

**SCAPE**

**GRESHAM SMITH**

**BIOHABITATS**

**GOOD THINKING ATLANTA**

**NEW SOUTH ASSOCIATES**

**DR. NA'TAKI OSBORNE JELKS**

**DR. RICHARD MILLIGAN**

**EDWARDS-PITMAN**

**CHATTAHOOCHEE RIVER**

**GREENWAY STUDY**

**FOR THE CHATTAHOOCHEE RIVERLANDS**

**TASK 2 MEMO**

**LITERATURE REVIEW &**

**EXISTING CONDITIONS ANALYSIS**

**SUBMITTED 03/21/2019**



# STUDY AREA

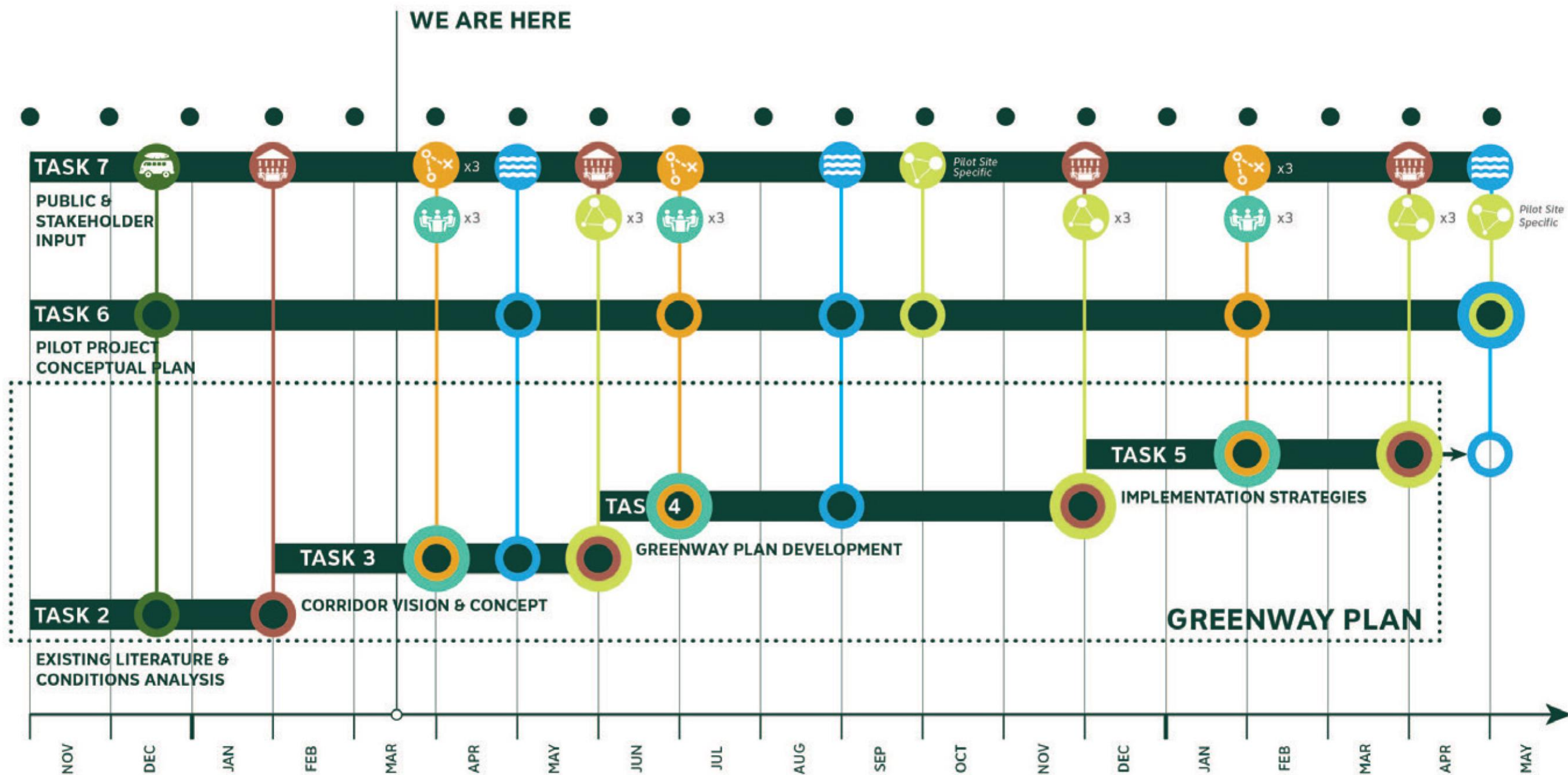
## DISTINCT SUB-AREAS BASED ON LAND AND POPULATION





# STUDY SCHEDULE & TASKS

## 2018-2020 – SEVEN MAJOR ELEMENTS



### PROJECT SCHEDULE LEGEND

SUB-AREA COMMITTEE MEETINGS  
(TO BE IDENTIFIED IN TASK 2)

PUBLIC FORUM  
(WITH SAC, LOCAL STAKEHOLDERS +  
COMMUNITY MEMBERS)

DESIGN CHARRETTE  
(WITH SAC + LOCAL STAKEHOLDERS)

FINAL TASK PRESENTATION  
(WITH THE CWG)

RIVER RAMBLES  
(OPEN TO THE PUBLIC)

WINDSHIELD DRIVING TOUR

CHATTAHOOCHEE WORKING GROUP MEETING

# STUDY TEAM

## MULTI-SCALE AND MULTI-SECTOR

**PROJECT MANAGEMENT TEAM:**

**ATLANTA REGIONAL COMMISSION**



**TRUST FOR PUBLIC LAND**



**COBB COUNTY**



**CITY OF ATLANTA**





# STUDY TEAM

## NATIONAL EXPERTS IN PLANNING, DESIGN, AND RESEARCH

### DESIGN TEAM

SCAPE



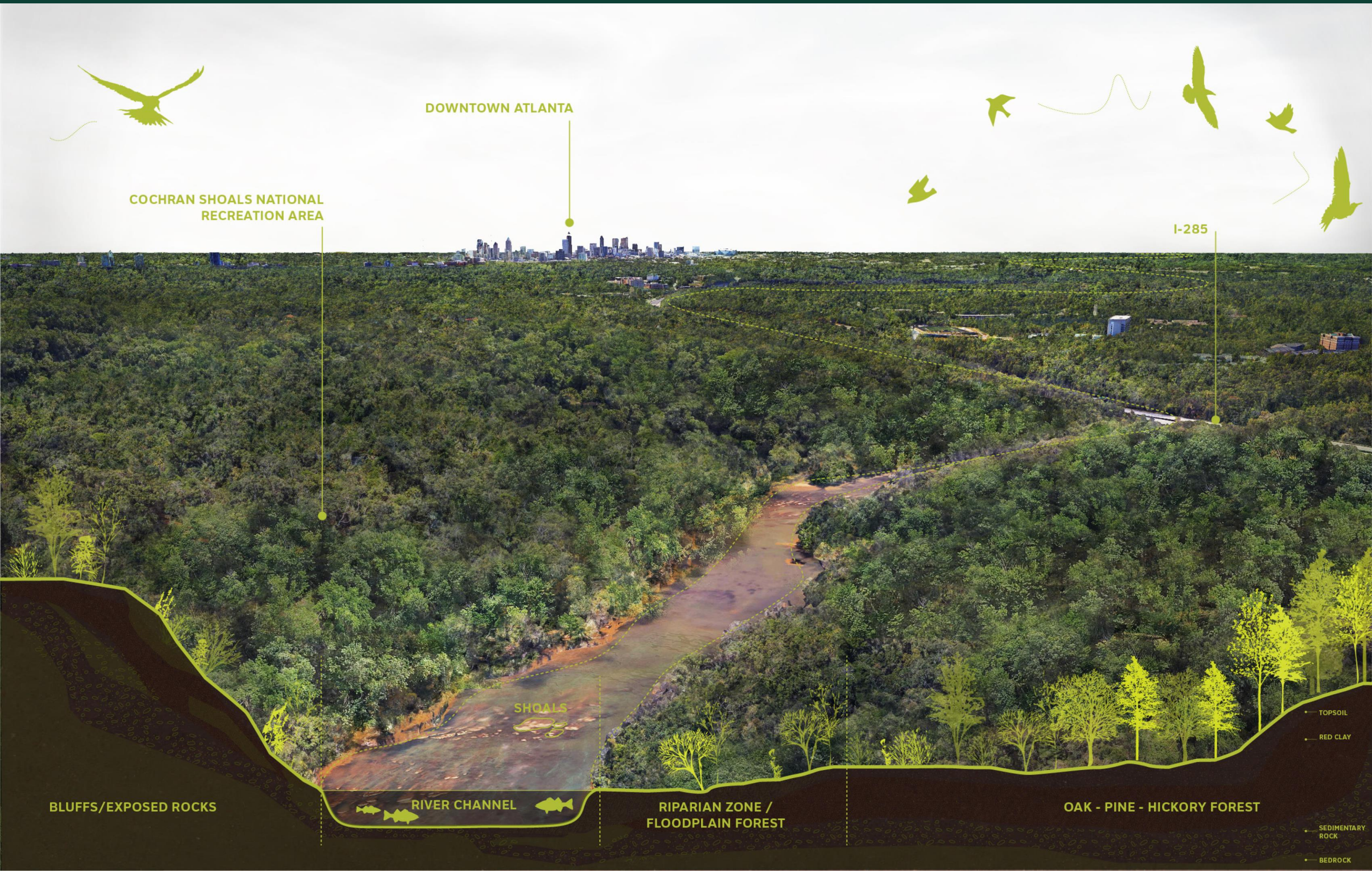
Dr. Na'Taki Osborne Jelks, MPH

Dr. Richard Milligan



# TASK 2: NEEDS ASSESSMENT

## FOUNDATION OF A DESIGN VISION





# TASK 2: NEEDS ASSESSMENT

## DATA & LOCAL STORIES TO INFORM GREENWAY PLANNING

### » HISTORICAL AND CULTURAL RESOURCES

History of human's interaction with the river and provides an inventory of historical remains of cultural significance.

### » ECOLOGY

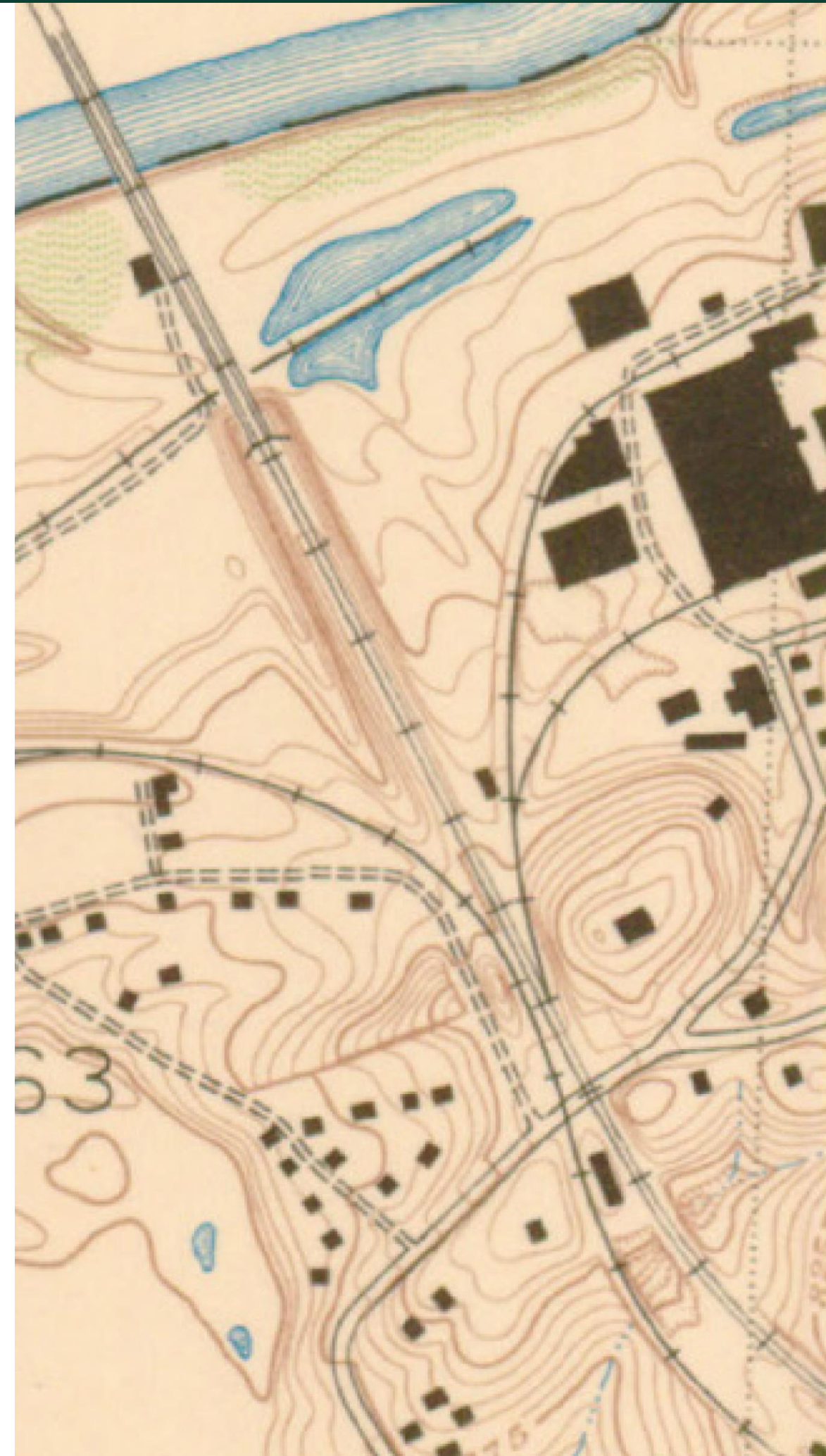
Overview of key environmental features and resources along the Chattahoochee river.

### » DEMOGRAPHICS

Inventory of demographics existing conditions using census data and looking at environmental justice indexes.

### » CONNECTIONS AND ACCESS

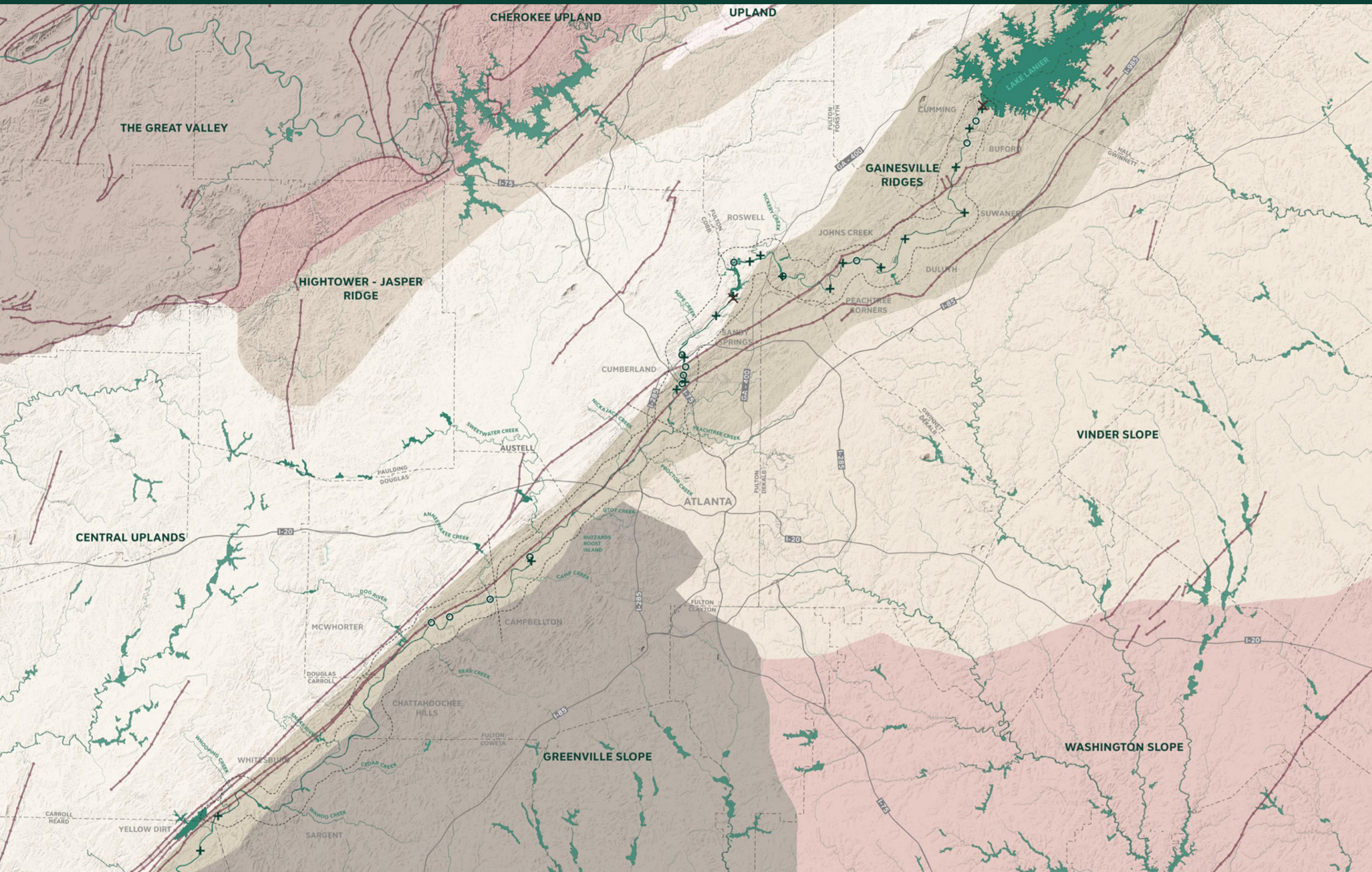
Understand the current transportation system, development patterns, and land uses.





# TASK 2: NEEDS ASSESSMENT

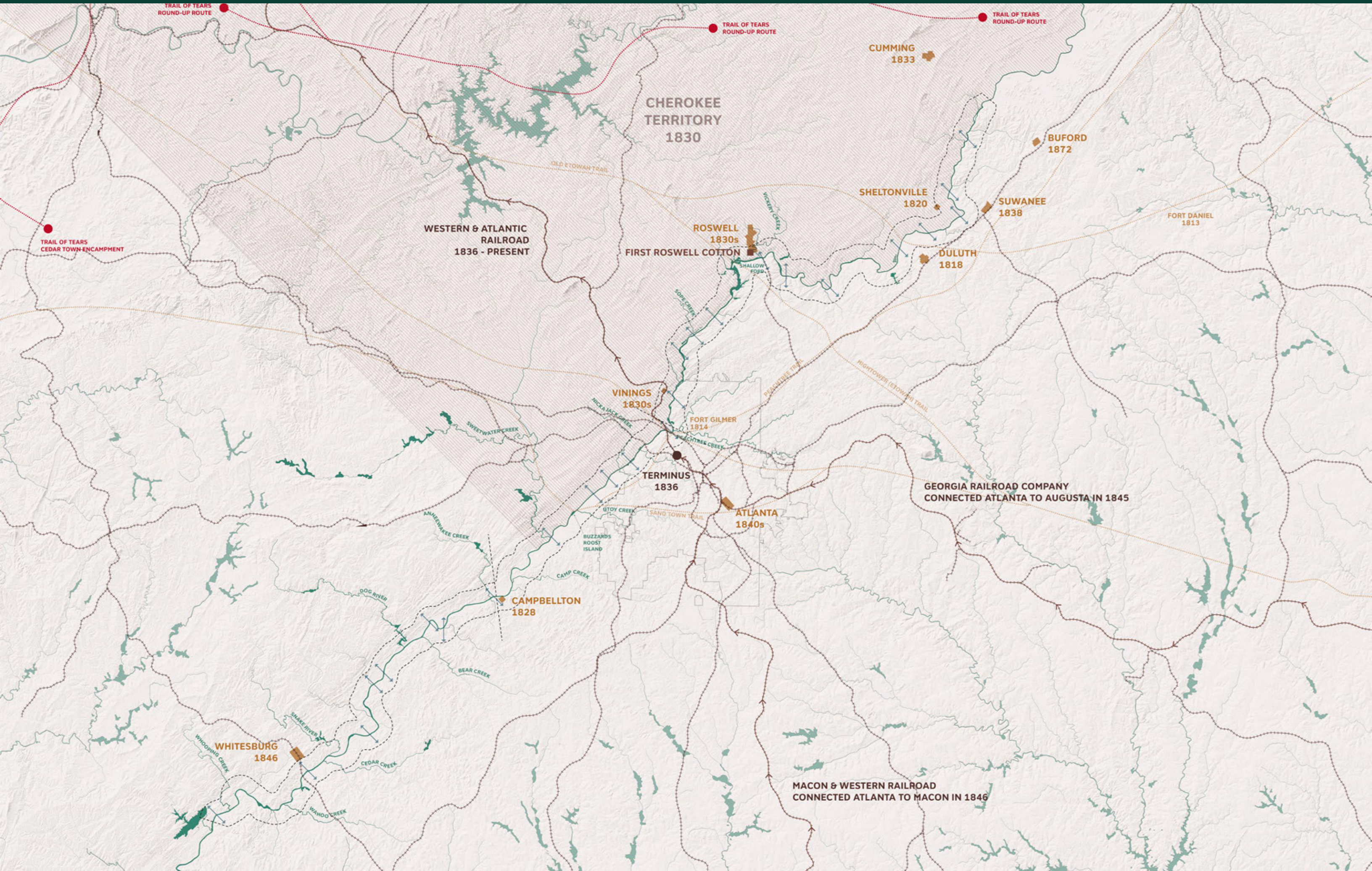
## GEOLOGIC PATTERNS DEFINE THE MODERN RIVER





# TASK 2: NEEDS ASSESSMENT

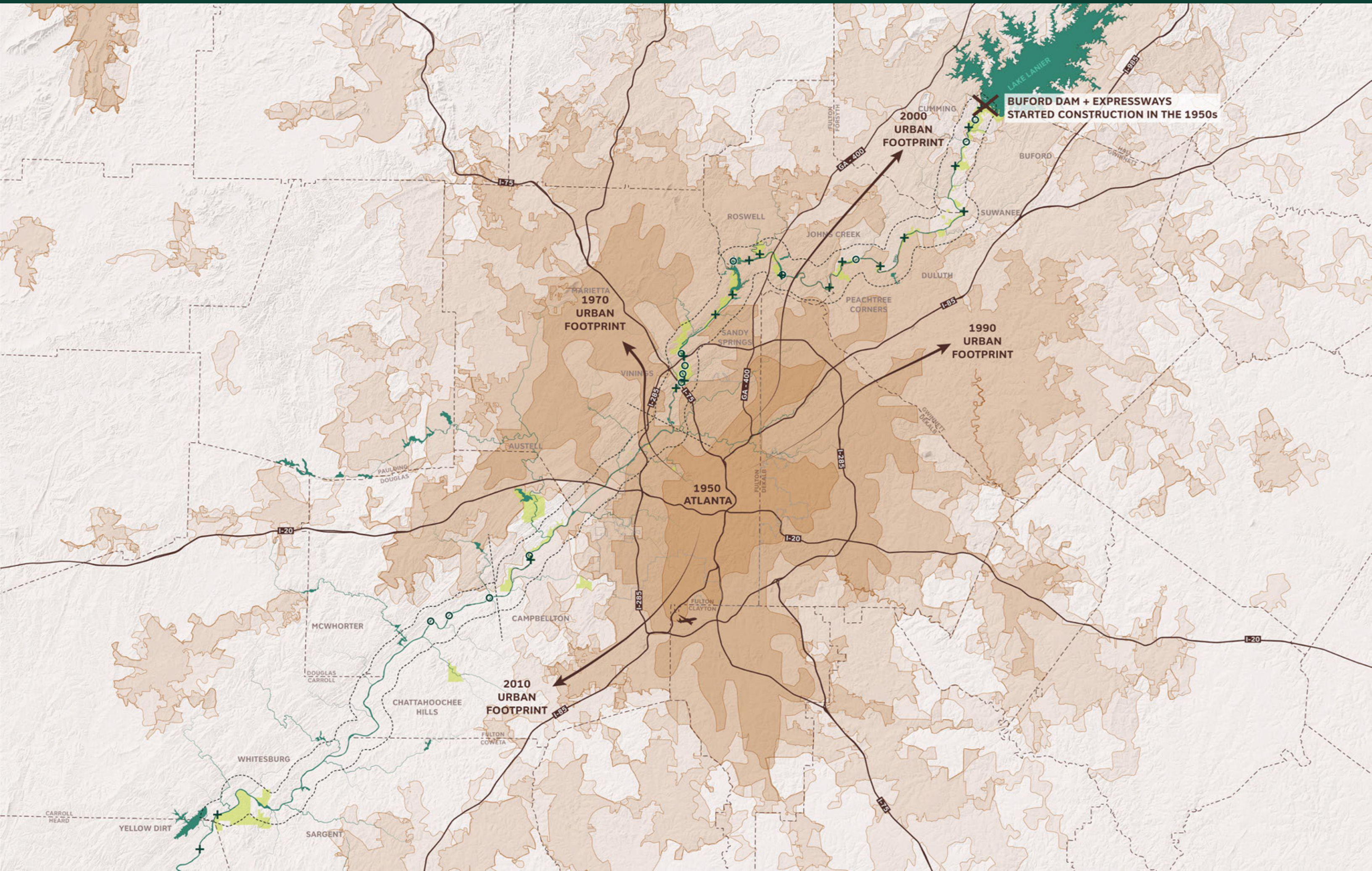
## 1800s – GROWTH OF GEORGIA AS A STATE





# TASK 2: NEEDS ASSESSMENT

## DECADES OF STEADY OUTWARD GROWTH





# TASK 2: NEEDS ASSESSMENT

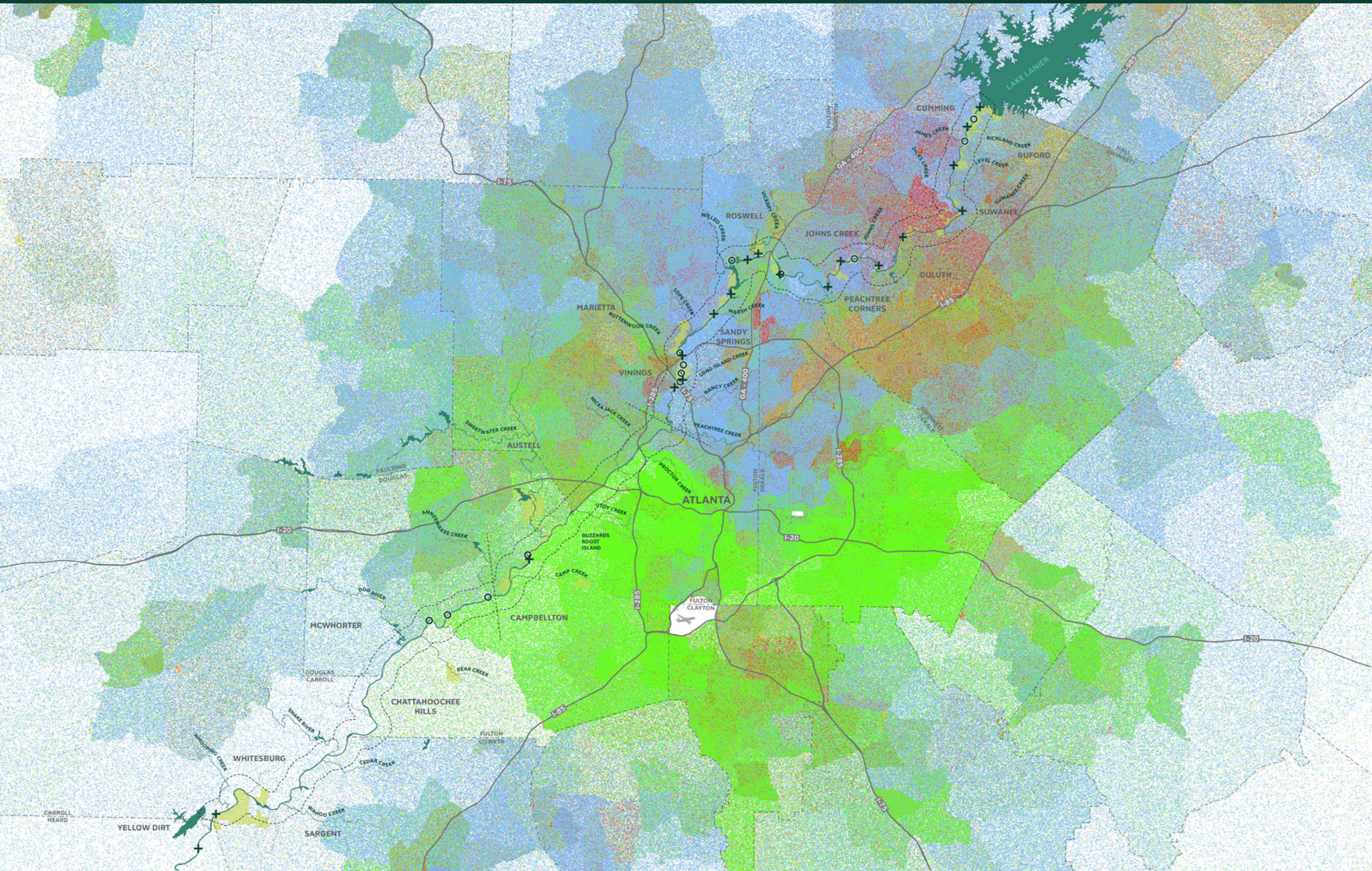
## IMPLICATIONS OF URBANIZATION ON THE LANDSCAPE





# TASK 2: NEEDS ASSESSMENT

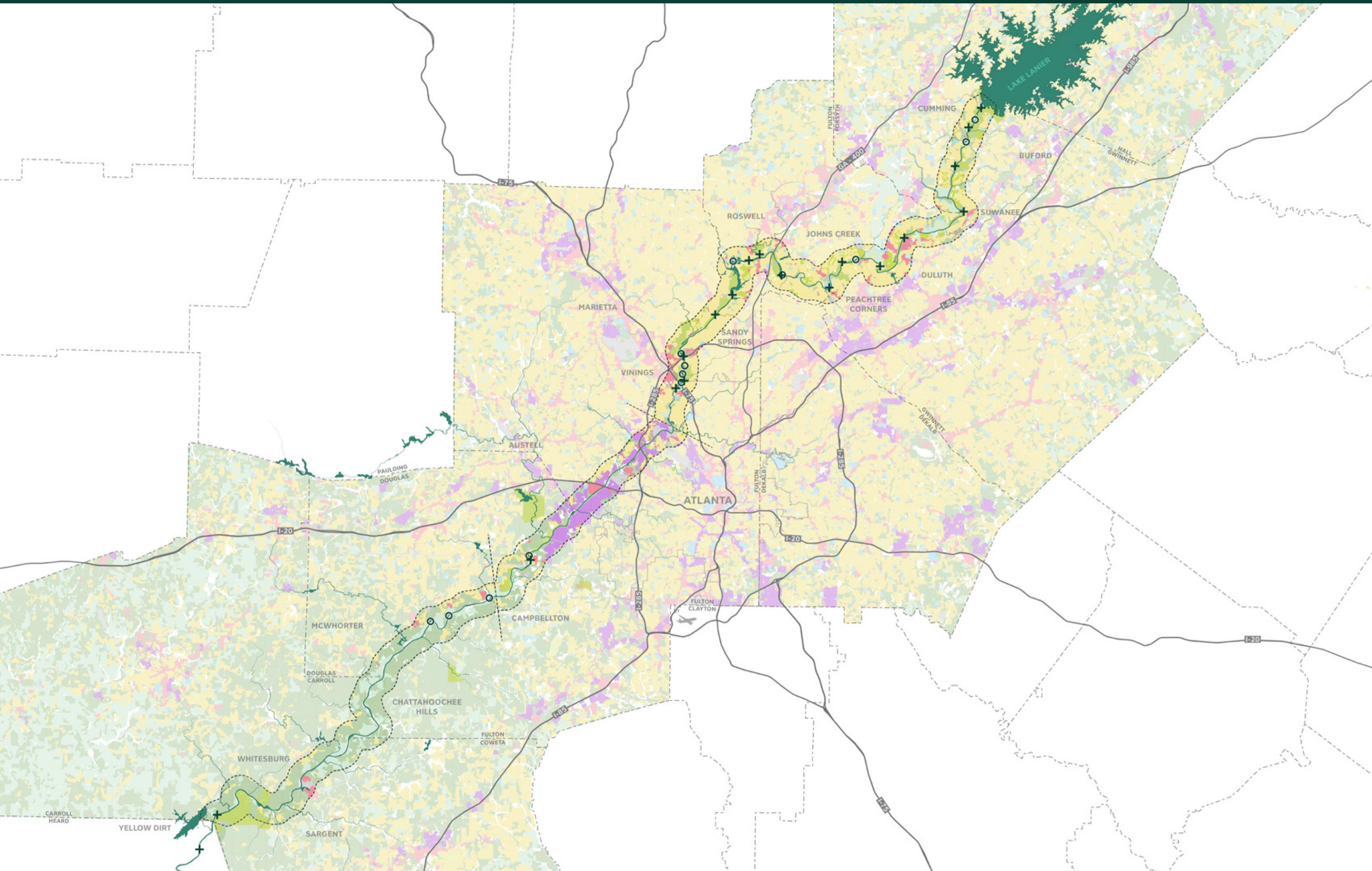
## RACE & ETHNICITY WITHIN A DIVERSE REGION





# TASK 2: NEEDS ASSESSMENT

## LAND COVER AND USE WITHIN A DIVERSE STUDY AREA



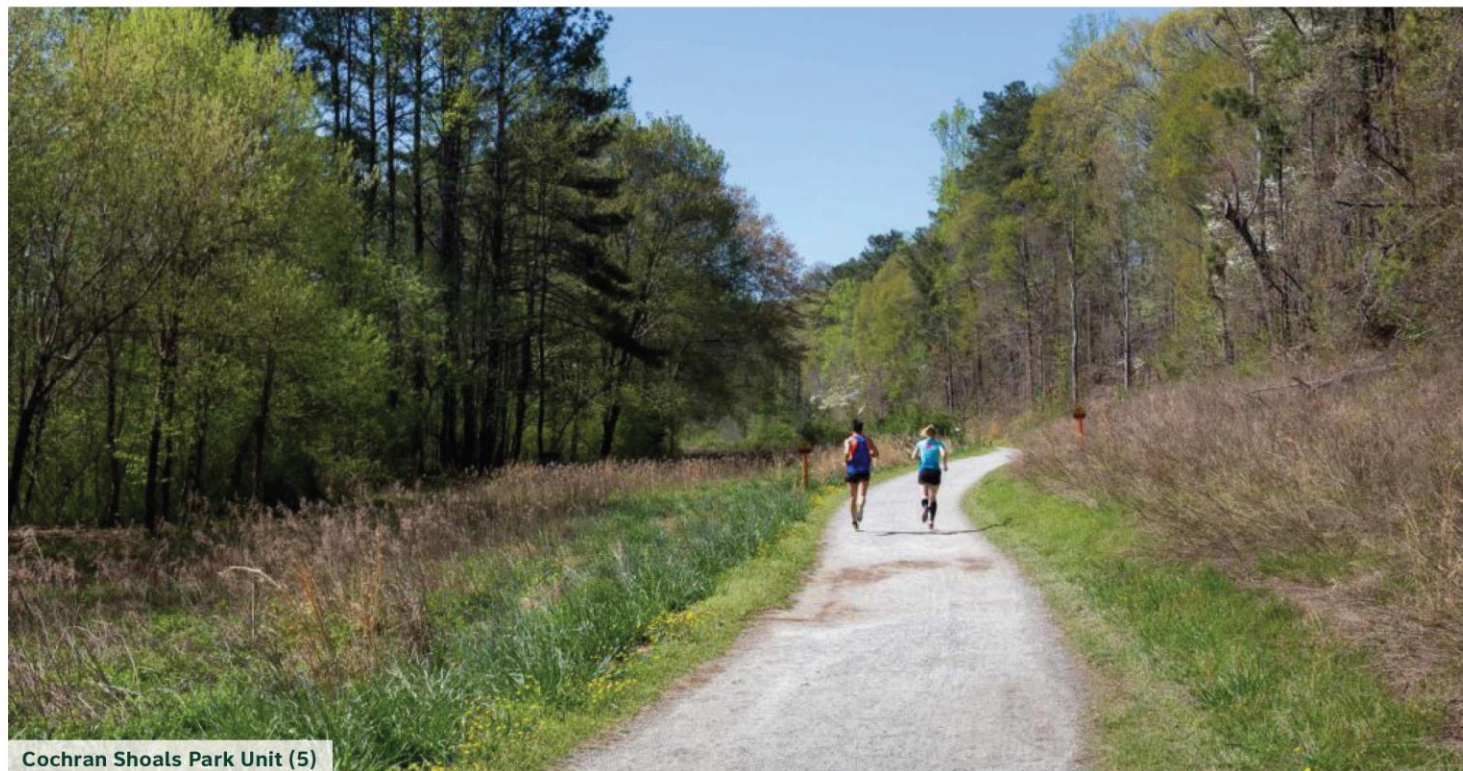


# TASK 2: NEEDS ASSESSMENT

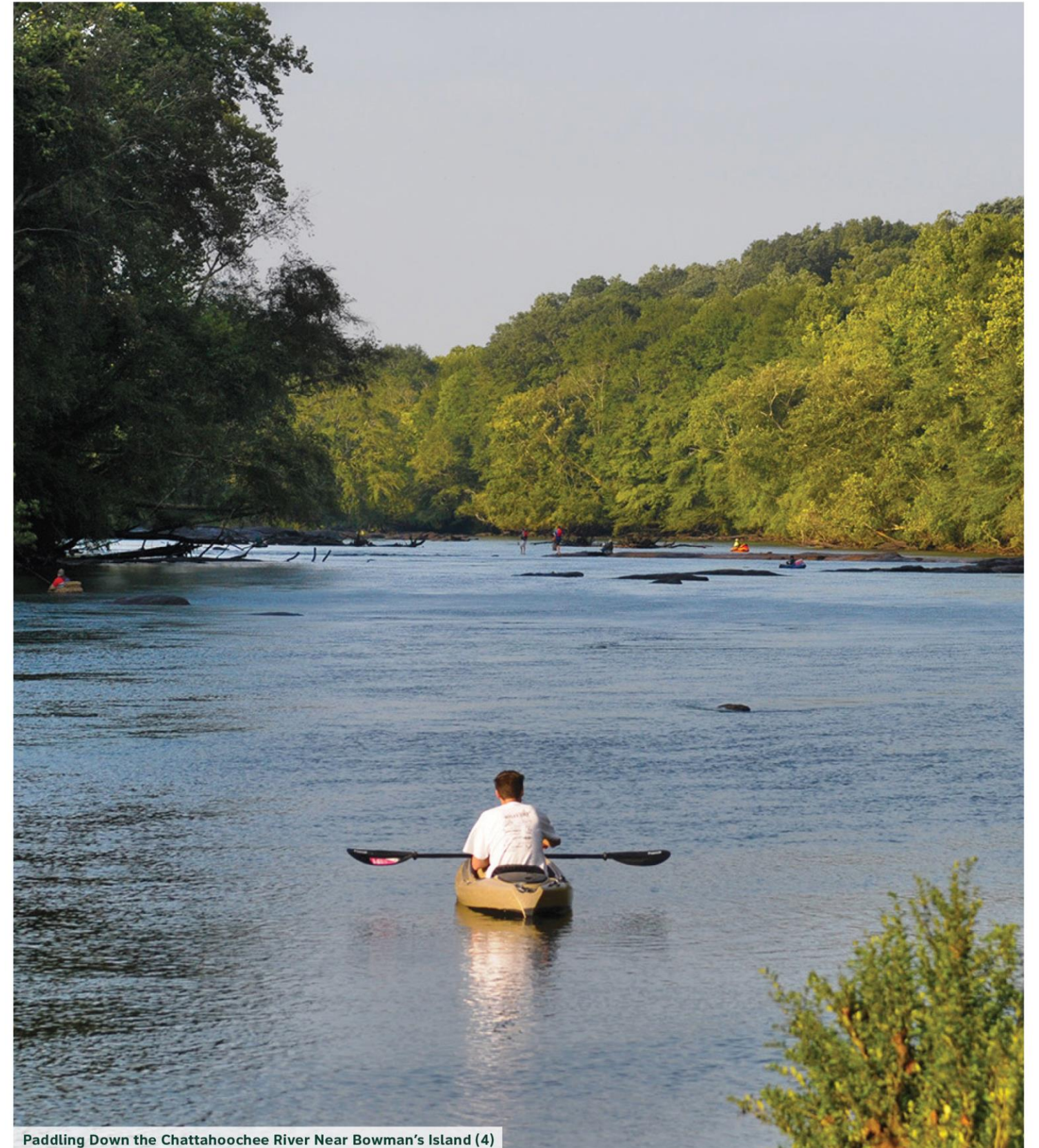
## VALUE OF THE RIVER AS A PUBLIC DESTINATION



Kids Fishing Day Near Peachtree Corners (3)



Cochran Shoals Park Unit (5)



Paddling Down the Chattahoochee River Near Bowman's Island (4)



# TASK 2: NEEDS ASSESSMENT

## REGIONAL PROTECTION FOR A LIMITED RESOURCE

### METROPOLITAN RIVER PROTECTION ACT

#### PROTECTING THE CHATTAHOOCHEE

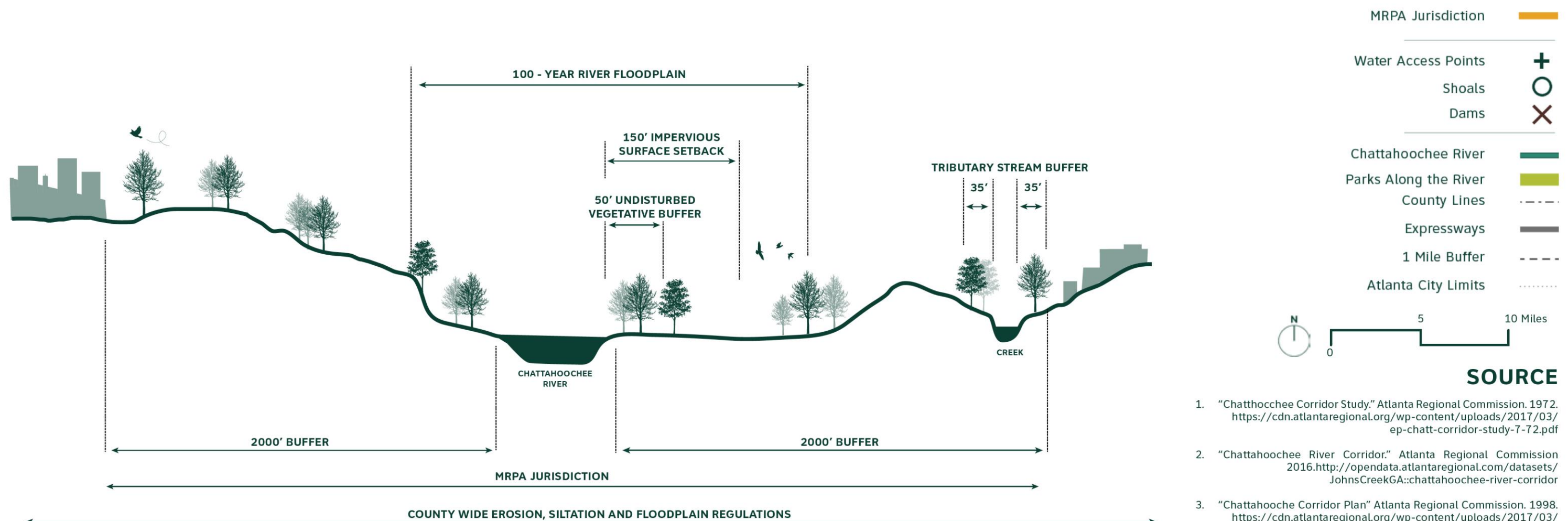
In 1972, the ARC completed the Chattahoochee Corridor Study to address growing debate over the future of the river. The following year, the Metropolitan River Protection Act (MRPA) was adopted, protecting a 48 mile stretch of river between Buford Dam and Peachtree Creek with a 2,000 ft buffer along each side of the river. The Act was amended in 1998 to extend the Corridor an additional 36 miles to the downstream limits of Fulton and Douglas counties.

The MRPA standards includes a 50 ft undisturbed vegetative buffer along the river, a 35 ft undisturbed vegetative buffer along streams in the corridor and a 150 ft impervious surface setback from the river.

In developing the standards for MRPA, the River Corridor Protection study developed a classification system for zones along the river based on soil erodibility, vegetation, hydrology, slope, flood plain and scenic views. From this land vulnerability maps were developed to be used as recommendations for future planning along the corridor. Land is classified by category A through F, from slight to severe vulnerability. Any land-disturbing activity must comply with the applicable rules pertaining to its classification type.

#### METROPOLITAN RIVER PROTECTION ACT CORRIDOR

A 48-mile stretch of the Chattahoochee between Buford Dam and Peachtree Creek establishing a 2,000 foot buffer along both banks of the river. The Act was amended in 1998 to extend the corridor 36 miles downstream to the limits of Fulton and Douglas counties.



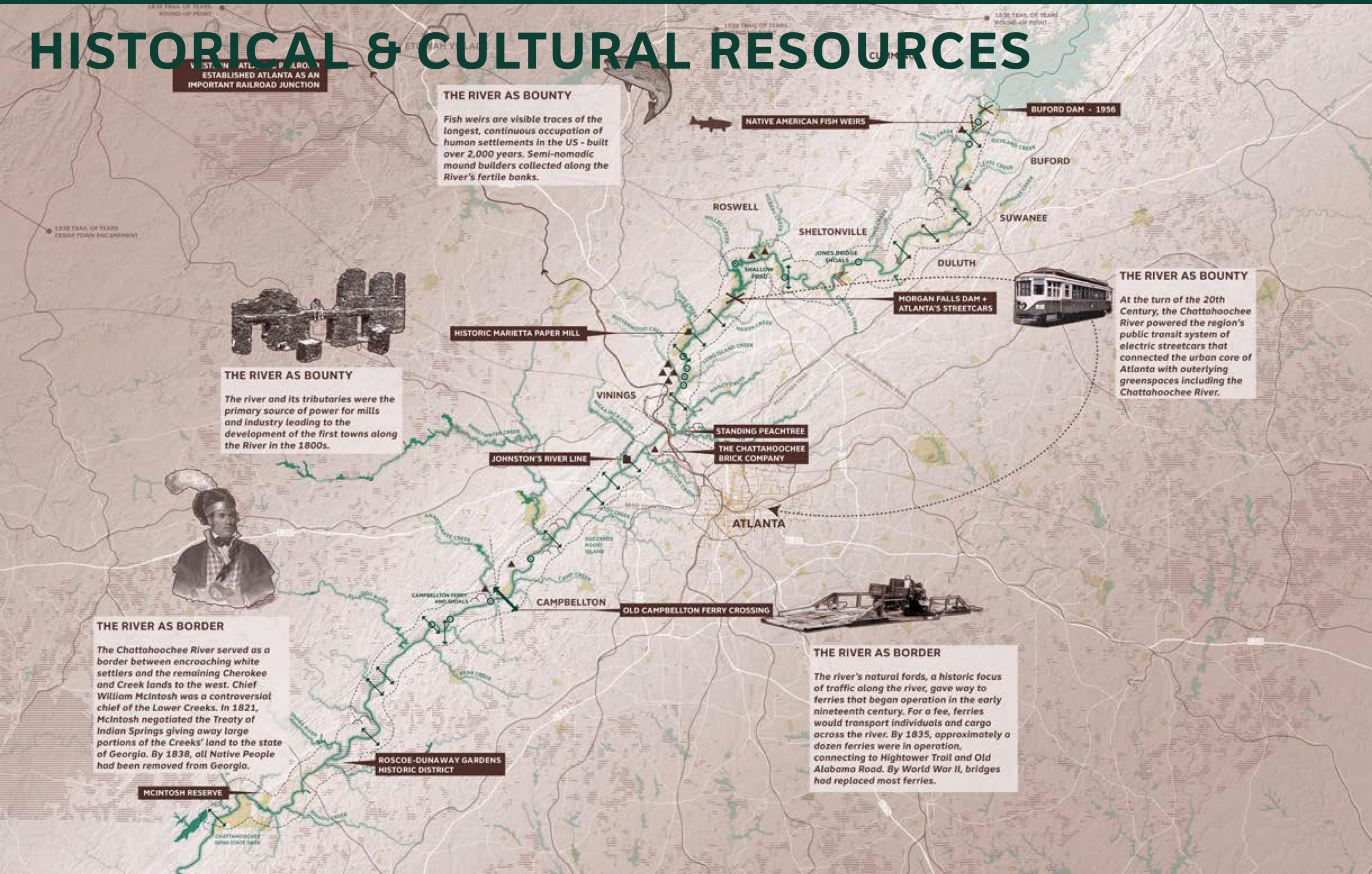
#### SOURCE

1. "Chattahoochee Corridor Study." Atlanta Regional Commission. 1972. <https://cdn.atlantaregional.org/wp-content/uploads/2017/03/ep-chatt-corridor-study-7-72.pdf>
2. "Chattahoochee River Corridor." Atlanta Regional Commission 2016. <http://opendata.atlantaregional.com/datasets/JohnsCreekGA:chattahoochee-river-corridor>
3. "Chattahoochee Corridor Plan" Atlanta Regional Commission. 1998. <https://cdn.atlantaregional.org/wp-content/uploads/2017/03/ep-corridor-plan.pdf>



# TASK 2: NEEDS ASSESSMENT SUMMARY

## HISTORICAL & CULTURAL RESOURCES





# TASK 2: NEEDS ASSESSMENT SUMMARY

## ECOLOGICAL RESOURCES

### A COSMOPOLITAN ECOLOGY

The Chattahoochee River supports a thriving recreational fishing economy and healthy populations of native and introduced species. The construction of Buford Dam in the 1950s created cold water conditions capable of supporting the most southern trout fishery in the United States. Rainbow trout are regularly stocked in the upper portion of the river, while brown trout stocking efforts have been so successful, they now have a self-sustaining population. Cooling of the river, combined with water quality issues, once devastated the native fish population. Water quality has since greatly improved in recent years and native species like shoal bass are being reintroduced through breeding and restocking programs.

### RAINBOW AND BROWN TROUT RANGE

The construction of Buford Dam cooled the river enough to support trout habitat in the upper reaches of the Chattahoochee. As the river flows downstream, it becomes increasingly warm, which confines the cold water fish to Sub Area 1 and 2.

### TROUT STOCKING

Rainbow are stocked in the upper river.

### BUFORD DAM

Cold water dam releases cool the upper portion of the river.

### MORGAN FALLS

Hot spot for bird watching and fishing.

### SHOAL BASS STOCKING

Shoal bass are stocked in Metro Atlanta.

### PROCTOR CREEK

CSD upgrades are improving the once heavily polluted creek.

### SWEETWATER CREEK

A healthy tributary with a large shoal bass population.

### SHOAL BASS RANGE

An endemic species, shoal bass were once present throughout the Chattahoochee but now only found in its tributaries. Recent restoration efforts have been made to bring the fish back to the river. As a warm water species, the barrier of Morgan Falls Dam combined with cooler water upstream, confines its reintroduction to Sub Area 2 and 3.

### ECOLOGY CONNECTIVITY

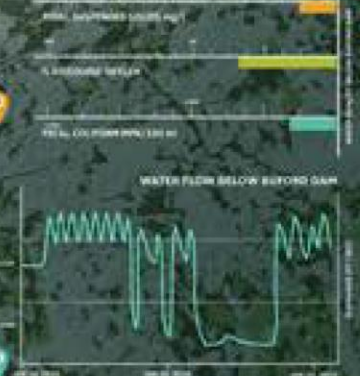
Sub Area-3 has large tracts of intact forests and national parks scattered along the river. The area provides an ecological corridor and connectivity along the river that extends to an even larger regional network. This area also contains some of the healthiest supporting tributaries of the Chattahoochee including Sweetwater Creek and Dog River. Tributary health is important for the overall health of the river.

### WATER QUALITY

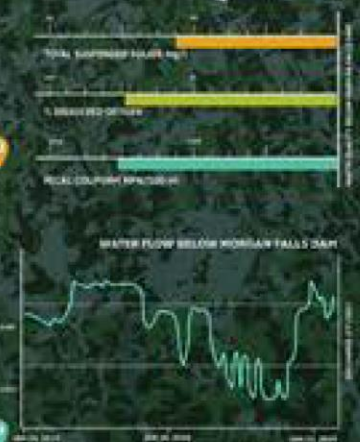
Water quality has significantly improved in recent years but the health of the Chattahoochee is largely dependent on the health of its tributaries. Water quality is impaired by the impacts of upstream urbanization, including runoff, sedimentation and disconnection of floodplains.

### WATER USE

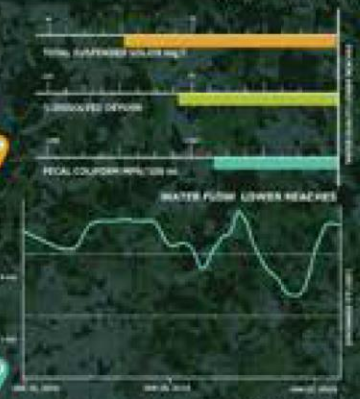
The Chattahoochee is a valuable resource. The river and Lake Lanier provide about 70% of metropolitan Atlanta's drinking water. As a relatively small river supporting a large population, the river is heavily relied upon by metropolitan Atlanta.



**SUB AREA 1**  
The intensity of suburban development in this area poses a barrier to ecological connectivity but cold water from Buford Dam has established a thriving trout fishery. The river water is relatively cold and clear but fluctuating and pulsing dam releases can destabilize aquatic habitat. It also impedes sediment transport and coalesces water runoff upstream.



**SUB AREA 2**  
Despite being the most urban Sub Area, there is still a wilderness around the river that provides recreational opportunities close to the city. The legacy of combined sewer overflows affect a cold water trout fishery but recent upgrades have significantly improved water quality. Morgan Falls Dam is a physical barrier for aquatic connectivity but has also become a hot spot for fishing and bird watching. It is the most highly connected portion of the river and supports a large metropolitan population.

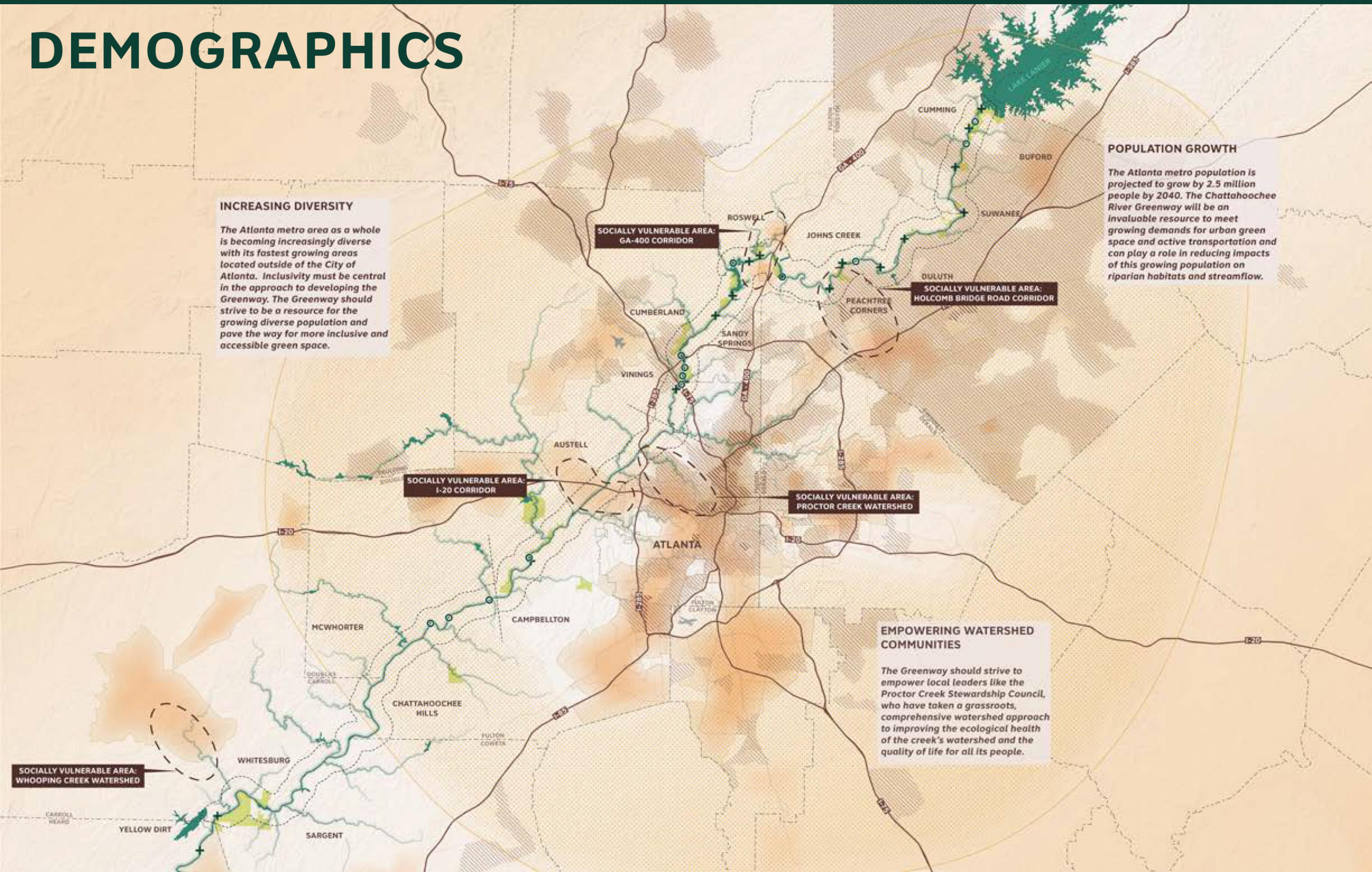


**SUB AREA 3**  
Sub Area 3 is the most rural of the sub areas. Ecological connectivity is high and there is significant intact forest habitat connecting to an even larger regional network further south. The distance from dams results in a more natural water flow but water quality is still heavily influenced by urbanization and upstream runoff.



## TASK 2: NEEDS ASSESSMENT SUMMARY

# DEMOGRAPHICS





# TASK 2: NEEDS ASSESSMENT SUMMARY

## CONNECTIONS & ACCESS



### SUB-AREA 1

The northern portion of river, north of Peachtree Creek, is dominated by a suburban fabric; low density residential housing and subdivisions. This area benefits from numerous water access points, as well as large parks encompassing a dense network of trails and multi-use paths. The presence of the Chattahoochee River National Recreation Area and its network of parks is a major asset for the greenway study but the land ownership patterns present challenges to communities that live further away from the river.



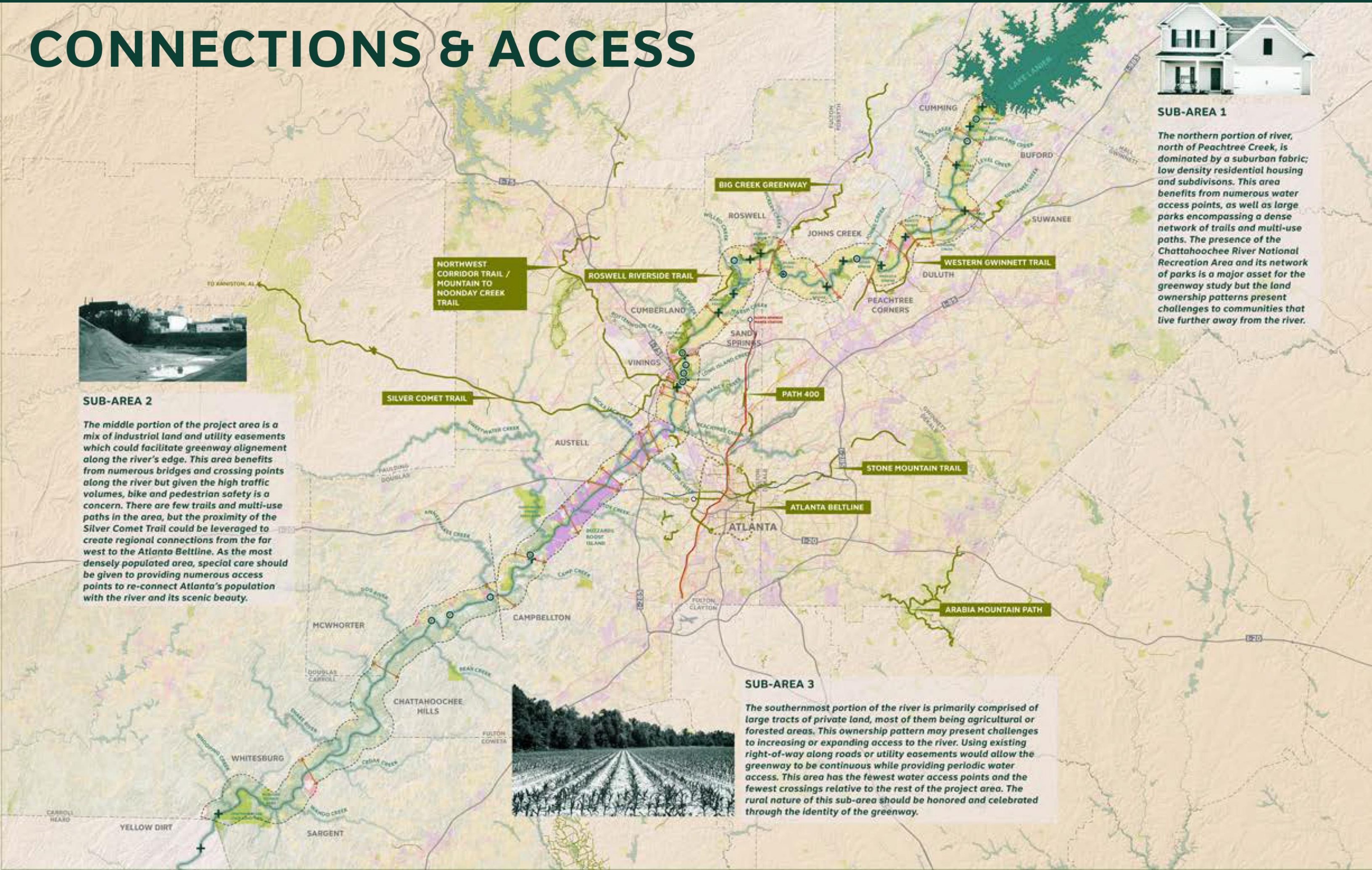
### SUB-AREA 2

The middle portion of the project area is a mix of industrial land and utility easements which could facilitate greenway alignment along the river's edge. This area benefits from numerous bridges and crossing points along the river but given the high traffic volumes, bike and pedestrian safety is a concern. There are few trails and multi-use paths in the area, but the proximity of the Silver Comet Trail could be leveraged to create regional connections from the far west to the Atlanta Beltline. As the most densely populated area, special care should be given to providing numerous access points to re-connect Atlanta's population with the river and its scenic beauty.



### SUB-AREA 3

The southernmost portion of the river is primarily comprised of large tracts of private land, most of them being agricultural or forested areas. This ownership pattern may present challenges to increasing or expanding access to the river. Using existing right-of-way along roads or utility easements would allow the greenway to be continuous while providing periodic water access. This area has the fewest water access points and the fewest crossings relative to the rest of the project area. The rural nature of this sub-area should be honored and celebrated through the identity of the greenway.





# TASK 3: CONCEPT & VISION

## QUESTIONS FOR PLANNING, DESIGN, & PUBLIC INPUT

- » Should the greenway prioritize access or conservation?
- » Could the greenway not only “do no harm” but actually improve ecological connectivity or restore habitat?
- » Should access points be distributed equally along the length of the river?
- » Who are the target users of the greenway?
- » What areas need access to open space the most?
- » Should the greenway incentivize economic development?
- » How can the greenway project avoid displacing socially vulnerable communities in this process?
- » Should it be a nature experience or have an active recreational feel?

