges, interstate highways, and provides planning and financial support for other modes of transportation such as rail, transit, aviation, and bicycling and walking. 40 Projects that seek to connect to State Routes or roadways owned and operated by the Georgia Department of Transportation (GDOT) need to coordinate with that agency and consider the need for encroachment permits when seeking to connect to State rights-of-way (ROW). Permits are required prior to performing any construction work or non-routine maintenance within the State Highway Right-of-Way. This includes but is not limited to grading, landscaping, drainage, and temporary access for logging, construction or development, as well as revisions to driveways and/or relocation within the State Highway ROW.<sup>41</sup> Applications must be made at and coordinated with the appropriate office in the GDOT District where the site is located.

Many of the roadways that cross the Chattahoochee River are State Highways and any segments proposed to run along or across these roadways will require coordination and approval from GDOT.

Similarly, RiverLands projects that run along or cross over local roadways will require coordination with County or municipal agencies. Depending on the location, this may include County Departments of Transportation or Public Works.

For example, the City of Atlanta regulates how transportation systems tie to their existing facilities inside the city's public right-of-way. RiverLands segments or connecting Tributary Trails that feed into the Chattahoochee RiverLands may well indeed fall within city owned right-of-way. Such projects will require close coordination with the City of Atlanta. As of January 2020, the City of Atlanta has a newlyformed Office of Transportation, whose mission is to maintain safe and accessible roadways for residents and visitors to enhance the traveling experience in the City of Atlanta. It can be expected that as the Office of Transportation establishes itself, processes for coordination will evolve.

# Regulatory Considerations for Implementation

Spanning more than 100 miles, the Chattahoochee RiverLands crosses a number of local jurisdictions and is subject not only to state and federal regulations, but local ones as well. A few key considerations are listed below:

- The funding source of each individual project will largely determine the applicable regulations. Federally funded projects and those within the Chattahoochee River National Recreation Area are likely subject to the National Environmental Policy Act. Projects with either 50% or more than \$250,000 in state funding may be subject to the Georgia Environmental Policy Act.
- As a Water of the U.S., the Chattahoochee River is protected by sections of the Clean Water Act. Projects that would potentially dredge or fill are subject to permits and approval by federal agencies.
- Projects within and near the 100-year floodplain, including many segments of the RiverLands may also be subject to FEMA regulations and could potentially require coordination to determine whether floodplain map revisions are needed and to ensure applicable regulations are adhered to.
- It is a stated design strategy of the RiverLands to align with Georgia's Metropolitan River Protection Act (MRPA). Projects within the River corridor (2000 feet along both sides of the river and its impoundments) from Buford Dam to the downstream limits of Fulton and Douglas Counties are subject to MRPA, which limits land disturbance and land clearance within the corridor in order to protect water quality and riparian ecology.
- Any projects that cross or come in close proximity to interstates, state highways, and state rights-of-way must coordinate with the Georgia Department of Transportation. Similarly, projects that cross or meet local roadways should be coordinated with local departments of transportation or public works as applicable.







# **CWG PARTICIPATING ORGANIZATIONS\***

Aerotropolis Atlanta Atlanta Audubon Society

Atlanta Cycling

Atlanta Housing Authority Atlanta Regional Commission

Atlanta Rowing Club

Atlanta's Upper West Side

Boulevard C.I.D. Carroll County

Carroll County Historical

Society

Carroll Tomorrow

Carroll Co. Chamber of

Commerce

Chattahoochee NOW

Chattahoochee National Park Conservancy

Chattahoochee Riverkeeper

City of Atlanta

City of Chattahoochee Hills

City of Duluth

City of Johns Creek

City of Roswell

City of Sandy Springs

City of South Fulton

City of Sugar Hill

Cobb County

Coweta County

Cumberland C.I.D.

Douglas County Forsyth Chamber of

Commerce

Forsyth County

Friends of McIntosh Reserve

Friends of Sugar Hill

Greenway

**Fulton County** 

Georgia Department of

Natural Resources

Georgia Institute of

Technology

Georgia River Network

Georgia Power

Groundwork Atlanta

**Gwinnett County** 

Historic Banning Mills

Invest Atlanta

Keep South Fulton Beautiful

Legacy at the River Line

Let's Go Fishing, Inc

Metro Atlanta Chamber of

Commerce

Mableton Improvement

Coalition

MTB Atlanta

Peachtree Corners Green

Committee

Proctor Creek Stewardship

Council

River Line Historic Area

Rivers through Atlanta

Riverwalk Atlanta

Roswell Creekways

Roswell, Inc.

Sandy Springs Conservancy

South Fulton C.I.D.

Sweetwater Creek Park

The Aimee Copeland

Foundation

The Trust for Public Land

U.S. Army Corps of Engineers

U.S. Environmental

Protection Agency

U.S. Forest Service

U.S. National Park Service

(CRNRA)

Upper Chattahoochee Trout

Unlimited

**Upper West Side** 

Vinings Village Civic Club

Westside Future Fund

\*As of April 2020

# SACS PARTICIPATING ORGANIZATIONS

Akens Design

Altanta Audubon

Army Corps

ATL Hawks

Atlanta Cycling

Atlanta Housing

Atlanta Rowing Club

Avid Paddler

Boulevard CID

Carroll County

Carroll Tomorrow

Chattahoochee Nature

Center

Chattahoochee NOW

Chattahoochee National

Park Conservancy

Chattahoochee Riverkeeper

City of Atlanta

City of Chattahoochee Hills

City of Douglasville

City of Duluth

City of Peachtree Corners

City of Roswell

City of Sandy Spring

City of Smyrna

City of South Fulton

City of Sugar Hill

Cobb County

Connect the Comet

Coweta County

Cumberland CID

Department of Natural

Resources
Douglas County

East Cobb

Environmental Protection

Agency

FOMR Forsyth County

Georgia Aquarium

Georgia Conservancy Georgia Institute of

Technology Georgia Power Greater North Fulton Chamber of Commerce

Groundwork Atlanta

Grove Park Neighborhood

Association
Gwinett County

Historic Banning Mills

Historic Westside Gardens

Invest Atlanta

Johns Creek

Keep South Fulton Beautiful

Kimley Horn Legacy at the River Line

Mableton Improvement Coalition

McIntosh Park

MTB Atlanta
My Hometown Realty Group

Park Pride

Council

My Hometown Realty Group National Parks Service

Proctor Creek Stewardship

Providence Neighborhood

Raulet Property Partners

River Line Historic Area

Rivers Through Atlanta

Riverwalk Atlanta

Roswell Creekways Sandy Creek Stewardship

Council

Sandy Springs Conservancy

Serenbe Farms

SORBA (Sope Creek Trails)
Southern Conservation Trust

Sweetwater Creek State Park University of Georgia

USEPA

Upper Chattahoochee Trout

Unlimited

Vinings Neighborhood

West Georgia University
Westside Future Fund

# **GLOSSARY OF TERMS**

### **ACRONYMS**

ADA: Americans with Disabilities Act

ARC: Atlanta Regional Commission

COA: City of Atlanta

CNPC: Chattahoochee National Park Conservancy

CRNRA: Chattahoochee River National Recreation Area

**CREEC**: Chattahoochee River Environmental Education

Center

CWG: Chattahoochee Working Group

DCP: Department of City Planning

**EPA**: Environmental Protection Agency

FOMR: Friends of McIntosh Reserve

FEMA: The Federal Emergency Management Agency

FHWA: Federal Highway Administration

FLAP: Federal Lands Access Program

**GDOT**: Georgia Department of Transportation

GEPA: Georgia Environmental Policy Act

MARTA: Metropolitan Atlanta Rapid Transit Authority

MRPA: Metropolitan River Protection Act

NPS: National Park Service

NRT: National Recreation Trails

**NEPA**: National Environmental Policy Act

PMT: Project Management Team

RCTA: Rivers, Trails, and Conservation Assistance

Program

SAC: Sub-Area Committee

PSEP: Public and Stakeholder Engagement Plan

**TDR**: Transferrable Development Rights

TPL: Trust for Public Land

**UEF**: Urban Ecology Framework

WAWA: West Atlanta Watershed Alliance

### **USEFUL TERMS**

**BLUEWAYS**: Blueways are marked routes on navigable waterway such as rivers, lakes, canals and coastlines for recreational use.

**DEMONSTRATION SITE**: The Demonstration Sites are sites that have been selected by the CWG to demonstrate a conceptual level of design for the RiverLands in typical conditions throughout the 100-mile corridor.

**EASEMENT**: An easement is a right to cross or otherwise use someone else's land for a specified purpose.

**FLOODPLAIN**: Floodplain is flat or nearly flat land adjacent to a stream or river that experiences occasional flooding. In the context of this study, the floodplain defines the extent of flooding during a 100-year flood event as documented by FEMA.

**WATERSHED**: Watershed is a land area that channels rainfall and snowmelt to creeks, streams, and rivers, and eventually to outflow points such as reservoirs, bays, and the ocean.

**RIPARIAN ZONE**: A riparian zone or riparian area is the interface between land and rivers or streams.

**MULTIMODAL TRAIL**: Multimodal Trail is a pathway or a trail used by at least two different modes of mobility.

**TRAILHEAD**: A Trailhead is the point at which a trail begins, where the trail is often intended for hiking, biking, or off-road vehicles



# FREQUENTLY ASKED QUESTIONS

## Q: What are the goals of the project?

A: The project has four main goals. To build:

- A Safe, Connective Corridor: The Chattahoochee RiverLands will connect communities along the River and the Metro Atlanta Region.
- A Common Ground for All: The Chattahoochee RiverLands will be accessible to people of all backgrounds, abilities, and ages.
- An Ecological Refuge for the Region: The Chattahoochee RiverLands will improve the ecological health of the River basin.
- A Living Legacy for Future Generations: The Chattahoochee RiverLands is a generational project that establishes a new, positive identity for the Chattahoochee River.

# Q: How will the project balance conservation and access? How close is the Greenway to the River?

A: The RiverLands Greenway will bypass sensitive habitats and avoid negatively impacting ecosystems throughout the River corridor. Forest cover will be protected or restored along trails, and programmatic elements and access points will be designed to minimize ecological footprints and to include habitat enhancements. Designing trails and access can increase awareness and spur stewardship. The RiverLands must balance access and conservation, preserving today's ecological resource for the future.

#### Q: Will the Greenway be wheelchair accessible?

A: Yes! People of all ages and abilities will be invited to move along the RiverLands Greenway freely and comfortably. Access from the land and water must be designed for all ages and mobility levels, inviting the widest possible range of users. The Project Team firmly believes that designing for those living with disabilities will make it easier for all to enjoy the RiverLands experience.

# Q: Will the RiverLands connect to other transportation systems and trails?

A: The Chattahoochee RiverLands is a network of trails and water access points that connects all residents of the Metro Atlanta Region. These connections will be strategically accessible by pedestrians, bicyclists, drivers, and public transit users. The RiverLands will be connected to the region's existing and growing public transit system and trail network.

# Q: How will the Greenway safely accommodate different user groups?

A: People of all ages and abilities will be invited to move along the RiverLands Greenway freely and comfortably. Many of the roadways that cross the Chattahoochee River are unsafe for pedestrians, while roads that parallel the River have high rates of bicycle and pedestrian crashes. By incorporating off street trails, safe bicycles and pedestrians crossings into the Greenway design, the RiverLands will provide safe and comfortable passages that encourage active recreation in the region.

#### Q: What material will the trail be?

A: An array of different potential trail materials has been identified. Both pervious, impervious and boardwalk materials could be used depending on the location and would be determined by the owner and operator of the trail segment. This Study recommends further developing Design Guidelines for the trail as the vision is implemented.

#### Q: How will the RiverLands be implemented?

A: The Chattahoochee RiverLands is a generational project and will take decades to complete. Construction of parks, trails and water access points will be a combination of opportunistic investments and strategic planning by many partners. A group that serves as the "keeper of the vision" will likely be needed to guide and direct implementation.

#### Q: What is the role of a Demonstration Site?

A: The purpose of the Demonstration Sites is to inspire the imagination of what the RiverLands could look like on the ground. For the Study, the Design Team worked with the Project Management Team and the Chattahoochee Working Group to identify three Demonstration Sites for which additional design studies were conducted to demonstrate the translation of the project goals into site design. These sites reveal the potential of the Chattahoochee RiverLands vision established

in Task 3 and represent typical conditions throughout the 100-mile corridor. The three Demonstration Sites are located in Sugar Hill, Atlanta, and Chattahoochee Hills.

#### Q: What is the width of the Greenway?

A: To accomplish both the health and safety goals for this project, our team is recommending a combination of existing guidelines along with more flexible design options. Typical sections should meet recommended greenway and shared-use path criteria identified by FHWA. Overall this Study recommends a width of 10 ' to 18', majority of the segments are proposed to be 14' wide.

#### Q: Who will respond in case of an emergency?

A: A primary function of the Chattahoochee RiverLands is to provide safe and protected routes for cyclists, pedestrians, and paddlers with regional connections to larger non-motorized transportation networks. Emergency response will be in the hands of local municipalities and the Greenway should be designed to accommodate emergency vehicle access. By working with River managers to publicize or broadcast River conditions, the RiverLands will promote safe and responsible activities on the River.

# Q: How was public engagement conducted for the study? What if I have a comment or a concern? What if I have a project or a site to consider?

A: Throughout the Chattahoochee RiverLands Greenway Study, the Design Team worked closely with the Project Management Team, met monthly with the Chattahoochee Working Group, and established Sub-Area Committees to better understand the needs and wants of each sub-area along the River. The Project Team (Project Management Team + Design Team) organized and participated in community meetings, design charrettes, public events, and maintained a public website. The project also included signature participatory events, called River Rambles. If you wish to get involved or share local knowledge, visit www.chattahoocheeRiverLands.com.

#### Q: What happens when the trail floods?

A: Within the RiverLands, shoreline riparian forests are regularly flooded and the trail is an opportunity to restore the floodplain to retain and store water within the riparian landscape. The trail, raised boardwalks, bridges, railings, benches and other proposed structures and objects in the floodplain will be flooded from time to time. This is typical in riverside trails. 48% of the

Preferred Alignment falls within the Chattahoochee River 100-year floodplain. Local jurisdictions have adopted local floodplain management ordinances to regulate uses within or development within flood hazard areas to prevent flood damage. All measures should be taken during design and engineering to construct facilities that can withstand periodic flooding.

#### Q: Is it safe to swim in the River?

A: The River has a reputation for less-than-healthy water quality. Although the water quality of the River has improved it still has its bad days. Visit the **BacteriAlert** website to find out how safe is it to swim, wade, and boat in the Chattahoochee River. In addition, water conditions are influenced on a daily basis by water releases from Buford and Morgan Falls dams. Check the information about flow rates online before putting in.

# Q: Who paid for this study?

A: The study was paid for by a federal transportation grant through the Atlanta Regional Commission with a 20% local match provided by Cobb County, the City of Atlanta, and the Trust for Public Land.

#### Q: When will the RiverLands be done?

A: The RiverLands is a generational project. While it will take decades to be fully completed, short individual segments and projects will be designed and built piece by piece over the course of time. The RiverLands also proposes using existing bike infrastructure as well as existing water access points that could be co-branded sooner to be part of the RiverLands system.

# Q: How can I become a champion of the RiverLands moving forward?

A: The Project Team encourages you to be an advocate for the Chattahoochee RiverLands and steward of the River! To help engage a larger constituency, the Design Team has developed a kit of materials. "Meeting-in-a-Box" includes maps, project reports, pamphlets and other items that can be used at neighborhood events or city council meetings. Meeting-in-a-Box materials are available for download at:

www.chattahoocheeRiverLands.com



# **THANK YOU!**

This project would not have been possible without the ongoing support, guidance and input of many groups and individuals over the last twenty months. The Project Team recognizes that it stood on the shoulder of giants while undertaking this study. While unfortunately it is impossible to individually thank every person who participated, attended a Public Forum or left a message for us on the website – the Project team is extremely grateful for you. The team hopes you'll find that your input has been reflected in this document. It is important to particularly thank a number of organizations and individuals without whom the work you see here would not have been possible.

First and foremost, thank you to the Chattahoochee Working Group members (CWG), who have participated in the process from the beginning. This group strengthened the project's collective impact, but to say that is all would be an understatement. Thank you for packing the room each month at the All Saints' Episcopal Church, for helping us think critically about every mile of this trail and ultimately for all of the valuable feedback, both inside and outside of meetings which has directly shaped this study. You now have the opportunity to promote this vision and make it your own through your individual organizations.

Much of the same can be said for the Sub-Area Committees, many of whom also served as members on the CWG. Thank you for your continued input, for traveling to meetings and charrettes wherever they may be, and for providing a truly local perspective at critical decision-making moments throughout the process.

The Project Team was fortunate to begin this process with a week-long Driving Tour to explore the full 100-mile corridor with the guidance of a number of individuals and groups who generously volunteered their time to getting the team better acquainted with the project area.

A special thanks to Erik Fyfe and Jason Ulseth of Chattahoochee Riverkeeper for the extremely cold yet wonderful boat tour.

Thank you to David Smith, Debra Ewing, Jeffrey Leatherman, Jeff Pruit, Jim Santo, Henning von Schmeling, and Liz Hausmann for joining the tour of the Roswell Riverwalk. Thank you to Melody Harclerode and Carolyn Axt of the Sandy Springs Parks Conservancy for the tour of Morgan Falls.

Thank you to CRNRA Superintendent Bill Cox and his Park Rangers that spent a great deal of time with the Project Team, attending the Chattahoochee Working Group, and providing special tours, requested information and input, and thoughtful insight and direction.

Thank you to Chattahoochee National Parks
Conservancy board member, Cathy Barnard, that made
the RiverLands Study a priority and spent many hours
participating in meetings and organizing events.

Thank you to all of those who hosted and joined on the tour of the Proctor Creek Greenway, including Andrew Walter, John Dargle, Clara Kwon, Daniel Calvert, Susan Rutherford, Juanita Wallace, Yvonne Sade Jones, Donna Stephens, Torrie Redding, Justine Schwartz, Jill Arrington, Keith Sharp, and Kathy Hearn.

The Project Team would like to extend an additional thank you to those who joined for the tour of the Chattahoochee Brick Site including Pamela Flores, Jill Arrington, Keith Sharp, Kathy Hearn and H.H. Howard.

Thank you to those from Cobb County who volunteered to initially show the Project Team around the Pilot Site and the Johnston's River Line Historic Area including Roberta Cook, Tom Bills, Ligia Florim, and Jim Santo.

Thank you to Steve Nygren, Mayor Tom Reed, Jett Hattaway, Tim Banks, Jessica Fangmeyer, Daryl Johnson, Keith Robinson, H. Smith McCullough III for hosting at Serenbe and for the tour around the Southern portion of the study area.

Thank you to each of the four Atlanta Neighborhood Planning Units (NPUs) who allowed the Project Team to present the project to your communities and provided feedback from those who were not able to attend the June Public Forums.

Thank you to Tim Beggerly and Liz Hausmann for the tour around the Fulton County Airport-Brown Field, which otherwise would not have been accessible to the Project Team.

Thank you to the City of Johns Creek, and particularly Kimberly Greer, for giving multiple tours of Cauley Creek Park. The Project Team commends you for your tireless efforts to increase public space along the River.

Thanks to the Friends of McIntosh Reserve, for personally showing the Project Team why McIntosh Reserve is a favorite of hikers and equestrian riders in the region.

The Project Team is so grateful that all of these individuals and their respective organizations have maintained a connection with the project from this initial trip onward. Working with and learning from you has been a true highlight of the process.

Another undeniable highlight of this study has been the opportunity to host and participate in River Rambles to cultivate knowledge and excitement about the study. Thank you to the Agape Youth and Family Center and the

National Park Service for participating in and facilitating the first River Ramble at Island Ford. Thank you to Nature for All for bringing together a large network of organizations including Atlanta Audubon, the Georgia Council of the Blind, Center for the Visually Impaired, Shepard Spinal Center, the Aimee Copeland Foundation, and Friends of Disabled Adults and Children (FODAC) for our second River Ramble at the Paces Mill Unit of the Chattahoochee River National Recreation Area. These events are some of our fondest memories of this project.

Finally, much of this would not have been possible without those who provided venues and facilities, generously offering their personal resources and staff so that Project Team could host meetings and engage the community. To that end, thank you to all those affiliated with the Chattahoochee Nature Center, Atlanta City Studio, Serenbe Farms, the City of Sugar Hill, the City of Duluth, the City South Fulton, and the C.T.Martin Natatorium and Recreation Center.

To take on a project of this scale, required the dedication of each and every person who volunteered their time and effort. For this, the Project Team is extremely grateful. The hope is that this document and your sustained engagement over the past twenty months inspires you to go forward; to initiate projects or launch advocacy effort, to continue to disseminate information, to gather input, and identify partnerships that will make this study a reality. The Project Team couldn't have gotten this far without you.



# STATISTICS METHODOLOGY AND ASSUMPTIONS

#### **ALIGNMENT STATISTICS**

For the statistics presented on pages 174-177 and in Appendix B, data was collected and calculated for the entire 125-mile Preferred Alignment trail as well as for each of the 25 existing and proposed trailheads directly along the Preferred Alignment multi-use path trail. Amenities for the entire Preferred Alignment multi-use path were identified by creating ¼, ½, and 3-mile buffers around the multi-use path and selecting cities, counties, parks, schools, libraries, campsites, houses of worship, bus stops, and rail stations within each buffer.

#### **DESTINATIONS STATISTICS**

Cities - Selected all cities fully or partially within the 3-mile buffer.

Trailheads – Selected all existing and proposed trailheads along the Preferred Alignment multi-use path.

Parks Connected, Water Access Points, Schools, Libraries, Churches, Campsites – Selected all features partially or fully within the buffers around the Preferred Alignment multi-use path and around the 25 proposed and existing trailheads. (Note: statistics were calculated counting the CRNRA both as one single park and as 15 separate units).

#### **OWNERSHIP AND LAND USE**

Public/Private Property – Clipped Preferred Alignment trail to parcels and calculating the length of trail within public and private property. (Note: the Project Team had previously identified ownership of tax parcels within one mile of the River using tax and ownership data obtained from the Atlanta Regional Commission and County governments.)

Greenspace, CRNRA, Easements - The mileage of trail within or along public parks. CRNRA units, and along easements were each calculated by clipping the Preferred Alignment trail to these features (with a 50-foot tolerance to account for trail segments just outside of park or easement boundaries) and then calculating lengths of segments.

On-Road/Off Road - Trail mileage along roadways was calculated by tracing segments where the trail abutted a road or public right-of-way (ROW).

#### **CONNECTIVITY STATISTICS**

Trails of Regional Significance - The number of trails of regional significance was calculated by overlaying the Preferred Alignment trail with ARC's bicycle facility inventory and examining connectivity between the RiverLands, existing Trails of Regional Significance and looking at trails that connect these to the RiverLands.

Bus Stops, MARTA Stations – Selected all transit stops (bus stops, rail stations, park-and-ride lots) within each buffer.

High-Risk and Major Road Crossings – High-risk and major road crossings were identified by intersecting the Preferred Alignment with data developed by ARC as part of Walk.Bike.Thrive! that illustrates the relative risk to cyclists and pedestrians of roadways throughout the region based on a number of factors such as historic crashes, speed, design, and more. Roadways that cross the Chattahoochee which are identified as higher risk according to ARC's Bicycle and Pedestrian Risk Assessment data were further refined by determining whether or not each higher risk segment: crosses a state highway or major road; has average annual daily traffic above 14,000 vehicles per day; has posted speed limit of 40MPH or above; or has three or more lanes.

#### **DEMOGRAPHIC STATISTICS**

High Walking and Biking Propensity Areas - Utilized data developed by ARC as part of the Walk.Bike.Thrive! plan for the Atlanta region that shows areas with higher and lower propensity for biking and walking. The Preferred Alignment multi-use path was clipped to the two highest propensity classes, which represent areas that exhibit characteristics that make it easier for people to bike and walk. The total length of the Preferred Alignment multi-use trail within these areas was calculated.

#### TRAILHEAD STATISTICS + WATER ACCESS POINTS

Amenities for each trailhead were identified by creating  $\frac{1}{4}$ ,  $\frac{1}{4}$ , and 3-mile buffers around the trailheads and selecting cities, counties, parks, schools, libraries, churches, transit stops, and transit rail stations within each buffer.

The distance and average distance between trailheads (Trailhead Mileage Chart, page A-25) was calculated by splitting the Preferred Alignment trail into segments bounded by each trailhead and then generating a mileage chart based on these segments in Excel. Trailheads that can be accessed through multiple routes had mileage calculated based on the shortest distance.

This same approach was utilized for water access points along the Chattahoochee River and the generation of the Water Access Mileage Chart (page A-27).

#### TRAIL SUITABILITY ANALYSIS

GA State Wildlife Action Plan (SWAP) Conservation Priority Species obervations from the GA Department of Natural Resources, ebird, iNaturalist, and Biodiversity Information Serving our Nation.

Landcover Analysis derived from 2017 National Agricultural Imagery Program (NAIP) 4-band aerial imagery.

Aquatic and Riparian Habitats from the National Wetlands Inventory, SSURGO Soils Database, USGS National Hydrography Dataset, FEMA floodplains, National Land Cover Database (NCLD) 2016.

Soil Erodibility from the SSURGO Soils Database.

Topography from the National Elevation Dataset.

Habitat Connectivity Analysis is derived from 2017 National Agricultural Imagery Program (NAIP) 4-band aerial imagery, National Land Cover Database (NCLD) 2016, National Wetlands Inventory, SSURGO Soils Database, USGS National Hydrography Dataset, FEMA floodplains, TIGER Census lines, Microsoft building footprints, Fulton County building footprints, Homeland Infrastructure Foundation Level Data transmission lines.

High Water Infiltration Areas derived from SSURGO Soils Database and National Land Cover Database (NCLD) 2016 Imperviousness data.

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# **IMAGE CREDITS**

The Chattahoochee RiverLands Design Team created and edited all images unless otherwise stated below:

#### **RIVER OVER TIME**

- Page 40 Cut out of Chief McIntosh courtesy of New Georgia Encyclopedia.
- Page 40 Cut out of Rainbow Trout courtesy of Mallorie Trapp.
  Cut out of tubers at the Ramblin River Race of 1977 courtesy of the Atlanta-Journal Constitution Photograph Collection at Georgia State University.
- Page 42 1800 1860 image of Marietta Paper Mill courtesy of Vanishing Georgia, Georgia Archives, University System of Georgia, Image cob516.
- Page 43 1860 1900 image of Historic Postcard of Western and Atlantic Railroad Bridge over the Chattahoochee River courtesy of private collection.
- Page 44 1950 1980 image of the River as a Neglected Resource courtesy of 1972 Atlanta Regional Commision Chattahoochee Corridor Study.
- Page 44 1970 1990 image of MRPA courtesy of 1972 Atlanta Regional Commision Chattahoochee Corridor Study.
- Page 45 1990 Present image of Kids Fishing Day in Peachtree Corners courtesy of John Amis. https://www. gwinnettdailypost.com/multimedio/slideshows/kid-s-fishingday-on-the-chattahoochee-river/collection\_b9cca652-2ac3-11e6-bbe4-2be92eae8c3b.html.

# CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA

- Page 46 Cut out of the late President Jimmy Carter courtesy of the Atlanta-Journal Constitution Photograph Collection at Georgia State University.
- Page 47 Photos courtesy of Sally Bethea, Tom Wilson and Erik Voss

### **MOORE'S BRIDGE**

Page 61 Cut out of Horace King, circa 1855, courtesy of Columbus Museum of Columbus, Georgia.

# FLOATING THE CHATTAHOOCHEE RIVER NATIONAL WATER TRAIL

- Page 69 Cut out of tubers at the *Ramblin River Race of 1977* courtesy of the Atlanta-Journal Constitution Photograph Collection at Georgia State University.
- Page 69 Photos courtesy of Sally Bethea, Tom Wilson and Erik Voss

#### JOHNSTON'S RIVER LINE HISTORIC AREA

Page 194 Cut out of Shoupade courtesy of Bill Scaife.

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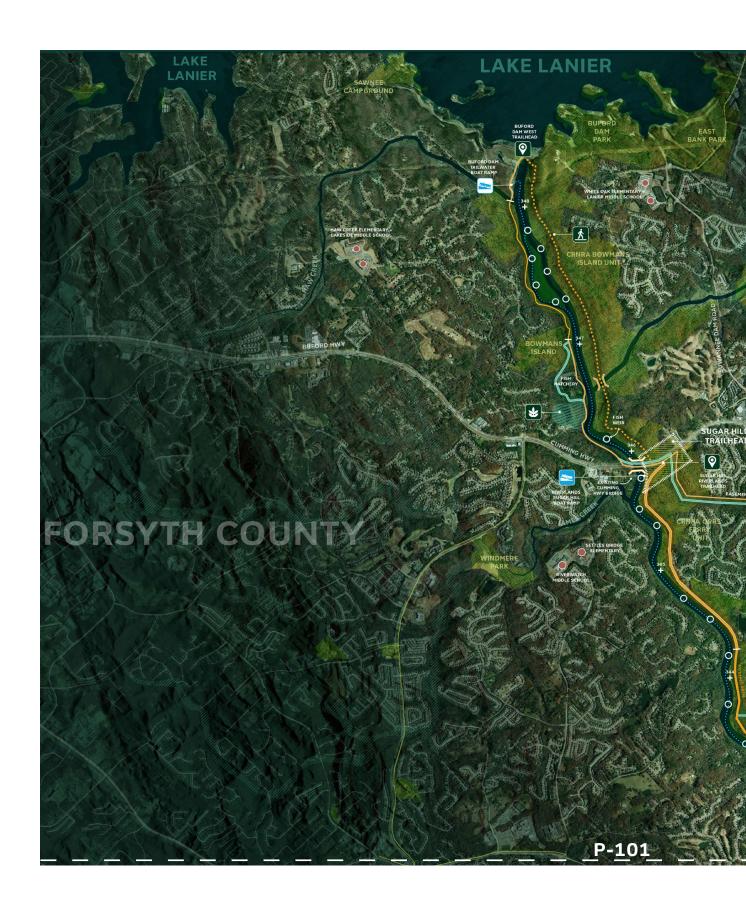
#### REGULATORY CONSIDERATIONS

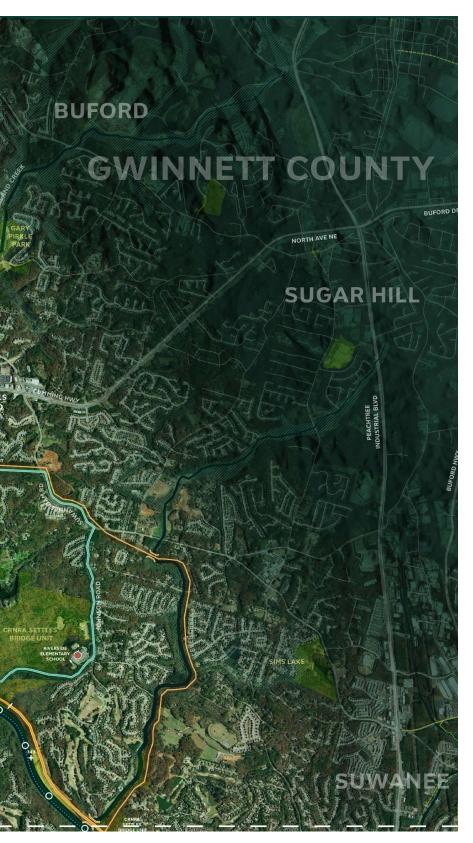
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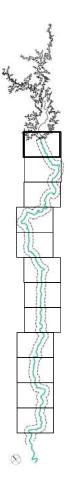




SOUTH FULTON APPENDIXA TRACING THE RIVERLANDS



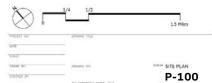




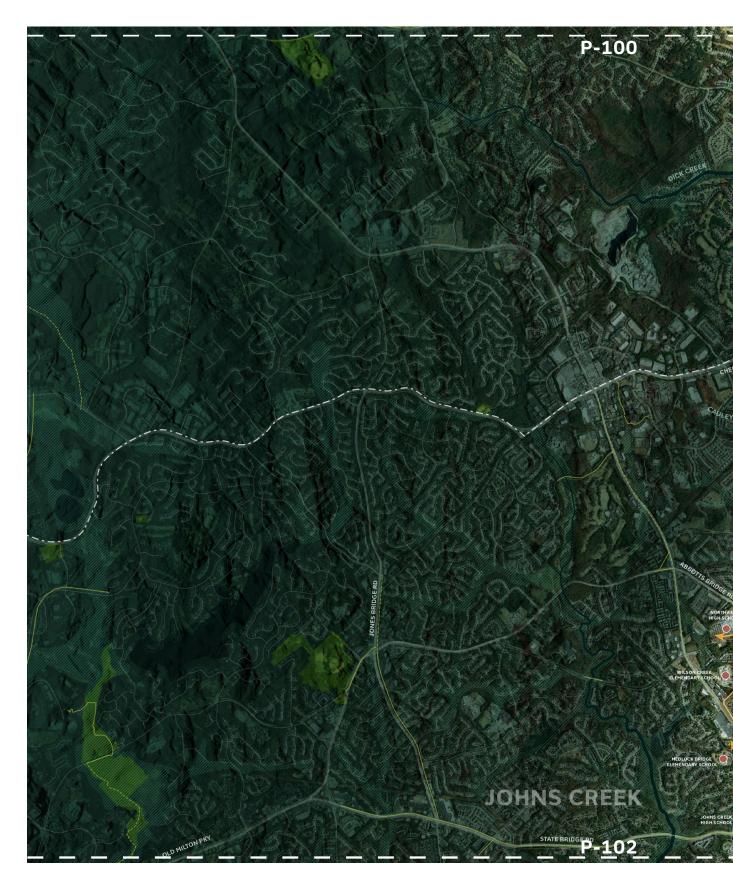
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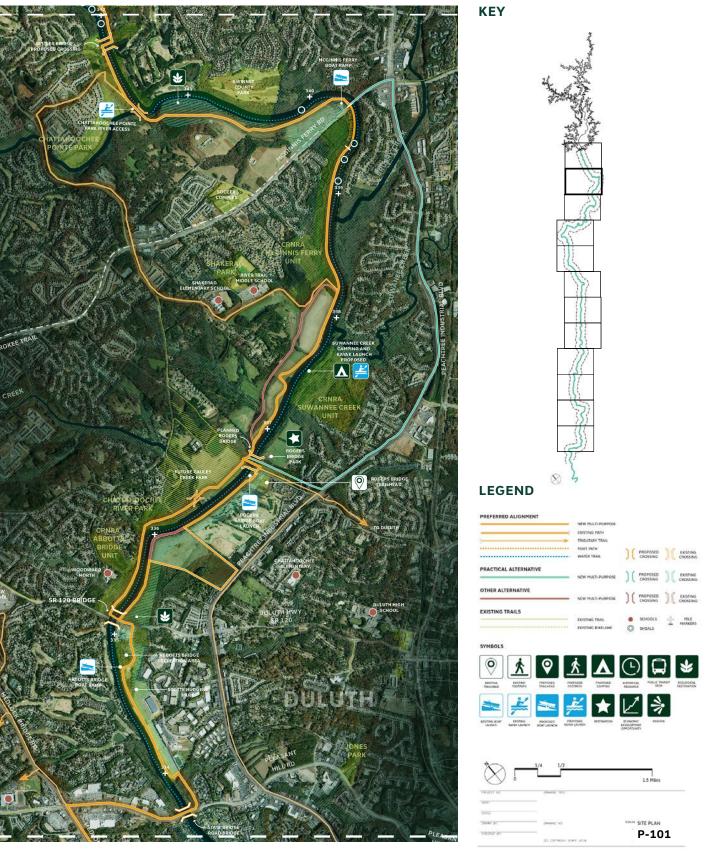




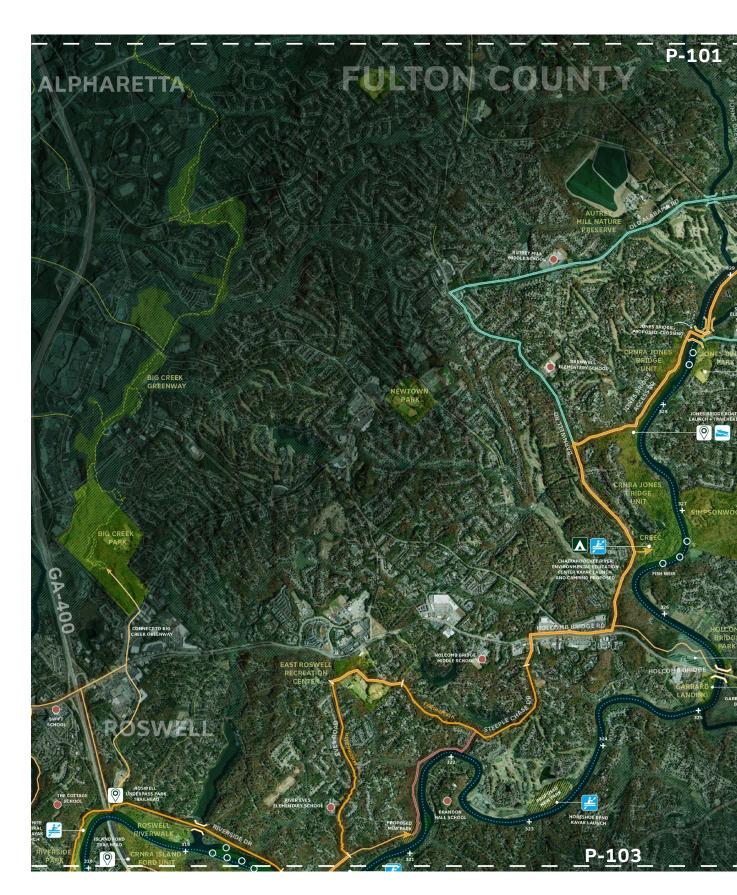


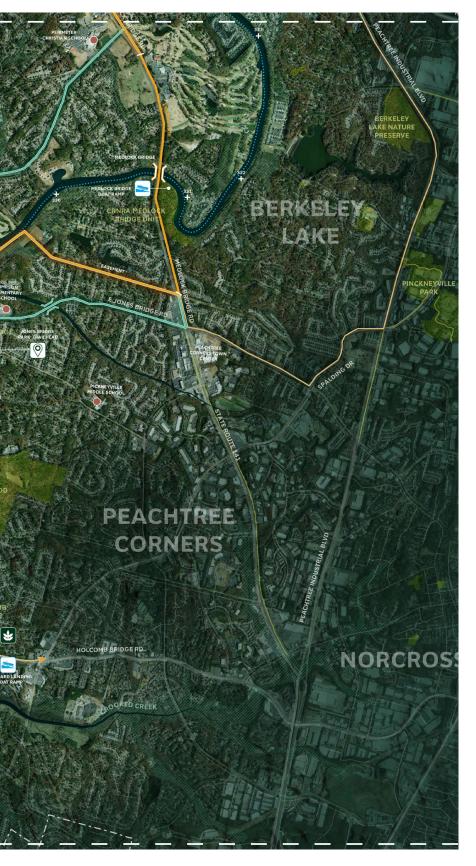


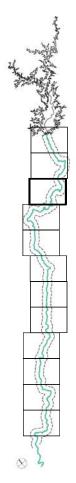
A-03 CHATTAHOOCHEE RIVERLANDS GREENWAY STUDY



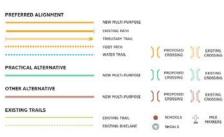








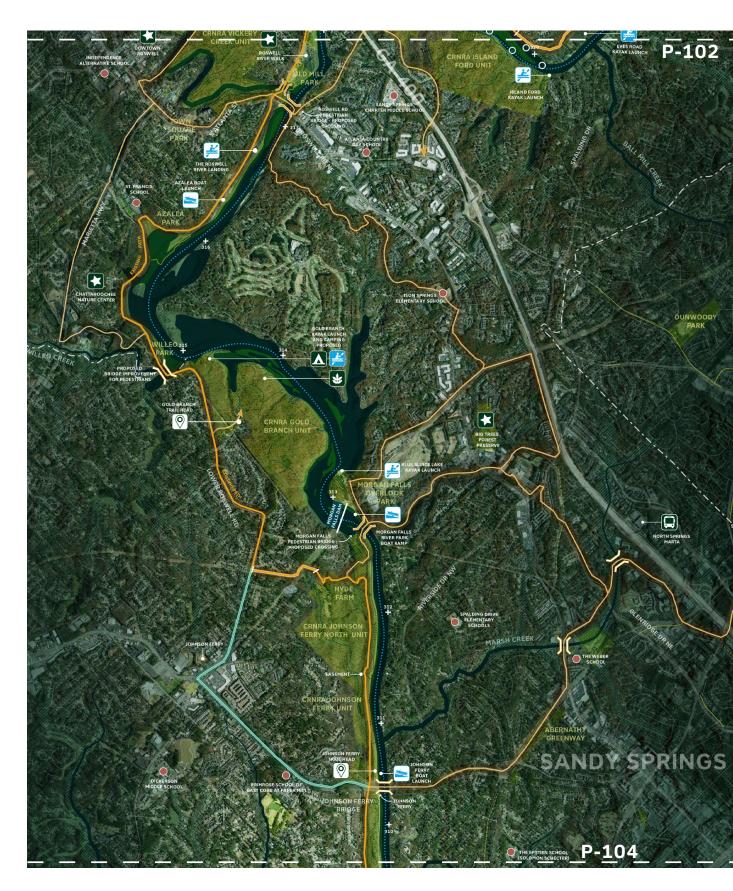
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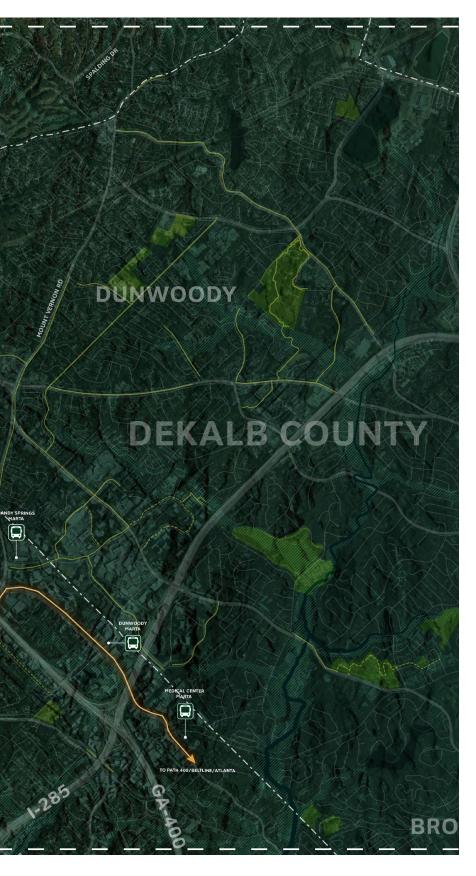




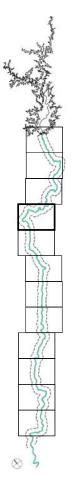












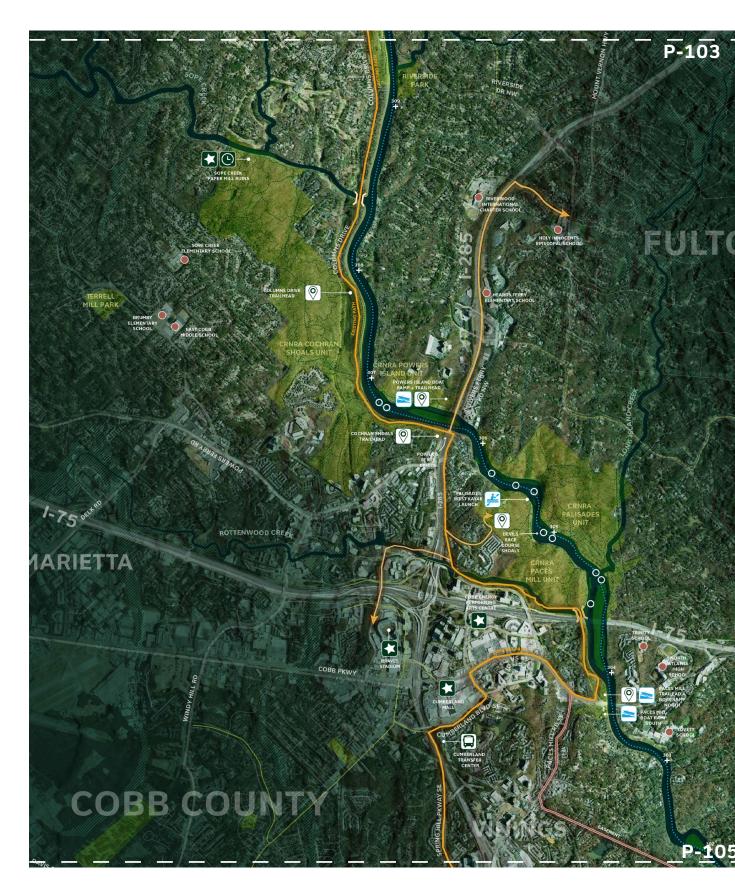
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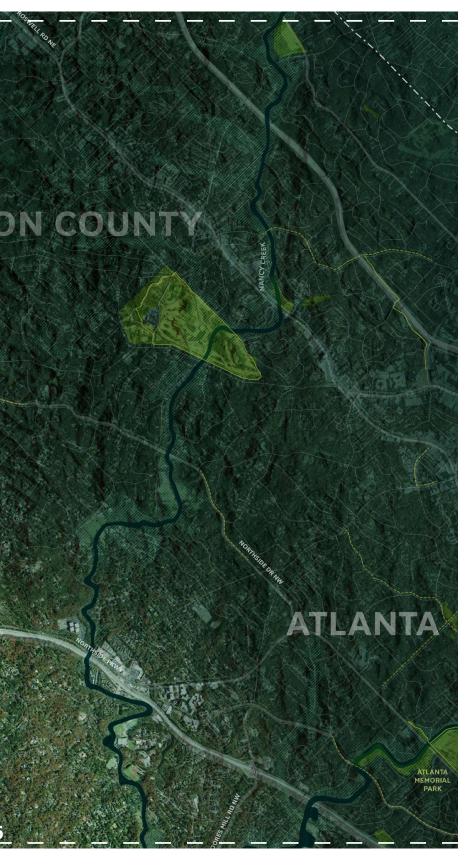


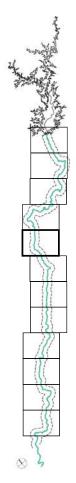




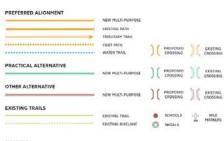




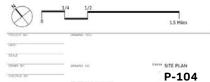




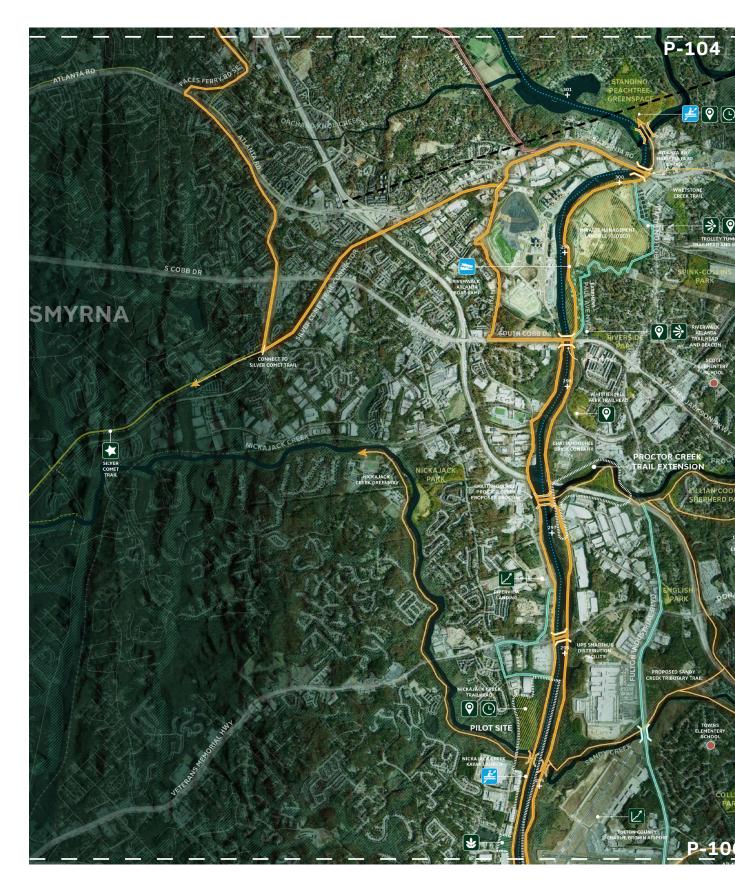
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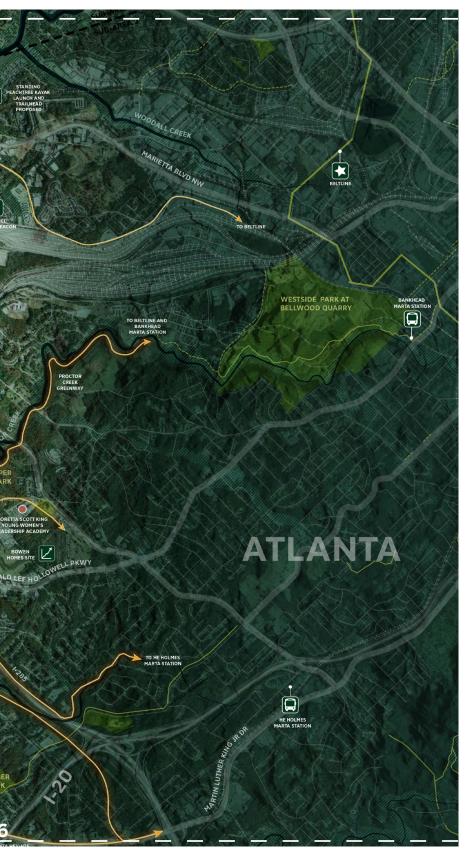




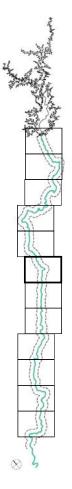




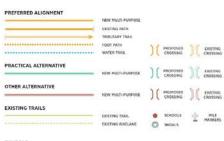




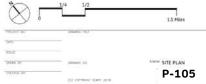




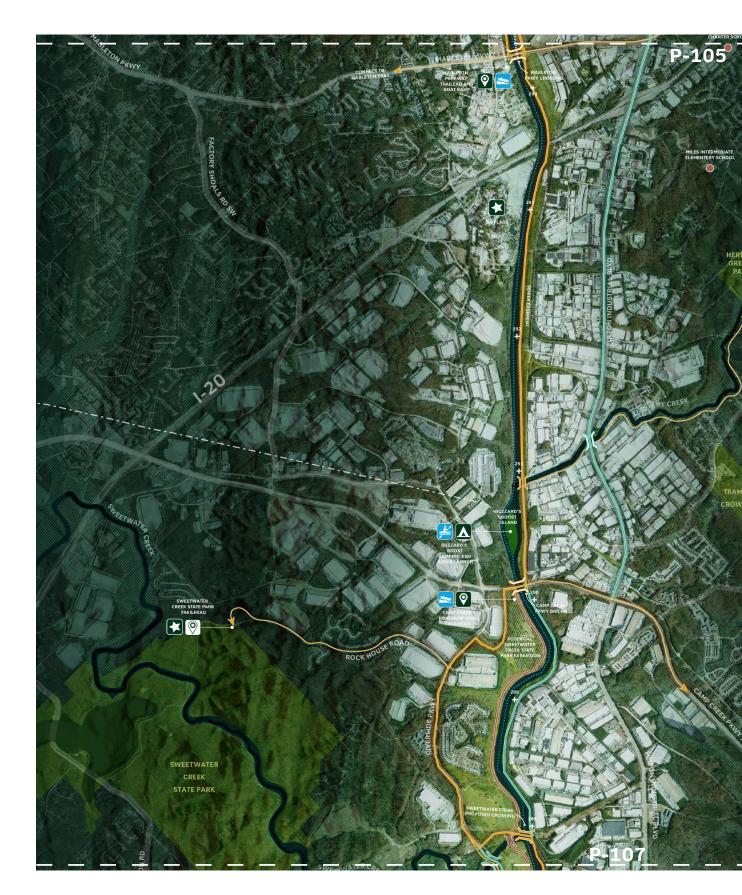
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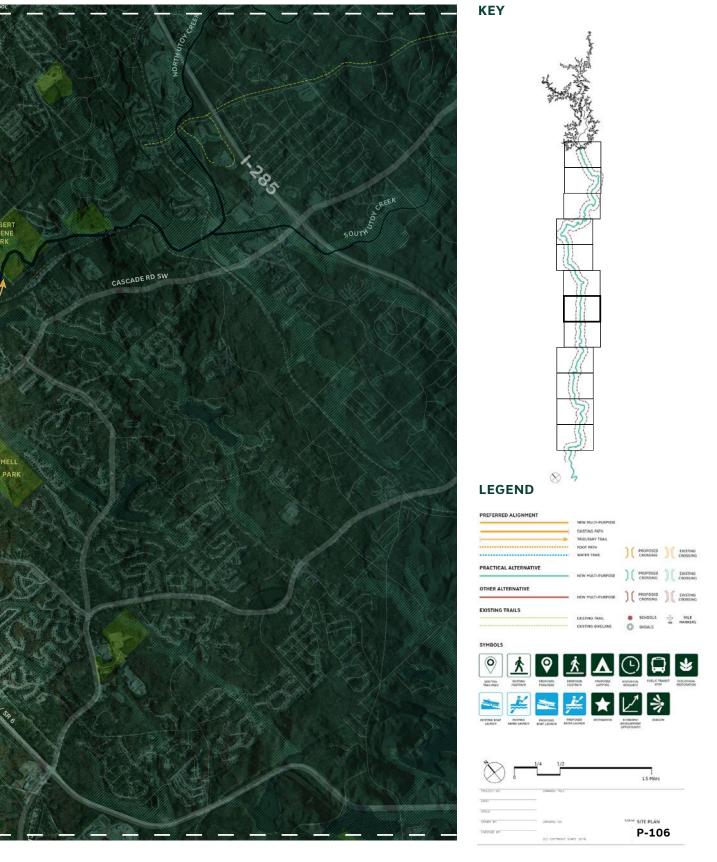




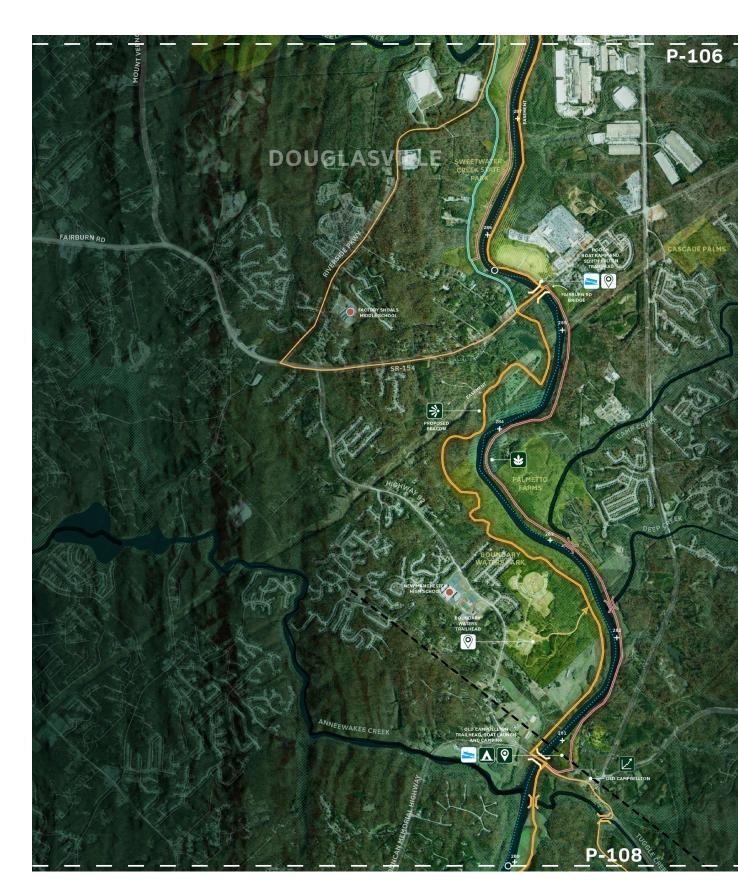


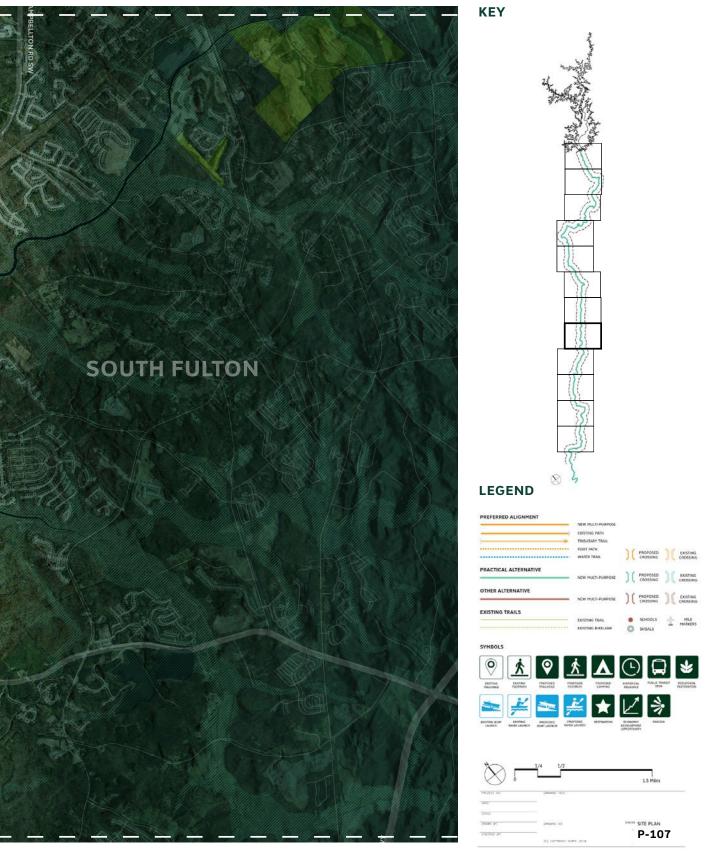




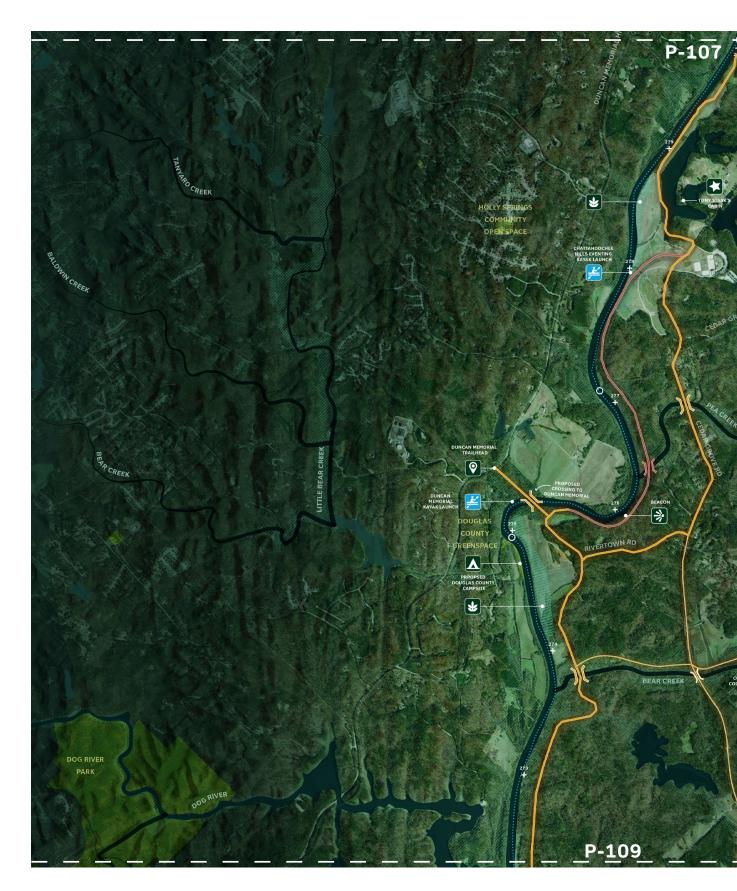






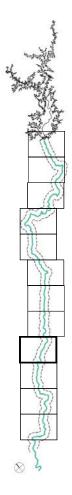




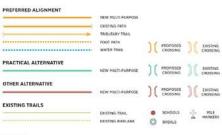


A-17 CHATTAHOOCHEE RIVERLANDS GREENWAY STUDY



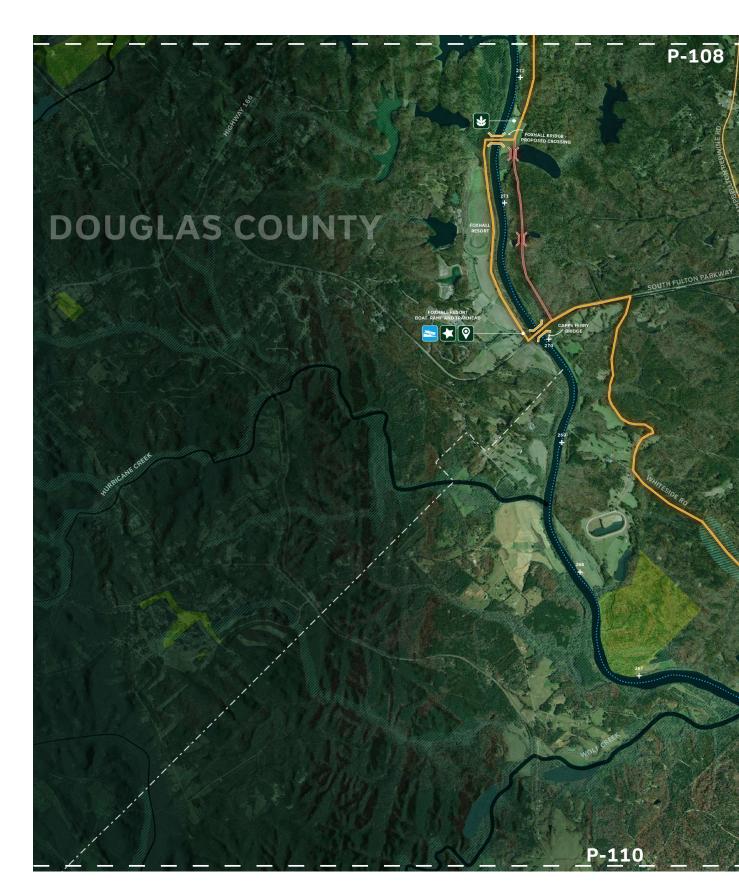


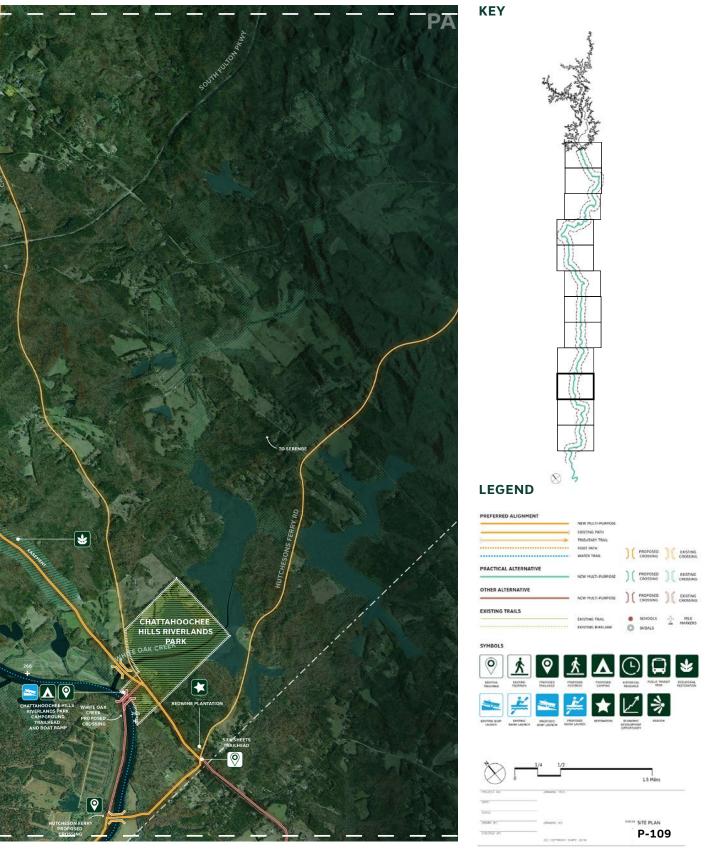
# **LEGEND**



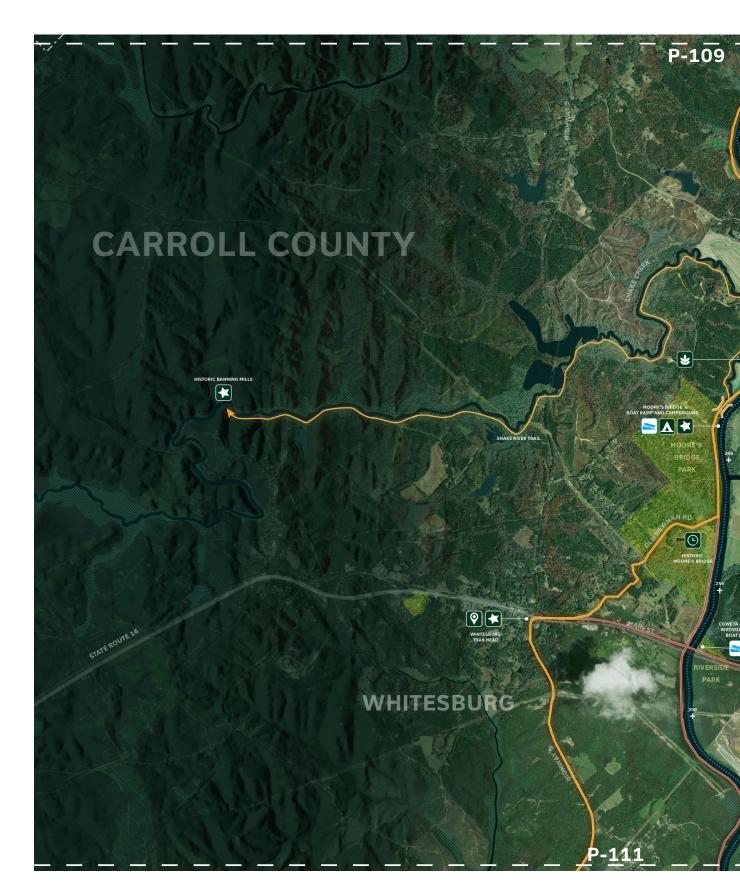


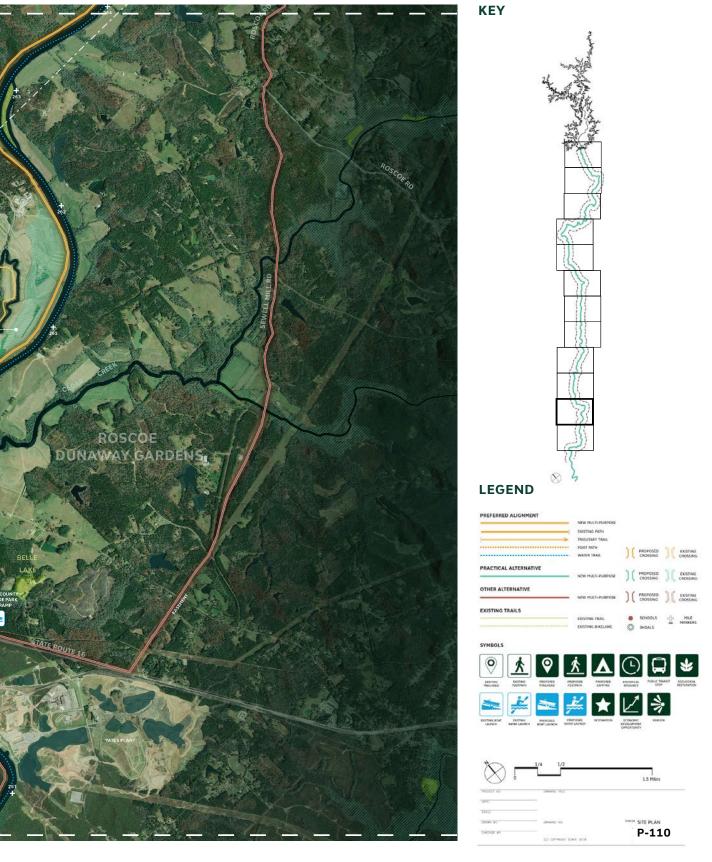




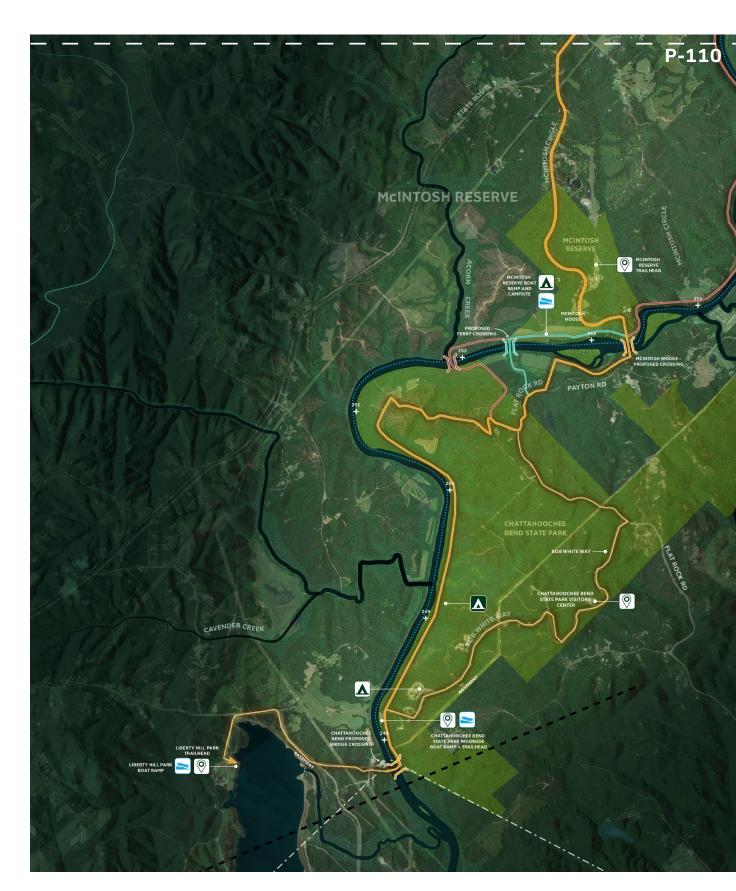


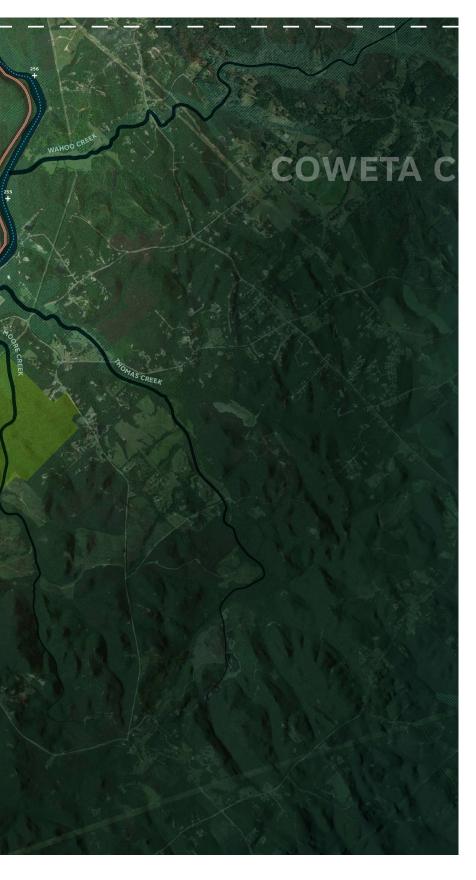


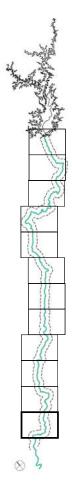




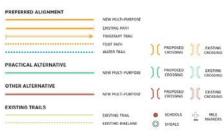








# **LEGEND**









# TRAILHEAD MILEAGE CHART

Use the chart below to pinpoint the distance between your trip's start and end points.

KEY  Existing Trailhead  Proposed Trailhead		Buford Dam west (at CRNRA Bowmans Island Unit)	Sugar Hill	CRNRA: Rogers Bridge	CRNRA: Jones Bridge Park	Roswell Underpass Park (at SR 400)	CRNRA: Johnson Ferry	CRNRA: Columns Drive	CRNRA: Cochran Shoals	CRNRA: Paces Mill SUB-AREA 1	SUB-AREA 2  Trolley Tunnel	
CRNRA: Buford Dam west	9		3.3	13.1	22.9	32.1	40.8	43.5	45.2	47.9	57.9	
Sugar Hill	9	3.3		9.8	19.6	28.8	37.6	40.2	41.9	44.6	54.6	
CRNRA: Rogers Bridge	<b>Q</b>	13.1	9.8		9.8	19.0	27.7	30.4	32.1	34.8	44.8	
CRNRA: Jones Bridge Park	<b>Q</b>	22.9	19.6	9.8		9.2	17.9	20.6	22.3	25.0	35.0	
Roswell Underpass Park	<b>Q</b>	32.1	28.8	19.0	9.2		8.7	11.4	13.1	15.8	25.8	
CRNRA: Johnson Ferry		40.8	37.6	27.7	17.9	8.7		2.6	4.3	7.1	17.1	
CRNRA: Columns Drive	<b>Q</b>	43.5	40.2	30.4	20.6	11.4	2.6		1.7	4.4	14.4	
CRNRA: Cochran Shoals		45.2	41.9	32.1	22.3	13.1	4.3	1.7		2.7	12.7	
SUB-AREA 1 CRNRA: Paces Mill	<b>Q</b>	47.9	44.6	34.8	25.0	15.8	7.1	4.4	2.7		10.0	
SUB-AREA 2 Trolley Tunnel	9	57.9	54.6	44.8	35.0	25.8	17.1	14.4	12.7	10.0		
Riverwalk Atlanta	9	59.2	55.9	46.1	36.3	27.1	18.4	15.7	14.0	11.3	1.3	
Whittier Mill Park	9	59.8	56.5	46.7	36.9	27.7	18.9	16.3	14.6	11.9	1.9	
Nickajack Creek	9	62.2	59.0	49.1	39.3	30.1	21.4	18.8	17.1	14.3	4.3	
Mableton Parkway		63.8	60.5	50.7	40.9	31.7	23.0	20.3	18.6	15.9	5.9	
Camp Creek		68.1	64.9	55.0	45.2	36.0	27.3	24.7	23.0	20.2	10.3	
South Fulton		73.3	70.0	60.2	50.4	41.2	32.4	29.8	28.1	25.4	15.4	
SUB-AREA 2 Old Campbellton		78.8	75.5	65.7	55.9	46.7	37.9	35.3	33.6	30.9	20.9	
SUB-AREA 3 Duncan Memorial		86.4	83.1	73.3	63.5	54.3	45.6	42.9	41.2	38.5	28.5	
Foxhall Resort		90.7	87.4	77.6	67.8	58.6	49.8	47.2	45.5	42.8	32.8	
Chattahoochee Hills RiverLands Park		95.9	92.6	82.8	73.0	63.8	55.0	52.4	50.7	48.0	38.0	
Silk Sheets		96.7	93.4	83.6	73.8	64.6	55.8	53.2	51.5	48.8	38.8	
Hutcheson Ferry	=	97.5	94.2	84.4	74.6	65.4	56.7	54.0	52.3	49.6	39.6	
Whitesburg		104.0	100.7	90.9	81.1	71.9	63.2	60.5	58.8	56.1	46.1	
McIntosh Reserve		108.2	104.9	95.1	85.3	76.1	67.4	64.7	63.1	60.3	50.3	
Chattahoochee Bend State Park Riverside	9	114.5	111.2	101.4	91.6	82.4	73.6	71.0	69.3	66.5	56.6	

Riverwalk Atlanta	Whittier Mill Park	Nickajack Creek (at Cobb County Pilot Site)	Mableton Parkway	Camp Creek	South Fulton (at Fairburn Rd)	Old Campbellton SUB-AREA 2	Duncan Memor	Foxhall Resort	Chattahoochee Hills RiverLands Park	Silk Sheets (at Campbellton Redwine Rd)	Hutcheson Ferry	<b>⊘</b> Whitesburg	McIntosh Reserve	Chattahoochee Bend State Park Riverside
<b>9</b> 59.2	<b>9</b> 59.8	62.2	63.8	68.1	73.3	<b>?</b> 8.8	<b>©</b> 86.4	90.7	<b>9</b> 5.9	96.7	<b>9</b> 7.5	104.0	108.2	114.5
55.9	56.5	59.0	60.5	64.9	70.0	75.5	83.1	87.4	92.6	93.4	94.2	104.0	104.9	111.2
46.1	46.7	49.1	50.7	55.0	60.2	65.7	73.3	77.6	82.8	83.6	84.4	90.9	95.1	101.4
36.3	36.9	39.3	40.9	45.2	50.4	55.9	63.5	67.8	73.0	73.8	74.6	81.1	85.3	91.6
27.1	27.7	30.1	31.7	36.0	41.2	46.7	54.3	58.6	63.8	64.6	65.4	71.9	76.1	82.4
 18.4	18.9	21.4	23.0	27.3	32.4	37.9	45.6	49.8	55.0	55.8	56.7	63.2	67.4	73.6
15.7	16.3	18.8	20.3	24.7	29.8	35.3	42.9	47.2	52.4	53.2	54.0	60.5	64.7	71.0
14.0	14.6	17.1	18.6	23.0	28.1	33.6	41.2	45.5	50.7	51.5	52.3	58.8	63.1	69.3
11.3	11.9	14.3	15.9	20.2	25.4	30.9	38.5	42.8	48.0	48.8	49.6	56.1	60.3	66.5
1.3	1.9	4.3	5.9	10.3	15.4	20.9	28.5	32.8	38.0	38.8	39.6	46.1	50.3	56.6
	0.6	3.0	4.6	8.9	14.1	19.6	27.2	31.5	36.7	37.5	38.3	44.8	49.0	55.3
0.6		2.5	4.0	8.4	13.5	19.0	26.6	30.9	36.1	36.9	37.7	44.3	48.5	54.7
3.0	2.5		1.6	5.9	11.0	16.5	24.2	28.4	33.6	34.4	35.3	41.8	46.0	52.2
4.6	4.0	1.6		4.3	9.5	15.0	22.6	26.9	32.1	32.9	33.7	40.2	44.4	50.7
8.9	8.4	5.9	4.3		5.1	10.6	18.2	22.5	27.7	28.5	29.4	35.9	40.1	46.3
14.1	13.5	11.0	9.5	5.1		5.5	13.1	17.4	22.6	23.4	24.2	30.7	34.9	41.2
19.6	19.0	16.5	15.0	10.6	5.5		7.6	11.9	17.1	17.9	18.7	25.2	29.4	35.7
27.2	26.6	24.2	22.6	18.2	13.1	7.6		6.3	11.5	12.3	13.1	19.6	23.8	30.0
31.5	30.9	28.4	26.9	22.5	17.4	11.9	6.3		5.2	6.0	6.8	13.3	17.5	23.8
36.7	36.1	33.6	32.1	27.7	22.6	17.1	11.5	5.2		8.0	1.6	8.1	12.4	18.6
37.5	36.9	34.4	32.9	28.5	23.4	17.9	12.3	6.0	8.0		8.0	7.3	11.5	17.8
38.3	37.7	35.3	33.7	29.4	24.2	18.7	13.1	6.8	1.6	8.0		6.5	10.7	16.9
44.8	44.3	41.8	40.2	35.9	30.7	25.2	19.6	13.3	8.1	7.3	6.5		4.2	10.4
 49.0	48.5	46.0	44.4	40.1	34.9	29.4	23.8	17.5	12.4	11.5	10.7	4.2		6.2
55.3	54.7	52.2	50.7	46.3	41.2	35.7	30.0	23.8	18.6	17.8	16.9	10.4	6.2	

# WATER ACCESS MILEAGE CHART

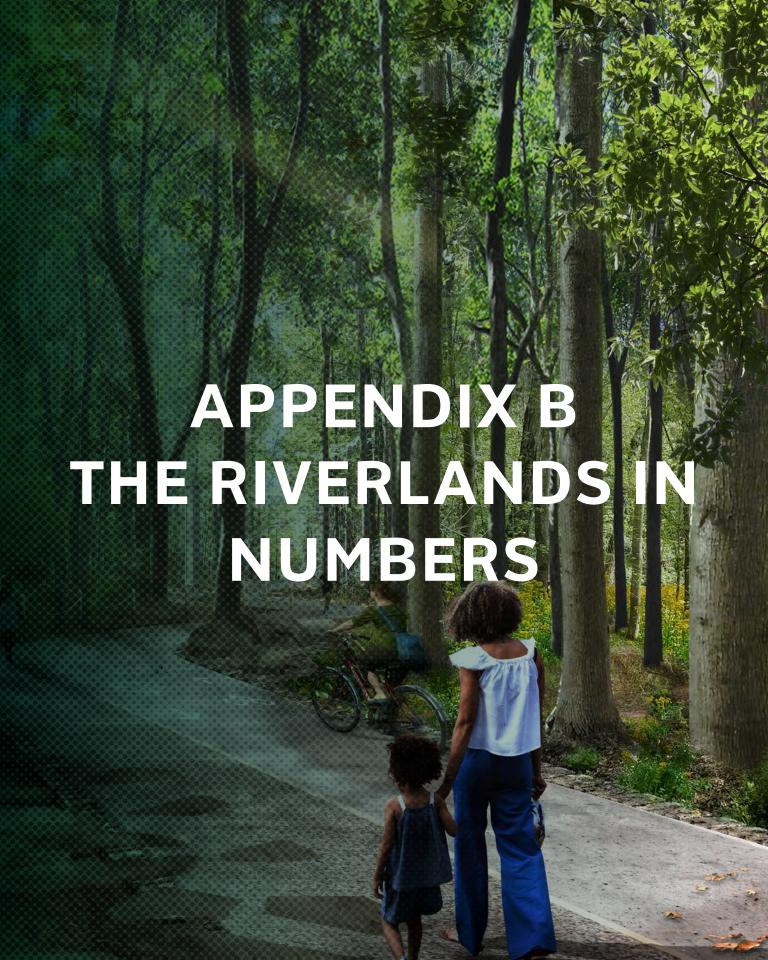
Use the chart below to pinpoint the distance between your put-in and take-out points.

KEY  Existing Boat Ramp  Proposed Boat Ramp  Existing Kayak Launch  Proposed Kayak Launch		CRNRA: Buford Dam Tailwater	🖟 Sugar Hill	RONRA: Settles Bridge	🗽 Chattahoochee Pointe Park	CRNRA: McGinnis Ferry	CRNRA: Suwanee Creek	// CRNRA: Rogers Bridge	CRNRA: Abbotts Bridge	🌃 CRNRA: Medlock Bridge	CRNRA: Jones Bridge	CRNRA: CREEC	CRNRA: Garrard Landing	🔭 Horseshoe Bend	Reves Road	K CRNRA: Island Ford	🔭 Don White	🔭 River Landing	₩ Azalea	
CRNRA: Buford Dam Tailwater			2.5	4.8	7.3	8.9	11.2	12.1	14.1	18.1	21.0	22.3	23.6	24.9	28.3	28.7	30.6	32.0	32.3	
Sugar Hill	*	2.5		2.3	4.7	6.3	8.7	9.5	11.5	15.5	18.5	19.8	21.0	22.3	25.7	26.1	28.0	29.4	29.8	
CRNRA: Settles Bridge	$\not=$	4.8	2.3		2.4	4.0	6.4	7.2	9.2	13.2	16.2	17.5	18.7	20.0	23.4	23.8	25.7	27.1	27.5	
Chattahoochee Pointe Park	¥	7.3	4.7	2.4		1.6	4.0	4.8	6.8	10.8	13.7	15.0	16.3	17.6	21.0	21.4	23.3	24.7	25.0	
CRNRA: McGinnis Ferry		8.9	6.3	4.0	1.6		2.4	3.2	5.2	9.2	12.1	13.4	14.7	16.0	19.4	19.8	21.7	23.1	23.4	
CRNRA: Suwanee Creek	¥	11.2	8.7	6.4	4.0	2.4		0.8	2.8	6.8	9.8	11.1	12.3	13.6	17.0	17.4	19.3	20.7	21.1	
CRNRA: Rogers Bridge		12.1	9.5	7.2	4.8	3.2	0.8		2.0	6.0	8.9	10.2	11.5	12.8	16.2	16.6	18.5	19.9	20.2	
CRNRA: Abbotts Bridge	*	14.1	11.5	9.2	6.8	5.2	2.8	2.0		4.0	7.0	8.3	9.5	10.8	14.2	14.6	16.5	17.9	18.3	
CRNRA: Medlock Bridge		18.1	15.5	13.2	10.8	9.2	6.8	6.0	4.0		3.0	4.3	5.5	6.8	10.2	10.6	12.5	13.9	14.3	
CRNRA: Jones Bridge		21.0	18.5	16.2	13.7	12.1	9.8	8.9	7.0	3.0		1.3	2.6	3.9	7.3	7.7	9.6	10.9	11.3	
CRNRA: CREEC	¥	22.3	19.8	17.5	15.0	13.4	11.1	10.2	8.3	4.3	1.3		1.3	2.6	6.0	6.4	8.3	9.6	10.0	
CRNRA: Garrard Landing		23.6	21.0	18.7	16.3	14.7	12.3	11.5	9.5	5.5	2.6	1.3		1.3	4.7	5.1	7.0	8.4	8.7	
Horseshoe Bend	¥	24.9	22.3	20.0	17.6	16.0	13.6	12.8	10.8	6.8	3.9	2.6	1.3		3.4	3.8	5.7	7.1	7.5	
Eves Road	¥	28.3	25.7	23.4	21.0	19.4	17.0	16.2	14.2	10.2	7.3	6.0	4.7	3.4		0.4	2.3	3.7	4.0	
CRNRA: Island Ford	¥	28.7	26.1	23.8	21.4	19.8	17.4	16.6	14.6	10.6	7.7	6.4	5.1	3.8	0.4		1.9	3.3	3.7	
Don White Memorial	*	30.6	28.0	25.7	23.3	21.7	19.3	18.5	16.5	12.5	9.6	8.3	7.0	5.7	2.3	1.9		1.4	1.7	
River Landing	*	32.0	29.4	27.1	24.7	23.1	20.7	19.9	17.9	13.9	10.9	9.6	8.4	7.1	3.7	3.3	1.4		0.4	
Azalea	*	32.3	29.8	27.5	25.0	23.4	21.1	20.2	18.3	14.3	11.3	10.0	8.7	7.5	4.0	3.7	1.7	0.4		
CRNRA: Gold Branch	×	34.1	31.5	29.2	26.8	25.2	22.8	22.0	20.0	16.0	13.1	11.8	10.5	9.2	5.8	5.4	3.5	2.1	1.7	
Bull Sluice Lake		35.7	33.1	30.9	28.4	26.8	24.5	23.6	21.6	17.6	14.7	13.4	12.1	10.8	7.4	7.0	5.1	3.7	3.4	
Morgan Falls	#	36.4	33.8	31.5	29.1	27.5	25.1	24.3	22.3	18.3	15.3	14.0	12.8	11.5	8.1	7.7	5.8	4.4	4.0	
CRNRA: Johnson Ferry		38.4	35.9	33.6	31.1	29.5	27.2	26.3	24.3	20.4	17.4	16.1	14.8	13.5	10.1	9.7	7.8	6.5	6.1	
CRNRA: Powers Island		42.4	39.9	37.6	35.2	33.6	31.2	30.4	28.4	24.4	21.4	20.1	18.9	17.6	14.2	13.8	11.9	10.5	10.1	
CRNRA: Palisades West	#	43.6	41.1	38.8	36.3	34.7	32.4	31.5	29.6	25.6	22.6	21.3	20.0	18.8	15.3	15.0	13.0	11.7	11.3	
CRNRA: Paces Mill North		45.1	42.6	40.3	37.8	36.2	33.9	33.0	31.1	27.1	24.1	22.8	21.5	20.2	16.8	16.4	14.5	13.2	12.8	
SUB-AREA 1 CRNRA: Paces Mill South SUB-AREA 2 Standing Peachtree		45.4	42.8	40.5	38.1	36.5	34.1	33.3	31.3	27.3	24.4	23.1	21.8	20.5	17.1	16.7	14.8	13.4	13.0	
SUB-AREA 2 Standing Peachtree Riverwalk Atlanta	<i>⊭</i>	48.4 49.8	45.8 47.3	43.5 45.0	41.1 42.6	39.5 41.0	37.1 38.6	36.3 37.8	34.3 35.8	30.3	27.4 28.8	26.1 27.5	24.8 26.3	23.5 25.0	20.1	19.7 21.2	17.8 19.3	16.4 17.9	16.1 17.5	
Nickajack Creek	<u>≠</u>	53.5	50.9	48.6	46.2	44.6	42.2	41.4	39.4	35.4	32.5	31.2	29.9	28.6	25.2	24.8	22.9	21.5	21.2	
Mableton Parkway	<i>;</i> ==	54.6	52.0	49.7	47.3	45.7	43.3	42.5	40.5	36.5	33.5	32.2	31.0	29.7	26.3	25.9	24.0	22.6	22.2	
Buzzard's Roost	<u> </u>	58.1	55.6	53.3	50.9	49.3	46.9	46.1	44.1	40.1	37.1	35.8	34.6	33.3	29.9	29.5	27.6	26.2	25.8	
Camp Creek	<u> </u>	58.6	56.1	53.8	51.4	49.8	47.4	46.6	44.6	40.6	37.6	36.3	35.1	33.8	30.4	30.0	28.1	26.7	26.3	
Hooch		63.2	60.7	58.4	56.0	54.3	52.0	51.1	49.2	45.2	42.2	40.9	39.7	38.4	35.0	34.6	32.7	31.3	30.9	
SUB-AREA 2 Old Campbellton		67.8	65.2	62.9	60.5	58.9	56.5	55.7	53.7	49.7	46.8	45.5	44.2	42.9	39.5	39.1	37.2	35.8	35.5	
SUB-AREA 3 Chattahoochee Hills	 <u>*</u>	70.6	68.1	65.8	63.3	61.7	59.4	58.5	56.6	52.6	49.6	48.3	47.0	45.7	42.3	41.9	40.0	38.7	38.3	
Duncan Memorial	¥	73.5	71.0	68.7	66.2	64.6	62.3	61.4	59.4	55.5	52.5	51.2	49.9	48.6	45.2	44.8	42.9	41.6	41.2	
Foxhall Resort	<u></u>	78.6	76.1	73.8	71.3	69.7	67.4	66.5	64.6	60.6	57.6	56.3	55.0	53.8	50.3	50.0	48.0	46.7	46.3	
Chattahoochee Hills RiverLands Park	<u>*</u>	83.5	81.0	78.7	76.2	74.6	72.3	71.4	69.4	65.5	62.5	61.2	59.9	58.6	55.2	54.8	52.9	51.6	51.2	
Moore's Bridge Boat Ramp		89.3	86.7	84.4	82.0	80.4	78.0	77.2	75.2	71.2	68.3	67.0	65.7	64.4	61.0	60.6	58.7	57.3	57.0	
Coweta County Riverside Park	<b>=</b>	90.2	87.6	85.3	82.9	81.3	78.9	78.1	76.1	72.1	69.2	67.9	66.6	65.3	61.9	61.5	59.6	58.2	57.9	
McIntosh Reserve	*	96.0	93.4	91.1	88.7	87.1	84.7	83.9	81.9	77.9	75.0	73.7	72.4	71.1	67.7	67.3	65.4	64.0	63.7	
Chattahoochee Bend State Park Riverside		100.5	98.0	95.7	93.2	91.6	89.3	88.4	86.5	82.5	79.5	78.2	76.9	75.6	72.2	71.8	69.9	68.6	68.2	

							SUB-AREA 1	SUB-AREA 2							SUB-AREA 2		Park		¥		erside		
CRNRA: Gold Branch	Bull Sluice Lake	Morgan Falls	CRNRA: Johnson Ferry	CRNRA: Powers Island	CRNRA: Palisades West	CRNRA: Paces Mill North	CRNRA: Paces Mill South	Standing Peachtree	Riverwalk Atlanta	Nickajack Creek	Mableton Parkway	Buzzard's Roost	Camp Creek	Hooch	Old Campbellton	Chattahoochee Hills	Duncan Memorial	Foxhall Resort	Chattahoochee Hills RiverLands Park	Moore's Bridge	Coweta County Riverside Park	McIntosh Reserve	] Chattahoochee Bend State Park Riverside
<u>#</u>	25.7	<i>⊭</i>	20.4	40.4	<u>#</u>	45.4	<b>A</b> E 4	<u>⊭</u>	<b>≥</b>	<i>¥</i>	<b>*</b>	<i>⊭</i>	<b>50.</b> 6	60.0	67.0	<u>⊭</u>	<u>#</u>	<u>≥</u>	22.5	<b>=</b>	<b>≥</b>	<b>=</b>	400.5
34.1 31.5	35.7 33.1	36.4 33.8	38.4 35.9	42.4 39.9	43.6 41.1	45.1 42.6	45.4 42.8	48.4 45.8	49.8 47.3	53.5 50.9	54.6 52.0	58.1 55.6	58.6 56.1	63.2 60.7	67.8 65.2	70.6 68.1	73.5 71.0	78.6 76.1	83.5 81.0	89.3 86.7	90.2 87.6	96.0 93.4	98.0
29.2	30.9	31.5	33.6	37.6	38.8	40.3	40.5	43.5	45.0	48.6	49.7	53.3	53.8	58.4	62.9	65.8	68.7	73.8	78.7	84.4	85.3	91.1	95.7
26.8	28.4	29.1	31.1	35.2	36.3	37.8	38.1	41.1	42.6	46.2	47.3	50.9	51.4	56.0	60.5	63.3	66.2	71.3	76.2	82.0	82.9	88.7	93.2
25.2	26.8	27.5	29.5	33.6	34.7	36.2	36.5	39.5	41.0	44.6	45.7	49.3	49.8	54.3	58.9	61.7	64.6	69.7	74.6	80.4	81.3	87.1	91.6
22.8	24.5	25.1	27.2	31.2	32.4	33.9	34.1	37.1	38.6	42.2	43.3	46.9	47.4	52.0	56.5	59.4	62.3	67.4	72.3	78.0	78.9	84.7	89.3
22.0	23.6	24.3	26.3	30.4	31.5	33.0	33.3	36.3	37.8	41.4	42.5	46.1	46.6	51.1	55.7	58.5	61.4	66.5	71.4	77.2	78.1	83.9	88.4
20.0	21.6	22.3	24.3	28.4	29.6	31.1	31.3	34.3	35.8	39.4	40.5	44.1	44.6	49.2	53.7	56.6	59.4	64.6	69.4	75.2	76.1	81.9	86.5
16.0	17.6	18.3	20.4	24.4	25.6	27.1	27.3	30.3	31.8	35.4	36.5	40.1	40.6	45.2	49.7	52.6	55.5	60.6	65.5	71.2	72.1	77.9	82.5
13.1	14.7	15.3	17.4	21.4	22.6	24.1	24.4	27.4	28.8	32.5	33.5	37.1	37.6	42.2	46.8	49.6	52.5	57.6	62.5	68.3	69.2	75.0	79.5
11.8	13.4	14.0	16.1	20.1	21.3	22.8	23.1	26.1	27.5	31.2	32.2	35.8	36.3	40.9	45.5	48.3	51.2	56.3	61.2	67.0	67.9	73.7	78.2
10.5	12.1	12.8	14.8	18.9	20.0	21.5	21.8	24.8	26.3	29.9	31.0	34.6	35.1	39.7	44.2	47.0	49.9	55.0	59.9	65.7	66.6	72.4	76.9
9.2	10.8	11.5	13.5	17.6	18.8	20.2	20.5	23.5	25.0	28.6	29.7	33.3	33.8	38.4	42.9	45.7	48.6	53.8	58.6	64.4	65.3	71.1	75.6
5.8	7.4	8.1	10.1	14.2	15.3	16.8	17.1	20.1	21.6	25.2	26.3	29.9	30.4	35.0	39.5	42.3	45.2	50.3	55.2	61.0	61.9	67.7	72.2
5.4	7.0	7.7	9.7	13.8	15.0	16.4	16.7	19.7	21.2	24.8	25.9	29.5	30.0	34.6	39.1	41.9	44.8	50.0	54.8	60.6	61.5	67.3	71.8
3.5 2.1	5.1 3.7	5.8 4.4	7.8 6.5	11.9 10.5	13.0	14.5	14.8 13.4	17.8 16.4	19.3 17.9	22.9 21.5	24.0	27.6 26.2	28.1	32.7 31.3	37.2	40.0 38.7	42.9 41.6	48.0 46.7	52.9 51.6	58.7 57.3	59.6 58.2	65.4 64.0	69.9
1.7	3.4	4.4	6.1	10.3	11.7 11.3	12.8	13.4	16.4	17.5	21.3	22.2	25.8	26.3	30.9	35.8 35.5	38.3	41.0	46.1	51.0	57.0	57.9	63.7	68.2
1.1	1.6	2.3	4.3	8.4	9.6	11.0	11.3	14.3	15.8	19.4	20.5	24.1	24.6	29.2	33.7	36.5	39.4	44.6	49.4	55.2	56.1	61.9	66.4
1.6	1.0	0.7	2.7	6.7	7.9	9.4	9.7	12.7	14.1	17.8	18.9	22.5	22.9	27.5	32.1	34.9	37.8	42.9	47.8	53.6	54.5	60.3	64.8
2.3	0.7		2.0	6.1	7.3	8.8	9.0	12.0	13.5	17.1	18.2	21.8	22.3	26.9	31.4	34.3	37.1	42.3	47.1	52.9	53.8	59.6	64.2
4.3	2.7	2.0		4.0	5.2	6.7	7.0	10.0	11.4	15.1	16.2	19.7	20.2	24.8	29.4	32.2	35.1	40.2	45.1	50.9	51.8	57.6	62.1
8.4	6.7	6.1	4.0		1.2	2.7	2.9	5.9	7.4	11.0	12.1	15.7	16.2	20.8	25.3	28.2	31.1	36.2	41.1	46.8	47.7	53.5	58.1
9.6	7.9	7.3	5.2	1.2		1.5	1.7	4.8	6.2	9.9	10.9	14.5	15.0	19.6	24.2	27.0	29.9	35.0	39.9	45.7	46.5	52.4	56.9
11.0	9.4	8.8	6.7	2.7	1.5		0.3	3.3	4.7	8.4	9.4	13.0	13.5	18.1	22.7	25.5	28.4	33.5	38.4	44.2	45.1	50.9	55.4
11.3	9.7	9.0	7.0	2.9	1.7	0.3		3.0	4.5	8.1	9.2	12.8	13.3	17.9	22.4	25.2	28.1	33.3	38.1	43.9	44.8	50.6	55.1
14.3	12.7	12.0	10.0	5.9	4.8	3.3	3.0		1.5	5.1	6.2	9.8	10.3	14.9	19.4	22.2	25.1	30.3	35.1	40.9	41.8	47.6	52.1
15.8	14.1	13.5	11.4	7.4	6.2	4.7	4.5	1.5		3.6	4.7	8.3	8.8	13.4	17.9	20.8	23.7	28.8	33.7	39.4	40.3	46.1	50.7
19.4	17.8	17.1	15.1	11.0	9.9	8.4	8.1	5.1	3.6		1.1	4.7	5.2	9.8	14.3	17.1	20.0	25.1	30.0	35.8	36.7	42.5	47.0
20.5	18.9	18.2	16.2	12.1	10.9	9.4	9.2	6.2	4.7	1.1	2.6	3.6	4.1	8.7	13.2	16.1	18.9	24.1	29.0	34.7	35.6	41.4	46.0
24.1	22.5	21.8	19.7	15.7 16.2	14.5 15.0	13.0	12.8 13.3	9.8	8.8	4.7 5.2	3.6 4.1	0.5	0.5	5.1 4.6	9.6 9.1	12.5 12.0	15.4 14.9	20.5	25.4 24.9	31.1 30.6	32.0	37.8 37.3	42.4
29.2	27.5	26.9	24.8	20.8	19.6	18.1	17.9	14.9	13.4	9.8	8.7	5.1	4.6	4.0	4.5	7.4	10.3	15.4	20.3	26.1	26.9	32.8	37.3
33.7	32.1	31.4	29.4	25.3	24.2	22.7	22.4	19.4	17.9	14.3	13.2	9.6	9.1	4.5	4.5	2.8	5.7	10.8	15.7	21.5	22.4	28.2	32.7
36.5	34.9	34.3	32.2	28.2	27.0	25.5	25.2	22.2	20.8	17.1	16.1	12.5	12.0	7.4	2.8		2.9	8.0	12.9	18.7	19.6	25.4	29.9
39.4	37.8	37.1	35.1	31.1	29.9	28.4	28.1	25.1	23.7	20.0	18.9	15.4	14.9	10.3	5.7	2.9		5.1	10.0	15.8	16.7	22.5	27.0
44.6	42.9	42.3	40.2	36.2	35.0	33.5	33.3	30.3	28.8	25.1	24.1	20.5	20.0	15.4	10.8	8.0	5.1		4.9	10.7	11.5	17.4	21.9
49.4	47.8	47.1	45.1	41.1	39.9	38.4	38.1	35.1	33.7	30.0	29.0	25.4	24.9	20.3	15.7	12.9	10.0	4.9		5.8	6.7	12.5	17.0
55.2	53.6	52.9	50.9	46.8	45.7	44.2	43.9	40.9	39.4	35.8	34.7	31.1	30.6	26.1	21.5	18.7	15.8	10.7	5.8		0.9	6.7	11.2
56.1	54.5	53.8	51.8	47.7	46.5	45.1	44.8	41.8	40.3	36.7	35.6	32.0	31.5	26.9	22.4	19.6	16.7	11.5	6.7	0.9		5.8	10.3
61.9	60.3	59.6	57.6	53.5	52.4	50.9	50.6	47.6	46.1	42.5	41.4	37.8	37.3	32.8	28.2	25.4	22.5	17.4	12.5	6.7	5.8		4.5
66.4	64.8	64.2	62.1	58.1	56.9	55.4	55.1	52.1	50.7	47.0	46.0	42.4	41.9	37.3	32.7	29.9	27.0	21.9	17.0	11.2	10.3	4.5	







# THE RIVERLANDS IN NUMBERS

KFY

1/4 mile = 5 min walk 1/2 mile = 10 min walk 3 miles = 10 min bike ride

# **GENERAL TRAIL STATISTICS**

#### **Miles of Trail**

• Preferred Alignment: 125 Miles Practical Alternative: 140 Miles Other Alternatives: 154 Miles

### **Tributary Trails**

• 44 tributary trails

#### Crossings

• 25

Average of 5 miles between River crossings

#### Trail Within 1/2 Mile of the River

• 97 Miles

• 78%

#### Trail Within 1/4 Mile of the River

• 80 Miles

• 64%

#### Which Side of the River

· West Side:

- 76 Miles

- 60%

· East Side:

- 49 Miles

- 40%

# **DESTINATIONS**

#### Cities

• 19 cities within 3 miles of the Preferred Alignment (not including tributary trails):

- Atlanta

- Norcross

Alpharetta

Peachtree Corners

Berkeley Lake

Roswell

Buford

- Sandy Springs

Chattahoochee Hills

- Smyrna

Douglasville

South Fulton

- Duluth

Sugar Hill

Dunwoody

- Suwanee

Johns Creek

- Whitesburg

Marietta

· 24 cities within 3 miles of trail and tributary trails

#### **Trailheads**

• 25 Trailheads considered along preferred trail alignment trail

• Average distance between Trailheads along Preferred Alignment is 5 miles

#### **Parks Connected**

• 26 Parks directly connect by the Preferred Alignment

- Public Parks in proximity to proposed Trailheads:
  - 24 parks within 1/4 mile of proposed Trailheads
  - 27 parks within 1/2 mile of proposed Trailheads
  - 103 parks within 3 miles of proposed Trailheads

#### **Water Access Points**

- 43 access points considered along the River:
  - Existing: 26
  - Proposed: 17
- 104 miles of River between start and end of Preferred Alignment trail
- · Average distance between access points is 2 miles

- 6 schools within 1/4 mile of the Preferred Alignment
- 39 schools within 1/2 mile of the Preferred Alignment
- 6 schools within 1/2 mile of proposed Trailheads
- · 152 schools within 3 miles of the Preferred Alignment
- 114 schools within 3 miles of proposed Trailheads

#### Libraries

- 6 libraries within 1/2 mile of the Preferred Alignment
- 2 libraries within 1/2 mile of proposed Trailheads
- 13 libraries within 3 miles of the Preferred Alignment
- 13 libraries within 3 miles of proposed Trailheads

#### Churches

- 6 churches within 1/4 mile of the Preferred Alignment
- 4 churches within 1/2 mile of proposed Trailheads
- 40 churches within 3 miles of proposed Trailheads

#### **Campsites**

• 8 campsites proposed along the Preferred Alignment

# OWNERSHIP AND LAND-USE

# **Public / Private Property**

- 38 miles of Preferred Alignment on private property not along public ROW/ roads or within public land (30%)
- 87 miles of Preferred Alignment either within public land or along public ROW/roads (70%)

#### Greenspace

• 38 miles of Preferred Alignment within or along parks/greenspace

• 20 miles of Preferred Alignment within or along CRNRA boundaries

• 39 miles of Preferred Alignment along or within an easement

#### On-Road / Off-Road

• 49 miles of Preferred Alignment along existing roadways (39%)

# CONNECTIVITY STATISTICS

#### **Trails of Significance**

- 6 significant trails are connected to the RiverLands:
  - Silver Comet Trail
  - Rottenwood Creek Trail / Bob Callan Trail
  - Big Creek Trail
  - Mableton Parkway Trail
  - The Atlanta BeltLine

#### **Bus Stops**

- 132 bus stops within 1/2 mile of the Preferred Alignment
- 4 SRTA Park and Ride facilities within 1/2 mile of the preferred alignment
- 2 bus stops within 1/4 mile of proposed Trailheads
- 24 bus stops within 1/2 mile of proposed Trailheads
- 1237 bus stops within 3 miles of proposed Trailheads

#### **MARTA Stations**

- · 6 MARTA rail stations:
  - North Springs (requires pedestrian bridge over GA 400)
  - Sandy Springs
  - Dunwoody
  - Medical Center
  - Bankhead
  - H.F. Holmes

## **High-Risk and Major Roads Crossings**

- Along the Preferred Alignment, 24 highrisk bicycle & pedestrian crossings have been identified for improvement
- Along the Preferred Alignment, 12 major roads crossings have been identified for improvements

# **ECOLOGY STATISTICS**

#### **Restoration and Remediation Sites**

 Along the Preferred Alignment, 16 sites have been identified for future restoration and remediation

#### Reforestation

 Along the Preferred Alignment, 31.7 miles of trail have been identified to have reforestation potential

# **Impaired Stream Crossings**

The Preferred Alignment crosses
 57 impaired streams

#### Floodplain

• 59.9 miles (48.0%) of the Preferred Alignment are within the 100 year floodplain

#### **MRPA**

 80.1 miles (64.1%) of the Preferred Alignment are Within the Chattahoochee River corridor and subject to MRPA

### **DEMOGRAPHICS**

# **Population Living Within Walking**

# Distance of the Preferred Alignment 69 521 people live within 1/4 mile of the

- 69,521 people live within 1/4 mile of the Preferred Alignment (5 min walk)
- 136,556 people live within 1/2 mile of the Preferred Alignment (10 min walk)
- 798,612 people living within 3 miles of the Preferred Alignment (15 min bike ride)

# Miles Within High Walking and Biking Propensity Areas

- 1 mile of Preferred Alignment in highest propensity area
- 8 miles of Preferred Alignment in highest two propensity classes

# **Population Living Within Bike**

#### Distance of New Trailhead

 232,913 people live within a 15 min bike ride (3 miles) of a new Trailhead

#### Income

- Out of all the people living within 1/2 mile of the Preferred Alignment, 6.8% live under poverty level
- Out of all the people living within 3 miles of the Preferred Alignment, 10% live under poverty level
- Out of all the people living within 1/2 mile of the Preferred Alignment, 37.8% or 20,681 households live under metro-Atlanta median income level
- Out of all the people living within 3 miles of the Preferred Alignment, 42.6% or 128,992 households live under Metro Atlanta Region median income level
- Out of all the people living within 1/2 mile of the Preferred Alignment, 27.9% or 15,270 households spend more than 30% of household income on rent or mortgage
- Out of all the people living within 3 miles of the Preferred Alignment, 29.4% or 88,932 households spend more than 30% of household income on rent or mortgage

#### **Car Ownership**

- Out of all the people living within 1/2 mile of the Preferred Alignment, 2.7% or 1,496 households do not own a car
- Out of all the people living within 3 miles of the Preferred Alignment, 4.8% or 14,522 households do not own a car

# Race Distribution Within 1/2 Mile of the

# **Preferred Alignment**

• White: 59%

• Black: 26%

• American Indian: <1%

• Asian: 10%

• Native Hawaiian: <1%

• Other: 2%

• Two or more: 3%



#### Race Distribution Within 3 Miles of the

#### **Preferred Alignment**

White: 57%Black: 26%

• American Indian: <1%

• Asian: 10%

• Native Hawaiian: <1%

Other: 3%Two or more: 3%

#### Miles Within Environmental Justice Areas

# (As Defined By Arc)

Well Above Avg: 2.0 miles (2%)Above Avg: 18.6 miles (15%)

• Avg: 48.7 miles (39%)

Below Avg: 25.0 miles (20%)Well Below Avg: 18.8 (15%)

• Not Assigned: 11.8 miles (9%)

# Age Distribution

 Out of all the people living within 3 miles of the Preferred Alignment, 25.3% or 201,908 people are under 18

 Out of all the people living within 3 miles of the Preferred Alignment, 11.0% or 87,503 people are over 65

#### **Disabilities**

 Out of all the people living within 1/2 mile of the Preferred Alignment, 7.5% or 7,824 people age 18 and over, live with disabilities

 Out of all the people living within 3 miles of the Preferred Alignment, 9.1% or 54,294 people age 18 and over, live with disabilities

#### Commute

 Out of all the people living within 3 miles of the Preferred Alignment, 0.1% or 527 workers report commuting by bike

# OVERVIEW OF TRAIL BENEFITS

# **JOB CREATION**

There are several resources that have documented the impact of multimodal trail implementation projects on job creation. Based on the research from the Political Economy Research Institute housed in the University of Massachusetts, a national study found that between roughly 9 and 12 jobs were created on average per \$1 million spent.¹ Boston University research found that over 58 projects, that for each \$1 million spent created roughly 11 jobs.²

# POSITIVE ECONOMIC IMPACT

The Eppley Institute of Indiana University has done extensive research on the positive economic benefits of multimodal trails. Based on their 2017 Trails Study Report, they found that on average each trail user spends about \$3,500 annually on activities related to trail visits. These economic benefits also matriculate into property value and sales with roughly 60% of adjacent property owners saying that the trail systems had a positive financial impact on them.

### POSITIVE HEALTH IMPACT

Health is always a major focus of more active forms of transportation and access to leisure activities. This can take many shapes and occurs in the form of physical fitness and mental health, as well as community ties. Unfortunately, the Atlanta area suffers from a 32.5% obesity rate, which is also associated with hypertension, type 2 diabetes, hypercholesterolemia, coronary heart disease, stroke and asthma.<sup>6</sup> The Centers for Disease Control and Prevention also report that only 1 in 5 Georgians get enough exercise to account for daily recommended goals. The American Heart Association<sup>7</sup> is promoting active living through infrastructure improvements that allow safe and comfortable access to achieve our daily recommended goals. Based on the population statistics, nearly 800,000 people live within 3 miles of the Chattahoochee RiverLands Trail. The Eppley Institute has found that nearly 67% of the surrounding population reported that their daily physical activity increased as a result of the proximity to greenways.

# **ADDITIONAL TRAIL BENEFITS**

#### AARP

- Eight in 10 Americans prefer being in a community that offers sidewalks and good places to walk<sup>8</sup>
- People who live in neighborhoods with sidewalks are 47 percent more likely than residents of areas without them to be active for at least 39 minutes per day<sup>9</sup>
- Surveys show that 60 percent of Americans would ride a bicycle if they felt safe doing so, and eight out of 10 agree that bicycling is a healthy, positive activity<sup>10</sup>
- In North Carolina's Outer Banks, bicycle tourism generates approximately \$60 million in annual economic activity, on a \$6.7 million investment in bicycle infrastructure – a return of nearly ten dollars for every dollar spent<sup>11</sup>
- Building bicycle infrastructure creates an average of 11.4 jobs for every \$1 million spent (more than compared to road projects, which only yield about 7.8 jobs per every \$1 million)<sup>12</sup>

#### Trust for Public Land<sup>13</sup>

- Calculations from the U.S. Army Corps of Engineers, there is a \$3.58 unit day value for recreation – a rough idea of the amount of money visitors potentially save by having free access to activities like walking or biking
- TPL has found that people who exercise regularly save an average of \$351 in annual medical costs per person
- A 2011 report showed that on average, for every \$1 million spent on trail design and construction, 8.83 jobs were created the national average from the same report was 8.96 jobs per \$1 million investment and the largest component was investment in bicycle infrastructure which accounted for 11.4 jobs
- TPL has determined, based on over 30 studies, the excellent parks add approximately 15 percent to the value of dwellings within 500 feet

# Silver Comet Trail Economic Impact Analysis and Planning Study<sup>14</sup>

- In a survey by the National Association of Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices.<sup>15</sup>
- The CDC determined that by creating and improving places in our communities to be physically active, we could see a 25% increase in the percentage of people who exercise at least three times per week.<sup>16</sup>
- Replacing two miles of driving each day with walking or bicycling will – over the course of one year – prevent 730 pounds of carbon dioxide from entering the atmosphere

### **Outdoor Industry Association**

- 58% of Georgia residents participate in outdoor recreation each year
- Outdoor recreation in Georgia generates \$27.3 billion in consumer spending annually and provides 238,000 jobs, \$8.1 billion in wages and salaries and \$1.8 billion in state and local tax revenue

 Georgia residents are more likely to participate in fishing and trail/road running than the average American

#### Rails-to-Trails Conservancy17

 17 jobs (in areas of design, engineering and construction) are created for every \$1 million spent on greenways, sidewalks, and bicycle facilities (more than the ratio for dollars spent to jobs created for pavement widening, bridge construction, new highway construction, etc.). This is based on a study commissioned by the American Association of State Highway and Transportation Officials (AASHTO) on American Recovery and Reinvestment Act job creation

#### **Footnotes**

- PERI UMASS Pedestrian and Bicycle Infrastructure A National Study of Employment Impacts
- Boston University Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts
- Assuming \$750k / mile on average 750k x 100 miles = 75mil 75mil x 10.66 (average of job creations listed above)
- Eppley Institute Indiana University 2017 Indiana Trails Study Summary Report: Measuring the Health, Economic, and Community Impacts of Trails in Indiana
- Based on Eppley Institute document for Nickel Plate and Cardinal Greenways which are similar context zones.
- 6. Centers for Disease Control Obesity: Data, Trends and Maps
- American Heart Association Changing the Built Environment to Promote Active Living
- National Association of Realtors. (November 2013) National Community Preference Survey. http://www.realtor.org/articles/nar-2013-communitypreference-survey cited in AARP Sidewalks: A Livability Fact Sheet
- Sallis J., et al. "Neighborhood Environments and Physical Activity among Adults in 11 countries." American Journal of Preventive Medicine, Vol. 36, No.2 cited in AARP Sidewalks: A Livability Fact Sheet AARP. Bicycling: A Livability Fact Sheet.
- 10. AARP. Bicycling: A Livability Fact Sheet
- 11. Flusche, D. League of American Bicyclists, Advocacy Advance (2009, 2012), Bicycling Means Business: The Economic Bene!ts of Bicycle Infrastructure. http://www.advocacyadvance.org/site\_images/content/Final\_Econ\_Update(small).pdf cited in AARP Bicycling: A Livability Fact Sheet
- 12. Garrett-Peltier, H. Political Economy Research Institute, University of Massachusetts at Amherst (June 2011), Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts. http://www.peri. umass.edu/#leadmin/pdf/published\_study/PERI\_ABikes\_June2011.pdf cited in AARP Bicycling: A Livability Fact Sheet
- Trust for Public Land. Overview of the Economic Benefits of Conservation around Stringer's Ridge, http://cloud.tpl.org/pubs/benefits-econstringersridge.pdf
- 14. http://www.bwnwga.org/wp-content/uploads/Silver\_Comet\_Combined.pdf
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- 17. Trail Investment: A good deal for the American Economy Trails and Trail Networks Revitalize American Infrastructure



