National Park Service
U.S. Department of the Interior

Chattahoochee River National Recreation Area
Georgia – Gold Branch Unit

Lower Roswell Road Improvements: Multi-Use Trail Facility And Entrance Improvements

FINDING OF NO SIGNIFICANT IMPACT May 2012

INTRODUCTION

The Lower Roswell Road Improvements Environmental Assessment (EA) and this Finding of No Significant Impact (FONSI) constitute the record of environmental impact analysis and decision-making process for the multi-use trail and Gold Branch Unit entrance improvement project along Lower Roswell Road in Cobb County, Georgia. The National Park Service (NPS) will implement the selected alternative (Alternative B: Construction of a multi-use trail and sidewalk, and relocation of Gold Branch Unit entrance). This means that the Chattahoochee River National Recreation Area (CRNRA) will undertake a federal action in issuing a Special-Use Permit to Cobb County, Georgia to construct a non-motorized recreational access route along Lower Roswell Road on park property and replace the existing entrance in the park's Gold Branch Unit.

This Finding of No Significant Impact (FONSI) summarizes the findings of the analysis detailed in the EA and incorporates the public input provided.

BACKGROUND

The CRNRA was authorized by congress in 1978 "to lead the preservation and protection of the 48-mile Chattahoochee River corridor from Buford Dam to Peachtree Creek, and its associated natural and cultural resources, for the benefit and enjoyment of the people" (NPS 2009). The park is located within portions of Forsyth, Gwinnett, Cobb, and Fulton Counties.

One of the unique features of the CRNRA is that as an urban park, it offers convenient access to recreational activities and enjoyment of undisturbed green space in the midst of a growing metropolitan area. The Gold Branch Unit (i.e. Unit) is located in the eastern portion of Cobb County, adjacent to Fulton County. The cities of Alpharetta, Marietta, Roswell, and Smyrna are within minutes of the Unit. Unincorporated areas of the county adjacent to the Unit include dense residential development. Development along Lower Roswell Road consists of single family residences and subdivisions. The CRNRA seeks to balance preservation of the natural and cultural elements with convenient and safe access for visitors to the Unit. Recent construction has provided improved infrastructure and facilities for visitors and includes a pervious-surface parking lot, improved and updated visitor signage, a paved driveway from Lower Roswell Road to the parking lot, and replacement of timber retaining walls along the driveway with more stable concrete retaining walls. In addition, the Unit contains approximately four miles of trails.

The purpose of the proposed project is the expansion of non-motorized public access and recreational opportunities within the jurisdiction of the CRNRA and Cobb County, Georgia to enhance visitor use and safety. The project will improve safe accessibility to the entrance for visitors who wish to walk, bike or drive to the Unit. Finally, the project will improve the safety of the roadway by modifying the current skewed angles and horizontal alignment of approaches to the three way intersection of Lower Roswell Road, Timber Ridge Road, and Willeo Road through construction of a roundabout.

The project is needed because a non-motorized recreation route connecting Cobb County with CRNRA's Gold Branch Unit and the City of Roswell's trail system will provide safe public access that currently does not exist. There is currently no safe access for non-motorized transportation users. The construction of a multi-use trail will provide for a wide variety of non-motorized access, including walking, running, rollerblading, and cycling. There is also a need to provide a safer, more efficient access for visitors driving to the Unit because the current alignment of the entrance drive makes entering and exiting difficult. Vegetation adjacent to the driveway hinders sight distance for visitors exiting onto Lower Roswell Road and makes the entrance difficult to see as the Unit is approached from Lower Roswell Road. Finally, the lack of a dedicated turning lane for southbound traffic on Lower Roswell Road into the Unit also creates an unsafe condition as vehicles stop in the travel lane waiting to turn. Realigning the entrance across from Asheforde Drive and adding a dedicated left turn lane for southbound traffic on Lower Roswell Road will improve sight distance issues and provide a safer approach for vehicles entering and exiting the Unit.

SELECTED ALTERNATIVE

Alternative B –Construction of a multi-use trail and sidewalk, and relocation of the Unit's entrance.

The NPS has selected alternative B to address pedestrian and vehicular access to the Park. This alternative will construct an eight-foot wide multi-use trail on the east side of Lower Roswell Road on NPS property and a five-foot wide sidewalk on the west side of Lower Roswell Road on Cobb County property. The limits of the project will be from Davidson Road to the intersection with Timber Ridge Road and Willeo Road. In addition to the trail and sidewalk, four-foot bike lanes will be constructed adjacent to the roadway travel lanes. The trail and sidewalk will be separated from the traveled roadway and bike lanes by two-foot wide curb and gutter and a 1.5-foot wide grass strip. This alternative will provide improved, safer pedestrian access to the Unit. It will also provide connectivity of the recreational opportunities within the Unit to adjacent residential areas, and become a component of the Cobb County trail system and nearby City of Roswell bike lane network. Alternative B will impact 3.44 acres of park land along Lower Roswell Road. Of this amount approximately 0.17 acre will be hard, impervious surface of the trail.

A new vehicle entrance will be constructed approximately 200 feet north of the existing location, across from Asheforde Drive. A southbound left turn lane will be placed on Lower Roswell Road, opposing the northbound Asheforde Drive left turn lane, in order to provide turning motorists refuge from through traffic. Turning radii will also be increased to 24 feet, allowing for safer turns into and out of the relocated paved driveway lined by two-foot grass shoulders. The new driveway will connect to the existing driveway approximately 200 feet east of the current entrance, and just west of recently constructed concrete retaining walls on both sides of the driveway. This alignment will avoid impacting the new retaining walls and a large oak tree located along the existing driveway. Approximately 140 feet of the existing driveway between Lower Roswell Road and the new driveway will be demolished, graded and planted with native vegetation. This alternative provides safe access by eliminating conflicting traffic movements from Lower Roswell Road into the Unit.

To improve the operational efficiency of the intersection of Lower Roswell Road, Timber Ridge Road, and Willeo Road a roundabout will be constructed. The roundabout construction will require placement of fill material onto existing road slopes to provide a safe road shoulder. Portions of this fill will be located within the 100 year floodplain of Willeo Creek, and a wetland identified west of Willeo Road. As a result of these impacts to the floodplain, a Statement of Findings for Floodplains has been prepared.

Because the Gold Branch Unit is designated as a natural zone in CRNRA's General Management Plan, allowing only pedestrian hiking on its primitive trails, Alternative B will include the placement of a bicycle weir and updated signage to prevent inadmissible activities within the unit itself, and the placement of a bicycle rack so that cyclists who visit the Unit may park bicycles while enjoying the primitive trails of Gold Branch on foot.

OTHER ALTERNATIVES CONSIDERED

In addition to Alternative B, the NPS considered and analyzed two additional alternatives; the No Action Alternative and a third alternative --construction of sidewalks only on both sides of Lower Roswell Road and relocation of the Park entrance and driveway and roundabout at the Timber Ridge, Lower Roswell Road and Willeo Road Intersection.

Alternative A – No Action Alternative

Under the No Action Alternative improvements would not be made to increase the opportunity for non-motorized forms of access to a wider segment of the public. No entrance upgrades for the driving public would occur. The No Action Alternative would not prevent future access to the Park. However, pedestrian access would only be available along the unimproved, grassed, sloped road shoulder, and use would continue to be primarily from those visitors residing adjacent or across from the Park. Unsafe conditions for visitors driving to the Park would remain, resulting from vertical elevation along Lower Roswell Road and limited sight access at the driveway entrance. Conflicting left turn movements would continue between southbound traffic on Lower Roswell Road turning left into the Park, and northbound traffic turning left into the Asheford subdivision.

Alternative C – Construction of sidewalks on both sides of the road, and relocation of the Unit's entrance.

This alternative would construct five-foot wide pedestrian-only sidewalks on both sides of Lower Roswell Road from Davidson Road to the intersection with Timber Ridge Road and Willeo Road. In addition to the two pedestrian sidewalks, four-foot bike lanes would be constructed adjacent to the roadway travel lanes. Sidewalks would be separated from the travel roadway by two-foot wide curb and gutter and a 1.5-foot wide grass strip. This alternative would provide improved, safer pedestrian access to the Unit. It would provide connectivity to the recreational opportunities within to pedestrians. This alternative does not offer the suite of recreational opportunities and access afforded by a multi-use trail. Alternative C would impact 3.22 acres of park land along Lower Roswell Road. Of this amount approximately 0.07 acre would be hard surface of the sidewalk.

A new vehicle entrance would be relocated approximately 200 feet north of the existing location, across from Asheforde Drive. A southbound left turn lane would be placed on Lower Roswell Road, opposing the northbound Asheforde Drive left turn lane, in order to provide turning motorists refuge from through traffic. Turning radii would also be increased to 24 feet, allowing for safer turns into and out of the relocated paved driveway lined by two-foot grass shoulders. The new driveway would connect to the existing driveway approximately 200 feet east of the current entrance, and just west of recently constructed concrete retaining walls on both sides of the driveway. This alignment would avoid impacting

the new retaining walls and a large oak tree located along the existing driveway. Approximately 140 feet of the existing driveway between Lower Roswell Road and the new driveway would be demolished, graded and planted with native vegetation. This alternative would provide a safe access by eliminating conflicting traffic movements from Lower Roswell Road into the Unit.

To improve the operational efficiency of the intersection of Lower Roswell Road, Timber Ridge Road, and Willeo Road a roundabout is proposed. The roundabout construction would require placement of fill material onto existing road slopes to provide a safe road shoulder. Portions of this fill would be located within the 100 year floodplain of Willeo Creek, and a wetland identified west of Willeo Road.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

In accordance with DO-12, the NPS is required to identify the environmentally preferable alternative in all environmental documents, including EAs. The environmentally preferable alternative is defined by the CEQ as "the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA, which considers:

- Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assuring for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- Preserving important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choices;
- Achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA, section 101)."

Generally, these criteria mean the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (Federal Register, 1981).

Alternative B is the environmentally preferable alternative. This alternative will succeed in maximizing visitor safety and the range of beneficial uses by providing safe, healthful choices for multiple users (walkers, runners, cyclists, etc.). Although the construction footprint will require removal of approximately 1.57 acres of woody vegetation within the Unit, the limits of construction are adjacent to Lower Roswell Road, minimizing disturbance and avoiding fragmentation of the Unit. Natural Zone designations of the Gold Branch Unit will continue to be maintained within the Unit's primitive trail system. Among the alternatives, Alternative B best achieves a balance between population and resource use that permits high standard of living through the creation of improved access and connectivity. While Alternative C would somewhat advance safety and beneficial uses, it would only go so far as to benefit one particular user group (i.e. pedestrians). Alternative A – No Action Alternative would maintain the unsafe and limited access currently in place and thus would fail to achieve a balance between population and resource use.

MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES FOR THE SELECTED ALTERNATIVE

In addition to analysis of impacts from the selected alternative, Best Management Practices (BMP) and mitigation measures will be implemented, where applicable, to reduce and minimize impacts during construction from the selected alternative.

1. Slopes constructed within the Unit will be reseeded using native grasses and vegetation.

2. Prior to construction, Cobb County will develop a landscape plan for Lower Roswell Road subject to review and approval by CRNRA staff. Cobb County will coordinate with natural resource staff at CRNRA to discuss the selection of native plant species and native grass seed mixes for use in all areas disturbed during construction of the trail and realignment of the driveway.

3. Borrow fill will be stripped of topsoil prior to use in the project area. Stripping of topsoil from borrow fill represents the best means to reduce the occurrence of weed seed introduction. This stripping serves general construction practices as well, as the topsoil primarily consists of organic plant matter that will continue to decay and thus provide poor structural support for the trail, entrance, and driveway. Most inherent weed seeds will likely be contained in the topsoil; avoiding its use limits invasive seed introduction.

4. Construction zones will be delineated with construction fence and two parallel rows of silt fence divided by a row of straw bales established prior to construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone. No machinery or equipment will access areas outside the construction limits.

5. All equipment will be inspected and cleaned before arrival to site to minimize the introduction of exotic invasive plant material and wildlife.

6. Construction equipment and materials will be stored in designated staging areas.

7. All equipment will be maintained in a clean and well-functioning state to avoid or minimize contamination from fluids and fuels. Prior to starting work each day, all machinery will be inspected for leaks (e.g., fuel, oil, and hydraulic fluid) and all necessary repairs will be made before the commencement of work.

8. Prior to the start of construction, a hazardous spill plan will be required from the contractor, subject to approval and review by NPS, stating what actions will be taken in the case of a spill and preventive measures to be implemented. Hazardous spill clean-up materials will be on site at all times. This measure is designed to avoid/minimize the introduction of chemical contaminants associated with machinery (e.g., fuel, oil, and hydraulic fluid) used in project implementation.

9. Contractors will be required to properly maintain construction equipment (i.e., mufflers and brakes) to minimize noise. Construction vehicle engines will not be allowed to idle for extended periods of time.

10. Material and equipment hauling will comply with all legal load restrictions. Load restrictions on park roads are identical to state load restrictions with such additional regulations may be imposed by the park Superintendent.

11. All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project work limits and properly disposed of upon project completion.

12. To minimize erosion resulting from construction-related ground disturbance, the contractor will be required to control erosion prior to, during, and following ground-disturbing activities. Standard erosion control measures will be used to minimize soil erosion and will comply with current Georgia Soil and Water Conservation Commission (GSWCC) Green Book practices, the Georgia Erosion and Sedimentation Act of 1975, Georgia Erosion and Sedimentation Act (amended 2000), Redwoods Amendment of March 27, 1978 (General Authorities Act), and NPS Management Policies, 2006.

13. Best Management Practices for erosion and sediment control, as determined by NPS, will be implemented by the contractor to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. Erosion barriers will be installed, inspected, and maintained regularly to ensure effectiveness. The primary measure used to control storm water runoff will be the installation of temporary silt fencing. Silt fences are made of synthetic fabric and are placed in drainage contours to trap sediments generated during construction. Silt fencing fabric will be inspected daily during project work and weekly after project completion, until removed. Accumulated sediments will be removed when the fabric is estimated to be approximately 75 percent full. Silt removal will be accomplished in such a way as to avoid introduction of silt into the Chattahoochee River.

14. Regular site inspections will be conducted to ensure that erosion-control measures are properly installed and functioning effectively.

15. Special status vegetation will be flagged for avoidance.

16. No archaeological sites or isolated finds were identified during the Phase I archaeological survey of the selected alternative. If archaeological features are encountered during construction, work will cease immediately and the DNR Historic Preservation Division, park Superintendent, and park Cultural Resources Specialist will be notified. Procedures will be followed, as per DO-28 and found in the guiding regulations in 36 CFR 800.13. No further action will take place until the NPS provides clearance.

17. During and after construction activities, soils will be stabilized with specially designed fabrics, certified straw, or other materials; and disturbed areas will be re-vegetated with native species as soon as possible after construction, with measures taken to avoid the introduction of invasive species.

18. Fifteen storm water drains will be constructed along the trail adjacent to the Unit. New curb and gutter along Lower Roswell Road will have a vertical drop from the incoming pipe that crosses beneath Lower Roswell Road which will allow stormwater to leave the storm drain system on a 1.0% grade on the outfall pipe at the bottom of the proposed slope. This will result in lower velocities for the outfalling stormwater that will minimize erosion and sedimentation. For example, a flow of 2.0 cubic feet per second (cfs) in an 18 inch diameter pipe will have a velocity of 4.6 feet per second (fps). By comparison, if the pipe followed the 2:1 (50%) fill slope, the 2.0 cfs will produce a velocity of 18.2 fps or if the usual maximum grade for fill slopes of a 10% grade will be used, the velocity of 10.4 fps will result. These storm drains will have outfall pipes placed below ground level.

19. At the outfall of each storm drain, the outlet apron will be comprised of 18 inch diameter river rock to further reduce the velocity of the stormwater and minimize erosion and sedimentation. The area around the outfall and placed river rock will be enhanced as necessary with vegetation to further dissipate outfall velocity and stabilize the surrounding soils. The natural stone also preserves the natural landscape and aesthetic values of the Unit.

20. All construction contracts pertaining to work within NPS jurisdiction will be presented to NPS for approval prior to work taking place.

DETERMINATION OF NO SIGNIFICANT IMPACT FROM IMPLEMENTATION OF THE SELECTED ALTERNATIVE

The term "significantly" as used in NEPA requires considerations of both context and intensity. Context means that the significance of short and long term effects of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. Intensity refers to the severity of impact. As defined in 40 CFR§1508.27, significance is determined by the following:

(1) Impacts that may have both beneficial and adverse impacts and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis

No significant impacts will occur as a result of the selected alternative. Effects from the selected alternative to the resources analyzed in the EA are described below:

Air Quality: Direct, adverse, negligible, short-term impacts are expected from construction activities resulting in temporary increases in air particulates and carbon monoxide. Indirect, beneficial, long-term impacts will result from access to the Unit for walkers and other non-motorized forms of transportation that are expected to slightly reduce traffic volume in the area.

Archaeological Resources and Historic Structures: No archeological resources or historic structures were identified within the area of construction for the selected alternative. There will be no effect to archaeological and historic resources.

Geology: Direct, adverse, moderate, and long-term impacts will occur as a result of the placement of fill, addition of impervious surfaces, and installation of drainage outfalls to create a safe and durable trail and sidewalk and direct stormwater flow away from the road, sidewalk, and trail.

Introduction/Promotion of Non-Native Species: The selected alternative will result in, direct, adverse, moderate, and long-term impacts during construction from the introduction of non-native species. Indirect, adverse, moderate, and long-term impacts are expected from the installation of a multi-use trail, as trails are known disturbance vectors that encourage and facilitate dispersal, recruitment and establishment of non-native species.

Scenic and Aesthetic Value and Concerns: Direct, adverse, moderate, short-term impacts are expected during constructions activities that impede and alter the natural scenic view and aesthetic values of the Gold Branch Unit. Direct, beneficial, and long-term impacts will result from completion of the construction and the re-vegetation and landscaping along the route and at the entrance.

Prime and Unique Farmland and Soils: No prime and unique farmland or soils were identified within construction limits of the selected alternative. There will be no effect to prime and unique farmland or soils.

Terrestrial Ecological Species: The selected alternative will result in direct and indirect, adverse, moderate, and long-term impacts to terrestrial ecological species. Vegetation will be cleared on 3.44 acres of parkland. Direct and indirect, adverse, minor and short-term impacts will result from the displacement and disturbance to wildlife from construction activities and the existence of the trail.

Threatened, Endangered, Candidate Species, and Species of Special Concern: Indirect, adverse, negligible, and long-term impacts to a candidate species for federal listing will result due to the location of the population in the Unit. No other listed species, species of concern, or potentially suitable habitat were identified in the area of impact for the proposed project.

Transportation: Direct, beneficial, and long-term impacts to transportation at the Gold Branch Unit are expected because this project will provide safe access to pedestrians and other non-motorized users through connectivity to existing trails, pathways, and routes.

Park Operations: Impacts to park operations will be direct, adverse, minor, and short-term during construction activities. The new entrance and driveway will be secured during construction to prevent visitor access in the construction zone.

Visitor Safety: Direct, beneficial, and long-term impacts will occur from safer vehicular access and traffic movement and a designated multi-use trail for non-motorized visitors. The multi-use trail will be separated from the road by curb and gutter and a grass strip. Relocation of the Gold Branch Unit entrance across from Asheforde Drive will improve safety and visibility. A dedicated left turn lane for southbound traffic on Lower Roswell Road will move left turning traffic out of the through lanes.

Visitor Use and Understanding: Direct, beneficial, long-term impacts are expected from the selected alternative, with improvements to access and opportunities for non-motorized visitors. Direct, adverse, minor, and short-term impacts to visitor use and understanding will occur during construction activities.

Water Resources, Wetlands, and Floodplains: The selected alternative will result in direct, adverse, minor, short-term impacts to water resources from construction activities and indirect, adverse, negligible, and long-term impacts to water resources from the addition of impervious surfaces. In addition direct, adverse, minor, short- and long-term impacts to wetlands and floodplains will result from increases to surface water run-off and soil erosion due to ground disturbances during construction activities, and stormwater run-off from the addition of impervious surfaces and fill placement.

Soundscapes: Direct, adverse, negligible to minor, short-term impacts to the soundscape from construction activities are expected.

(2) The degree to which the proposed action affects public health or safety.

The construction of the multi-use trail will provide a permanent, safe alternative for non-motorized access to the Gold Branch Unit. The limits of the trail along the length of Lower Roswell Road will result in safe access for a larger sector of the visiting public. Relocation of the Gold Branch Unit driveway entrance will improve visibility of the entrance for visitors driving to the Gold Branch Unit; move southbound left turning traffic into the Gold Branch Unit out of the through lanes and into a dedicated left turn lane; and eliminate conflicting left turn movements between Gold Branch Unit and Asheford subdivision.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

Within the construction limits of the selected alternative no historic or cultural resources, prime farmlands and soils, wild and scenic rivers, or ecologically critical areas were identified and will not be impacted. Construction of the selected alternative will impact 3.44 acres of park lands. No trees larger than 6 inches dbh will be removed, and disturbed areas will be reseeded with native grasses. The disturbed area primarily consists of previously disturbed road shoulder. The location of the multi-use trail and relocated

entrance and driveway occur at the periphery of the Gold Branch Unit, and will not impact cultural resources, wetlands, or ecologically critical areas that may exist within the Park.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Direct, adverse, minor, and short-term impacts to visitor use will occur during construction activities for the selected alternative. Park access during the construction period may be restricted, but the Gold Branch Unit will not be closed during the construction period. During construction, traffic flow on Lower Roswell Road may be slowed or controlled; however, the roadway will not be closed, and access to adjacent subdivisions will remain open at all times.

No highly controversial impacts were identified during public scoping efforts or the 30 day public review and comment period. Public information meetings were held on November 15, 2007 and October 22, 2008. At the first public meeting approximately 154 people attended the public meeting and 116 comments were received. Of the comments received 53 were in favor of the project, 35 expressed conditional support, and 28 opposed the project. At the second public meeting approximately 147 people attended the meeting, generating 182 comments. Of the comments received 127 were in favor of the project, 21 expressed conditional support, and 34 opposed the project.

The EA was made available for public comment between March 27 and April 24, 2012. A total of 26 public comments were received. Twenty-two comments were in favor of the selected alternative, two comments were in favor of the No Action Alternative, and two were in favor of the sidewalk only alternative. A summary of comments received during the 30 day public comment period is included in Appendix A of this FONSI.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no highly uncertain impacts to the human environment from the selected alternative. Unique or unknown risks are not expected.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Construction of the multi-use trail and relocation of the entrance to Gold Branch Unit will not establish a precedent for future actions. No precedent is intended or created with the selected alternative. All future NPS actions and decisions will be made based on law, policy, and management objectives.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The selected alternative, when considered with other reasonably foreseeable past, present, and future projects is anticipated to result in cumulative effects. None of the cumulative effects are significant.
Negligibly beneficial cumulative impacts may occur to air quality resulting from alternatives to driving to the Park. Cumulative impacts to geology are expected to be minor due to the permanent alteration resulting from construction of the multi-use trail and entrance driveway. Minor cumulative effects are expected to occur from introduction of non-native species. Moderate cumulative effects to park operations will occur if the selected alternative results in the need for additional resource management, trail maintenance, and enforcement of Natural Zone designation activity stipulations in response to increased activity within the Unit.

Cumulative effects to terrestrial species are expected to be minor and are minimized by constructing the trail along the already disturbed road shoulder of Lower Roswell Road. Cumulative impact to transportation will be moderately beneficial, as this project will ultimately connect the park unit with a regional trail system in both Cobb and Fulton Counties, GA. Cumulative impacts to visitor safety and visitor use will also be moderately beneficial. The trail will provide safe, non-motorized access to a larger area of potential visitors, as well as safer vehicular access. Minor to moderate adverse cumulative impacts to visitor appreciation could result from increases in visitation.

Construction of the selected alternative will have negligible impacts on water resources because the small amount of surface that would be paved is unlikely to accelerate the average levels of stormwater flow in the area. Impact to water resources during construction activities will be mitigated with implementation of erosion control devices during construction, reseeding areas with native vegetation, specialized stormwater catch basins designed to minimize erosion, and the small area disturbed for construction.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

No archaeological or historic resources eligible for listing in the National Register were identified within the construction limits of the selected alternative. In accordance with Section 106 of the NHPA, formal consultation with the Georgia SHPO has resulted in a finding of No Effect to archaeological and historic resources. The No Effect concurrence for historic resources was received on May 25, 2010, and on December 17, 2010 for archaeological resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

No critical habitat was identified within the construction limits of the selected alternative. No endangered or threatened species were identified within areas that will be disturbed for construction of the multi-use trail and entrance improvements. The shoulder along Lower Roswell Road is potentially suitable habitat for Georgia aster, although surveys conducted during the flowering season did not identify any species. On March 19, 2012 the US Fish and Wildlife Service (USFWS) concurred with the NPS determination that the selected alternative will not affect federally listed or candidate species, concluding consultation under Section 7 of the Endangered Species Act.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The selected alternative will not threaten a violation of any other Federal, State, or local law imposed for the protection of the environment. The selected alternative will impact the 25-foot vegetated buffer of Willeo Creek. Cobb County has obtained a Stream Buffer Variance from the Georgia Department of Natural Resources Environmental Protection Division on April 5, 2011 for the impacts, in compliance with Department of Natural Resources Rule 391-3-7.05(2)(a). The selected alternative will also require extension of a culvert conveying a perennial stream and impacts to a wetland. A Nationwide Permit Numbers 14 and 33 were issued by the US Army Corps of Engineers on December 3, 2010 to Cobb County for the stream and wetland impacts, in accordance with Section 404 of the Clean Water Act.

PUBLIC INVOLVEMENT

Scoping efforts were undertaken during the EA process to inform the public and obtain comments about the proposed multi-use trail and entrance improvements. The scoping effort took various forms. Internal scoping meetings were held between CRNRA personnel, Cobb County, and engineering design firm, as well as with Cobb County elected officials. External scoping with the public was held with different groups and in different formats.

Internal scoping meetings were held between CRNRA staff, Cobb County Department of Transportation, and the design engineering firm in February and July 2007, February 2008, and February 2010.

Citizens groups and Home Owner Associations including the bicycling community were involved in the scoping process, and including Waterford Green/Riversound subdivision residents, St. Lyons subdivision residents, and the Ashford HOA. These meetings were held in March, July, and September of 2007, November and December of 2008, and January of 2009. Meetings with elected county officials were held in March 2007, and May and September of 2008.

Public information meetings were held on November 15, 2007 and October 22, 2008. The first public meeting was held at Mt. Bethel Methodist Church, located at the intersection of Lower Roswell Road and Johnson Ferry Road, approximately three miles from the Park. Approximately 154 people attended the public meeting. During the two week comment period 116 comment sheets and emails were received. Of the comments received 53 were in favor of the project, 35 expressed conditional support, and 28 opposed the project.

The second public meeting was held at the East Cobb Government Center on Lower Roswell Road, also located approximately three miles from the Park. Approximately 147 people attended this meeting, and 182 comment sheets and emails were received during the two week comment period. Of the comments received 127 were in favor of the project, 21 expressed conditional support, and 34 opposed the project

The EA was made available for public comment between March 27 and April 24, 2012. During this period 26 comments were received, 22 in favor of the selected alternative (Alternative B), two in favor of the No Action Alternative (Alternative A), and two in favor of the sidewalk alternative (Alternative C). A summary of comments received during the 30 day public comment period is included in Appendix A of the FONSI.

CONCLUSION

The selected alternative will not have a significant effect, either adverse or beneficial, to the human environment. Adverse impacts will not exceed the moderate level, and will be mitigated to the extent possible during construction. The EA provides a thorough analysis for determining that an Environmental Impact Statement for the proposed action is not required.

The NPS has determined that the level of analysis in the EA meets the requirements set forth in the National Environmental Policy Act to assess the impacts of the proposed action. The Finding of No Significant Impact is based on review of the EA and consideration of the impacts and effects of the proposed action.

Recommended: _____ _____

Patricia Wissinger — Date
Superintendent
Chattahoochee River National Recreation Area

Approved: _____ _____

David Vela — Date
Regional Director, Southeast Region
National Park Service

APPENDIX A

PUBLIC COMMENTS AND RESPONSES

PUBLIC COMMENTS & RESPONSES

The Lower Roswell Road Improvements Environmental Assessment was made available for public review and comment during a 30-day period ending April 24, 2012. A total of 26 public comments were received. Twenty-two comments were in favor of the selected alternative (Alternative B) including a multi-use trail. Two comments were in favor of the No Action Alternative (Alternative A), and two were in favor of the sidewalk alternative (Alternative C). Substantive comments on the EA focused on several topics: enhanced access to Gold Branch Unit, connectivity to municipal trail systems, increased recreation opportunity, aesthetics, vehicular safety, non-motorized transportation safety, property values of neighboring homes, cost of proposed improvements, and potential compromising of National Park land. A summary of the public comments received and the NPS responses to those comments is provided below.

A multi-use trail and entrance alignment with turn lane provides safer access for visitors.

The selected alternative incorporates a number of features to enhance safety in access to Gold Branch Unit and connectivity to area trails. These safety enhancements benefit both motorized and non-motorized visitors. An 8-foot-wide multi-use trail on NPS property is separated from the roadway, providing refuge for non-motorized users of various skill levels. Bike lanes on the roadway allow for road-bikers or bicycling commuters to travel efficiently on a dedicated bike lane along the Lower Roswell Road traffic route. A realignment of Gold Branch entrance will offer non-motorized visitors safer access. It will also provide greater safety for vehicles entering and exiting the Unit. A separate turning lane will provide turning vehicles with refuge from through traffic.

There is a need for unambiguous signage regarding bicycle use in the Gold Branch Unit.

The Gold Branch Unit is considered a “Natural Zone” in the park’s General Management Plan, which expressly prohibits off-road bicycling within the primitive trail system of Unit. Due to unclear signage presently in place at the Unit, this is not always readily understood by visitors and results in non-permissible off-road bicycling, creating occasional problems for hikers. The increased access to bicyclers afforded by the construction of a multi-use trail could have the potential to increase the incidence of off-road bicycling within the Unit. NPS acknowledges this potential for conflict. The park plans to minimize this issue through more effective signage, installation of bike weirs to prevent access to bicyclers on the primitive trails, and the placing of bike racks in the entrance area.

The trail should incorporate wood fence between the trail and the roadway for increased aesthetics.

The selected alternative provides for a 1.5-foot grass strip dividing the roadway and the multi-use trail. Installation of an attractive low-level wood fence along this dividing strip is an idea that holds merit. While this is not currently outlined in the proposed project, NPS would be open to considering this type of enhancement should a clear need and funding source be identified in the future.

A multi-use trail will provide for many forms of non-motorized uses and skill levels.

NPS anticipates that a multi-use trail in this area along the Gold Branch Unit will see use by a wide number of user groups including walkers, hikers, bikers, roller-bladers, etc. This trail will provide connectivity between the Cobb County trail system and a separately proposed trail for Willeo Road that, when constructed, would begin at the Fulton County line. An 8-foot-wide multi-use trail separated from the roadway, as opposed to a 5-foot-wide sidewalk at this site, provides safer recreational opportunity for groups or families traveling together, and for individuals at a variety of skill levels.

A multi-use trail will increase the property values of neighboring houses and parcels.

NPS can make no prediction as to market trends in property values; nor can we comment on whether the presence of a multi-use trail would affect those monetary values. However, it is reasonable to state that

access to high quality recreational opportunities can have a positive effect on the quality of life for local residents. The selected alternative will provide for safe, non-motorized connectivity to a wider system of area trails as well as to primitive hiking trails in the Gold Branch Unit of CRNRA.

The amount of traffic along Lower Roswell Road is not sufficient to justify the cost of roundabout construction.

NPS issuance of a Special-Use permit to Cobb County for the selected alternative would permit construction activities associated with the project. This means that Cobb County would incur costs associated with roundabout construction. The intersection of Lower Roswell Road, Timber Ridge Road, and Willeo Road will be modified with a roundabout. While a slowing of traffic around a roundabout may benefit traffic volume in this area to some extent, a greater benefit will be derived from the elimination of unsafe visibility problems. Specifically, skewed angles and horizontal alignment of approaches to the three way intersection will be remediated by constructing a roundabout at this location.

The project represents encroachment onto National Park Service property that will not benefit the land unit.

The selected alternative for this project requires that a strip of NPS land along Lower Roswell Road totaling 3.44 acres be impacted to complete this project. NPS considers all impacts to our federal lands very carefully. We believe that the benefits provided by this project to the visiting public in terms of accessibility, connectivity, public enjoyment, and safety serve to enhance the value of this land and are consistent with the NPS mission.

The proposed project does not account for increased parking needs as a result of the project.

The primary purpose of this project is to provide connectivity between the Cobb County trail system, Gold Branch Unit and a proposed trail that will begin at the Fulton County line. While parking needs may increase somewhat, the goal of connecting regional trail systems is to create opportunities for non-motorized access and transportation that will ultimately reduce the use of motorized vehicles in the area.

APPENDIX B

FLOODPLAIN STATEMENT OF FINDINGS

FLOODPLAINS STATEMENT OF FINDINGS

Lower Roswell Road Improvements: Multi-Use Trail and Entrance Improvements
Chattahoochee River National Recreation Area – Gold Branch Unit

March 2012

Recommended:

Patricia Wissinger, Superintendent
Chattahoochee River National Recreation Area

Date

Certified for Technical Accuracy and Servicewide Consistency:

Chief, Water Resources Division

Date

Approved:

David Vela, Southeast Regional Director

Date

1. INTRODUCTION

Executive Order (EO) 11988, *Floodplain Management*, requires the National Park Service (NPS) and other agencies to evaluate the potential impacts of actions in floodplains. This Statement of Findings (SOF) for Floodplains has been prepared in compliance with EO 11988, and in accordance with the outline presented in the *National Park Service Procedural Manual 77-2: Floodplain Management* (NPS 2011).

1.1 Description of the Proposed Action

The Chattahoochee River National Recreation Area (CRNRA) would undertake a federal action in issuing a Special-Use Permit to Cobb County, Georgia to construct a non-motorized recreational access route along Lower Roswell Road on park property and replace the existing Unit entrance in the park's Gold Branch Unit (see Figure 1). The purpose of the proposed project is the expansion of non-motorized public access and recreational opportunities within the jurisdiction of the CRNRA and Cobb County, Georgia to enhance visitor use and safety. Specifically, the objective of the proposed project is to provide connectivity within the greater Chattahoochee River corridor between the Cobb County trail system and a separately proposed trail for Willeo Road that would begin at the Fulton County line. This objective is consistent with authorizing legislation for the CRNRA which authorizes the park to work cooperatively with state, local, and private entities "to establish a series of linear corridors linking existing units of the recreation area and to protect other open spaces of the Chattahoochee River corridor" (U.S. Public Law 106-154 of 1999). The proposed project represents a key opportunity to advance linkage among CRNRA and multiple municipally owned landholdings in support of a regional system of continuous trails, parks and green spaces in the north Metro Atlanta area.

The proposed project would address several goals in the "Final General Management Plan/Environmental Impact Statement" (September 2009) including:

- Expand use of the CRNRA facilities to visitors,
- Increase connectivity to neighboring communities through trail linkages, and
- Increase cooperative efforts with local agencies to enhance the level of connectivity.

The preferred action alternative would construct an eight-foot wide multi-use trail on the east side of Lower Roswell Road on park property and a five-foot wide sidewalk on the west side of Lower Roswell Road on Cobb County property. The limits of the project would be from Davidson Road to the intersection with Timber Ridge Road and Willeo Road. In addition to the trail and sidewalk, four-foot bike lanes would be constructed adjacent to the roadway travel lanes. The trail and sidewalk would be separated from the traveled roadway and bike lanes by two-foot wide curb and gutter and a 1.5-foot wide grass strip. A new vehicle entrance would be constructed approximately 200 feet north of the existing location, across from Asheforde Drive. A southbound left turn lane would be placed on Lower Roswell Road, opposing the northbound Asheforde Drive left turn lane, in order to provide turning motorists refuge from through traffic. Turning radii would also be increased to 24 feet, allowing for safer turns into and out of the relocated paved driveway lined by two-foot grass shoulders. To improve the operational efficiency of the intersection of Lower Roswell Road, Timber Ridge Road, and Willeo Road a roundabout is proposed.

Approximately 0.75 mile of the trail would be constructed along Unit's boundary. Total impacts to Gold Branch Unit from construction activities and the final trail footprint would be 3.44 acres, 0.17 acre of which would be the hard surface of the trail. Construction of the multi-use trail and entrance would

require clearing of approximately 1.57 acre of woody vegetation. There are no floodplains or wetlands within the area of construction for either the multi-use trail or entrance improvements. The trail and entrance would not impact floodplains or wetlands.

Construction of the roundabout at the terminus of the proposed project would require approximately 1,540 square feet of fill material, of which 746 square feet will go into the 100-year floodplain of Willeo Creek within the Gold Branch Unit. The impact to the floodplain is necessary to construct sufficient road shoulders to install safety guardrail for motorists.

1.2 Site Description

Gold Branch Unit is located in northern Cobb County, Georgia on the Chattahoochee River. The river flows along the eastern and southern boundaries, Lower Roswell Road makes up the western boundary, and Willeo Creek delineates the northern side. Surrounding land use is residential. Gold Branch Unit consists of several miles of unpaved hiking trails. The park is heavily wooded mixed hardwood/pine forest, with minimal facilities including hiking trails, an access driveway from Lower Roswell Road, and a pervious-surface parking lot. Wetlands and floodplains areas are located on the northern side of the Unit adjacent to the proposed trail terminus and roundabout. No trails or other park facilities are in the area adjacent to the roundabout.

The multi-use trail would be constructed along the road shoulder of Lower Roswell Road. The entrance realignment would be constructed at Lower Roswell Road, and is designed to minimize impacts to the forested environment. There are no wetlands within the construction limits of either the trail or the entrance improvements. The trail and entrance would be constructed outside the limits of the floodplain of the Chattahoochee River.

Willeo Creek flows under Willeo Road, and is located north of the construction limits of the trail and roundabout. The creek flows easterly approximately 800 feet into the Chattahoochee River. Two wetlands, one on each side of Willeo Road, are located in the floodplain of Willeo Creek. Fill would be required within the floodplain of Willeo Creek and one of the wetlands for the roundabout construction to stabilize road shoulders, reduce erosion potential, and provide stability for safety the guardrail. The Chattahoochee River floodplain would not be impacted by the roundabout. Figure 2 shows the trail and roundabout construction in relationship to stream and wetland features.

Floodplains

Floodplains have numerous values, some of which include flood storage and retention, groundwater recharge, nutrient removal, and wildlife habitat. The Chattahoochee River within the CRNRA flows along the Brevard Fault Zone 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.

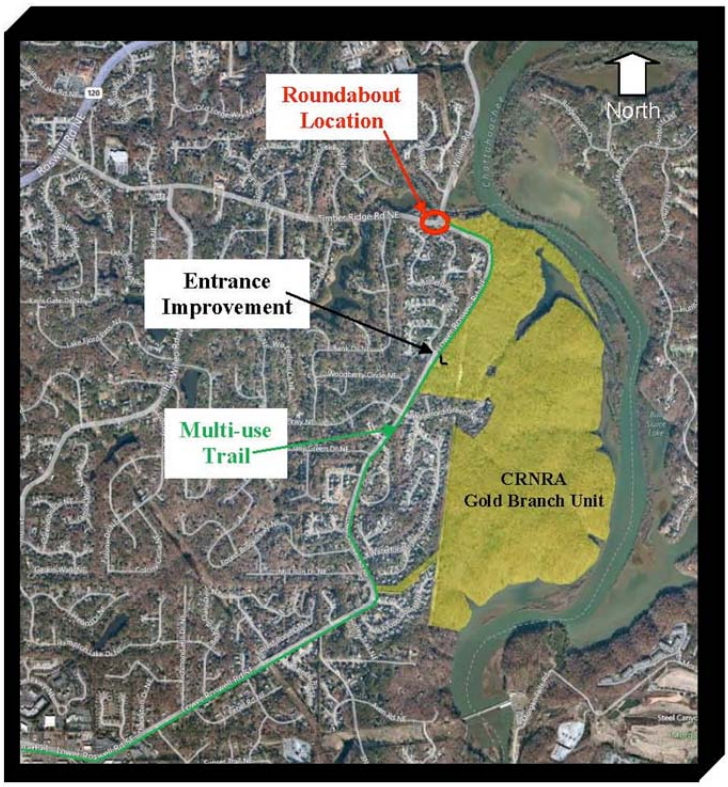
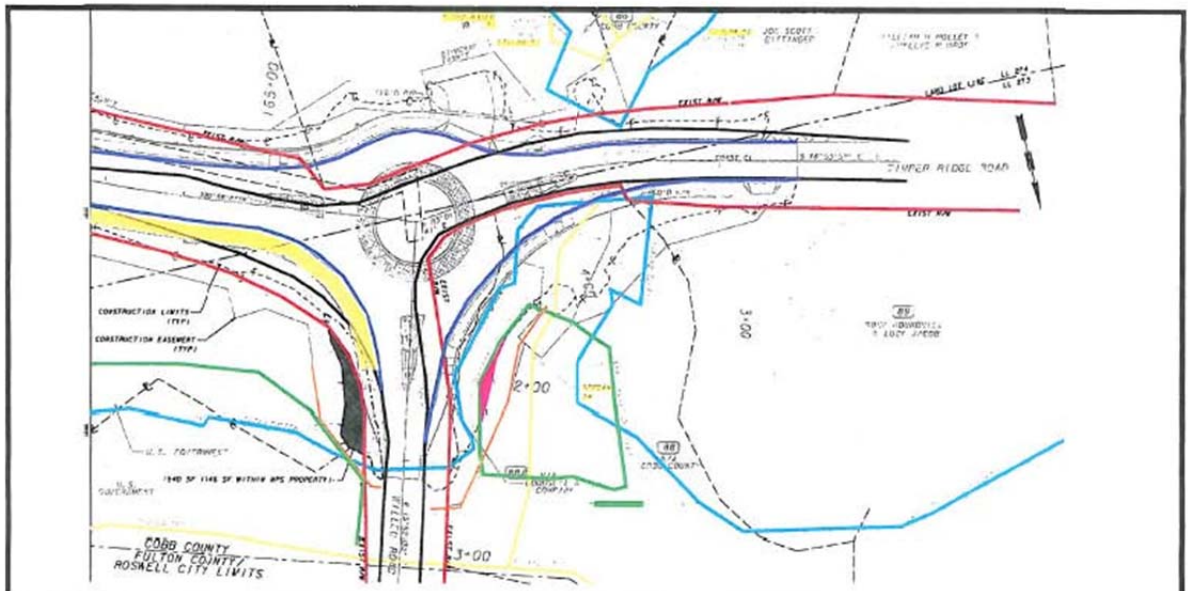


Figure 1. Gold Branch Unit Vicinity Map

The narrow floodplains along the Chattahoochee River and its tributaries are a result of the local geology. Urban sprawl has increased the expanse of impervious surfaces in the watershed, thus increasing the frequency and height of floodplain overflows. However, even with the loss of riverine system floodplain buffers, the remaining floodplain still supports the overall flood-control for the area and provides many other valuable functions.

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 heavily vegetative floodplain also increases because it provides more suitable habitat for wildlife (NPS 2005). The area of the Unit associated with the floodplain of Willeo Creek is characterized by a diverse assemblage of plant species including River birch (*Betula nigra*), box elder (*Acer negundo*), sweetgum (*Liquidambar styraciflua*), loblolly pine (*Pinus taeda*), tulip poplar (*Liriodendron tulipifera*), blackgum (*Nyssa sylvatica*), and water oak (*Quercus nigra*).



Source: Gresham, Smith and Partners

Not to Scale

Figure 2

Resources Near Roundabout Construction

Legend

- Existing Edge of Pavement
- Stream Centerline
- Stream Buffer
- Wetland Buffer
- Orange Barrier Fencing
- Multi-use Trail
- Proposed Edge of Pavement
- Park Boundary/ Existing Right-of-Way
- Fill Within 100-Year Floodplain in Gold Branch Unit
- Wetland Impact

The diverse assemblage of mesic-hardwood floodplain, bottomland forested wetlands, saturated wetlands, and mudflats in the immediate vicinity of the roundabout potentially support wildlife, which could attract more visitors to the Gold Branch Unit. The natural sinuosity of the river, the expanse of Bull Sluice Lake and the large mudflat areas have the potential to contain large quantities of water during flooding events, thus impeding potential flooding.

Elevation of Lower Roswell Road generally decreases as one travels from the Unit entrance north to the intersection with Timber Ridge Road and Willeo Road, as the road approaches Willeo Creek. The Federal Emergency Management Agency Flood Insurance Rate Map for Cobb County, Georgia (Panel No. 13067C0132G), dated December 16, 2008, shows that the project area is within floodplain Zone AE (see Figure 3), which is an area inundated by 100-year flooding, and for which Base Flood Elevations (BFEs) have been determined.

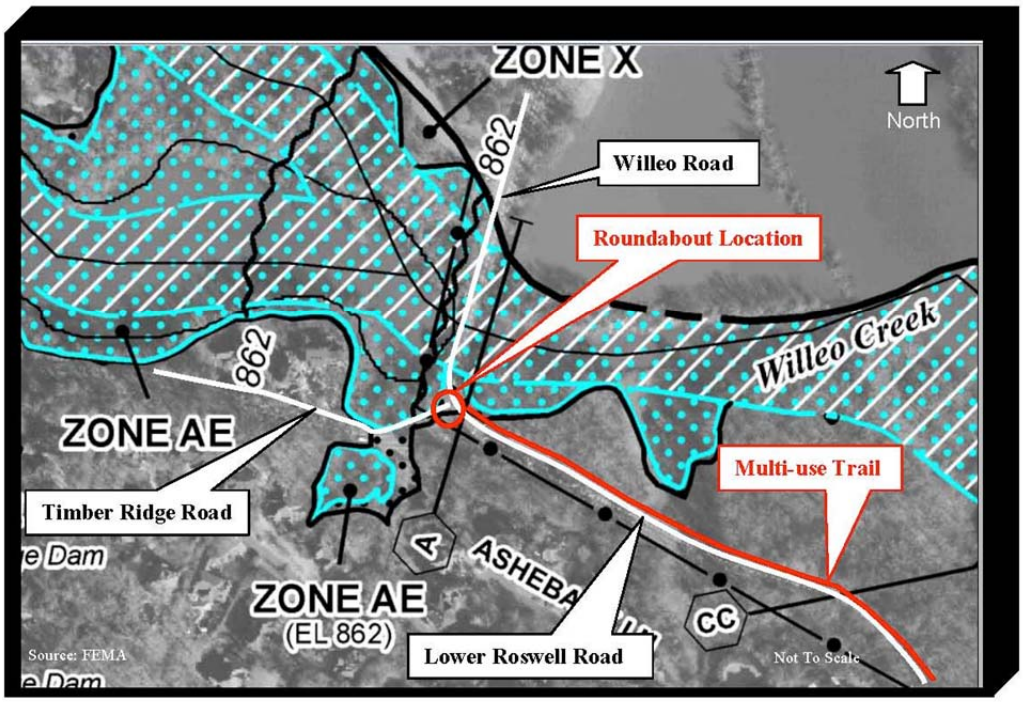


Figure 3 – FEMA Map Zone Map

2. JUSTIFICATION FOR USE OF THE FLOODPLAIN

The purpose of the proposed project is the expansion of non-motorized public access and recreational opportunities within the jurisdiction of the CRNRA and Cobb County, Georgia to enhance visitor use and safety. The project would be constructed along the previously disturbed shoulder of Lower Roswell Road, confining construction along the road shoulder and minimizing the amount of impacts to resources.

Aligning the project along Lower Roswell Road avoids fragmentation and disturbance of the Unit, while providing easier and safer access and connectivity for alternative means of transportation. The proposed route lies on upland forested land until its terminus at the intersection with Willeo and Timber Ridge Roads at the proposed roundabout site. Willeo Creek and its associated wetlands and floodplains are located at this section of the project. No wetlands exist in the upland sections of the proposed route and construction limits. As shown on Figure 2, the proposed route ends approximately 80 to 90 feet from a bridge over Willeo Creek.

The entrance improvements and new driveway would be constructed at the periphery of the Unit along Lower Roswell Road. The entrance lies in the upland mixed hardwood/pine forested area.

The proposed route follows Lower Roswell Road to the intersection with Willeo and Timber Ridge Roads where a bridge is located over Willeo Creek. This alignment provides the most practicable situation for the location of a multi-use trail as it lies mostly within the shoulder of Lower Roswell Road, following the road to a pre-existing bridge at Willeo Creek. This path minimizes environmental impacts to the Gold Branch Unit, but takes the route through the wetlands and floodplains associated with Willeo Creek. The placement of fill in the wetland and floodplain areas is unavoidable for the creation of a safe roundabout to accommodate traffic at the intersection of these three roads. Because the amount of fill placed in the wetland on the western side of Willeo Road is less than 0.01 acres and is specifically for safety measures, no formal Wetland statement of findings or wetland mitigation is required under NPS policy. The amount of fill that would be placed in the floodplain does not reduce or limit flood storage capacity in this area; therefore, no floodplain mitigation is required.

The proposed approach curvature on Lower Roswell Road would deflect the roadway further away from the Gold Branch Unit than the present alignment, avoiding impacts to the park. Impacts to the floodplain of Willeo Creek are a result of tying the roundabout into the current alignment of Willeo Road at a point before the bridge that crosses over Willeo Creek. This design would allow avoidance of bridge replacement and the associated increase in floodplain impact as compared with the current proposed design. Floodplain impact would result from placement of fill soils, and not the impervious road surface. The fill soil is required to stabilize road shoulders, reduce erosion potential, and provide stability for the safety guardrail required due to the proximity of the road to the bridge.

2.1 Investigation of Alternative Sites

Several alternatives were considered for the project. These alternatives include:

- Construction of the multi-use trail entirely within the boundary of Gold Branch Unit, adjacent to the Chattahoochee River - The CRNRA Management Plan designates the Gold Branch Unit as a "Natural Zone," precluding off-road cycling and hardened trails. This alternative would severely compromise the stated management policy and zone designation allowances of the CRNRA.

- Construction of sidewalks on both sides of the road, and relocation of the Unit's entrance – Sidewalks would provide less variety of opportunities for non-motorized access to the Unit.

- Constructing the multi-use trail on the west side of Lower Roswell Road, across from Gold Branch Unit - The available area to construct an eight-foot wide trail is constrained by the existing road alignment, residential development, and a large rock outcrop on the west side of Lower Roswell Road at the north end of the project. This alternative would also result in safety concerns for pedestrians accessing the Unit. Because the access trail would be across the road from the Unit, a pedestrian crossing would be required at the Unit entrance. Line-of-sight

limitations along Lower Roswell Road in this area would make it difficult for motorists to see pedestrians crossing the road.

- Improvement of the entrance at its current location, or relocating the entrance further to the south- Improving the entrance at its current location would not resolve sight distance concerns currently experienced on Lower Roswell Road. A dedicated left turn lane for southbound traffic would not be constructed, as a left turn lane into the Unit would conflict with the existing turn lane onto Asheforde Drive. Relocating the entrance further to the south would require a larger footprint for construction of the dedicated left turn lane, requiring more impacts within the Unit than locating the entrance further north.

- Installation of a traffic signal – Installation of a traffic signal would not require alteration of the intersection or any approach legs to the intersection and would allow for easier pedestrian crossing. However, the number of conflicting vehicle movements will not be reduced, the undesirable horizontal curve between Lower Roswell Road and Willeo Road would not be improved to AASHTO guidelines for the posted speed, and motorists turning from Timber Ridge Road would still have poor intersection sight distance. Therefore this alternative does not meet one of the project needs to improve operational efficiency and potentially reduce the number of crashes at the intersection.

- Construction of a tee-intersection with stop control on the stem leg– Reconfiguring Lower Roswell Road through the tee-intersection to tie into Willeo Road on a horizontal curve that complied with AASHTO guidelines for the 35 mph posted speed to improve operational efficiency and potentially reduce the number of crashes would require a major realignment of Lower Roswell Road and increased impacts to resources. Straightening the alignment of Lower Roswell Road with Timber Ridge Road would impact three residences south of the intersection, resulting in a displacement of these properties. Further, the number of conflicting vehicle movements will not be reduced at the intersection and it would be more difficult for pedestrians to cross Lower Roswell Road and Willeo Road to access the multi-use trail.

- Reconfiguring Willeo Road through the tee-intersection to tie into Lower Roswell Road on a horizontal curve that complied with AASHTO guidelines for the 35 mph posted speed would place the road within the boundary of Gold Branch Unit. It would also require a new bridge on Willeo Road over Willeo Creek, increased impacts to the floodplains, and stream impacts. As in the previous alternative, the number of conflicting vehicle movements will not be reduced at the intersection and it would be more difficult for pedestrians to cross Lower Roswell Road and Willeo Road to access the multi-use trail.

- Reconfiguring Timber Ridge Road through the tee-intersection to tie into Lower Roswell Road as the through movement with Willeo Road becoming the stop controlled stem would worsen the intersection's efficiency as the majority of traffic through the intersection passes from Lower Roswell Road to Willeo Road (this would also apply if all three legs were stop controlled). The number of conflicting vehicle movements will still not be reduced at the intersection and it would be more difficult for pedestrians to cross Lower Roswell Road and Willeo Road to access the multi-use trail.

3. FLOOD RISKS

3.1 Nature of Flooding in the Area

Flood potential in the Chattahoochee River is influenced by several factors. These include urban and suburban stormwater runoff, large localized storm events, and hydropower releases of water from Buford Dam by the U.S Army Corps of Engineers (USACE), Mobile District. The area of the proposed project is downstream of Buford Dam. Hydropower releases result in water level increases of up to 8 feet above average immediately below Buford Dam. Downstream of Buford Dam, the height of water level change decreases, especially along wider sections of the Chattahoochee 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. Willeo Creek at the Chattahoochee River is approximately 21 miles south-southwest of Buford Dam.

Closer to the project area, the dam at Morgan Falls is located approximately 2.2 miles downstream. Operated by the Georgia Power Company, Morgan Falls Dam is operated in a modified run-of-river mode to generate power and re-regulate peaking flows from Buford Dam.

Releases from Buford Dam coupled with heavy rain events can cause the pool behind the Morgan Falls Dam to increase, resulting in flooding upstream. This backflow may cause flooding up into tributaries like Willeo Creek.

3.2 Hydraulics of Flooding at the Site

Morgan Falls Dam should have limited impact on the floodplain at Willeo Creek. Willeo Creek is approximately 12,000 feet upstream from Morgan Falls. Impact should disappear approximately 4,700 feet upstream from Morgan Falls, based on the Cobb County Flood Insurance Study (FIS) (June 18, 2010). There is no indication from the flood profiles that Bull Sluice Lake would have any significant impact on the floodplain on Willeo Creek. The floodplain at Willeo Creek, according to flood profiles is influenced by the tailwater from the Chattahoochee River. The 100-year flood plain elevation at the bridge at Willeo Creek has an elevation of 861.8, while the elevation at the Morgan Falls Dam is 854.2, according to the current FIS.

Flows would expand at a ratio approximately 2:1 as they exit the Willeo Road bridge on the downstream (nearer the Chattahoochee River). According to the USACE Hydrologic Engineering Center – River Analysis System (HEC-RAS) Technical Manual (2008), all flows outside of the 2:1 slope ratio are considered ineffective flow areas and should therefore not impact the flood elevations in those areas. This can be better seen during high flood flows as eddies will appear in those areas as returning flow back into the main channel and flow is very slow or stagnant.

3.3 Time Required for Flooding to Occur (Amount of Warning Time Possible)

Given the distance from Buford Dam, dam release is not likely to be the primary cause of flooding for Willeo Creek. The approximate time for the river to rise at Azalea Park after release from Buford Dam is approximately 10.5 hours (CRNRA website). Azalea Park is approximately 1.5 miles upstream from the Gold Branch Unit.

The primary flood risk would be from flooding caused by storm water runoff during major rain events. The bridge on Willeo Road is high enough so that 100 year floods will not overtop the road, or close the intersection. However, flash flooding could occur and overtop the road, due to the high amount of

impervious surfaces associated with development in the area. Impervious surfaces result in rapid runoff during storm events.

3.4 Geomorphic Considerations (Erosion, Sediment Deposition, and Channel Adjustments)

During construction activities, the project route would be prone to erosion from storm events. The use of erosion control devises would be used to limit erosion during construction activities.

As stated in Section 3.1, based on flow expansion modeling in the HEC-RAS all flows outside of the 2:1 slope ratio are considered ineffective flow areas.

The stream banks on the south side of Willeo Creek would be rehabilitated with natural vegetation. The rehabilitated stream bank areas would help minimize erosion and stabilize the stream bank, reducing the potential for sediment deposition.

Placement of fill within the 100-year floodplain of Willeo Creek for construction of the roundabout would have minimal localized effects on current patterns, and the sinuosity of the stream is not expected to change.

4. MINIMIZATION

The footprint of Willeo Road between the proposed roundabout and existing bridge over Willeo Creek was minimized as much as possible. The use of 11- foot travel lanes versus the standard 12- foot width is proposed on Willeo Road to minimize the project's footprint. Further, the 8- foot multi-use trail in the northeast corner of Willeo Road and Lower Roswell Road ends immediately after roundabout's northern crosswalk. This reduces the shoulder on the east side of Willeo Road within the floodplain from 15 foot to 4.5 feet. Slopes would be at 2:1 ratio and Georgia Department of Transportation W-beam guardrail are proposed on the east side of Willeo Road between the roundabout and existing bridge to minimize impacts within the floodplain while not posing a travel hazard to motorists. The fill would be seeded with a native seed mix to minimize erosion and sedimentation from the newly created slopes.

Placement of OBF would be installed to demarcate limits of construction. No construction, staging of equipment, or other work would be allowed beyond the OBF. It would be installed by hand by driving steel rebar stakes for support. Erosion control devices would also be installed by hand, minimizing impacts to floodplain and wetlands.

The OBF and erosion control devices on the east side of Willeo Road would be installed from the road shoulder and outside the limits of the wetland to avoid impacts. On the west side of Willeo Road, a section of the OBF and erosion control would be within the wetland. Installation and removal of the OBF and erosion control by hand would minimize impacts.

5. MITIGATION

The proposed fill in the floodplain would not affect flood storage capacity. No mitigation is required.

6. COMPLIANCE

The amount of fill to be placed within the floodplain would not be within the regulatory floodway of Little Willeo Creek. Coordination with FEMA is not required for a rise/no rise determination. The

project is designed such that the fill would have no significant encroachment on this floodplain. The project would not represent a significant risk to life or property and would not have a significant impact on natural and beneficial floodplain values. The structures associated with the proposed project would meet the requirements of the National Flood Insurance Program (44 CFR Part 60).

The project is anticipated to be in compliance with the Metropolitan Rivers Protection Act (1973) (MRPA). Cobb County Water Authority is the local agency ensuring projects comply with the MRPA. Confirmation from Cobb County Water Authority is being obtained by Cobb County Department of Transportation.

7. SUMMARY

The proposed alternative to construct a multi-use trail, and entrance improvements would address several goals in the "Final General Management Plan/Environmental Impact Statement" (September 2009) including:

- Expand use of the CRNRA facilities to visitors,
- Increase connectivity to neighboring communities through trail linkages, and
- Increase cooperative efforts with local agencies to enhance the level of connectivity.

The trail terminus at the roundabout expands a non-motorized opportunity for access to the Gold Branch Unit to the larger surrounding community. Neighborhoods along Timber Ridge Road and Willeo Road would be provided a safe option to driving to the Unit. Improvements to the entrance and the intersection at Lower Roswell Road would provide a safer access for visitors. Coordination between Cobb County and the CRNRA for construction of the multi-use trail result in expanded access to Gold Branch Unit while addressing operational efficiency concerns for Cobb County at the intersection. Construction of the trail is also included as a component for Cobb Counties larger master trail plan.

The proposed trail and entrance would not impact floodplains or wetlands.

The proposed roundabout located at the terminus of the trail would require placement of approximately 746 square feet of fill within the 100-year floodplain of Willeo Creek located within the boundary of the Gold Branch Unit. The fill is necessary to stabilize road slopes, and provide sufficient shoulders for installation of safety guardrail. The proposed roundabout design would minimize impacts to other natural resources and adjacent land owners.

The quantity of fill in the floodplain downstream from the Willeo Road bridge would not contribute to hazardous conditions associated with flooding in Willeo Creek. Flooding events would most likely be associated with runoff from impervious surfaces of the surrounding area during rainfall events.

Permits with other state and federal agencies have been obtained by Cobb County for construction of the roundabout. No permitting is required for placement of the fill amount within the floodplain.

8. REFERENCES

Executive Order (EO) 11988, *Floodplain Management*, (1977).

EO 11990, *Protection of Wetlands*, (1977).

National Park Service (NPS) Procedural Manual 77-2 *Floodplain Management*, (2011).

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United States Army Corps of Engineers, Wetlands Delineation Manual, (1987).

U.S. Fish and Wildlife Service (USFWS) *Classification of Wetlands and Deepwater Habitats of the United States* Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, (1979).

USACE Hydrologic Engineering Center – River Analysis System (HEC-RAS) Technical Manual (2008)

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

Cobb County Flood Insurance Study (2010)

APPENDIX C

IMPAIRMENT DETERMINATION

Lower Roswell Road Improvements: Multi-Use Trail Facility and Entrance Improvements
Impairment Determination

The Prohibition on Impairment of Park Resources and Values

NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values

> While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

What is Impairment?

NPS *Management Policies 2006*, Section 1.4.5, *What Constitutes Impairment of Park Resources and Values*, and Section 1.4.6, *What Constitutes Park Resources and Values*, provide an explanation of impairment.

> Impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.

Section 1.4.5 of *Management Policies 2006* states:

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park,
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. Per section 1.4.6 of *Management Policies 2006*, park resources and values that may be impaired include:

- The park's scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural

soundscapes and smells; water resources; archeological resources; cultural landscapes; ethnographic resources; historic and pre-historic sites, structure, and objects; museum collection; and native plants and animals;
- Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- The parks role in contributing the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- Any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park, but this would not be a violation of the Organic Act unless the NPS was in some way responsible for the action.

How is a Determination Made?

Section 1.4.7 of *Management Policies 2006* states, "[i]n making a determination of whether there would be an impairment, an NPS decision maker must use his or her professional judgment. This means that the decision maker must consider any environmental assessment or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under Section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advise or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

Management Policies 2006 further define "professional judgment" as "a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker's education, training, and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities related to the decision."

Impairment Determination for the Selected Alternative

The determination on impairment has been prepared for the selected alternative, Alternative B, Multi-Use Trail Alternative: Construction of a Multi-Use Trail and Sidewalk, and Relocation of the Unit's Entrance. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for visitor use and experience, public safety, socioeconomic resources and adjacent lands, and operations and infrastructure because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot by impaired in the same way that an action can impair park resources and values.

Air Quality

Implementation of Alternative B will result in direct, adverse, negligible, short-term impacts on air quality from construction activities resulting in temporary increases in air particulates and carbon monoxide from heavy equipment powered by combustible fuels. Alternative B will result in indirect, beneficial, long-term impacts by providing access to the Unit for walkers and other non-motorized forms of transportation that are expected to slightly reduce traffic volume in the area.

Because construction impacts will be temporary and because the multi-use trail and sidewalks provide visitors alternative means of access to the Unit other than by motorized vehicle, Alternative B will not result in impairment to air quality.

Archeological Resource and Historic Structures

Because no archeological resources or historic structures were identified, Alternative B will result in no impairment to the Unit's cultural environment.

Geology

Implementation of Alternative B will result in direct, adverse, moderate, and long-term impacts due to the placement of fill, addition of impervious surfaces, and installation of drainage outfalls to create a safe and durable trail and sidewalk and direct stormwater flow away from the road, sidewalk, and trail.

Because the fill materials not paved will be stabilized and seeded with native vegetation seed mixes, and specialized drainage outfalls will be designed to dissipate the velocity of stormwater flow with vertical drops, and because natural stone and plantings will be installed at the mouth of the outfalls, Alternative B's impacts will not constitute impairment to geology.

Introduce/Promote Non-native Species

During construction, direct, adverse, moderate, and long-term impacts from the introduction of non-native species will occur under Alternative B. Soil and debris caught on equipment performing ground disturbing activities and the importation of fill dirt provide pathways for the importation of non-native species. Indirect, adverse, moderate, and long-term impacts will result from the installation of a multi-use trail. Trails are known disturbance vectors that encourage and facilitate dispersal, recruitment and establishment of non-native species.

Because best management practices (i.e. washing equipment before bringing it onto park property) will be followed, because all ground disturbance and fill areas will be immediately seeded with a native vegetation seed mix, and because the native species will provide competition to the invasive species introduced by use of the trail, Alternative B will not result in impairment to park resources by the introduction and/or promotion of non-native species.

Scenic and Aesthetic Value and Concerns

Alternative B will result in direct, adverse, moderate, short-term impacts from constructions activities that impede and alter the natural scenic view and aesthetic values of the Unit. Direct, beneficial, and long-term impacts will result from completion of the construction and the re-vegetation and landscaping along the route and at the entrance.

Because all ground disturbance and fill will be reseeded and landscaped with native species, because the entrance re-route will be landscaped, and because the multi-use trail will give users an improved view of the park, Alternative B will not result in impairment to scenic and aesthetic value and concerns.

Prime and Unique Farmlands and Soils

Because no prime and unique farmland soils were identified in the areas of the multi-use trail, sidewalk, or entrance, Alternative B will result in no impairment to prime and unique farmlands and soils.

Terrestrial Ecological Species

Alternative B will result in direct and indirect, adverse, moderate, and long-term impacts to terrestrial ecological species. Vegetation will be cleared on 3.44 acres of parkland for the multi-use trail and entrance re-route. Direct and indirect, adverse, minor and short-term impacts will result from the displacement and disturbance to wildlife from construction activities and the existence of the trail.

Because all ground disturbances and fill will be seeded and planted with native species, because the route for the multi-use trail follows an existing road where the vegetation is currently impacted by road maintenance practices, because no trees larger than 6 inches dbh will be removed outside of the trail footprint, and because wildlife use is limited along the current road corridor, Alternative B will not result in impairment to terrestrial ecological species.

Threatened, Endangered, Candidate Species, and Species of Special Concern

Indirect, adverse, negligible, and long-term impacts to a candidate for federal listing will result from implementation of Alternative B due to the location of the population in the Unit. No other listed species, species of concern, or potentially suitable habitat were identified in the area of impact for the proposed project.

Because the population of a candidate species is not in proximity to the construction and will be only negligibly affected by the construction or existence of a multi-use trail, and because the USFWS has determined that there will be no effect to threatened, endangered, or candidate species, Alternative B will not result in impairment to threatened, endangered, candidate species, and species of special concern or suitable habitat.

Water Resources, Wetlands and Floodplains

Alternative B will result in direct, adverse, minor, short-term impacts to water resources from construction activities and indirect, adverse, negligible, and long-term impacts to water resources from the addition of impervious surfaces. The use of silt fencing, erosion barriers, and other BMPs will reduce the effects of sedimentation and surface pollution from stormwater flow on surface waters. The installation of specialized stormwater outfall features with vertical drops to limit velocity of storm events, the use of natural stone at the outfall to decrease sedimentation, and the addition of berms planted with native vegetation will reduce impacts to surface waters from implementing Alternative B.

Direct, adverse, minor, short- and long-term impacts to wetlands and floodplains will result in increases to surface water run-off and soil erosion due to ground disturbances during construction activities, and stormwater run-off from the addition of impervious surfaces and fill placement from the multi-use trail in Alternative B.

Because construction impacts will be temporary, because the long-term impacts to wetlands and floodplains are minor, and because compliance with all other entities has been satisfactorily executed (i.e. USACE CWA Section 404 permit for stream and wetland impacts issued by the USACE Savannah District), there will be no impairment of water resource, wetlands, and floodplains from Alternative B.

Soundscape

Direct, adverse, negligible to minor, short-term impacts to the soundscape from construction activities will occur under Alternative B. Because the impacts are temporary there will be no impairment to the Unit's soundscape from Alternative B.