COMBINED STATEMENT OF FINDINGS FOR FLOODPLAINS AND WETLANDS

1) SR 9 from SR 120 to the Chattahoochee River,

2) Mitigation Trails for the SR 9 from SR 120 to the Chattahoochee River Project, and

3) SR 9 Pedestrian Bridge and Multi-Use Trail

Fulton County, Georgia

For

Chattahoochee River National Recreation Area

August 2018

Recommended:

_____ _____

Bill Cox, Superintendent — Date
Chattahoochee River National Recreation Area

Certified for Technical Accuracy and Servicewide Consistency:

_____ _____

Forrest Harvey, Chief, Water Resources Division — Date

Approved:

_____ _____

Robert Vogel, Southeast Regional Director — Date

1. Introduction

Executive Order (EO) 11988, *Floodplain Management*, requires federal agencies such as the National Park Service (NPS) and other agencies to evaluate the potential impacts of actions in floodplains. Executive Order 11990, *Protection of Wetlands* requires federal agencies, including the NPS, to minimize the destruction, loss, or degradation of wetlands, preserve and enhance the natural and beneficial values of wetlands, and avoid direct or indirect support of new construction in wetlands unless there are no practicable alternatives and the proposed action includes all practicable measures to minimize harm to wetlands. This Combined Statement of Findings (SOF) for Floodplains and Wetlands has been prepared in compliance with EO 11988 and EO 11990, and in general accordance with the outline presented in the *National Park Service Procedural Manual 77-2: Floodplain Management* (NPS 2011) and *NPS Procedural Manual 77-1Wetland Protection* (Reissued June 2016).

Three projects are discussed in this SOF; 1) SR 9 between SR 120 and the Chattahoochee River (i.e., Historic Roswell Gateway), 2) trail mitigation related to the SR 9 between SR 120 and the Chattahoochee River project (i.e., Mitigation Trails), and 3) SR 9 Pedestrian Bridge and Multi-Use Trail (i.e., SR 9 Pedestrian Bridge). Each project has separate funding and construction schedules. However, all three projects are located adjacent to or impact the Chattahoochee River National Recreation Area (CRNRA). Therefore, all three projects have been included in one SOF document. In each section of the SOF the projects are discussed separately under the following headings;

- Historic Roswell Gateway
- Mitigation Trails
- SR 9 Pedestrian Bridge

2. Project Area Description

All three projects are located in an area consisting of single and multi-family development, commercial property, and recreational use areas. Figure 1 depicts the locations of all three projects.

Historic Roswell Gateway

Adjacent land use to the project area includes single family and apartment home complexes on the west side of the corridor and Vickery Creek Unit on the east side of the corridor, on the south end of the project. On the north end of the project commercial properties, churches, retail, and restaurants are located on both sides of the corridor. South of the project, in addition to Vickery Creek Unit, other recreational uses include the Chattahoochee River, Riverside Park, Azalea Park, and Riverwalk Multi-Use Trail.

Mitigation Trails

The area proposed for mitigation trails associated with a Highway Easement Deed is entirely within the boundary of the Vickery Creek Unit. The exact location and length of trails are being developed, but the proposed new trails would be within an area bound by SR 9 to the west, Big Creek to the east, and the Chattahoochee River to the south.

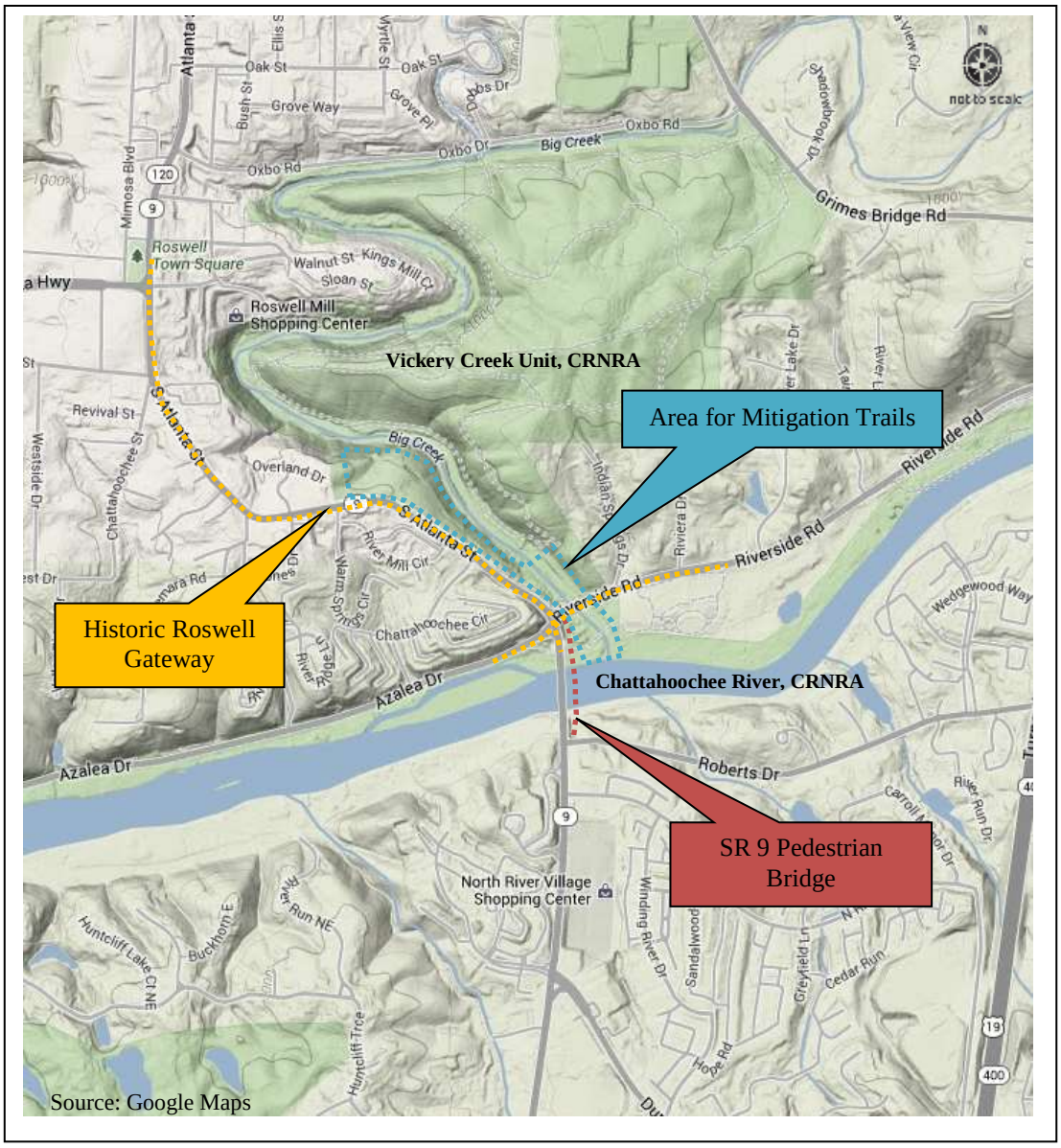


Figure 1 – Project Location

SR 9 Pedestrian Bridge

In the vicinity of the proposed project the Vickery Creek Unit is adjacent to the east side of SR 9 and north of Riverside Road. Vickery Creek Unit consists of several miles of unpaved hiking trails. The park is heavily wooded, with the only improvements being the hiking trails, an access driveway from Riverside Road, and a parking lot with information billboards.

The SR 9 pedestrian bridge would cross the Chattahoochee River, managed as part of the CRNRA. The river provides recreational opportunities such as fishing, rafting, canoeing, kayaking, and paddle boarding. A boat launch is located west of the project areas and the SR 9 bridge. The Chattahoochee River in the project area is bordered on its north side by Riverside Park, a local recreational facility

managed by the City of Roswell. The south side of the river is bordered by single family homes and undeveloped wooded buffer consisting of various pine and mixed hardwood species.

3. Proposed Actions

Historic Roswell Gateway

This proposed project would remove the existing three-lane reversible system along SR 9 between Riverside Road/Azalea Drive and SR 120/Marietta Highway. This section of SR 9 would be widened to a four-lane divided roadway which would connect to the existing four-lane sections south of Riverside Road/Azalea Drive and north of SR 120/Marietta Highway. The total project length is approximately 1.5 miles.

The proposed project would include roundabouts on SR 9 at the intersections with Jones Drive and with Chattahoochee Street/King Street/Neel Reid Drive, and on Riverside Road at Azalea Drive/Indian Springs Drive/proposed Riverside Connector. The project would grade-separate the intersection of SR 9 over Riverside Road/Azalea Drive and also replace the deficient bridge on Riverside Road over Big Creek with two new bridges. The proposed project would extend Azalea Drive east under SR 9 and over Big Creek to the Riverside Road/Azalea Drive/Indian Springs Drive roundabout. A new roadway, the Riverside Connector, would be constructed just north of and parallel to the proposed Azalea Drive extension and would include a separate new bridge over Big Creek.

The proposed typical section for SR 9 between the Riverside Road/Azalea Drive and Warm Springs Circle intersections would include four 11-foot travel lanes (two in each direction) with a 20-foot raised median. A 10-foot wide multi-use trail would be constructed along the east side of SR 9 and would include a seven-foot grassed buffer (from the back of curb and gutter to the sidewalk) and a one-foot buffer strip along the trail's outer edge. The proposed typical section for SR 9 between Warm Springs Circle and SR 120 would include four 11-foot travel lanes (two in each direction) with a seven-foot raised median. Eight-foot wide continuous sidewalks would be constructed on both sides of SR 9 and would include a varied two to eight-foot grassed buffer (from the back of curb and gutter to the sidewalk) and a one-foot buffer strip along the sidewalk's outer edge. The proposed right-of-way along SR 9 would vary between 80 to 186 feet.

The proposed typical section for Riverside Road/Azalea Drive would include two 11-foot travel lanes with an eight-foot shoulder, two feet of which would be paved. The Riverside Connector would include a total of three 11-foot travel lanes, consisting of two westbound lanes and one eastbound lane between SR 9 and the east end of the Big Creek bridge and changing to one westbound lane and two eastbound lanes approaching the Riverside Road/Azalea Drive/Indian Springs Drive roundabout. An eight-foot wide sidewalk would be constructed along the eastbound lane of the Riverside Connector to the proposed Riverside Road/Azalea Drive/Indian Springs Drive roundabout.

As a result of these proposed actions, land from within the Vickery Creek Unit of the CRNRA would be required to complete the project. These areas include 1.2633 acres of right-of-way, 1.328 acres of permanent easement to construct and maintain road features and retaining walls, 0.0287 acre of temporary easement needed to construct the project, and 0.2936 acre of temporary driveway easement at Allenbrook to improve the existing drive and tie it back into proposed improvements on SR 9. Permission to use this area within the CRNRA would require a federal action through issuance of a Highway Easement Deed by the NPS to the Georgia Department of Transportation (GDOT).

The purpose of the project is to address current deficiencies in the system that include traffic congestion, safety, bridge deficiency, and lack of pedestrian facilities and connectivity along the existing reversible lanes segment of the SR 9 corridor.

Mitigation Trails

As a requirement for issuance of the Highway Easement Deed for impacts to NPS land as part of the Historic Roswell Gateway project, mitigation is proposed to offset the impacts. The proposed mitigation includes a number of proposed actions for the Vickery Creek Unit including construction of new trails, upgrading existing trails, and entrance improvements.

The proposed trails would be four to six feet wide and utilize natural surface material. Boardwalk may be included to protect sensitive soils or wetlands. Signage may also be included with the new or improved trails. The existing entrance to Vickery Creek Unit from Riverside Road would be removed and replaced with native vegetation and a new trailhead and entrance sign. Improvements would also occur to the existing access for the Historic Allenbrook House. The current access from SR 9 would be closed and replaced with native vegetation, a new trailhead, and signage. A replacement parking lot would be constructed at a location away from the Historic Allenbrook House, and a new trail connecting the parking lot to the Historic Allenbrook House would be constructed. Finally, a Cultural Landscape Inventory would be completed to accurately inventory, map, and assess all features associated with the Ivy Mill site so as to support its long-term preservation.

SR 9 Pedestrian Bridge

The CRNRA would undertake a federal action in issuing a Special-Use Permit to GDOT to construct a 674-foot long pedestrian bridge across the Chattahoochee River between the cities of Roswell and Sandy Springs. The pedestrian bridge would support a multi-use trail and be constructed adjacent to, but detached from, the SR 9 road bridge. The trail would vary in width from 10 to 20 feet, with the 10-foot width on the north end of the project to connect to existing sidewalks. The 20-foot widths are refuge areas that would bulb out from the trail to allow pedestrians a place to stop and rest, and enjoy the river scenery out of the path of more active users along the trail. The approach sections to the bridge would be constructed on fill, with a concrete retaining wall and stamped stone finish facing. The limits of the project would be Riverside Road on the north and Roberts Drive on the south.

The pedestrian bridge would be located adjacent to the Vickery Creek Unit, but would not be located within its boundary. Bridge construction would require placement of six support piers within the Chattahoochee River. Additionally, temporary rock jetties would be required to support cranes necessary for construction. Two rock jetties would be constructed, one from each side of the river. The jetty placement would be phased so that only one jetty is within the river at a time. The rock jetties would be removed after approximately 18 months.

The existing SR 9 bridge is currently the only available option for pedestrian to cross the river at this location. The bridge does not contain features to support safe pedestrian crossing, such as dedicated bike lanes or sidewalks separated from the traveled roadway by distance or vegetated buffer.

The purpose of the proposed project is to provide a safe alternative for pedestrians to cross the Chattahoochee River, connecting existing pedestrian facilities on both sides and improving access to recreational and entertainment opportunities, business offices, and residential areas within the communities of Roswell and Sandy Springs. Multi-use trails, playgrounds, a boat ramp, and rafting and rowing opportunities can be found within Riverside Park on the north side of the river. The Vickery

Creek Unit of the CRNRA is also located on the north side of the river, northeast of SR 9. Business parks, restaurants, and shopping can be accessed from existing sidewalks on the south side of the river.

3.1 No Action Alternative

Historic Roswell Gateway

If the No Action Alternative were selected for the Historic Roswell Gateway no roadway or pedestrian improvements would occur to improve operational efficiency along SR 9 or at the intersection of SR 9 and Riverside Road/Azalea Drive. With the No Action Alternative, no wetlands or floodplains would be disturbed. No land from within the CRNRA would be required for construction.

Mitigation Trails

With the No Action Alternative for the Historic Roswell Gateway project, no land would be required from within the CRNRA for construction of the project, and therefore no Mitigation Trails would be necessary.

SR 9 Pedestrian Bridge

Under the No Action Alternative, the proposed trail and bridge would not be constructed and no wetlands would be disturbed. There would be no safe alternative to crossing the Chattahoochee River to connect residential areas and recreational opportunities on both sides of the river.

4. Floodplains

In general, floodplains can offer several valuable functions including flood storage and retention, groundwater recharge, nutrient removal, and wildlife habitat. The amount of natural vegetation cover present within a floodplain determines the degree of retention or effective function a floodplain can provide. The more vegetation that is present within the floodplain, the better the floodplain can protect the surrounding area from soil erosion, floodwater expanse, and strong water movements. The ecological value of a floodplain also increases when it is heavily vegetated because it provides more suitable habitat for wildlife.

The Chattahoochee River within the CRNRA flows along the Brevard Fault within the Gainesville Ridges District. This district is characterized by a series of northeast-trending, low, linear, parallel ridges separated by narrow valleys, which drives the localized surface water hydrology of the Chattahoochee River watershed. Flooding is controlled somewhat through releases from Buford Dam by the US Army Corps of Engineers (USACE). However, during heavy rainfall events over short periods of time, flooding is more likely downstream of the dam as a result of the narrow corridor created by geologic features described previously. In addition, urban sprawl along much of the river has increased impervious surfaces in the watershed, contributing to the frequency and height of floodplain overflows.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Fulton County, Georgia (Panel No. 13121C0063G), dated September 18, 2013 was referenced for floodplain information for all three projects.

Historic Roswell Gateway

The proposed project is within or adjacent to floodplains associated with Big Creek and the Chattahoochee River (see Figure 2). Within the area for construction of the proposed project, tree stratum consists of 25 to 80 year old species including green ash (*Fraxinus pennsylvanica*), box elder (*Acer negundo*), red maple (*Acer rubrum*), river birch (*Betula nigra*), sycamore (*Platanus occidentalis*), water oak (*Quercus nigra*), willow oak (*Quercus phellos*), iron wood (*Carpinus caroliniana*), black walnut (*Juglans nigra*), black willow (*Salix nigra*), and sugarberry (*Celtis laevigata*).

The understory consists of saplings of the canopy species as well as elderberry (*Sambucus canadensis*), Carolina laurel cherry (*Prunus caroliniana*), and red mulberry (*Morus rubra*).

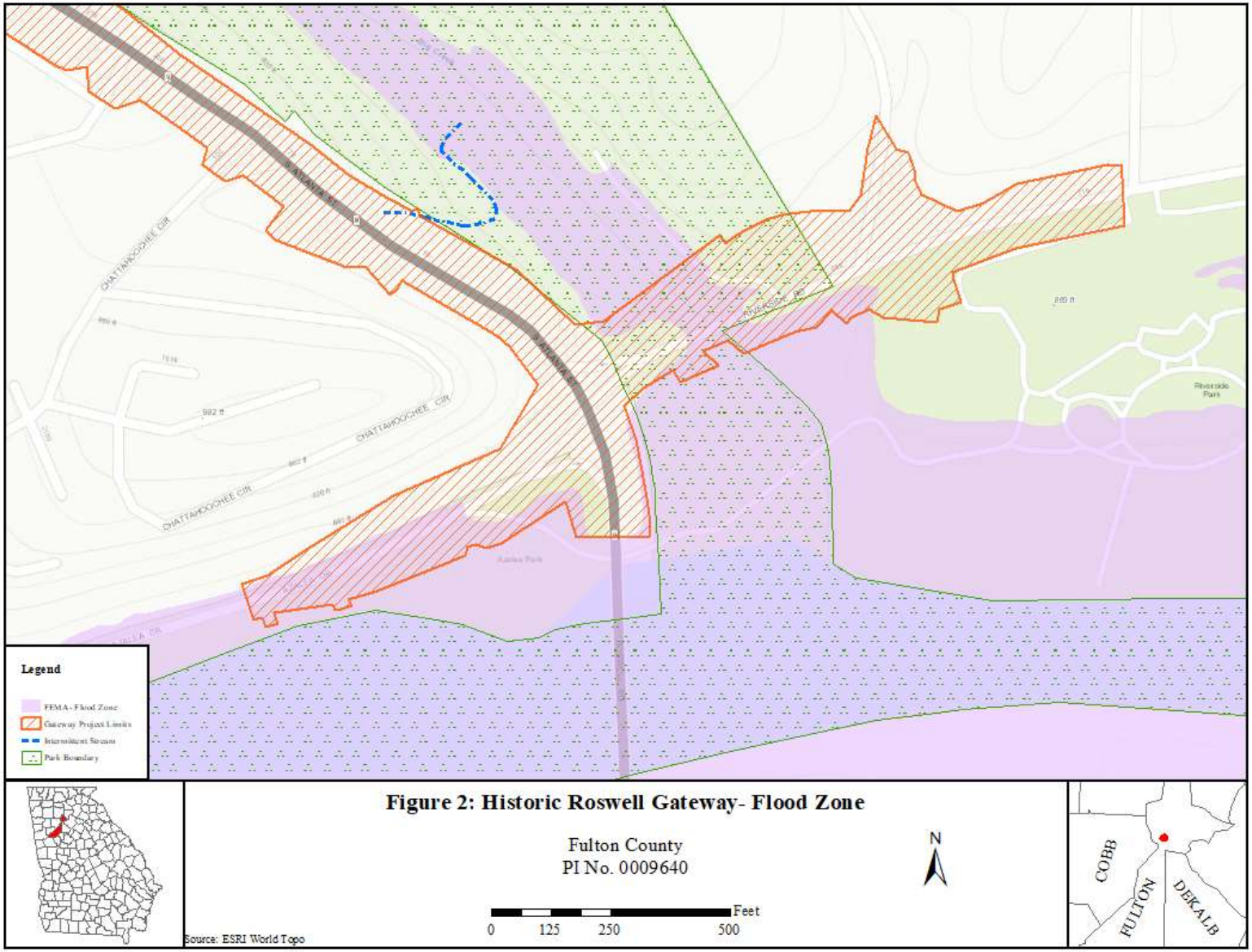
The herbaceous vegetation was fairly dense, especially in sunny locations, and consisted primarily of arrowleaf tearthumb (*Polygonum sagittatum*), swamp smartweed (*Polygonum hydropiperoides*), woolly rosette grass (*Dichanthelium scabriusculum*), Virginia wild rye (*Elymus virginicus*), calico aster (*Symphyotrichum lateriflorum*), greater bladder sedge (*Carex intumescens*), three-way sedge (*Dulichium arundinaceum*), hairy leafcup (*Smallanthus uvedalius*), pokeweed (*Phytolacca americana*), jewelweed (*Impatiens capensis*), common boneset (*Eupatorium perfoliatum*), soft rush (*Juncus effusus*), and river oats (*Chasmanthium latifolium*).

In addition to the native vegetation observed, there was also a significant amount of non-native invasive species within the area such as Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), leatherleaf mahonia (*Mahonia bealei*), mimosa (*Albizia julibrissin*), kudzu (*Pueraria montana*), thorn olive (*Elaeagnus pungens*), multiflora rose (*Rosa multiflora*), Chinese holly (*Ilex cornuta*), Chinese wisteria (*Wisteria sinensis*), English ivy (*Hedera helix*), Japanese stilt grass (*Microstegium vimineum*), and monkey grass (*Liriope muscari*).

As a result of density and diversity of plant species and visible signs of various terrestrial mammal, reptile and bird species, the primary function of floodplains within the Historic Roswell Gateway project area is wildlife foraging and cover habitat, with a minor function being flood attenuation.

Mitigation Trails

Two of the proposed areas for trail mitigation are located within the 100-year floodplain (FEMA zone AE) of Big Creek (see Figure 3). The first floodplain area is comprised of a sandy loamy clay substrate and consists of an overstory of river birch (*Betula nigra*), box elder (*Acer negundo*), water oak (*Quercus nigra*), red maple (*Acer rubrum*), a midstory of Chinese privet (*Ligustrum sinense*), tulip tree saplings, (*Liriodendron tulipifera*) and an understory of pokeweed (*Phytolacca americana*), false nettle (*Boehmeria cylindrica*), trumpet creeper (*Campsis radicans*), poison ivy, (*Toxicodendron radicans)*, Japanese honeysuckle (*Lonicera japonica*), greenbrier (*Smilax rotundifolia*), Virginia creeper (*Parthenocissus cinquefolia*), *Rubus spp*., and English ivy (*Hedera helix*). The second floodplain is comprised of a sandy substrate and exhibits an abundance of Chinese privet (*Ligustrum sinense*) and several old growth hardwoods with an overstory of river birch (*Betula nigra*), box elder (*Acer negundo*), black walnut (*Juglans nigra*), sweetgum (*Liquidambar styraciflua*), basswood (*Tilia heretophylla*), a midstory of Chinese privet (*Ligustrum sinense*), pokeweed (*Phytolacca americana*), American hornbeam (*Carpinus caroliniana*), and an understory of Virginia creeper (*Parthenocissus cinquefolia*), sensitive fern (*Onoclea sensibilis*), *Rubus spp*., and muscadine (*Vitis rotundifolia*).


Legend
FEMA - Flood Zone
Gateway Project Limits
Intermittent Stream
Park Boundary
Figure 2: Historic Roswell Gateway- Flood Zone
Fulton County
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Source: ESRI World Topo
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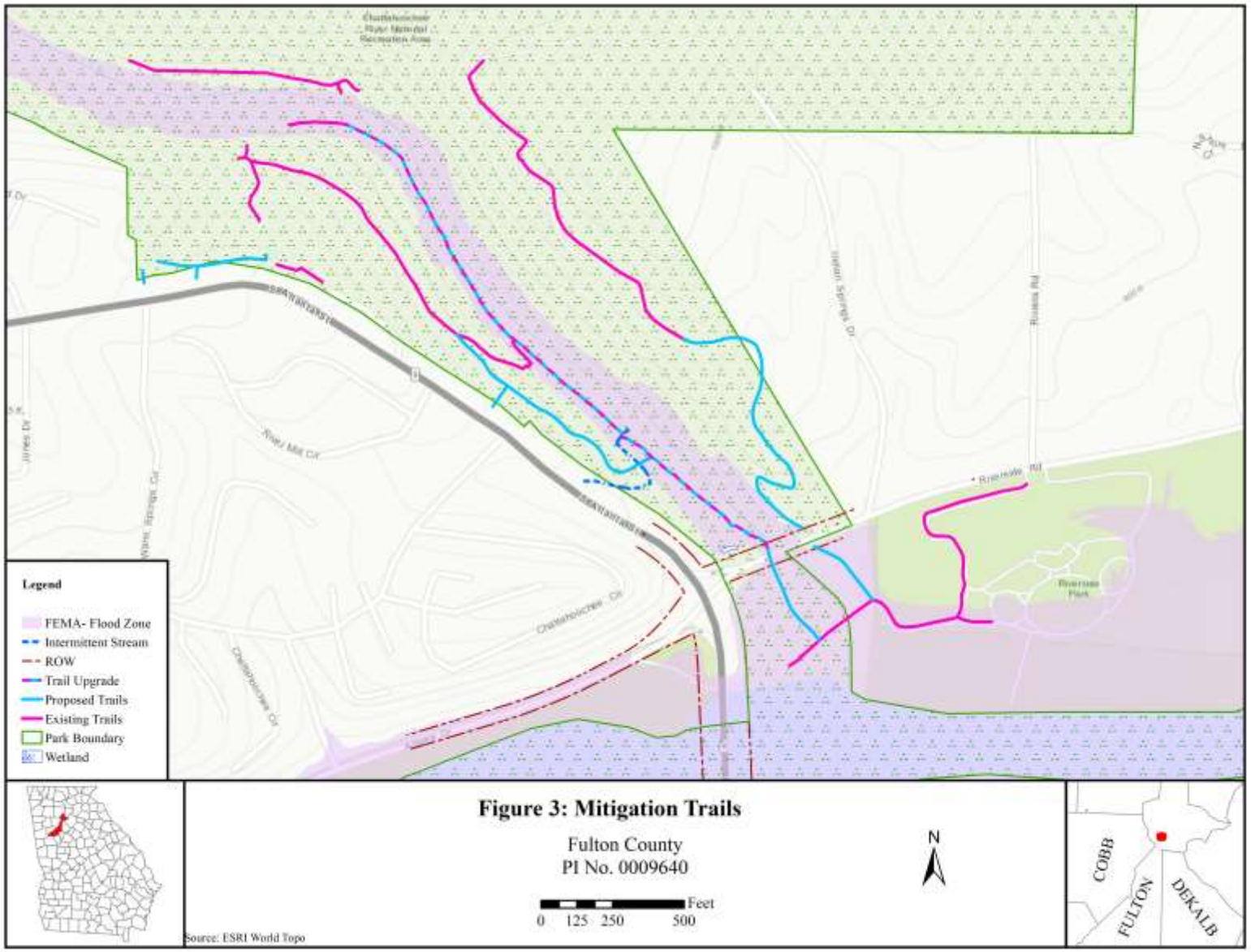
Legend
FEMA- Flood Zone
Intermittent Stream
ROW
Trail Upgrade
Proposed Trails
Existing Trails
Park Boundary
Wetland
Figure 3: Mitigation Trails
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As a result of the dense vegetation the primary functions of the floodplains include buffering of overland flows, slowing down runoff as it flows into the creek and preventing further erosion, and rich habitat for local wildlife. Additional ecological functions include processing organic wastes, filtering nutrients and impurities from runoff, groundwater recharge, and moderating water temperature through shading. The Big Creek floodplain provides a broad area for overflow to spread out and temporarily store floodwaters, reducing flood peaks and velocities and the potential for bank erosion.

SR 9 Pedestrian Bridge

The SR 9 Pedestrian Bridge project is within and adjacent to the floodplain associated with the Chattahoochee River (see Figure 4). Due to the proximity of the Historic Roswell Gateway and SR 9 Pedestrian Bridge projects, the plant species and functions are similar. Floodplains within the area proposed for the SR 9 pedestrian bridge and trails contain 25 to 80 year old tree stratum with dense understory and herbaceous plant species.

The floodplain associated with the SR 9 pedestrian bridge project primarily functions as wildlife foraging and cover habitat, with some minor function for flood attenuation.

4.1 Floodplain Risk and Disturbance

Flood potential in the area of the proposed projects is influenced primarily by either stormwater runoff or hydroelectric power releases from Buford Dam.

The stretch of the Chattahoochee River below the Buford Dam traverses through suburban and urban areas containing residential, commercial, and linear transportation development. While development adjacent to the river is restricted to some extent by local requirements and state legislation such as the Metropolitan Rivers Protection Act, stormwater runoff can be a major contributor to flooding due to expanse of impervious surfaces near the river, especially during large localized storm events.

Hydropower releases of water from Buford Dam can result in water level increases of up to eight feet above average immediately below the dam. However, downstream of the dam, the height of water level change decreases with distance from the dam and along wider sections of the river. Although effects of water discharge from Buford Dam are felt throughout the entire 48-mile river stretch of the CRNRA and tributaries, the further away from the dam the slower the water flow is. The approximate time for the river to rise at Azalea Park after release from Buford Dam is approximately 10.5 hours (CRNRA website). However, given the distance of the project areas from the dam, release is not likely to be the primary cause of flooding.

Historic Roswell Gateway

In general, impacts at floodplain crossings are associated with roadway construction and culvert removal and/extension. These impacts have been minimized to the extent possible by utilizing the existing roadway alignment where possible as well as utilizing bridges to cross Big Creek and realigning intersecting roadways. The proposed project would result in placement of approximately 610 cubic yards of net fill within the Big Creek floodplain and an approximate net excavation (cut) of 8,369 cubic yards in the floodplain associated with the Chattahoochee River. Hydrology studies of impacts from the project have determined that the project would not increase the 100-year flood elevations, floodway elevations, and floodway widths on the Big Creek. As a result of these findings an engineering “No Rise” certification was prepared for the project on May 11, 2016.

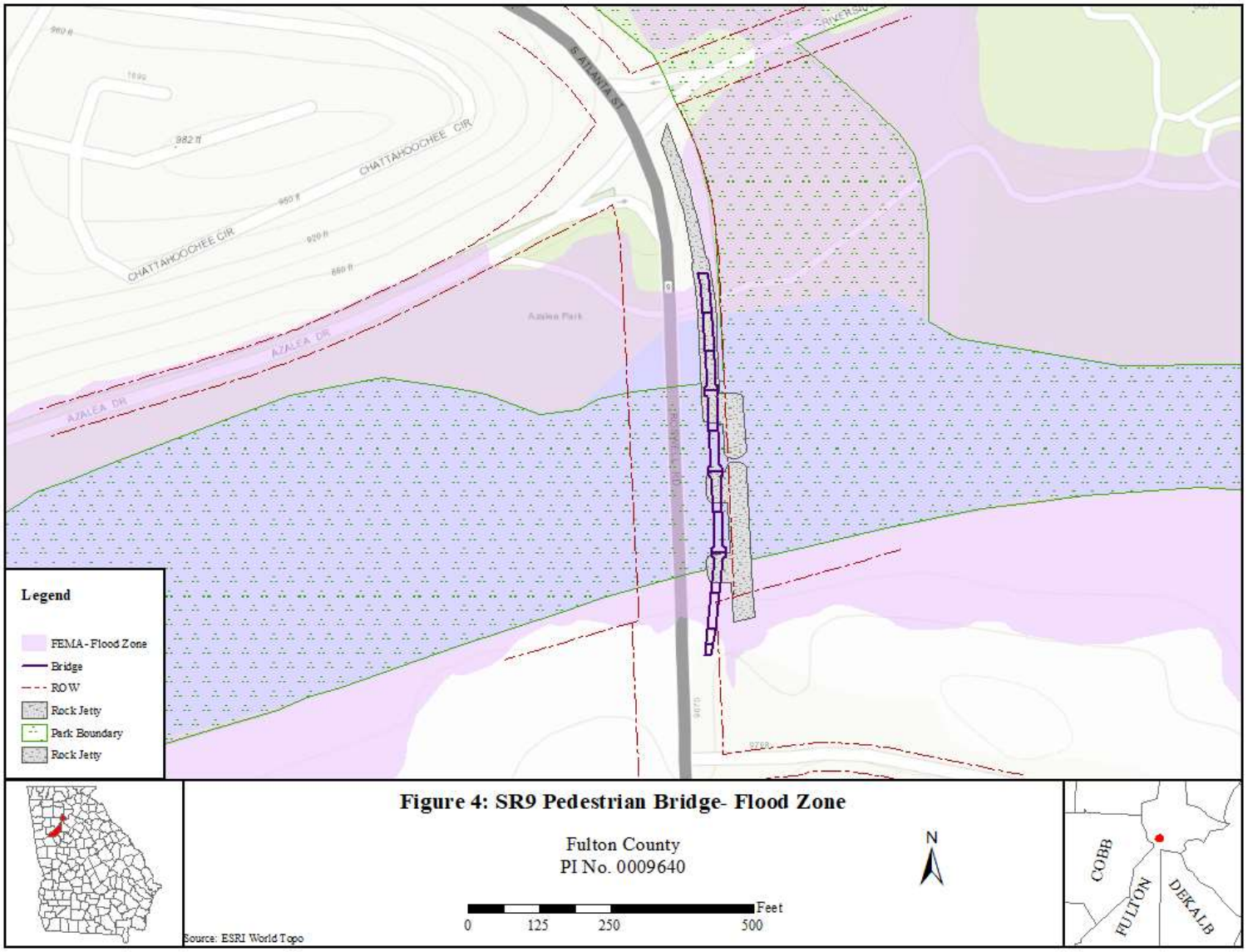

Figure 4: SR9 Pedestrian Bridge- Flood Zone

Fulton County
PI No. 0009640

Mitigation Trails

Construction of features associated with the Mitigation Trails would have minimal impact to floodplains. Direct impacts to floodplain are construction of new walking trails. The trails would be natural surfaces and require clearing of some ground vegetation but would not include impervious surfaces such as asphalt or concrete. The trails in the floodplain would be approximately four to five feet wide and total approximately 715 feet. Other trails associated with the Mitigation Trails have been designed outside floodplains.

SR 9 Pedestrian Bridge

Permanent impact to the floodplain from construction activity would be negligible. The portion of the multi-use trail constructed on fill would be located within the right-of-way and outside designated flood zones. The pedestrian bridge would require placement of bridge support piles in the floodplain.

Temporary impacts to the floodplain would occur during construction, resulting from the temporary rock jetties and cofferdams to drill bridge support piles. Temporary rock jetties would be placed into the Chattahoochee River from each bank. Also, temporary coffer dams would be constructed in the river to allow drilling of bridge piles. Impacts within the floodplain for construction of the SR 9 Pedestrian Bridge include:

Temporary Impacts

- **Rock Jetties** – Approximately 29,135 square feet. Two temporary rock jetties, one constructed from each bank. Jetties would not be constructed at the same time. Each would remain in place approximately 10 months. Construction to extend jetties would occur from on top of jetties.
- **Forms for Drilled Shafts** – Approximately 27 linear feet. Area includes one casing for each of the six bridge supports within the river channel. Each form would be slightly wider than the shaft diameter.

Permanent Impacts

- **Bridge Pile** - Approximately 26 linear feet. Area includes six concrete and rebar columns. The columns range in diameter from four to five feet.

Hydrology studies of impacts from the project have determined that the project would not increase the 100-year flood elevations, floodway elevations, and floodway widths for the Chattahoochee River. As a result of these findings an engineering "No Rise" certification was prepared for the project on November 15, 2013.

5. Wetlands

The project limits of each of the three projects were surveyed for wetland features using criteria outlined in the current version of NPS *Director's Order #77-1*: *Wetland Protection* (January 2016). Surveys were conducted by experienced wetland ecologists from consulting firms WSP for the Historic Roswell Gateway project, AECOM for the Mitigation Trails, and Edwards-Pitman for the SR 9 Pedestrian Bridge Project. Findings from the Historic Roswell Gateway and SR 9 Pedestrian Bridge project were included in reports submitted to GDOT to comply with requirements of the Federal Highway Administration (FHWA) for federal aid projects. Results from the Mitigation Trails survey will be included in the Environmental Assessment being prepared for the NPS by AECOM.

According to the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soil survey data for Fulton County, the soils found within the survey areas that have a hydric component are Cartecay-Toccoa complex. The Cartecay-Toccoa complex is occasionally flooded and comprised of three components; Cartecay, Toccoa, and Weehadkee as a minor component. The Weehadkee component is the only component rated as hydric, and the USDA NRCS describes the Weehadkee series as consisting of very deep, poorly drained, and very poorly drained soils on floodplains along streams that drain from the mountains and piedmont.

Any wetlands identified exhibited one or more of the following attributes:

- At least periodically, the land supports predominantly hydrophytic vegetation
- Predominantly undrained hydric soil
- The substrate is saturated with water or covered by shallow water during the growing season of each year

Historic Roswell Gateway

Two wetlands were identified within the survey area for the project (see Figure 5). One wetland is located north of Riverside Road and east of SR 9. The wetland receives water from roadway runoff and overflow from Big Creek. The wetland has low plant species diversity, dominated by invasive plant species. The wetland is considered low quality wildlife habitat.

A second wetland is located south of Riverside Road and east of SR 9. The wetland on NPS land extends on the north bank of the Chattahoochee River up into the area of the Ivey Mill site. As with the wetland located north of Riverside Road the wetland receives water from roadway runoff and overflow from Big Creek, has low plant species diversity, and is dominated by invasive plant species. The wetland is considered low quality wildlife habitat.

Mitigation Trails

No wetlands were identified within the project limits for the proposed new or improved trails (see Figure 6).

SR 9 Pedestrian Bridge

One wetland was identified within the project limits (see Figure7). The wetland is the same one described under the Historic Roswell Gateway above located south of Riverside Road and east of SR 9, and described above.

5.1 Wetland Function and Value

General values and benefits of the wetlands identified include minor groundwater recharge, wildlife habitat, dissipation of erosive force, minor sediment and nutrient retention, and water quality improvement.

The two wetlands identified for the Historic Roswell Gateway have similar characteristics and function. Because the wetland characteristics are similar, and one of the wetlands is the same for the Historic Roswell Gateway and SR 9 Pedestrian Bridge projects, wetland function and value as listed in DO 77-1 for both wetlands are included below.

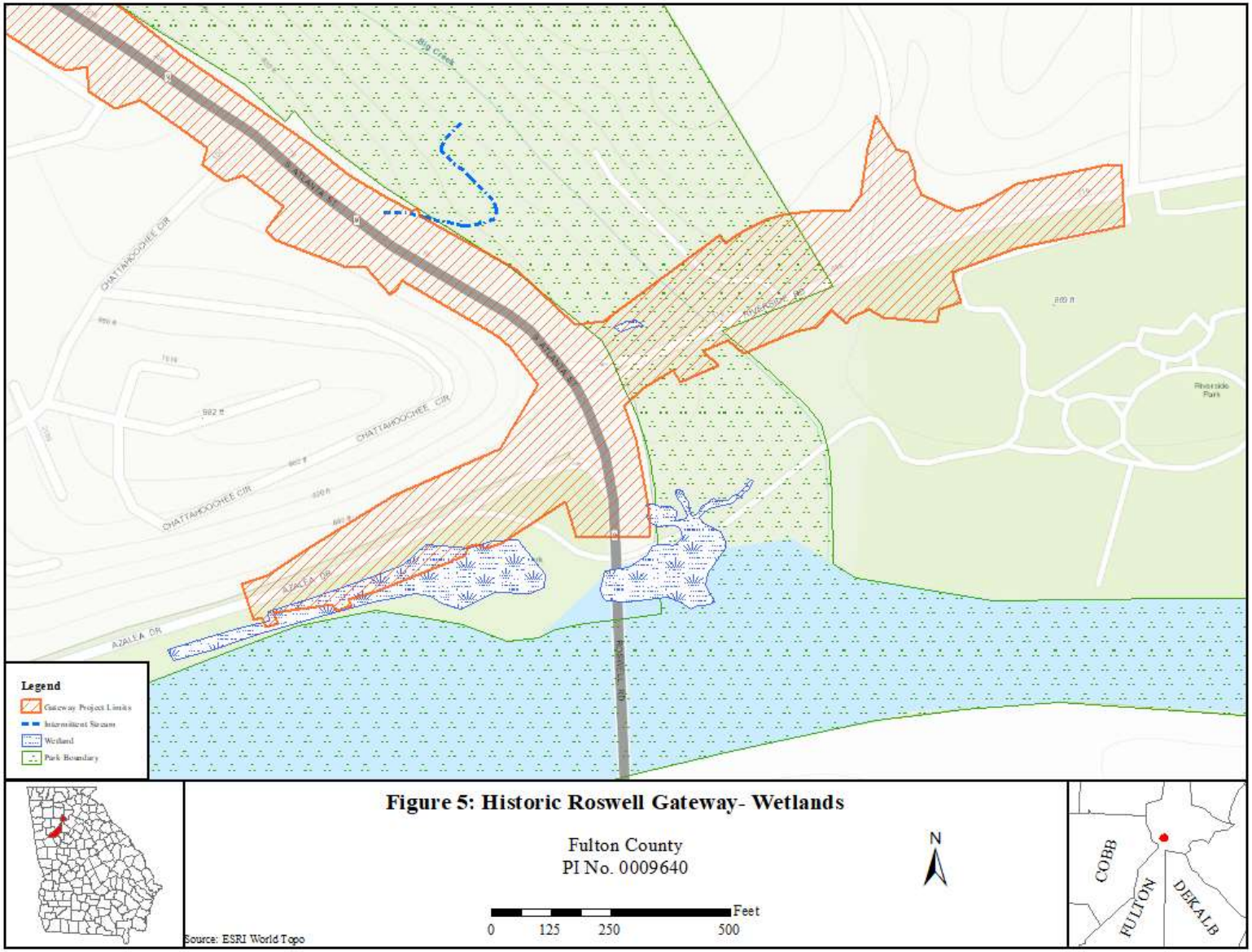

Figure 5: Historic Roswell Gateway- Wetlands

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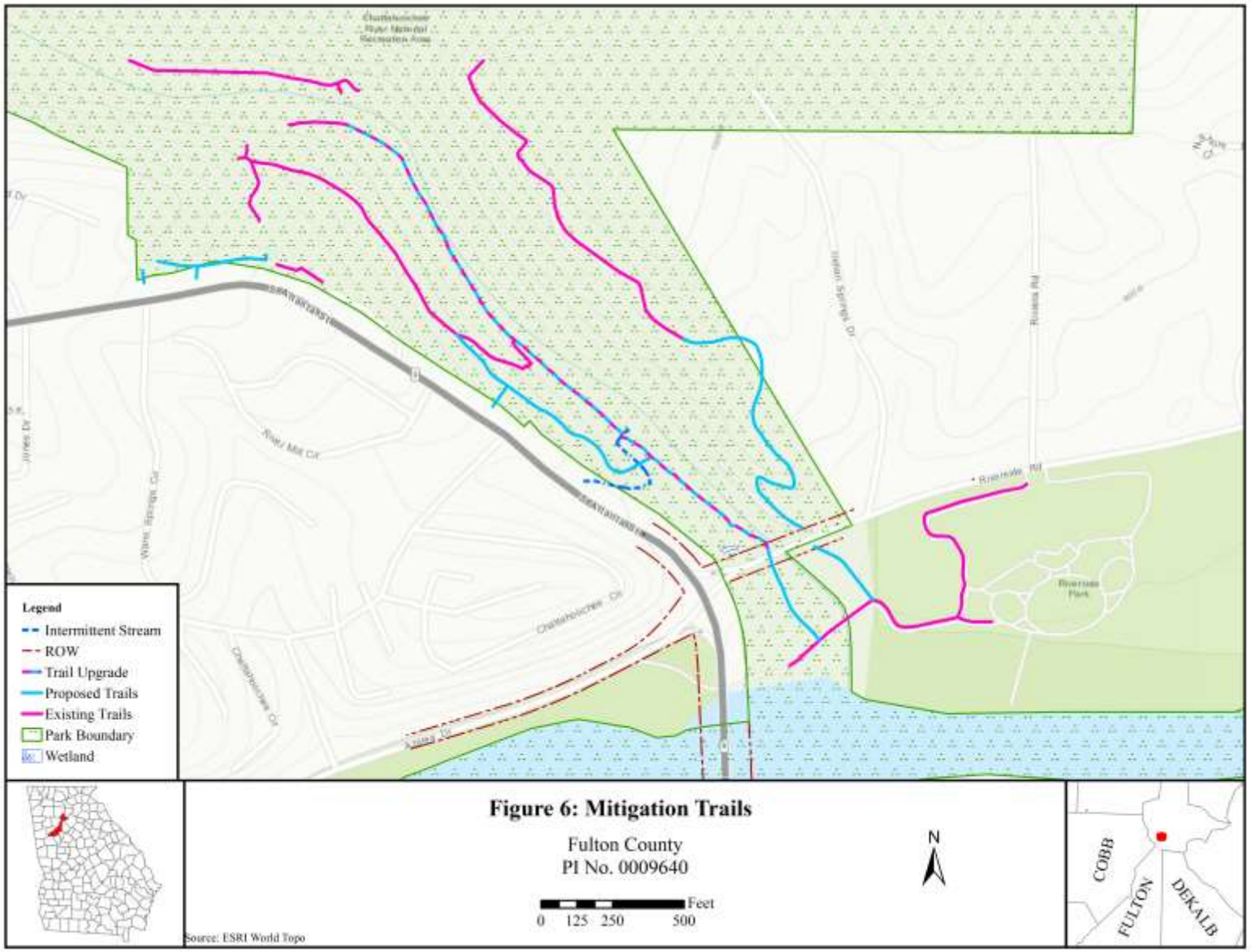
Legend
Intermittent Stream
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Trail Upgrade
Proposed Trails
Existing Trails
Park Boundary
Wetland
Figure 6: Mitigation Trails
Fulton County
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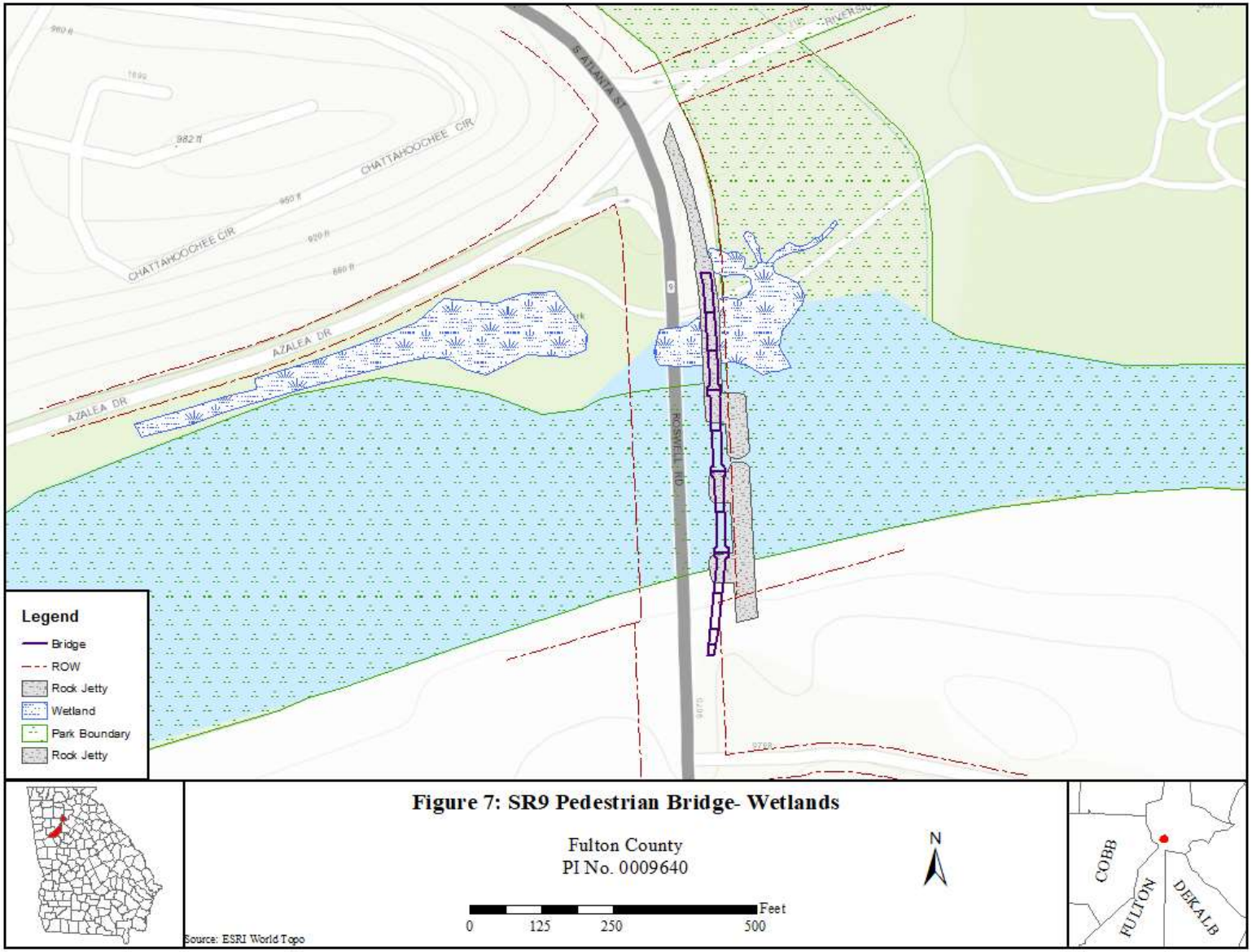

Figure 7: SR9 Pedestrian Bridge- Wetlands

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5.1.1 Flora

The wetlands consist of a layered strata of an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer. Overstory and understory vegetation consists of trees of various age including river birch, sugarberry, red maple, box elder, and sycamore. Herbaceous low or ground cover includes Chinese privet (*Ligustrum sinense*), false nettle (*Boehmeria cylindrica*), soft rush (*Juncus effusus*), common boneset (*Eupatorium perfoliatum*), smartweeds (*Polygonum spp*.), American hornbeam (*Carpinus caroliniana*), jewelweed (*Impatiens capensis*), marsh dayflower (*Murdannia keisak*), groundnut (*Apios Americana*), mondo grass (*Ophiopogon* japonicas), and crossvine (*Bignonia capreolata*). Invasive plant species are predominant in both wetlands.

5.1.2 Fauna

A wide diversity of fauna is present within the CRNRA and potentially use the wetlands identified for habitat and food source. However no species were observed within the wetlands during the period the wetlands were delineated in the field. This is due primarily to the relatively short period of time the field surveys were conducted.

5.1.3 Biotic Functions

Overall, the wetlands are typical of the undeveloped areas along the Chattahoochee River in this region. No federal or state protected species have been recorded within the survey area by the United States Fish and Wildlife Service (USFWS) or the Georgia Department of Natural Resources (GADNR), and no protected species were identified during the field surveys. No temporary isolated pools important for amphibian species are located within or immediately adjacent to the proposed impacted areas. Portions of the wetlands located adjacent to the existing SR 9 bridge and roadway are considered highly disturbed. These areas are mostly associated with compacted soils and infestations of invasive species such as Chinese privet that reduce the biotic functions and wildlife value. The wetland impacts of the environmentally preferred alternative would occur mostly within the areas of diminished biotic function.

In addition, the permanent impacts consist of the small footprint needed for the pedestrian bridge piles and fill of the small wetland from proposed roads, and therefore permanent effects to biotic functions would be minimal. Erosion, Sedimentation, and Pollution Control Plans would be implemented in accordance with the practices set forth in the Manual for Erosion and Sedimentation Control in Georgia and temporary wetland impacts would be replanted with native wetland/riparian vegetation. The erosion control plans would specify in detail the type and placement of control measures, and steps monitoring, repairing, and replacing devices as necessary. Like orange barrier fence (obf) discussed in Section 5.1.7, the erosion control devices would be installed from the construction side of the right-of-way, avoiding additional impacts to the wetland. Removal of the obf and erosion control devices would be by hand to further minimize impacts.

5.1.4 Hydrologic Functions

The wetlands in the project area function as flood water storage and wildlife habitat. There is no significant hydrologic function of the wetland north of Riverside Road due to its small size. Impacts to the hydrologic function for the wetland south of Riverside Road have been significantly reduced by the construction of the existing SR 9 bridge and roadway and its associated runoff. The permanent impacts associated from this project are only associated with the small footprint from the bridge piles; therefore, the permanent effects to hydrologic functions would be minimal.

To minimize impacts from flash flooding or heavy storm events, GDOT would conduct regular inspections of the rock jetties to monitor and abate sediment buildup. The GDOT would be responsible for mitigation required at the project site or downstream as a result of a storm event.

5.1.5 Economic Factors

The primary economic factor associated with the wetlands are recreational use. However, this is only a consideration for the wetland south of Riverside Road from the multi-use trail running parallel with the river, and through the wetland. Also, although not a designated landing along the river, kayakers, rafters, and paddle boarders could use the bank to access the river. There are designated facilities for this purpose at Azalea Park located west of the SR 9 bridge, so use as a landing area is minimal. During construction, connectivity from the trail would be temporarily disrupted due to the rock jetty and the SR 9 right-of-way to be used as a staging area for construction materials. Use and access to parks on both sides of SR 9, including the Vickery Creek Unit of CRNRA, would not be affected during construction. Once the projects are complete, recreational use from the trail would resume, without any permanent, long term effects. The support piles for the pedestrian bridge are designed to allow the existing alignment of the trail to remain.

The Chattahoochee River is used as a recreational resource for rowers, kayakers, canoers, and tube floating. Construction of the temporary rock jetties would impede use of the entire river through the construction area. However, the phased construction of the jetties (constructing only one jetty at a time) would allow access to approximately half the river width even when jetties are present. The support piles for the pedestrian bridge would align with the existing road bridge structures so that the pedestrian bridge would not permanently effect recreational use on the river.

5.1.6 Social and Cultural Functions

The southern end of Vickery Creek Unit also contains the ruins of the Ivey Mill archaeological site, located south of Riverside Road and west of SR 9. Portions of the wetland south of Riverside Road are located within the Ivey Mill archaeological site. The multi-use trail that is located parallel to the river and within the Vickery Creek Unit includes interpretive signs related to Ivey Mill. Access within the mill site is not permitted other than on the trail. The Ivey Mill site has been subject to previous archaeological studies, and the site is listed on the National Register of Historic Places. Due to disturbance from construction of the SR 9 bridge in the past, limits of the archaeological site have been defined as the SR 9 right-of-way. Since access to the Ivey Mill site, and the wetland portions in the area, are limited to the multi-use trail, no permanent impacts to social and cultural functions would occur from the project.

5.1.7 Existing Technology Factors

Considerable evaluation was conducted to develop designs and alignments that considered constructability options to provide a sound engineering design that was cost effective and minimized impacts to environmental resources.

The design of the proposed one-way pair road for Riverside Road was minimized to the extent that safety was not compromised. The wetland north of the existing Riverside Road would be within the alignment of the westbound one-way pair of Riverside Road. However, other designs would not provide the operational efficiency or safety required for the volume of vehicles that are anticipated to use the roadway.

Relating to the wetland south of Riverside Road the bridge engineer conducted a bridge study that considered six different designs for the pedestrian bridge. While clear-spanning the river may have the

least impact from its footprint, this option was cost prohibitive because it exceeded funds available for the project. There were also engineering and material problems resulting from spanning the width of the river in the area. Other designs would have required more supports within the river and adjacent wetlands. The proposed bridge design would be constructed on piers instead of using fill material within the floodplain and wetland to support the structure. For sections of the approach trail constructed on fill, these areas are outside the 100-year floodplain and wetlands identified. In addition, in areas requiring fill, retaining walls are included in the design to minimize fill limits and construction slopes.

Construction alternatives were also included in the bridge study. Construction techniques considered included a floating work barge, a sunken work barge, construction from on the existing SR 9 road bridge, and rock jetties. Use of a floating work barge would require constant flow of the river at a certain level for an extended period of time. This would require coordination and agreement from the US Army Corps of Engineers for release from Buford Dam. Sinking a work barge for construction would require securing its location for extended periods of time, and relocating and resinking the barge several times to provide access for bridge construction due to the width of the river. There would also have to be consideration of how to transport cranes and equipment from the short to the barge. A sunken barge would also affect recreational uses on the river for several years while the pedestrian bridge is under construction. Construction of the pedestrian bridge from the SR 9 road bridge would require closure of at least two of the four lanes of traffic for several years. Although not quantifiable in terms of dollar amount, given the volume of traffic using SR 9 every day and the extensive delays this would cause commuters, this alternative was not considered by GDOT. The temporary rock jetties necessary for construction equipment have been designed to the minimal footprint possible. Given the size and weight of the cranes necessary to set the bridge supports, reducing the size of the jetties would risk contractor safety.

Construction and staging would be limited within the existing SR 9 right-of-way. Demarcation of the limits of construction would be through placement of obf at the right-of-way. No construction, staging of equipment, or other work would be allowed beyond the obf. The obf would be installed by hand by driving steel rebar stakes to support the obf. The stakes are less than one inch in diameter. Erosion control devices would also be installed by hand, minimizing impacts to wetlands.

5.1.8 Scientific Values

Similar type and functioning wetlands to the ones to be impacted by the environmentally preferred alternative occur along the Chattahoochee River at various locations within the 48-mile stretch of the CRNRA. These wetlands do not offer unique scientific value. Due to the commonality of the wetland and minimal permanent impact, the effect to scientific value would be negligible.

5.2 Wetland Risk and Disturbance

Historic Roswell Gateway

Construction of the proposed project would result in temporary and permanent impacts to wetlands within areas managed by the CRNRA (for purposes of impact discussion, stream impacts are considered as part of the overall wetland impacts). An intermittent stream is located on the east side of SR 9, north of Riverside Road. The project would require extension of the existing culvert under SR 9, and placement of riprap at the outflow of the culvert extension to minimize erosion. The culvert extension and placement of riprap would occur within the CRNRA boundary.

A wetland system is located north of Riverside Road, and east of SR 9. This small wetland system is within the construction limits of the proposed westbound Riverside Road. Construction of the road would result in temporary and permanent impacts to the wetland.

Finally, temporary impacts would occur within Big Creek as a result of coffer dams required to remove existing bridge supports. Table 1 below summarizes impacts within the CRNRA as a result of the proposed Historic Roswell Gateway project.

Table 1

Project	Water Feature	Temporary Impact Area	Permanent Impact Area
Historic Roswell Gateway	Perennial Stream 2 (Big Creek)	0.06 acre due to temporary cofferdams	0.0 acre
	Intermittent Stream 5	0.0 acre	0.007 acre due to culvert extension and rip rap material
	Wetland 2a	0.12 acre due to clearing	0.005 acre due to permanent fill

Mitigation Trails

Construction of new trails and improvements to existing trail would not impact wetlands on NPS property.

SR 9 Pedestrian Bridge

Construction of the proposed project would result in temporary and permanent impacts to wetlands within areas managed by the CRNRA (for purposes of impact discussion, stream impacts are considered as part of the overall wetland impacts). Temporary and permanent impacts would occur within the Chattahoochee River from construction of temporary coffer dams and the drilled supports for the pedestrian bridge. Temporary impacts would also occur from placement of rock jetties within the river to facilitate construction. Table 2 below summarizes impacts within the CRNRA as a result of the proposed SR 9 Pedestrian Bridge project.

Table 2

Project	Water Feature	Temporary Impact Area	Permanent Impact Area
SR 9 Pedestrian Bridge	Perennial Stream 2 (Chattahoochee River)	0.442 acre due to placement of temporary rock jetties	0.002 acre due to 6 bridge piles

6.0 Justification for use of the Floodplain and Wetlands

The designs for the historic gateway, new and improved trails, and pedestrian bridge projects have been prepared to minimize environmental impacts, achieve the stated need and purpose of each project, and meet currently acceptable design and safety standards.

Historic Roswell Gateway

Improvements to SR 9 cross the stream perpendicularly. Due to horizontal curves in SR 9 between the Chattahoochee River and SR 140, shifting the proposed alignment west to avoid impacts would require a longer section of the road than just at the crossing. Particularly to the south at the intersection of SR 9 with Azalea Drive/Riverside Road a shift would conflict with the intersection, and the existing SR 9 bridges over the Chattahoochee River, which are not being replaced or improved. However, the culvert extension would be sized to accommodate projected flows, and riprap placement at the outflow would aid in preventing erosion downstream of the outlet.

The wetland located north of Riverside Road would be impacted regardless of an alternative that would safely accommodate future traffic volumes projected for the area. Riverside Road requires improvement to operate efficiently and safely for future traffic volumes and proposed improvements at the intersection with SR 9. The proposed Riverside Road improvements have been designed to minimize impacts and includes the narrowest lanes widths and shoulders allowed by current design standards for the posted speed, sloped shoulders, and guardrail where appropriate. However, given the location of the wetland, regardless of the proposed improvements, impacts to the wetland cannot be avoided.

Impacts to Big Creek from the cofferdams would be temporary, to remove existing bridge bents. No permanent impacts to the streams function are anticipated.

The amount of fill required for the project has been minimized to the extent possible to safely construct the project. Fill impacts to the floodplain are primarily limited to the bridge approaches over Big Creek. Based on hydrology studies, a No-Rise certification has been prepared, indicating the required fill would not alter the capacity of the floodplain.

Mitigation Trails

No wetlands were identified in areas of the proposed new trails, or trails proposed for improvements. Some locations of the new and improved trails are within floodplain areas, but use of natural surfaces in place of impervious material are anticipated to minimize runoff. Some vegetation clearing may be required, but these activities are not anticipated to have permanent, long term impacts to floodplain function.

SR 9 Pedestrian Bridge

Construction of the trail would be perpendicular to the floodplain and wetland, minimizing the area of impact. In addition, the bridge would be constructed on piers as opposed to fill, which would result in less permanent impact.

In assessing alternative locations for the pedestrian bridge and approaches, two primary factors were considered; 1) proximity to the existing SR 9 road bridge to minimize aesthetic and visual impacts, and 2) connectivity to existing recreational facilities and infrastructure. Although attachment of the pedestrian bridge to the existing SR 9 road bridge was not possible due to the need to maintain structural integrity of the road bridge, placing the pedestrian bridge as close as possible would provide a view of a singular structure across the river. Furthermore, placement of piers for the pedestrian bridge would align with support structures for the road bridge, providing a uniform view from the river.

With these two primary considerations in mind, there were two potential locations for the pedestrian bridge; upriver, or east, of the SR 9 bridge, and downriver, or west, of the SR 9 bridge. The environmentally preferred alternative on the east side of the SR 9 bridge provides a location within or

close to other recreation uses in the area including the Vickery Creek Unit, Riverside Park, Azalea Park, and the existing multi-use trail along the north bank of the river. In addition, this location would connect with a planned multi-use trail to be constructed by the City of Roswell that would extend north from the river, on the east side of SR 9. It also connects with the City of Sandy Springs planned sidewalk and pedestrian improvements south of the river.

Locating the alignment west of the SR 9 bridge would provide connection to Riverside Park, but would require construction of additional infrastructure to connect to other recreational uses and planned and existing pedestrian facilities on both sides of the river. Additionally, due to overhead power lines on the west side of the SR 9 road bridge, the west alignment would be constructed further from the bridge and not provide the perception of a single structure across the river.

With regards to environmental impacts, because the wetland systems identified are parallel with the river, the alignment for the proposed trail would result in impacts regardless of location. While the area of impact may be slightly different between the two alignments, both locations would require a permit from the USACE. And due to the width of the river in the area, the construction and design of the bridge would be the same, and require the placement of the same number of piers in the river to support the structure.

Because the proposed trail and bridge are to be constructed within the SR 9 right-of-way, disturbance of the wetland within the SR 9 right-of-way would not result in impact to the Ivey Mill site. Fencing would be located along the right-of-way to identify limits for construction activities. All construction, staging, and activity would occur with the SR 9 right-of-way.

The area of permanent impact is small, and effects to the aesthetic value are considered negligible. Natural revegegation is anticipated to occur rapidly after construction, and supports for the pedestrian bridge would align with the road bridge structures providing minimal change in the setting of the wetland.

7. Mitigation

7.1 Floodplains

Historic Roswell Gateway

Fill material for the project would not alter the flood capacity of the 100-year floodplain of the Chattahoochee River and Big Creek. Proposed bridges would clear-span most of the floodplain, and any other impacts are considered minor and would not adversely change the function of the floodplain. No mitigation is required for floodplain impacts.

Mitigation Trails

Construction of new trails or improvement to existing trails would utilize natural surfaces. No fill material within the floodplain would be required for new or improved trails. No mitigation is required for floodplain impacts.

SR 9 Pedestrian Bridge

Fill material for the project would not alter the flood capacity of the 100-year floodplain of the Chattahoochee River. Proposed bridge piles to support bridge piers for the bridge structure in the floodplain would not affect flood storage capacity. No mitigation is required.

7.2 Wetlands

For the purposes of mitigation discussion, impacts from project construction are included for both wetlands and streams within areas under jurisdiction of the NPS within the CRNRA. Following Cowardin et al (1979), the NPS considers streams to a depth of 2.1 meters from the bank as wetlands. Both temporary and permanent impacts would occur.

Historic Roswell Gateway

Temporary and permanent impacts to wetlands and streams would result from implementation of the proposed project. Both temporary and permanent impacts would occur to Big Creek resulting from culvert extension and riprap replacement for erosion control would occur to an intermittent stream. Permanent impact resulting from fill material to construct road approaches to a bridge over Big Creek would occur. Total impacts include 0.18 acre of temporary and 0.012 acre of permanent impacts. Mitigation for these impacts is discussed in Section 7.2.1 below.

Mitigation Trails

Construction of new trails and improvement to existing trails would not impact wetlands. No mitigation is required.

SR 9 Pedestrian Bridge

Temporary and permanent impacts to streams would result from implementation of the proposed project. Drilling of support piles would result in permanent impacts from pile construction, and temporary impacts from drill shafts, within the Chattahoochee River. Temporary rock jetties would be required within the Chattahoochee River to facilitate construction of the pedestrian bridge. A total of 0.442 acre of temporary impacts and 0.002 acre of permanent impact would occur. Mitigation for these impacts is discussed in Section 7.2.1 below.

7.2.1 Wetland Mitigation Plan

The project design emphasis has been to avoid and minimize impact to wetland resources to the largest extent possible. A total of 0.622 acre of temporary impact and 0.014 acre of permanent impact would occur from the Historic Roswell Gateway, Mitigation Trails, and SR 9 Pedestrian Bridge projects. Total impacts to wetlands and streams within the CRNRA from all three projects are summarized in Table 3.

Impacts to wetlands within the CRNRA are increasingly a regular occurrence as a result of local, state, and federally funded projects within and around the Atlanta Metropolitan area. Due to the number of projects for which impacts must be mitigated in compliance with DO 77-1 and other NPS policies, the management staff at CRNRA has developed a strategy to mitigate impacts by focusing on enhancement of a single wetland system, rather than identifying a separate wetland system for mitigation for individual projects.

The staff of the CRNRA has identified a palustrine wetland system within the Cochran Shoals Unit totaling approximately 17 acres that would be the focus of mitigation projects (see Figure 8). Palustrine wetlands inhabit the floodplains of the Chattahoochee River, tributary streams, and associated sloughs. These wetlands provide important habitat for wildlife, protect the water quality of the river by stabilizing the stream and river banks, help control flooding, provide recreational birding opportunities and produce plant material that helps support the adjacent aquatic ecosystem. An old roadbed currently bisects the wetland.

Table 3

Project	Water Feature [1]	Temporary Impact Area	Permanent Impact Area
Historic Roswell Gateway	Perennial Stream 2 (Big Creek)	0.06 acre due to temporary cofferdams	0.0 acre
	Intermittent Stream 5	0.0 acre	0.007 acre due to culvert extension and rip rap material
	Wetland 2a	0.12 acre due to clearing	0.005 acre due to permanent fill
Mitigation Trails	No Impacts		
SR 9 Pedestrian Bridge	Perennial Stream 2 (Chattahoochee River)	0.442 acre due to placement of temporary rock jetties	0.002 acre due to 6 bridge piles
Totals		.622 acre	0.014 acre

[1]Designations are from Ecology Reports Prepared by Consultants for These Georgia Department of Transportation Projects

Figure 8 – Wetland Mitigation Site

There are two deteriorating culverts that transport the flow between the two wetland segments (approximately 785 feet long and 14.5 feet wide). The roadbed effectively acts as a dam resulting in altered wetland hydrology by requiring a higher stage to pass an equivalent discharge, so the water-level fluctuation during a storm is large and the wetland's hydropattern is altered (Figure 9). Additionally, debris commonly obstructs the culvert's inflow and beavers dam the inflow which increases the problem. The decreased flow rates cause increased sediment deposition in the upstream wetland. In addition to restricting flow, the road reduces the ability of aquatic organisms to transverse between the upstream and downstream portions of the wetland.

CRNRA management has identified the removal of the road as a high priority for the park and plans to complete the restoration in phases. The first phase of the restoration would remove 100 feet of the roadbed at the northeastern side of the restoration site. The local sponsor for the three projects, the City of Roswell, would contribute $50,000 as mitigation for impacts on NPS property resulting from construction of the Historic Roswell Gateway, Mitigation Trails, and SR 9 Pedestrian Bridge projects. As identified by CRNRA management, these funds would be used to fund the first phase of restoration to this wetland system. The hydrologic restoration will require the excavation of the old roadbed material from the wetland along with the associated culvert and re-grading the site to its natural condition.

In general, in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site. However, in the case of the impacted Riverine Wetlands (0.511 acres) from the SR9 Pedestrian Bridge and the Historic Roswell Gateway, it was decided that additional/enhanced Palustrine Wetland would adequately compensate for the lost functions and services of the 0.502 acres of temporary impacts and the 0.0009 acres of permanent impacts to the Riverine Wetlands as it would mitigate for the loss of flood water storage and wildlife habitat lost by the three projects. In order to assess the wetland functional improvements of removing the roadbed, the Freshwater Wetland Qualitative Assessment from the Savannah District USACE was completed. The current Water Storage Functional Score for the Cochran Shoals wetland is low. The removal of the roadbed (a structure obstructing hydrologic flows) increases the Water Storage Functional Score to Moderate. Additionally, wildlife habitat will be improved in the Cochran Shoals wetland with the roadbed removal because it will provide a corridor for aquatic organisms to transverse between the upstream and downstream portions of the wetland.

With the removal of 100 linear feet of roadbed, 0.033 acres of wetland will be created (100 LF Length x 14.5 LF Width). The ratio of wetland created to permanently impacted wetlands will be 2.378:1 (0.033 Acres Created: 0.014 Acres Lost), which is consistent with the NPS no-net-loss wetland policy. Additionally, the roadbed removal will enhance 2.166 acres of wetlands. Since removal of the entire roadbed would enhance the entire 17 acre wetland, the removal of a portion of the roadbed (100 LF Road Removed/785 LF Total Road) will proportionally enhance the wetland (17 Acres Wetland x 12.7% Enhanced). The ratio of wetland enhanced to temporarily impacted wetlands will be 3.482:1 (2.166 Acres Enhanced: 0.622 Acres Temporarily Impacted). The final ratio of mitigated wetlands to total wetlands impacts is 3.457:1 (2.199 Acres Mitigated: 0.636 Acres Impacted), which again is consistent with the NPS no-net-loss wetland policy. This project also fulfills the objects of Call to Action 22 by promoting conservation to support healthy ecosystems. Additionally, it is in line with the CRNRA's 4th Core Value: Sustainability outlined in the CRNRA 5 year strategic plan.

Figure 9 – Roadbed Dam

Additionally, best management practices will be implemented during the construction of the Historic Roswell Gateway and the SR9 Pedestrian Bridge to help reduce impacts to wetlands during construction. These Best Management Practices include:

- Equipment would be inspected for leaks of oil, fuels, or hydraulic fluids before and during use to prevent soil and water contamination. Contractors would be required to implement a plan to promptly clean up any leaks or spills from equipment, such as hydraulic fluid, oil, fuel, or antifreeze;
- Equipment would be washed and cleaned of mud and debris that may transport unwanted pest before being brought on-site to prevent the transportation of exotic invasive plans and animal species.
- Fueling and maintenance of equipment would be occur off-site to prevent the risk of spills;
- Actions would be taken to minimize effects on site hydrology and fluvial processes, including flow, circulation, water level fluctuations, and sediment transport. Take care to avoid any rutting caused by vehicles or equipment;
- Measures would be employed to prevent or control spills of fuels, lubricants, or other contaminants from entering wetland areas, if a spoil occurred. Action would be consistent with state water quality standards and Clean Water Act Section 401 certification requirements;
- Temporarily impacted areas will be restored to their pre-construction condition using native vegetation;
- Appropriate erosion and siltation controls would be maintained during construction in accordance to an approved Erosion, Sedimentation, and Pollution Control Plan.

Phase 1 - Mitigation Success Criteria

The mitigation will be considered successful if the following conditions are realized at the end of the 5-year monitoring program:

- Hydrologic connectivity between the two wetlands is established and maintained,
- Erosion is not occurring around the mitigation site,
- Wildlife species are utilizing the established corridor,
- 70% coverage of hydrophytic vegetation

A schedule of the monitoring program is provided in Table 4.

Phase 1 - On-Site Monitoring Methodology:

Monitoring will be conducted for the mitigation site, beginning immediately after the mitigation (after the roadbed removal and re-grading), which will be designated as time-zero or the beginning of the mitigation time period. Monitoring surveys will be done by qualified CRNRA personnel after the first growing season or approximately one year. Monitoring surveys will include vegetation surveys, aquatic macroinvertebrate surveys, and the deployment of wildlife cameras for 1 month in the area of the old roadbed. If needed, supplemental work will be completed, and another monitoring survey will be done after the second growing season. A final monitoring survey will be done after the fifth growing season.

Status/documentation of vegetation, photographs, wildlife, and general weather will be documented at the mitigation site. All reports will be kept on file at CRNRA headquarters. Any issues that arise or corrective action that needs to be taken will also be included in the monitoring reports.

Table 4

Mitigation Activity	Due Date
Remove Road/Re-grading the Site	Fall/Winter 2019
Time-Zero Monitoring Report	April 2020
First Monitoring Report	April 2021
Second Monitoring Report	April 2022
No monitoring will be done after the third and fourth growing season	2023-2024
Final Monitoring Report (after fifth growing season)	April 2025

Monitoring Reports

Monitoring reports will be prepared by CRNRA resource management staff. These reports will provide documentation of the success of the mitigation program and the general condition of the enhanced area.

Monitoring reports will consist of the following information:

- Narrative description of the enhancement activities performed since the last report,
- Explanation of maintenance work to be conducted over the next year,
- Narrative description of the site-hydrology,
- List of wildlife species observed on the wildlife camera,
- Results of vegetative monitoring, listing percent cover of hydrophytic vegetation
- Photographs taken at photo station locations on compass points,
- General weather description, and
- Description of any remedial action recommendations (if necessary).
- These reports will be submitted to the CRNRA Chief of Planning and Resource Stewardship for review and filed at CRNRA.

8. Compliance

8.1 Floodplains

The fill required for Historic Roswell Gateway and SR 9 Pedestrian Bridge projects have been minimized to the extent possible while still allowing for an engineering design that meets currently required engineering standards. Although fill would be required within the floodplains of both Big Creek and the Chattahoochee River, fill material would not be within the regulatory floodways. Based on hydrology studies for both projects, the fill material and piles required for the pedestrian bridge would not change the floodplain storage capacity or alter flood elevations. The structures associated with the proposed pedestrian bridge would meet the requirements of the National Flood Insurance Program (44 CFR Part 60). Engineering No-Rise certifications have been prepared for both projects. The projects would not represent a significant risk to life or property and would not have a significant impact on natural and beneficial floodplain values.

The activities associated with the Mitigation Trails would not require fill within the floodplains of Big Creek or Chattahoochee River.

8.2 Wetlands

In addition to complying with NPS policy and guidance in this SOF, compliance with Section 404 of the Clean Water Act would require a Nationwide or Regional permit obtained by the GDOT from the USACE, Savannah District for impacts to wetlands and streams on the Historic Roswell Gateway and SR 9 Pedestrian Bridge projects. The permit would be obtained prior to letting the project for construction.

8.3 Metropolitan Rivers Protection Act

The Metropolitan Rivers Protection Act (MRPA) (1973) was passed by the state of Georgia in response to growing concerns about impacts to the Chattahoochee River from adjacent development. It established a 2000-foot corridor along both banks of the river for 48 miles between Buford Dam and Peachtree Creek. An amendment to the act in 1998 extended the corridor an additional 36 miles to the downstream limits of Fulton and Douglas counties. The act requires the Atlanta Regional Commission (ARC) to adopt a plan to

protect the Chattahoochee River corridor and to review development proposals for consistency with the plans. The act requires local governments along the corridor to implement the plan. Under the act, land-disturbing activity in the corridor must comply with the adopted plan to be legal. The cities of Roswell and Sandy Springs are the local authorities ensuring projects comply with the MRPA. Based on the types of projects the Historic Roswell Gateway project, Mitigation Trails project, and the SR 9 Pedestrian Bridge project are in compliance with the MRPA.

9. References

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NPS Chattahoochee River National Recreation Area (CRNRA) *Final General Management Plan/Environmental Impact Statement*, (2009).

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FEMA National Flood Insurance Program, (44 CFR Part 60), *Criteria for Land Management Use*, (1979)

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