

**US Army Corps
of Engineers**
Savannah District

**FINAL
ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT**

**INCREASED DEVELOPMENT OF
WILDWOOD PARK**

**J. STROM THURMOND LAKE
COLUMBIA COUNTY, GEORGIA**

May 2010

TABLE OF CONTENTS

INTRODUCTION	1
1.0 PURPOSE AND NEED	4
2.0 PROPOSED FEDERAL ACTION	10
3.0 ALTERNATIVES.....	10
3.1 ALTERNATIVES TO THE PROPOSED ACTION.....	11
3.1.1 <i>No Action Alternative (Alternative A)</i>	12
3.1.2 <i>Conceptual Master Plan-2007 (Alternative B)</i>	12
3.1.3 <i>Conceptual Master Plan-2008 (Alternative C)</i>	14
3.2 SELECTION OF PROPOSED ACTION.....	14
4.0 EXISTING ENVIRONMENT.....	15
4.1 AIR QUALITY	15
4.2 CULTURAL RESOURCES	16
4.2.1 <i>Historic Buildings</i>	18
4.2.2 <i>Archeological Resources</i>	19
4.2.3 <i>Native American Resources</i>	19
4.3 NOISE	19
4.4 SOILS	22
4.4.1 <i>Farmland</i>	31
4.4.2 <i>Geology/Topography</i>	33
4.5 THREATENED AND ENDANGERED SPECIES	33
4.6 WETLAND RESOURCES.....	35
4.6.1 <i>Floodplains</i>	38
4.7 WATER RESOURCES MANAGEMENT	39
4.7.1 <i>Water/Wastewater Infrastructure/Treatment</i>	39
4.8 FACILITIES	39
4.9 SOCIOECONOMICS	40
4.9.1 <i>Income</i>	40
4.9.2 <i>Utilities</i>	40
4.9.3 <i>Population</i>	41
4.9.4 <i>Employment</i>	41
4.10 ENVIRONMENTAL JUSTICE	42
4.11 PROTECTION OF CHILDREN	42
4.12 ENERGY	45
4.13 LAND USE	45

Final Environmental Assessment
Wildwood Park

4.14 HAZARDOUS MATERIALS/HAZARDOUS WASTES	49
4.14.1 Solid Waste	51
4.15 TRAFFIC AND TRANSPORTATION	51
5.0 ENVIRONMENTAL CONSEQUENCES.....	52
5.1 AIR QUALITY	53
5.1.1 Alternative C (Preferred Alternative)	53
5.1.2 No Action Alternative	53
5.2 CULTURAL RESOURCES	54
5.2.1 Alternative C (Preferred Alternative)	54
5.2.2 No Action Alternative	56
5.3 NOISE	57
5.3.1 Alternative C (Preferred Alternative)	57
5.3.2 No Action Alternative	57
5.4 SOILS	58
5.4.1 Alternative C (Preferred Alternative)	58
5.4.2 No Action Alternative	60
5.5 THREATENED AND ENDANGERED SPECIES	61
5.5.1 Alternative C (Preferred Alternative)	61
5.5.2 No Action Alternative	62
5.6 WETLAND RESOURCES.....	63
5.6.1 Alternative C (Preferred Alternative)	63
5.6.2 No Action Alternative	65
5.7 WATER RESOURCES MANAGEMENT	66
5.7.1 Alternative C (Preferred Alternative)	66
5.7.2 No Action Alternative	68
5.8 FACILITIES	68
5.8.1 Alternative C (Preferred Alternative)	68
5.8.2 No Action Alternative	69
5.9 SOCIOECONOMICS	69
5.9.1 Alternative C (Preferred Alternative)	69
5.9.2 No Action Alternative	71
5.10 ENVIRONMENTAL JUSTICE	73
5.10.1 Alternative C (Preferred Alternative)	73
5.10.2 No Action Alternative	73
5.11 PROTECTION OF CHILDREN	73
5.11.1 Alternative C (Preferred Alternative)	73
5.11.2 No Action Alternative	74
5.12 ENERGY	74
5.12.1 Alternative C (Preferred Alternative)	74
5.12.2 No Action Alternative	75
5.13 LAND USE	75
5.13.1 Alternative C (Preferred Alternative)	75
5.13.2 No Action Alternative	76

Final Environmental Assessment
Wildwood Park

5.14 HAZARDOUS MATERIALS/HAZARDOUS WASTES	77
5.14.1 <i>Alternative C (Preferred Alternative)</i>	77
5.14.2 <i>No Action Alternative</i>	78
5.15 TRAFFIC AND TRANSPORTATION	79
5.15.1 <i>Alternative C (Preferred Alternative)</i>	79
5.15.2 <i>No Action Alternative</i>	80
6.0 CONCLUSIONS	80
7.0 REFERENCES	84
8.0 LIST OF PREPARERS	86

Final Environmental Assessment Wildwood Park

Figures

Figure 1: Project Location Map	2
Figure 2: 2008 Conceptual Master Plan.....	5
Figure 3: Soil Survey Map	23
Figure 4: Prime Farmland Map	32
Figure 5: Natural Areas Features Map.....	37
Figure 6: Percent Minority Population in the Project Study Area	43
Figure 7: Percent Below Poverty Level in the Project Study Area	44
Figure 8: Columbia County Existing Land Use Map	47
Figure 9: Columbia County Future Land Use Map	48

Tables

Table 1: Columbia County Programming and Facility Needs	7
Table 2: Timing of Proposed Improvements.....	10
Table 2A: Wildwood Park 2010 Event List and Participant Information	21
Table 3: Soil Survey	24
Table 4: Protected Species Known to Occur in Columbia County, Georgia	34
Table 5: Hazardous Materials, Pollution Prevention and Solid Waste Laws	50
Table 6: Summary of Potential Jurisdictional Impacts.....	63
Table 7: Summary of Findings and Conclusions	85

Appendices

APPENDIX A: 2007 WILDWOOD PARK CONCEPTUAL MASTER PLAN

APPENDIX B: COLUMBIA COUNTY PARKS AND RECREATION SYSTEM COMPREHENSIVE
MASTER PLAN

APPENDIX C: ECOLOGY REPORT

APPENDIX D: CORRESPONDENCE

APPENDIX E: 1999 AND 2005 PROTECTED SPECIES SURVEYS

APPENDIX F: MODIFICATION TO THE J. STROM THURMOND MASTER PLAN

FINDING OF NO SIGNIFICANT IMPACT

Name of Action: Increased Development of Wildwood Park, J. Strom Thurmond Lake, Columbia County, Georgia

1. Description of the Proposed Action

The proposed action consists of increased development of Wildwood Park, which is located on the J. Strom Thurmond Lake in Columbia County, Georgia. The proposed improvements to the park would accommodate Columbia County's new visions and programs for the park, while maintaining its valuable existing features. The Plan includes the following features:

- **New Gatehouse:** primary gatehouse building with three entry lanes for faster processing of visitors during events
- **Visitor's Center:** 1,600 square foot building with a 25-space parking lot adjacent to the new gatehouse
- **Outdoor Amphitheater:** fixed seating for 650 and lawn seating for 350 persons
- **Equestrian Campground:** 11-acre site with camping amenities, restrooms, campfire ring, picnic pavilion, trail access, and spaces for approximately 10 horse trailers and future room for five additional spaces
- **Super-Playground:** two-acre site built to the standards of the American Disability Act, 20-space parking area, small restroom building and drop off area
- **Day Use Area / Beach Relocation:** 26-acre site including beach pavilion with showers, picnic pavilion, picnic area, 50-car gravel parking area in the woods (expandable), open play area and improved beach area
- **Lodge Site:** 100-room lodge with a restaurant and meeting facilities with lakefront views, gift/general store, parking for 40 boat trailers with electric hookups and guard and parking for 135 cars
- **Cabin Site:** 42-acre site that includes 24 cabins and parking for each cabin providing more secluded accommodations for visitors
- **Natural and Team Building Area:** 264-acre site which includes rope courses, wilderness training, team building area and other low impact outdoor group activities
- **Archery Areas:** approximately 2,200 linear feet of relocated archery ranges being moved from other areas of the park
- **12 Miles of Hiking Trails**
- **2.6 Miles of Mountain Bike Trails**

- **6.1 Miles of Equestrian Trails**
- **8.1 Miles of 12-foot wide Paved Multi-Use Trails.**
- **Natural Areas** that will be preserved both for wildlife and aesthetic reasons

Columbia County would fund the proposed construction and continue to operate Wildwood Park after the improvements are in place.

2. Other Alternatives Considered

Alternatives to the Proposed Action were developed as part of the planning process. The alternatives that were considered were as follows:

- a. No Action Alternative (Continue with Columbia County's operation of the Park's existing facilities)
- b. Alternative 2: Columbia County's 2007 Conceptual Master Plan (Alternative B)
Columbia County identified specific recreational needs and facilities to be developed in Wildwood Park in their 2007 Recreation Master Plan. The recommendations included a lodge/cabin for extended stay, upgraded group picnic facilities, primitive campground areas, greenway connection to Mistletoe State Park, improved beaches and swimming amenities, horseback-only trails, additional hiking trails, open space/playfield for flexible programming, increased parking, addition of parks department offices and visitor center, additional property for greenway-only connections, and facilities within the park to increase programming opportunities and revenue generation.

The 2007 Master Plan design attempted to avoid sites in which a conflict might occur. For example, trails were sited outside of floodplains, wetlands and/or streams to the fullest extent possible. Major features like the visitor center were placed in upland areas away from any environmentally-sensitive features. Design efforts also matched particular features with related facilities; for example, placing the proposed amphitheater close to the exiting parking facilities so that additional parking would not have to be built.

However, the 2007 Master Plan design used "desk top" analyses and minimal real-time data. No major recent ecological surveys had been completed prior to the development of that plan. The County subsequently funded field surveys which suggested adjustments to the design should be included. The Corps also revised its Nationwide wetland regulations, which placed larger restrictions on acquiring these permits and also covered additional features not previously considered jurisdictional (i.e., ephemeral drainages). These items indicated that revisions to the 2007 plan were warranted.

3. Coordination

Savannah District coordinated this action with Federal, State and local agencies and issued a Notice of Availability to solicit comments from the public on the Draft Environmental Assessment (EA). The District posted the Public Notice that described the proposed action and requested comments on its public website on March 30, 2010.

The April 11, 2010 issue of the Augusta Chronicle contained an article describing the proposed action and the Savannah District address where comments could be sent.

The City of Augusta and McDuffie County indicated that the proposed project would be beneficial. The Georgia Department of Natural Resources Historic Preservation Division stated that it concurred that the proposed project would result in no adverse effect to identified archaeological sites and that the Keg Creek Park does not appear to be eligible for listing on the National Register of Historic Places.

The District did not receive any comments opposing the proposed action.

4. Conclusions

Based on a review of the information contained in the EA, I have determined that the preferred alternative is the best course of action. I have also determined that the proposed action and the accompanying modification to the J. Strom Thurmond Lake Master Plan are not major Federal actions within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. Accordingly, preparation of an Environmental Impact Statement is not required. My determination was made considering the following factors discussed in the EA to which this document is attached:

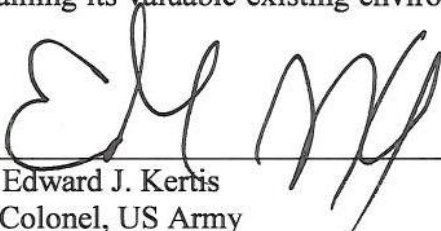
- a. The proposed action is not expected to adversely affect any threatened or endangered species. Additional surveys would be conducted prior to construction during the flowering or fruiting periods of Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily to confirm their presence/non-presence.
- b. The proposed action would not adversely impact cultural resources.
- c. The proposed action would not adversely impact air quality.
- d. The proposed action complies with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."
- e. The proposed action would not cause any significant long term net adverse impacts to wetlands. Impacts would be mitigated through purchase of mitigation credits from an appropriate mitigation bank.

- f. No unacceptable adverse cumulative or secondary impacts would result from the implementation of the proposed action.
- g. A Stormwater and Erosion Control Permit would be required before construction could occur.

5. Findings

The proposed increased development of Wildwood Park (Alternative C) appears to be the best course of action and is the Preferred Alternative. The proposal would increase development of Wildwood Park to accommodate Columbia County's new visions and programs for the site. The improvements would increase the recreational opportunities and services provided by the Park, while maintaining its valuable existing environmental features.

15 June 10
Date



Edward J. Kertis
Colonel, US Army
Commanding

Introduction

Wildwood Park is located in Columbia County, Georgia on J. Strom Thurmond Lake. It is approximately 121 miles east of Atlanta; 21 miles northwest of Augusta and 6 miles north of Appling, Georgia. The park office is located at 6212 Holloway Road and the main entrance to the park is located at the intersection of Dogwood Lane and State Route (SR) 47. The closest major highway is Interstate 20 (I-20) which is approximately ten miles south of the Wildwood Park entrance. **Figure 1: Project Location Map** shows the location and vicinity of Wildwood Park.

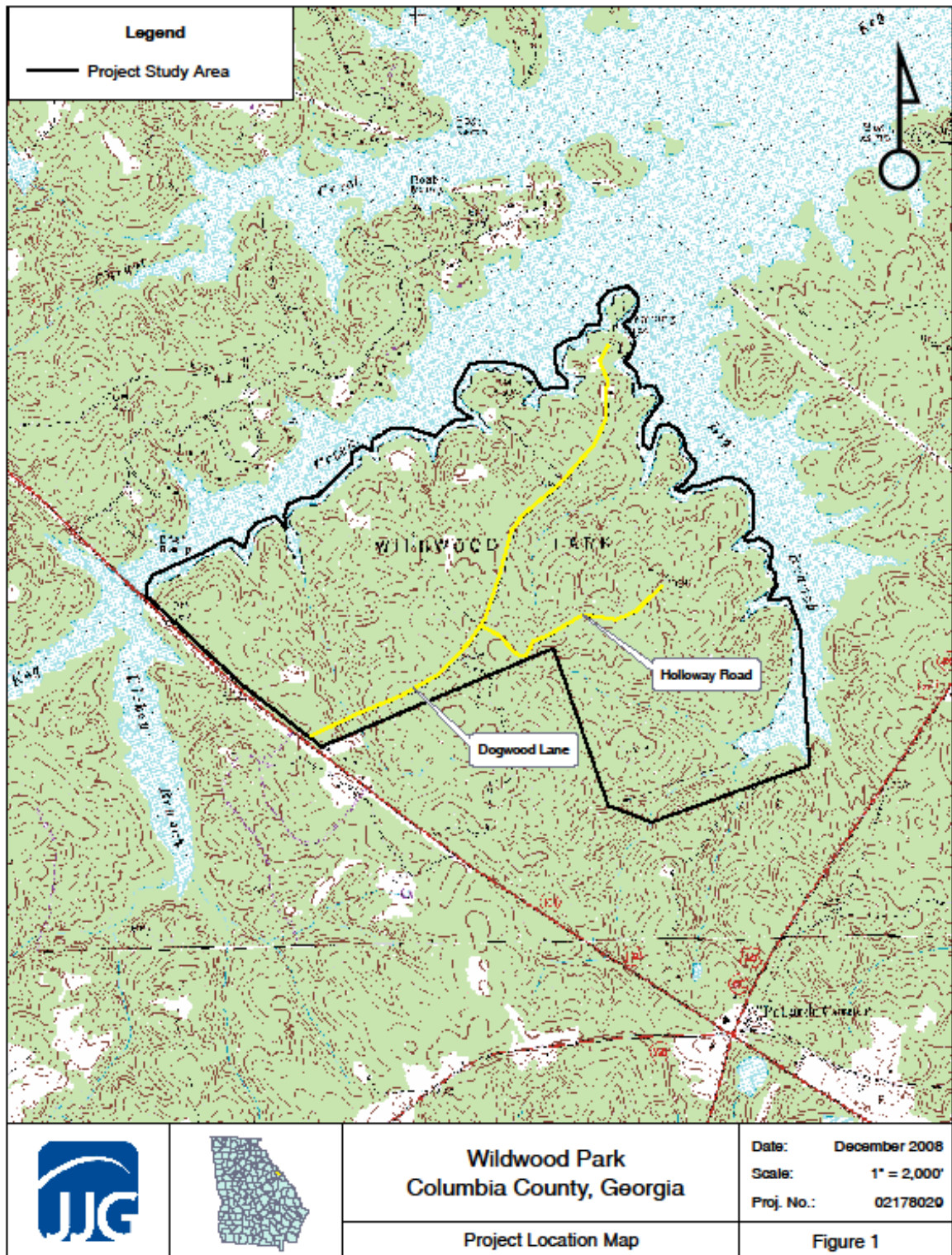
Wildwood Park is situated on approximately 975 acres of land and offers a diverse range of recreational activities and is both a local and regional draw for visitors. J. Strom Thurmond Lake is known regionally for its extensive fishing and boating amenities. The lake consists of 71,000 acres of water and approximately 80,000 acres of land managed by the US Army Corps of Engineers. Prior to 1988, J. Strom Thurmond Lake was known as Clarks Hill Lake. The Park is managed by the Columbia County Government (County) and resides on property leased from the US Army Corps of Engineers-Savannah District (Corps) through a long term lease agreement.

The park has played host to major fishing tournaments and other sporting events. Recently, Wildwood Park has become home to the headquarters for the International Disc Golf Center and Hall of Fame managed by the Professional Disc Golf Association (PDGA). Wildwood Park currently includes two boat ramp areas, including a mega boat ramp/dock area with eight docks, numerous picnic areas, 61 campsites, a sand beach area, small playground and covered pavilions, and several miles of hiking, mountain bike and equestrian trails. The land surrounding the park consists of open water, forested, residential, commercial, agriculture and public/open space.

This Draft Environmental Assessment (EA) evaluates the potential environmental consequences associated with modifying the Master Plan for the Wildwood Park and increasing the use of the park as described in Columbia County's 2008 Wildwood Park Conceptual Master Plan. The Conceptual Master Plan (Plan) includes improvements to Wildwood Park that would accommodate the County's new visions and programs for the park while maintaining its valuable existing features. The Plan includes the following features:

- **New Gatehouse:** primary gatehouse building with three entry lanes for faster processing of visitors during events
- **Visitor's Center:** 1,600 square foot building with a 25-space parking lot adjacent to the new gatehouse
- **Outdoor Amphitheater:** fixed seating for 650 and lawn seating for 350 persons
- **Equestrian Campground:** 11-acre site with camping amenities, restrooms, campfire ring, picnic pavilion, trail access, and spaces for approximately 10 horse trailers and future room for five additional spaces

Figure 1: Project Location Map



Final Environmental Assessment Wildwood Park

- **Super-Playground:** two-acre site built to the standards of the American Disability Act, 20-space parking area, small restroom building and drop off area
- **Day Use Area / Beach Relocation:** 26-acre site including beach pavilion with showers, picnic pavilion, picnic area, 50-car gravel parking area in the woods (expandable), open play area and improved beach area
- **Lodge Site:** 100-room lodge with a restaurant and meeting facilities with lakefront views, gift/general store, parking for 40 boat trailers with electric hookups and guard and parking for 135 cars
- **Cabin Site:** 42-acre site that includes 24 cabins and parking for each cabin providing more secluded accommodations for visitors
- **Natural and Team Building Area:** 264-acre site which includes rope courses, wilderness training, team building area and other low impact outdoor group activities
- **Archery Areas:** approximately 2,200 linear feet of relocated archery ranges being moved from other areas of the park
- **12 Miles of Hiking Trails**
- **2.6 Miles of Mountain Bike Trails**
- **6.1 Miles of Equestrian Trails**
- **8.1 Miles of 12-foot wide Paved Multi-Use Trails.**
- **Natural Areas** that will be preserved both for wildlife and aesthetic reasons

In addition to the above identified features, uniform signage, stormwater runoff, wastewater treatment, and staffing considerations would also be included. The Corps expects Columbia County to implement the proposal within five-years of approval. More detailed information about Plan phasing can be found in Section 5 of **Appendix A: 2007 Wildwood Park Conceptual Master Plan.**

The 2008 Conceptual Design Plan was developed from the 2007 Conceptual Design Plan after final environmental baseline surveys were completed in March 2008. To decrease environmental impact, the 2007 Plan was re-designed to decrease impacts to streams, wetlands and other environmentally-sensitive features. A copy of the 2007 Conceptual Plan is provided in Appendix A. The 2007 Conceptual Design Plan and the 2008 Conceptual Design Plan offer the same amount of features as described above. The 2008 Conceptual Design Plan only varies slightly from the 2007 Conceptual Design Plan with regards to environmental impact. A discussion of each of the plans is provided in the Alternatives Analysis Section.

1.0 Purpose and Need

Wildwood Park is situated on federally-owned property which is leased to the County by the Corps. In accordance with NEPA, the Corps must assess the potential environmental consequences associated with increasing the development of the park as Columbia County proposes in its 2008 Conceptual Master Plan. The proposed action is shown in **Figure 2: 2008 Conceptual Master Plan** and a copy of the Plan is provided in Appendix A. Implementation of the proposed action would constitute a federal action that may adversely affect the environment. NEPA and the President's Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [C.F.R.] 1500-1508) require that the Corps prepare an assessment to analyze the existing environment and the effects of the proposed action and alternatives. CEQ's regulations allow an agency to prepare an Environmental Assessment as an initial level of analysis if the agency's proposed action is not categorically excluded from preparation of a NEPA document (see 40 C.F.R. 1501.3, 1508.4, 1508.9) and would not normally require the initial preparation of an Environmental Impact Statement (EIS). The Corps will use the Final Environmental Assessment to make a decision whether a Finding of No Significant Impact (FONSI) or an EIS is required.

In the spring of 2002, the County published their **Columbia County Parks and Recreation System Comprehensive Master Plan** (Recreation Master Plan) and a copy is provided in **Appendix B**. The Recreation Master Plan was developed to address the County's recreation delivery system. The primary purpose in developing the Recreation Master Plan was to assess the needs and desires of Columbia County citizens related to parks and recreation. The planning of the Recreation Master Plan was intended to help the County's Recreation and Leisure Services Department take advantage of their strengths while eliminating or minimizing weaknesses. It was also intended to identify and maximize opportunities for recreation and to mitigate constraints on staff and elected officials as they respond to citizen expectations. The County focused on providing both active and passive recreation facilities and programs for all citizens of Columbia County while ensuring maximum efficiency and quality of operations.

The planning and development of the Recreation Master Plan relied heavily on the participation of county staff, elected officials and citizens. The planning process identified how citizens prioritize desired programs and facilities, and it measured their level of support for specific initiatives. Gathering public input was an important component for the planning process that provided the planning team with the basis on which to formulate recommendations. Input was obtained from a variety of different forums including: interviews of all Recreation and Leisure Services Department staff, key government employees, community leaders, Parks and Recreation Advisory Board members and other community recreation providers.

Final Environmental Assessment Wildwood Park

As part of the Recreation Master Plan, a citizens' steering committee was put together, comprised of volunteers from the community. A user survey was distributed in January 2002 which provided an opportunity for approximately 6,000 area residents to offer opinions about community parks and recreation. In addition, public meetings were conducted in October 2001, offering residents the opportunity to come out and speak on issues that were important to them. Other comments were received via e-mail and mail-ins, completing the public input process and providing a full inventory of public opinion.

To arrive at a realistic understanding of existing conditions and community expectations, the steering committee participated in an all-day planning workshop. The committee broke into three groups and focused on three critical questions.

- Question 1: what are the five most critical issues facing the Recreation and Leisure Services Department?
- Question 2: what are the strengths of the Recreation and Leisure Services Department's organization, programs and facilities?
- Question 3: what are the weaknesses of the Recreation and Leisure Services Department's organization, programs and facilities?

Based on Question 1, the responses concluded that funding was a major issue facing the recreation department. Growth and property development were also mentioned, as well as the lack of staff and meeting the needs of the community. Based on Question 2, the responses concluded that the County's best offering is in youth athletics, specifically baseball and softball. Finally on Question 3, the responses concluded that the Recreation and Leisure Department does not have a very diverse offering of program options, and the options it does have are not communicated well to the public. Issues were also brought up regarding staffing, maintenance and practice facilities.

Table 1: Columbia County Programming and Facility Needs summarizes the voting results from all three groups and the final ranking for each. The rankings represent the programming and facility requests from the community and how important each item is to the community.

Final Environmental Assessment
Wildwood Park

Table 1: Columbia County Programming and Facility Needs	
Programs	Final Rank
Expand Youth Sports	1
Education: Tennis, Golf, Swimming	2
Expand Adult Sports	3
Special Events (e.g., Health Fair)	4
Concerts	5
Volleyball (indoor/outdoor)	6
Crafts/Art	7
Education (genealogy)	8
Archery	9
Gymnastics	10
Horseback Riding	11
Drama	12
Facilities	Final Rank
Trails/Greenways (walking/biking/horseback)	1
Improve Existing Facilities	2
Alternative Sports Complex	3
Soccer Complex	4
Neighborhood Parks (Playground)	5
Aquatics Center	6
Outdoor Pavilion	7
Family Parks (passive)	8
Improve Wildwood Park	9
Gymnastics Facility	10
Archery Range	11
Golf Course	12
Public Shooting Range	13
Equestrian Center	14
Community Playhouse Concert Hall	15
Model Plane Airport	16
Ice Rink	17
Civic Center	18

The results of the Citizen's Steering Committee workshop were presented in three public meetings in late October 2001. In addition to a steering committee, a user survey was also completed. The survey was developed for the Recreation Master Plan which consisted of 16 questions that tested the program and facility prioritization generated by the Citizens' Steering Committee, as well as issues identified by interviews and other sources. The document was mailed to a statistical sampling of 6,000 Columbia County residents selected randomly from a list of property owners provided by a Columbia County Geographical Information System (GIS) database. The survey response rate was approximately nine percent.

Final Environmental Assessment Wildwood Park

The User Survey response results expressed interests in many different activities and programs, some of which are already offered by the County but in limited amounts and/or sites within Columbia County. One of the 16 questions asked in the User Survey specifically dealt with existing and proposed facilities that should be added to Columbia County Park system. Table 1 (Facilities Section) shows the list of items on which the User Survey responders were asked to vote. Of these 18 facilities, the User Survey indicated that Trails and Greenways, at 60 percent, were favored by a large margin over Neighborhood Parks with Playgrounds at 45 percent (the next most popular item). Improvements to Wildwood Park were favored at 18 percent which was number 9 on the list.

Recommendations regarding the structure of the Recreation and Leisure Services Department were made based on the existing structure and organization of the department which are detailed in Chapter 4 of the Recreation Master Plan. Recommendations for improving Wildwood Park were to add additional staff to better capture potential revenue generation because it is located on a regional destination lake offering water-based activities and overnight accommodations. In addition to organization recommendations, new facilities and land acquisition recommendations were developed which are detailed in Chapter 6 of the Recreation Master Plan. Recommendations for land acquisition and new parks and facilities were based on national standards, regional comparisons, public input and the impacts of population growth within Columbia County. To provide the appropriate amount of parkland and recreation facilities and to distribute facilities relative to where people live, information related to population was extrapolated from 2000 census figures and applied to the five recreation districts identified in the County's Master Plan. Data for each district included the 2000 population, rate of growth from 1990-2000 and the percent of population under the age of 18. Additionally, the inventory of existing parks and facilities that serve individual districts was prepared. Wildwood Park was designated as District 5 (please see Appendix B, Section 6- Columbia County, GA Parks & Recreation Master Plan Proposed Park Districts Figure [between pages 6.1 and 6.2]). The recommendations detailed in the Recreation Master Plan for District 5 were the following:

- Lodge/cabin for extended stay
- Upgraded group picnic facilities
- Primitive campground areas
- Greenway connection to Mistletoe State Park
- Improved beaches and swimming amenities
- Horseback-only trails
- Additional hiking trails
- Open space/playfield for flexible programming
- Increase parking capacity
- Add parks department offices and visitor's center

The only land acquisition that was recommended was for greenway connections. Also, the Recreation Master Plan recommended adding facilities within the park to increase programming opportunities and revenue generation.

Final Environmental Assessment Wildwood Park

The purpose of the proposed action to be considered in this DEA is to increase development of Wildwood Park to accommodate the County's new visions and programs for that site, while maintaining its invaluable existing features. The County's new vision and program were built on the recommendations of the Recreation Master Plan which was developed in 2002. This purpose also compliments the primary objective of the Corps' outgranting program to lease land to non-federal entities to provide public recreational benefits.

The Recreation Master Plan describes the needs of the community for recreational programming and facilities in Columbia County. Some of these community needs can be attained through the improvements proposed at Wildwood Park. Program and Facility needs identified in Table 1 such as Expanding Adult Sports Programs, Concert Programs, Archery Programs and Archery Facilities, Horseback Riding Programs, Special Event Programs, Drama Programs Trails/Greenways Facilities, Neighborhood Park Facilities, Outdoor Pavilion Facilities, Family Park Facilities and Improve Existing Facilities would be accomplished through specific expansion features of the proposed action. For example:

- The proposed archery areas would satisfy some of the need for Archery Programs, Archery Facilities and Expanding Adult Sports Programs in the county
- The proposed Natural Area and Team Building Area would satisfy some of the need for Special Event Programs in the county
- The proposed amphitheater would satisfy some of the need for Drama Programs, Concert Programs and Outdoor Pavilion Facilities in the county
- The proposed superplayground area would satisfy some of the need for Neighborhood Park and Family Park Facilities in the county
- The proposed new equestrian, mountain bike, hiking and paved multi-use trails would satisfy some of the need for Horseback Riding Programs and Trails/Greenways Facilities in the county
- The proposed equestrian parking and camping area would satisfy some of the need for Equestrian Center Facilities in the county
- The proposed improvements to the park would satisfy some of the need for Improvements to Existing Facilities in the county

The proposed action is needed to partially satisfy community desires for recreational programs and facilities in Columbia County. The proposed action would enhance recreational opportunities and experiences, wisely manage cultural/natural resources, and manage park facilities in an effective and cost-efficient manner.

2.0 Proposed Federal Action

The Corps proposes to modify its Masterplan for Wildwood Park to include the development proposed by Columbia County and allow the County to develop the park as proposed in their 2008 Wildwood Park Conceptual Design Plan. The Corps expects the County to implement their plan in roughly five years of receiving approval from the Corps. **Table 2** summarizes the Plan's improvements and categorizes the priority of each item.

Table 2: Timing of Proposed Improvements

Facility	Year 1	Year 2	Year 3	Year 4	Year 5
Development of New Gatehouse are (i.e., clearing, grading, erosion control, etc.)	√				
Construction of New Gatehouse	√				
Construction of New Visitors Center		√			
Beach Area: construction documents, permitting, construction of new beach area and rehabilitation of former beach site			√		
Design and Planning of Super playground			√	√	
Outdoor Amphitheater					√
Lodge and Cabins					√
Team Building Area					√
Equestrian Campground					√
Natural Areas					√
Trails: hiking, mountain biking, equestrian and multi-use.					√

The proposed action, as illustrated in Figure 2 and additional information is provided in the Plan (Appendix A).

The format and contents of this report conform to the guidance set forth in the NEPA Analysis Guidance Manual (Canter 2007).

3.0 Alternatives

NEPA Section 102(2)(E), requires an EA to consider the proposed action and a discussion of the consequences of taking no action. There is no requirement for a specific number of alternatives to be included in an EA. The discussion of the proposed action and the no action alternative allows a reviewer to establish a baseline for comparing the

Final Environmental Assessment Wildwood Park

impacts of the proposed action. The EA presents the environmental impacts of the proposed action and the reasonable alternatives in comparative form to sharply define the issues and provide a basis for evaluation of potential environmental impacts and a decision about whether to proceed with the proposed action.

The objective of this alternative analysis is to identify reasonable alternatives to improve and enhance Wildwood Park. Once identified, each alternative is evaluated in terms of its ability to satisfy the objectives outlined in the Purpose and Need (**Section 1.0**) and its potential to affect the surrounding environment. The results of this evaluation determine which alternatives will be considered reasonable and practicable, thereby warranting further consideration.

The environmental consequences of maintaining the existing park in its current layout will be evaluated as the no action alternative. The environmental consequences the implementing the 2008 Plan will be evaluated as the proposed action.

3.1 Alternatives to the Proposed Action

This section presents information used in evaluating and screening the alternatives. The screening process helps identify a preferred alternative by evaluating comparable alternatives using the following criteria: ability to meet project needs, feasibility and prudence/practicability, and environmental factors.

Ability to Meet Project Purpose and Need

As a fundamental condition of the purpose and need for the proposed action, the degree to which Wildwood Park would accommodate the County's new visions and programs, while maintaining its invaluable existing features, must be considered. Accordingly, alternatives that do not provide the facilities requirement to the meet Columbia County's vision would be inconsistent with the purpose and need of the proposed action.

Feasibility and Prudence/Practicability

This criterion addresses standards relating to the selection of alternatives. The CEQ C.F.R. Section 1502.14 regulations requires that an environmental assessment present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. Some environmental laws also specify conditions in considering an appropriate range of alternatives. For example, the U.S. Department of Transportation (DOT) Act, Section 4(f) states that an alternative may be rejected if it is considered not feasible or prudent. An alternative may be considered not feasible or prudent for any of the following reasons: does not meet the purpose and need, excessive construction costs, severe operational or safety problems, unacceptable impacts (social, economic or environmental), serious community disruption or a combination of any of the above. To be considered "excessive", the costs of the alternative would need to be of such magnitude as to make the development financially infeasible.

Environmental Factors

Alternatives addressing the same need may differ substantially with respect to potential environmental impacts. Alternatives that have significantly more environmental impacts when compared to other alternatives, while addressing the same needs, should be eliminated from consideration. Relevant environmental factors may include noise impacts, wetland impacts, disruption of existing development patterns, and disproportionate impacts to minority and low-income populations (environmental justice).

3.1.1 No Action Alternative (Alternative A)

The no action alternative assumes that the proposed action would not occur at Wildwood Park. With or without the proposed improvements, the County's population would continue to increase, the desire for diverse recreational programs would still occur. Therefore, the County's forecasted demand for recreational programs and associated activities would be the same under the no action alternative as those described for the proposed action. This alternative does not meet the purpose and need; however, in accordance with 40 C.F.R. 1502.14(d), the no action alternative is considered further as a basis for comparing the environmental consequences of the proposed action.

3.1.2 Conceptual Master Plan-2007 (Alternative B)

Specific recreational needs and facilities to be developed in Wildwood Park were identified in the County's Recreation Master Plan. As discussed previously, the recommendations for the Park from the 2007 Recreation Master Plan (Appendix B) included a lodge/cabin for extended stay, upgraded group picnic facilities, primitive campground areas, greenway connection to Mistletoe State Park, improved beaches and swimming amenities, horseback-only trails, additional hiking trails, open space/playfield for flexible programming, increase parking capacity, addition of parks department offices and visitor's center, acquire additional property for greenway only connections and add facilities within the park to increase programming opportunities and revenue generation. These recommendations were used to generate the 2007 Master Plan (Alternative B) for Wildwood Park. The main features of the County's 2007 Master Plan include the following:

- New Gatehouse building with 3 entry lanes for faster processing of visitors during events
- Visitor's Center building with a 25-space parking lot adjacent to the new gatehouse
- Outdoor Amphitheater with fixed seating for 650 and lawn seating for 350 persons
- Equestrian Campground with camping amenities, trail access, and spaces for approximately 10 horse trailers
- Super-Playground with Americans With Disabilities Act access, parking area and restroom

Final Environmental Assessment Wildwood Park

- Day Use Area / Beach Relocation including new picnic pavilions, gravel parking areas, and improved beach area
- A proposed 100-room lodge with a restaurant and meeting facilities with lakefront views and 24 cabins providing more secluded accommodations for visitors
- Team Building Area which can be used for rope courses or other low impact outdoor group activities
- 12 Miles of Hiking Trails
- 2.6 Miles of Mountain Bike Trails
- 6.1 Miles of Equestrian Trails
- 8.1 Miles of 12-foot wide Paved Multi-Use Trails
- Natural Areas that will be preserved both for wildlife and aesthetic reasons

A map of the 2007 Master Plan along with a more detailed discussion of each feature can be found in Appendix A.

A new entrance road to the park with improved landscaping and signage was originally part of the 2007 Master Plan. The County judged those items as being critical and opted to complete that small project quickly. A separate NEPA document was prepared and construction was completed in early 2009.

The 2007 Master Plan was designed using the needs and facilities recommended in the Recreation Master Plan and guidance from the County's Recreation Department. Electronic mapping information such as US Geologic Survey (USGS) topographic maps, US Fish and Wildlife (US FWS) National Wetland Inventory maps, Federal Emergency Management Agency (FEMA) floodplain mapping and aerial photography were used to create a baseline environmental map. The County provided other baseline electronic mapping information (e.g., electronic survey data, existing feature locations, etc). In addition, the Corps provided electronic data captured from previous environmental assessments/work for Wildwood Park (e.g., data on environmentally sensitive features). All of this information was used to design recommended features and avoid areas in which a conflict might occur. For example, trails were sited outside of floodplains, wetlands and/or streams to the fullest extent possible. To the fullest extent possible, major features like the Visitor Center were placed in upland areas away from any environmentally-sensitive features. Design efforts were also implemented to match particular features with similar features; for example, placing the proposed amphitheater close to the exiting parking facilities so that additional parking would not have to be built.

The 2007 Master Plan was designed using "desk top" analysis and minimal real-time data. No major recent ecological surveys had been completed prior to the development of that plan. In addition, the Corps published new nationwide wetland regulations which placed larger restrictions on acquiring these permits and also covered additional features not previously considered jurisdictional (i.e., ephemeral drainages). A copy of those regulations can be found at the Corps' permitting website (Fonferek 2008). Calculations of potential impacts to environmentally sensitive areas could only be estimated and were not field verified. Electronic data concerning environmentally sensitive areas are not field

Final Environmental Assessment Wildwood Park

verified especially regarding wetlands and streams. Data such as USFWS NWI's are generated based on other mapping, including USGS topographic maps and county soil surveys. The accuracy of information is for planning purposes only.

The 2007 Master Plan meets the purpose and need; but it was not recommended for further evaluation. After the plan was developed, the Corps issued new nationwide wetland regulations which would require site-specific field surveys of the potentially affected area.

3.1.3 Conceptual Master Plan-2008 (Alternative C)

The 2008 Conceptual Plan (Alternative C) was based on Alternative B. Alternative C has all of the features that were proposed in Alternative B and incorporates recent site-specific field surveys. An ecological survey of environmentally-sensitive areas was completed in January 2008 (see **Appendix C: Ecology Report**), providing real-time data for use in refining the 2007 Master Plan. Based on this new information, features such as the gatehouse, visitor's center, lodge and cabins, amphitheater and equestrian campground were resited to locations that are not environmentally-sensitive. The major changes and differences between Alternative C and Alternative B are associated with the realignment of the proposed trails to minimize impact to environmentally-sensitive areas. Alternative B would have impacted 571 linear feet of stream and 0.023 acre of wetland. In comparison, Alternative C would impact 571 linear feet of stream and 0.022 acre of wetland. The decrease in environmental impact was accomplished through avoiding known environmentally-sensitive areas which were identified in the 2008 survey. The length of trails remained virtually the same between both alternatives. Impacts would still occur with either alternative; but with such a large park (i.e., 975 acres) and the amount of proposed features, the overall impact to environmentally-sensitive areas would be minimal. Alternative C meets the purpose and need, is practical, feasible and prudent. Because it reduces potential impacts on environmentally sensitive resources versus other alternatives, it is retained for further evaluation.

3.2 Selection of Proposed Action

Based on a review of the alternatives to the proposed action, Alternative B was eliminated from further consideration because it was designed without ecological survey data and new Corps wetland regulations were developed after the design was completed. Alternative C meets the purpose and need with the least environmental impact.

The purpose of Alternative C is to accommodate the County's new visions and programs for Wildwood Park, while maintaining its invaluable existing features.

The alternatives assessment, therefore, has identified the alternative that meets the purpose and need with the lowest adverse environmental impact.

4.0 Existing Environment

This section provides background information on the existing physical, natural and cultural environments within and surrounding Wildwood Park. Sources of this information include correspondence received from specific agencies and non-governmental organizations (see **Appendix D: Correspondence**), as well as the Wildwood Park Master Plan.

The project study area includes the existing footprint of Wildwood Park and its immediate surrounding vicinity. The total project area is approximately 1000 acres. The project study area is defined in Figure 1. The project study area is used for a general reference to gather existing data/conditions of the area and to formulate the information contained in this section. The area is also used to evaluate any potential environmental impacts that will be discussed in Chapter 5.0, Environmental Consequences.

4.1 Air Quality

Wildwood Park, located in Columbia County, experiences a variety of weather conditions during the year. The average temperature range is from approximately 40 degrees to 80 degrees Fahrenheit. Daily highs can reach over 90 degrees in the summer months, and the daily lows can reach below 30 degrees during the winter months. Wildwood Park usually experiences its highest average rainfall during the months of January, February and March which is approximately four to five inches. The lowest average rainfall occurs in the months of April and October which is approximately three inches. Average afternoon humidity is consistent throughout the year and remains between 45 to 55 percent and the average morning humidity is also consistent and stays between 80 to 90 percent. Wildwood Park generally receives less than one-inch of snowfall each year, and on average, it can expect a greater than 70 percent chance of having a cloud-free day. Wind speed in the area ranges from five to eight mph, with the winter months experiencing the higher speeds and the late summer months experiencing the lower speeds. Wildwood Park did not have specific climate data available; therefore, all climate data was extrapolated from Evans, Georgia which is approximately 12 miles south of the park (City-Data 2008).

Many factors influence air quality, such as meteorological and climate information which are essential in assessing air quality. Air quality is the measurement of pollutants in the air, and air pollution is the addition of harmful contaminants to the atmosphere. According to the EPA, air contaminants include solid or liquid particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any matter or substance either physical, chemical, biological, or radioactive (including source material, special nuclear material, and by-product material) or any combination of the above.

Final Environmental Assessment Wildwood Park

All states must designate each area within their borders with the National Ambient Air Quality Standards (NAAQS) as a requirement of the Clean Air Act Amendments (CAAA) of 1990. The EPA defines ambient air within C.F.R. 40, Part 50, as “that portion of the atmosphere, external to buildings, to which the general public has access.” The NAAQS were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the EPA has issued NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur oxides (SO_x), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), and lead (Pb).

Regions that comply with the NAAQS are designated as “Attainment” areas and areas that do not meet the NAAQS are designated as “Non-Attainment” areas. States are required to develop EPA-approved plans, called State Implementation Plans (SIPs), to achieve or maintain the NAAQS within timeframes set under the CAAA. Under the CAAA, state and local air pollution agencies have the authority to adopt and enforce ambient air quality standards (AAQS), which are typically more stringent than the NAAQS. The State of Georgia adopted the NAAQS and currently has designated Columbia County as an “Attainment Area” for all the NAAQS criteria pollutants. There are presently no known concerns about the quality of the air in Wildwood Park. Concerns have been identified for PM 2.5 and ozone in the greater Augusta area, which includes Columbia County. The CSRA Air Quality Alliance has been working on initiatives to improve air quality in the Augusta area.

4.2 Cultural Resources

The project study area was field surveyed for cultural resources to comply with Section 106 of the National Historic Preservation Act of 1966 and its amendments. Cultural resources are defined within Army Regulation 200-4, Cultural Resources Management, as: historic properties, as defined in the National Historic Preservation Act; cultural items as defined in the Native American Graves Protection and Repatriation Act; archeological resources as defined in the Archeological Resources Protection Act; sacred sites as defined in Executive Order 13007 to which access is provided under the American Indian Religious Freedom Act; and collections as defined in 36 C.F.R. 79, Curation of Federally-Owned and Administered Collections.

In addition to the Georgia State Historic Preservation Office (SHPO), other potential consulting parties were identified based on the nature of the undertaking. The other potential consulting parties identified were the Central Savannah River Area Regional Development Center, the Corps, and the Columbia County Commission.

The area of potential effects (APE), as defined in 36 C.F.R. 800.16(d), is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on the nature and the scope of the undertaking and past experience with similar projects, the APE for this proposed action has been evaluated and defined. The APE boundary corresponds with the project study area boundary defined in Figure 1. Because of the nature and scope of the undertaking, the area of potential direct effects consists of the project view

Final Environmental Assessment Wildwood Park

shed and the existing 975 acres of Wildwood Park, within which all construction and ground disturbing activity would be confined.

Wildwood Park was included in a 1999 archaeological survey of Thurmond Lake project lands. The survey identified archaeological sites within the park. Two prehistoric archaeological sites were recommended potentially eligible for inclusion in the National Register of Historic Places (NRHP). One cemetery was also identified. The remaining sites located within the tract were recommended ineligible for inclusion in the NRHP. In accordance with the National Historic Preservation Act (P.L. 89-655, as amended) and 36 CFR, Part 800, the survey report was reviewed by the Georgia State Historic Preservation Officer (GA SHPO) in August 1999. The GA SHPO concurred with the report findings and recommendations.

The location and significance of the two potentially eligible archaeological sites and the cemetery were considered during creation of the development plan. A buffer of a minimum of 100 feet has been established around each site within larger forested areas. Lake personnel will work closely with the County during final design phases and construction to ensure that buffer is maintained.

During preparation of this Environmental Assessment, the District determined that Wildwood Park needed to be evaluated for historical significance. The Park was created in the 1950s as Keg Creek State Park, one of two parks at the lake designated for exclusive use of African Americans. The park was leased to the State of Georgia for development as a unit of the state park system. It was later subleased under the name Wildwood Park to Columbia County and is now leased directly by Savannah District to the County as Wildwood Park.

The Corps' 1950 Master Plan for the lake shows the originally proposed improvements to Keg Creek State Park. The 1980 Master Plan, which was prepared long after the park was desegregated, refers to the park as Wildwood Park. This Master Plan shows features that had been constructed at that time and indicates that no further improvements are planned. The 1995 Master Plan shows features constructed at that date and also indicates that no further improvements are planned. The facilities shown on the 1980 Master Plan bear little resemblance to those proposed in the 1950 Master Plan. An examination of other recreation areas indicates that most of the 1950 plans were also heavily modified and severely reduced in scale.

Keg Creek State Park does not meet NRHP eligibility Criterion B. It is not known to have been associated with a significant individual. It also does not meet Criterion C. There are no standing structures associated with the early park history and only the main entrance road and portions of two side roads reflect the 1950 Master Plan. All other extant landscape features reflect the 1980 and 1995 Master Plans. The Park also does not meet eligibility Criterion D. While the archaeological surveyors were unaware of the Park's history, none of the historic period sites identified can be positively associated with the Park's early history and all were heavily disturbed by more recent recreational development and activities, timber harvesting, and erosion.

Final Environmental Assessment Wildwood Park

Under NRHP Criterion A., Keg Creek State Park was associated with “events that made a significant contribution to the broad patterns of our history (e.g. segregation, separate but equal policies). However, no extant features remain to preserve and interpret this theme. While Keg Creek State Park could be included in some future national or regional study of segregation within the Federal and State park systems, its contribution to that study would be limited to archival research and informant interviews. As such, the proposed development would have no effect upon the Park’s potential ability to yield information to support this study.

In summary, the proposed development of Wildwood Park will have no effect upon the two potentially-eligible archaeological sites -- the cemetery and the old Keg Creek State Park. Avoidance buffers and active involvement and monitoring during the final design and construction process will protect the archaeological sites and cemetery. The proposed additional development of the Park will have no effect on the characteristics that might qualify Keg Creek State Park for the NRHP under Criterion A. In accordance with Section 106 of the National Historic Preservation Act (P.L. 89-655, as amended) and 36 CFR, Part 800, the GA SHPO has been asked to review and comment upon this determination.

4.2.1 Historic Buildings

The review of existing information on previously identified historic properties revealed no National Register listed properties, proposed National Register nominations, National Historic Landmarks, or bridges determined eligible for inclusion in the National Register in the updated Georgia Historic Bridge Survey (GHBS) were identified within the proposed action's APE. In addition, no properties 50 years old or older were identified within the proposed action's APE in the 1978 and 1990 Georgia Department of Natural Resources-Historic Preservation Division (GDNR-HPD) Columbia County surveys (GA DNR-HPD 2007).

Even though the GA DNR-HPD surveys did not identify any properties 50 years old or older within the APE and because buildings and structures were visible on aerial photography and topographic maps, the project study area was field surveyed for historic properties on October 10, 2007 and February 25, 2008.

One property 50 years of age or older not identified in the GA DNR-HPD surveys was identified within the proposed action's APE during the field survey. The property is Keg Creek Park/Wildwood Park, constructed in 1952 as a State Park facility for African-Americans at Clarks Hill Lake (now J. Strom Thurmond Lake). In 1952, the Corps leased two properties to the State of Georgia for use as state parks. Mistletoe State Park, located to the west of Wildwood Park, was intended to be used by whites, while Keg Creek Park (now Wildwood Park) was intended for use by African-Americans. Keg Creek Park/Wildwood Park was evaluated for eligibility for listing in the National Register under Criterion A for state significance in the area of African-American history. The property is considered to be not eligible for listing in the National Register. Despite the importance of Keg Creek Park/Wildwood Park to Georgia’s history, the park does not

Final Environmental Assessment Wildwood Park

retain any historic buildings or structures that are able to convey this significance. The park retains its historic location, setting and association with African-American history, but these factors of integrity are insufficient to convey significance in the absence of any physical building or structure dating from the park's use as a segregated facility.

4.2.2 Archeological Resources

Three environmentally sensitive resources were identified within the project APE in a 1998 Cultural Resource Survey conducted by Panamerican Consultants, Inc. and Gulf South Research Corporation for the Corps. Of the three, two were determined to be potentially eligible for listing in the National Register. The third resource is a cemetery and, although not considered to be eligible for the National Register, is protected by state burial laws. Information on the location of cultural resources on the J. Strom Thurmond Project is considered sensitive and is protected; therefore, any information regarding the location of these resources, including copies of Cultural Resource Survey Reports, must be requested specifically from the Corps. Potential impacts to those resources will be coordinated with the GA DNR-HPD, who must concur in any expected impacts to those resources.

4.2.3 Native American Resources

The project study area was evaluated for Native American Resources as defined in the Native American Graves Protection and Repatriation Act or sacred sites as defined in Executive Order 13007 to which access is provided under the American Indian Religious Freedom Act.

No Native American resources, such as funerary objects, sacred sites, or objects of cultural patrimony, were identified within the APE of the proposed action in the 1998 Cultural Resource Survey conducted by Panamerican Consultants, Inc. and Gulf South Research Corporation for the Corps.

The Draft EA will be coordinated with the following tribal governments who may have a cultural affiliation to the area: Absentee-Shawnee Tribe of Oklahoma, Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Cherokee Nation, Chickasaw Nation, Coushatta Tribe of Louisiana, Eastern Band of Cherokee Indians of North Carolina, Kialegee Tribal Town of the Creek Nation of Oklahoma, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida, Seminole Nation of Oklahoma, Thlopthlocco Tribal Town, and the United Keetoowah Band of Indians.

4.3 Noise

Noise may be defined as unwanted sound. Noise and sound are physically the same; the difference is the subjective opinion of the receiver. At its most fundamental level, a sound is produced by a source that has caused the air to vibrate. Sound waves radiate in all directions and may be reflected and scattered by interruptions to their flow.

Final Environmental Assessment Wildwood Park

Sound is measured by its pressure or energy in terms of decibels (dB). Because of the enormous range of sound pressures to which the human ear is sensitive, the raw sound pressure measurement is converted to the dB scale for purposes of description and analysis. The dB scale is logarithmic. A 10-decibel increase in sound is perceived as a doubling of sound (or twice as loud) by the human ear. Day-Night Average Sound Level (DNL) is a noise measure used to describe the average sound level over a 24-hour period, typically an average day over the course of a year. In computing DNL, an extra weight of 10 dB is assigned to noise occurring between the hours of 10:00 p.m. and 6:59 a.m. to account for increased annoyance when ambient noise levels are lower and people are trying to sleep. DNL may be determined for individual locations or expressed in noise contours. DNL is the standard federal metric for determining cumulative exposure of individuals to noise.

There is currently no significant source of noise at Wildwood Park on a regular basis. Occasional un-quantified spikes in noise levels result from automobile traffic in and around the park and boat launches/take-outs at the boat ramps. Those spikes increase when bass fishing tournaments occur. Currently, the most frequent sources of noise come from automobile traffic entering and exiting the park and not from activities within the park itself. In addition, noise within the Park is muted by existing forest cover and by the distance between the park and residential areas.

The ESPN/BASS Masters fishing tournament is one of the more notable boating events that occurs within the park annually. The tournament takes place in late spring/early summer for four days. For the year 2010, the tournament is planned for May 20, 2010 to May 23, 2010. Approximately 100 to 125 boats participate in this event. However, a specific noise study was not conducted.

It is anticipated that large construction equipment will be used during the expansion of Wildwood Park. That equipment would be similar in nature to equipment used during highway construction. Typical noise levels from this type of equipment range from 70 – 92 dBA at 50 feet according to information published by the U.S. Department of Transportation Federal Highway Administration (FHWA). These noise levels are anticipated to be minor and temporary in nature. Information on noise levels was provided via FHWA's website (USDOT 2008).

Table 2A: Wildwood Park 2010 Event List and Participant Information shows a list of the events hosted by the park during the 2010 year. The peak season for boat and vehicle traffic is in the months from April – September. The peak occurs during May due to tournaments and the beginning of summer vacation. Please note that noise studies are not conducted for the various events conducted at the park.

Final Environmental Assessment
Wildwood Park

Table 2A. Wildwood Park 2010 Event List and Participant Information

Event	Date	Participant Information
Cabela's Crappie USA	2/20/2010	50 - 60 boats
Tommy Shaw Memorial	3/6/2010	125 - 150 boats
Paralyzed Veterans of America	3/26-28/2010	50-60 boats
Top 6 Tournament	4/2-3/2010	125 - 150 boats
Tim Selinski US Master Championship (Disc Golf)	4/30-5/2/2010	150 - 200 participants
2nd Annual CSRA RV & Boat Show	5/1/2010	25 - 30 Vendors, 300+ spectators
Easter Seals	5/8-9/2010	175 - 200 boats
Fish for Life	5/15/2010	125 - 150 boats
ESPN/BASS Masters	5/20-23/2010	100 - 125 boats
BFL	9/25-26/2010	125 - 150 boats
Mr. Clark Hill	10/2/2010	100 - 125 boats

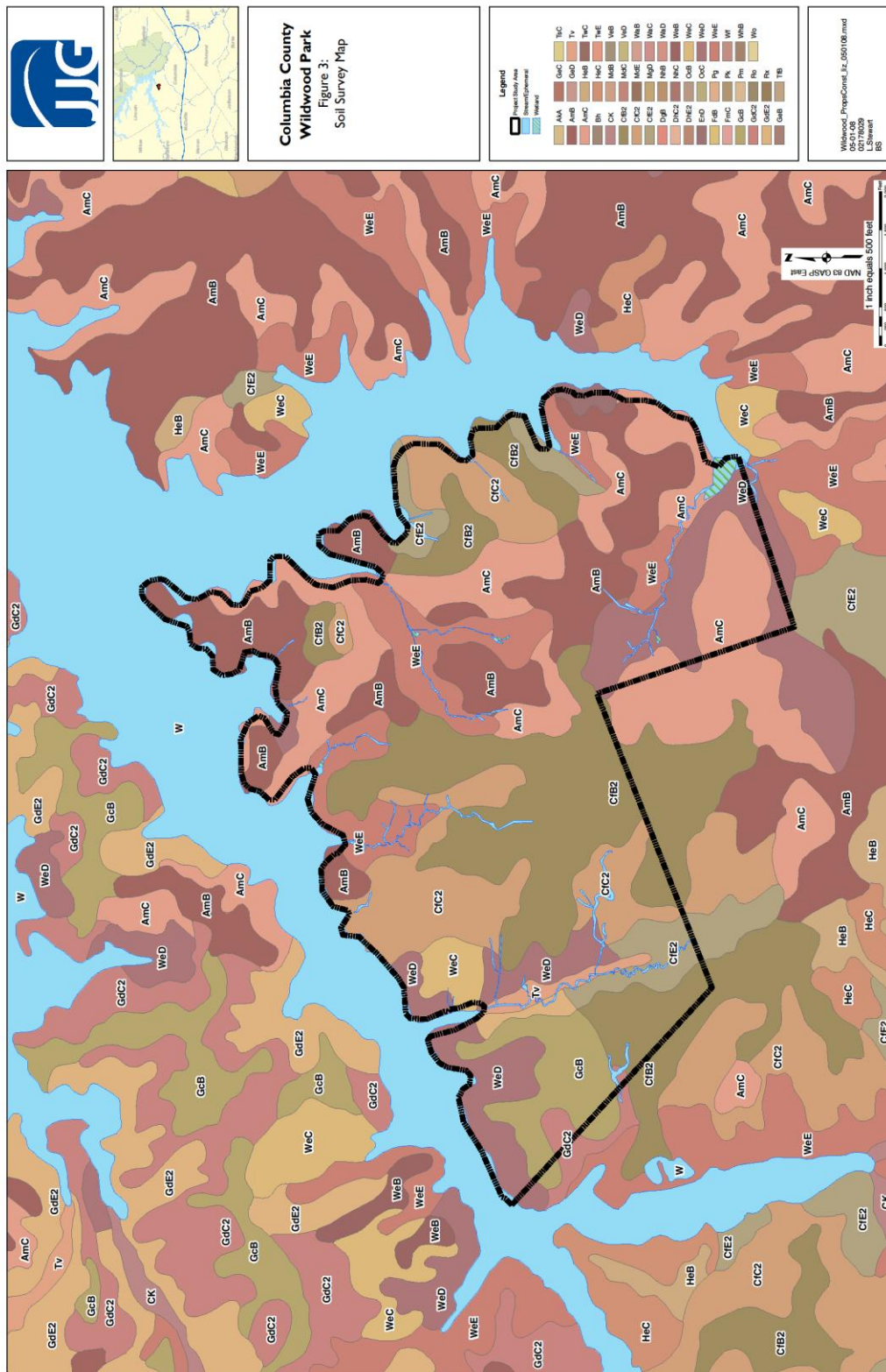
4.4 Soils

The surface soils of the Piedmont range from light-colored sandy loams to reddish clay loams. The subsoils are primarily composed of clay and weathered igneous and metamorphic rocks, which are considered the soils' parent materials. The soil series delineated in **Figure 3: Soil Survey Map** were developed from the Natural Resource Conservation Service's (NRCS) Soil Data Mart (USDA 2008). The Soil Data Mart was queried to provide a list of soils that underlie the Wildwood Park. Soils in the project study area of Wildwood Park include Appling sandy loam (AmB and AmC), Cecil sandy clay loam (CfB2, CfC2, and CfE2), Enon sandy loam (EnD), Georgeville fine sandy loam (GcB), Georgeville clay loam (GdC2 and GdE2), Toccoa loam (Tv), and Wedowee loamy sand (WeC and WeD). Hydric soils were not identified within Wildwood Park based on soil mapping. A detailed description of the soil mapping units within Wildwood Park is located in **Table 3: Soil Survey**.

Impacts to the existing environment will vary by trail type and construction area. The equestrian and hiking trails will use bare soil as the substrate, and the trail width will not exceed six feet. The multi-use trails will be paved with asphalt and concrete 10 to 12 feet in width with an overall clearing of 15 feet. Boardwalks will be constructed in wet areas on all the different trail types. Cut and fill operations will be implemented on the proposed roadway, multi-use trails and proposed facility construction areas, which will consist of various structures such as cabins, a lodge, parking areas, and other support facilities. Field surveys within the existing Wildwood Park boundary did not identify any severe erosion areas. The acreage of proposed impacts to each mapping unit is listed in Table 3.

During construction, a Sedimentation and Erosion Control Plan would be implemented to reduce erosion of the exposed soil surfaces.

Figure 3: Soil Survey Map



Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Appling sandy loam (AmB)	153.02	3.51	13.67	33.6	50.78	moderate	2 to 6 percent slopes, well drained, parent material: residuum weathered from granite, gneiss, and/or schist rocks; no frequency of flooding or ponding	ridgetops of the Piedmont Upland	0 to 9 inches: sandy loam; 9 to 48 inches: sandy clay loam, sandy clay, and clay loam; 48 to 72 inches: sandy loam	good	good	not hydric
Appling sandy loam (AmC)	156.76	3.45	8.53	19.24	31.22	moderate-severe	6 to 10 percent slopes, well drained, parent material: residuum weathered from granite, gneiss, and/or schist rocks; no frequency of flooding or ponding	ridgetops and long hillsides of the Piedmont Upland	0 to 10 inches: sandy loam; 10 to 70 inches: sandy clay loam and sandy clay	fair	good	not hydric

Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Cecil sandy clay loam (CfB2)	217.49	7.09	23.50	28.01	58.6	moderate	2 to 6 percent slopes, well drained, parent material: residuum weathered from granite, gneiss, and/or schist rocks; no frequency of flooding or ponding	ridgetops of the Piedmont Upland	0 to 4 inches: sandy clay loam; 4 to 59 inches: clay; 59 to 69 inches: weathered granite	poor	fair	not hydric
Cecil sandy clay loam (CfC2)	124.88	3.18	8.09	23.97	35.24	moderate	6 to 10 percent slopes, well drained, parent material: residuum weathered from granite, gneiss, and/or schist rocks; no frequency of flooding or ponding	narrow ridgetops and moderately long hillsides of the Piedmont Upland	0 to 5 inches: sandy clay loam; 5 to 62 inches: sandy clay loam and clay	poor	poor	not hydric

Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Cecil sandy clay loam (CfE2)	44.78	0.9	4.07	15.08	20.05	severe	15 to 25 percent slopes, well drained, parent material: residuum weathered from granite, gneiss, and/or schist rocks; no frequency of flooding or ponding	moderately long hillsides of the Piedmont Upland	0 to 5 inches: sandy clay loam; 5 to 45 inches: sandy clay loam and sandy clay; 45 to 60 inches: clay loam	poor	poor	not hydric
Enon sandy loam (EnD)	5.17	0	0.52	3.75	4.27	moderate	10 to 15 percent slopes, well drained, parent material: residuum weathered from hornfels, diabase, diorite, and gneiss rocks; no frequency of flooding or ponding	hillsides of the Piedmont Upland	0 to 9 inches: sandy loam; 9 to 32 inches: sandy clay loam and clay; 32 to 60 inches: clay loam and sandy loam	poor	poor	not hydric

Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Georgeville fine sandy loam (GcB)	44.57	1.96	1.58	0	3.54	moderate	2 to 6 percent slopes, well drained, parent material: residuum weathered from slate; no frequency of flooding or ponding	broad ridgetops of the Piedmont Upland	0 to 7 inches: sandy loam; 7 to 56 inches: silty clay loam and clay; beyond 56 inches: weathered slate	poor	good	not hydric
Georgeville clay loam (GdC2)	6.59	0.41	0	0	0.41	moderate	6 to 10 percent slopes, well drained, parent material: residuum weathered from slate; no frequency of flooding or ponding	hillsides of the Piedmont Upland	0 to 4 inches: clay loam; 4 to 47 inches: clay loam, clay, and silty clay loam; beyond 47 inches: weathered slate	fair	fair	not hydric

Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Georgeville clay loam (GdE2)	5.57	0.2	0.48	0	0.68	moderate-severe	10 to 25 percent slopes, well drained, parent material: residuum weathered from slate; no frequency of flooding or ponding	hillsides of the Piedmont Upland	0 to 6 inches: clay loam; 6 to 48 inches: clay and silty clay; beyond 48 inches: weathered slate	poor	fair	not hydric
Toccoa loam (Tv)	9.15	0.25	0.62	0	0.87	low	0 to 4 percent slopes, well drained, parent material: loamy and sandy alluvium; occasional to frequent brief flooding between October and May, no ponding	floodplains and natural levees of the Piedmont	0 to 8 inches: loam; 8 to 60 inches: loamy sand and fine sandy loam; 60 to 70 inches: sandy loam	poor	good	not hydric

Final Environmental Assessment
Wildwood Park

Table 3: Soil Survey

Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Wedowee loamy sand (WeC)	25.11	0.61	1.01	0	1.62	moderate-severe	6 to 10 percent slopes, well drained, parent material: residuum weathered from granite and gneiss rocks; no frequency of flooding or ponding	ridgetops and long hillsides of the Piedmont Upland	0 to 6 inches: loamy sand; 6 to 10 inches: sandy loam; 10 to 36 inches: sandy clay loam and sandy clay; 36 to 60 inches: sandy clay loam	fair	fair	not hydric
Wedowee loamy sand (WeD)	119.2	3.27	1.12	0.33	4.72	severe	10 to 15 percent slopes, well drained, parent material: residuum weathered from granite and gneiss rocks; no frequency of flooding or ponding	narrow, moderately long hillsides of the Piedmont Upland	0 to 10 inches: loamy sand; 10 to 32 inches: clay, sandy clay, and clay loam; 32 to 48 inches: sandy loam and sandy clay loam; at 48 inches: hard rock	poor	poor	not hydric

Final Environmental Assessment
Wildwood Park

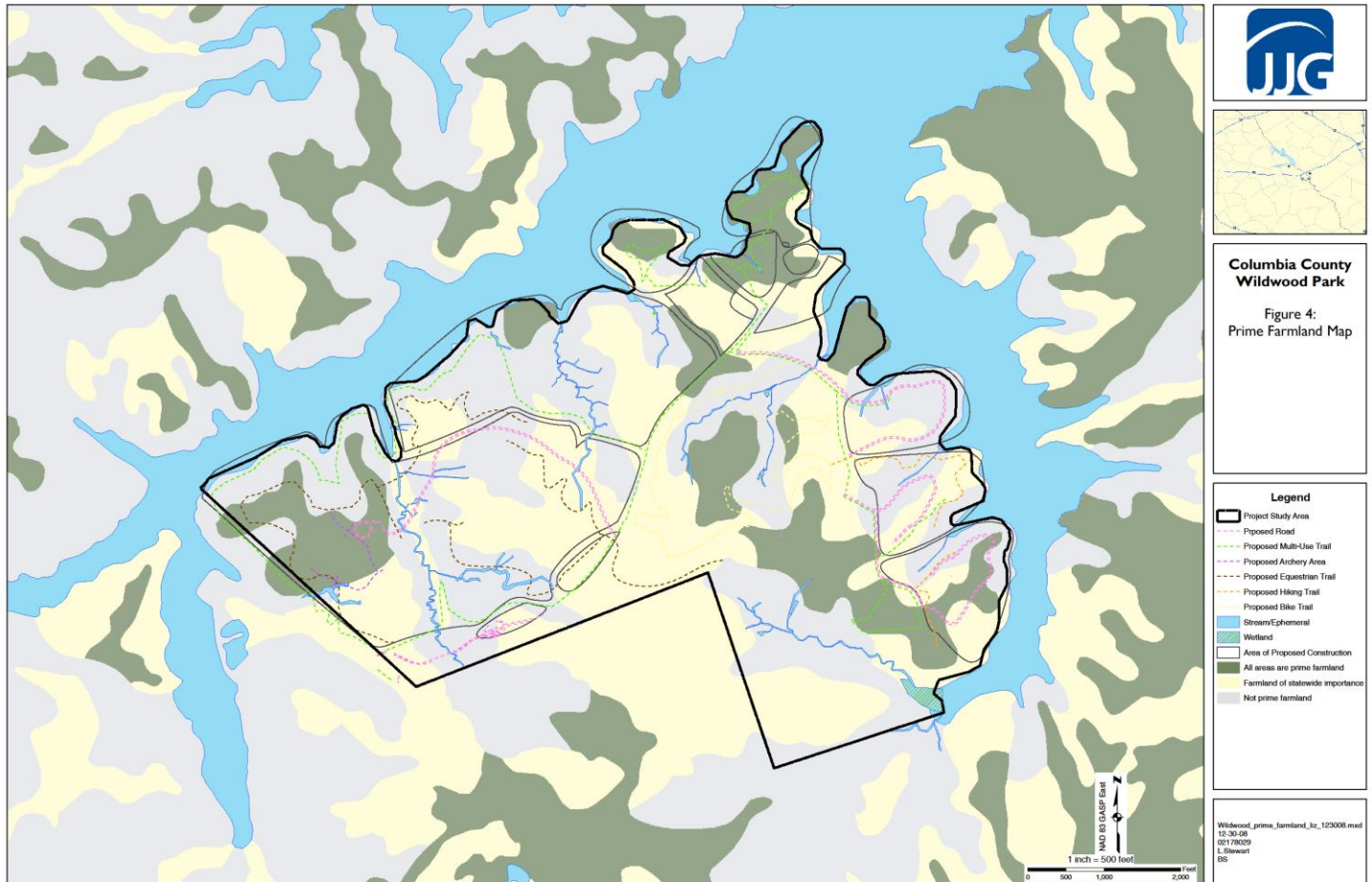
Table 3: Soil Survey												
Map Unit Description	Existing Acreage	Proposed Trail Impacts	Proposed Road Impacts	Proposed Facility Construction Impacts	Total Impacted Acreage	Erosion Factors	Properties and Qualities	Typical Setting	Typical Profile	Road Material Source	Topsoil Source	Hydric Soil
Wedowee loamy sand (WeE)	107.12	2.1	3.26	6.07	11.43	moderate-severe	15 to 25 percent slopes, well drained, parent material: residuum weathered from granite and gneiss rocks; no frequency of flooding or ponding	hillsides of the Piedmont Upland	0 to 6 inches: loamy sand; 6 to 37 inches: sandy clay loam, sandy clay, and clay loam; 37 to 60 inches: sandy clay loam	poor	poor	not hydric

4.4.1 Farmland

The Farmland Protection Policy Act (FPPA) regulates Federal actions with the potential to convert farmland to non-agricultural uses. The FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. **Figure 4: Prime Farmland Map** depicts the prime farmland and farmland of statewide importance.

The U.S. Department of Agriculture (USDA) NRCS was consulted to determine if the FPPA applies to the land the proposed action would convert to non-agricultural use. The NRCS identified farmland within Wildwood Park. Therefore, a Farmland Conversion Impact Rating form (AD-1006) would be required for the land conversion. Of the total 975 acres within the project study area, 191.8 acres is designated as prime farmland, 384.7 acres are designated as farmland of statewide importance and the remaining 398.5 acres are designated as not farmland.

Figure 4: Prime Farmland



4.4.2 Geology/Topography

The Appalachian Province is a formation series that extends from Newfoundland to southwest Texas. The region can be broken into five separate subzones: southeastern Canada and New England, the Valley and Ridge Zone, the Blue Ridge, the Piedmont and the Triassic Basins (Roberts 1996). Columbia County is located on the Piedmont region of Georgia. The Piedmont region encompasses a large area of Georgia and the dynamic changes over time in this area are complex. The plateau of the Piedmont region was formed largely on the edges of steeply upturned and altered rocks. Topographically, the Piedmont is made up of low hills and narrow valleys. The worn-down igneous and metamorphic rocks of the Piedmont region pass below the sedimentary rocks of the Atlantic Coastal Plain for more than 150 miles from the fall line. The rise of the Appalachians was about 500 million years ago, at the end of the Cambrian Period.

The underlying rock formations at the Wildwood Park consist of granite gneiss/amphibolites and sericite schist (GDNR 1997). Rocks in the Piedmont are frequently overlaid by a thick layer of decomposed rock called saprolite, which is the red clay of Georgia.

Saprolite is made up of clay minerals rich in silicon, aluminum, and some other elements, plus more or less pigmentary iron oxides and resistant minerals such as quartz. Topography at Wildwood Park ranges from 330 MSL to 430 MSL (USGS 1985).

4.5 Threatened and Endangered Species

Under the terms of Section 7 of the Endangered Species Act (ESA), 16 U.S.C. Section 1536(a)(2), federal agencies shall “*ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary to be critical...*” In compliance with the ESA, agencies overseeing federally-funded projects are required to obtain from the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS), as appropriate, information concerning any species listed, or proposed to be listed, which may be present in the area of the proposed action. The ESA places protected plants and animals into two classifications; “endangered” and “threatened.” Endangered species are defined as flora and fauna species faced with danger of imminent extinction. Threatened species are in less danger, but require special protection in order to maintain their populations and prevent them from being endangered. Species that are of “special concern” are those which a concern for welfare or risk of endangerment has been documented.

Final Environmental Assessment
Wildwood Park

The USFWS removed the bald eagle from the ESA list of threatened species on August 8, 2007, and subsequently published the National Bald Eagle Management Guidelines (Eagle Guidelines) to assist the public in understanding protections afforded to and prohibitions related to the bald eagle under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d) (Eagle Act), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Lacey Act (16 U.S.C. 3371-3378). The Eagle Act prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald eagles, including their parts, nests, or eggs. The Eagle Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.”

As part of the Ecology Report preparation, coordination was conducted with the GA DNR Wildlife Resources Division, Nongame Conservation Section (GA DNR-NCS) and the USFWS to request concurrence regarding state and federally protected species in Columbia County. Previous Protected Species Survey in 1999 and 2005 were reviewed (see **Appendix F: 1999 and 2005 Protected Species Surveys**) as well as an office review of federal, state, and privately published reference material was performed prior to conducting the field studies. **Table 4: Protected Species Known to Occur in Columbia County, Georgia** is followed by a brief description of each species.

Table 4: Protected Species Known to Occur in Columbia County, Georgia				
Common Name	Scientific Name	Federal Rank	State Rank	Preferred Habitat
Fauna				
bald eagle	<i>Haliaeetus leucocephalus</i>	D	ST	inland waterways and estuarine areas in Georgia
Flora				
Dixie mountain breadroot	<i>Pedimelum piedmontanum</i>	N/A	SE	upland pine-mixed oak savanna and powerline right-of-ways
Georgia aster	<i>Symphyotrichum georgianum</i>	C	ST	upland oak-hickory pine forests, roadsides, and right-of-ways
Georgia plume	<i>Elliottia racemosa</i>	N/A	ST	extremely dry to moist sandy soils on oak ridges, sand ridges, sandstone outcrops, and evergreen hammocks
granite stonecrop	<i>Sedum pusillum</i>	N/A	ST	granite outcrops, often in mats of moss under eastern redcedar trees
mat-forming quillwort	<i>Isoetes tegetiformans</i>	E	SE	vernal pools on granite outcrops less than a foot in depth and with gravelly soil at least 2cm deep
Ocmulgee skullcap	<i>Scutellaria ocmulgee</i>	N/A	ST	hardwood slopes, riverbanks, forested terraces
pool sprite	<i>Amphianthus pusillus</i>	T	ST	vernal pools on granite outcrops less than a foot in depth with a minimum of 2cm of soil
relict trillium	<i>Trillium reliquum</i>	E	SE	hardwood forests in coastal plain with boulders and ledges with limestone, hardwood forests in Piedmont with deep, loamy soils in ravines or adjacent alluvial terraces
shoals spiderlily	<i>Hymenocallis coronaria</i>	N/A	ST	rocky shoals along major streams and rivers, found in cracks of bedrock, occurs with riverweed (<i>Podostemon ceratophyllum</i>) and water-willow (<i>Justicia americana</i>)
sun-loving draba	<i>Draba aprica</i>	N/A	SE	granite outcrops with shallow soils, especially under old growth Eastern redcedar (<i>Juniperus virginiana</i>)

Table 4: Protected Species Known to Occur in Columbia County, Georgia

Common Name	Scientific Name	Federal Rank	State Rank	Preferred Habitat
pineland Barbara buttons	<i>Marshallia ramosa</i>	N/A	SR	Altamaha grit outcrops, ultramafic rock outcrops, and shallow soils of longleaf pine forests
sweet pitcherplant	<i>Sarracenia rubra</i>	N/A	ST	Atlantic white cedar swamps, wet savannahs, sloughs, ditches, low areas in pine flatwoods, sandhill seeps, acidic soils of open bogs
yellow nailwort	<i>Paronychia virginica</i>	N/A	SE	shallow, rocky outcrops

E= endangered, T= threatened, C= candidate, D = recently delisted, SE= state endangered, ST= state threatened, SR= State Rare; N/A= Not Applicable

Protected species databases list 14 protected species with known occurrences in Columbia County, Georgia. Potential habitat was identified for bald eagle, Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily. No observations of these species were made during field efforts conducted in 2008. These field studies were not conducted during the flowering or fruiting periods of the following protected species: Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily. Therefore, follow-up surveys would be conducted prior to construction to confirm the absence of those species. However, according to early coordination with the GA DNR-NCS, there are no known occurrences of state- or federal-protected species within a three-mile radius of the study area. Previous Protected Species Surveys in 1999 and 2005 did not identify any listed species in either report; however, suitable habitat was identified for numerous listed species (see Appendix F). In addition, the USFWS stated that federally listed species are not likely to occur on the project site in a letter dated May 9, 2008 (see Appendix D). The GA DNR-NCS identified three recently active bald eagle nests, all of which are approximately 20 miles from the project study area. Recently an active eagle nest was identified approximately 6 miles from the Park.

4.6 Wetland Resources

Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands also include estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Executive Order 11990, the Rivers and Harbors Act of 1899 and the Clean Water Act address activities in Waters of the U.S. (i.e., wetlands, streams and open waters). Executive Order 11990 requires Federal agencies to ensure their actions minimize the destruction, loss, or degradation of Waters of the US. It also assures the protection, preservation, and enhancement of the Nation's Waters to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

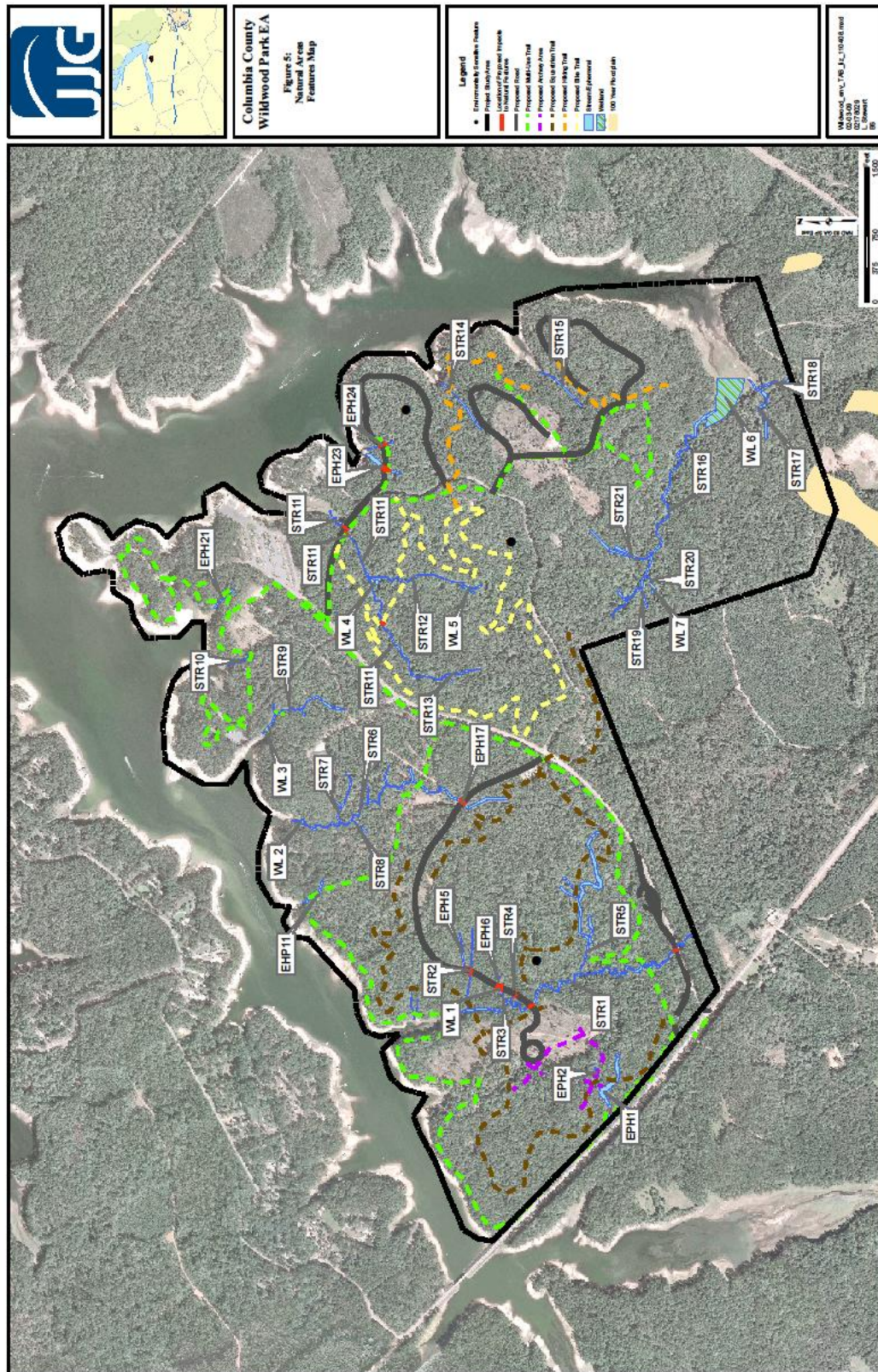
Final Environmental Assessment Wildwood Park

Jurisdictional Waters of the US are defined by 33 C.F.R. Part 328.3 (b) and are protected by Section 404 of the Clean Water Act (33 USC 1344), which is administered and enforced by the Corps. Jurisdictional Waters of the U.S. include wetlands, streams, open waters, and ephemeral channels. The *Federal Register* defines wetlands as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Jurisdictional streams exhibit a definite channel (ordinary high water mark) and show evidence of water flow at times other than major storm events. Ephemeral channels are natural topographic features; however, water flow within the channel is directly attributed to rainfall events.

An Ecology Report was completed for the proposed action in September 2008. The ecological studies included a survey for federally-listed species and Jurisdictional Waters of the US within the project study area. Background research was performed using federal and state online databases, USGS topographic maps, NWI maps, and aerial imagery. Wetland locations were determined using methodologies outlined in the *1987 Corps of Engineers Wetlands Delineation Manual*. The report includes a site description, a discussion of study methodologies, and results of field surveys. Please refer to the Ecology Report provided in Appendix C for detailed information.

In summary, field studies identified one open water, 21 jurisdictional streams, 7 jurisdictional wetlands, and 29 ephemeral drainages. Please see **Figure 5: Natural Areas Features Map** for locations of open waters, streams, wetlands, and ephemeral drainages.

Figure 5: Natural Areas Features Map



Final Environmental Assessment Wildwood Park

Section 404 of the Clean Water Act C.F.R. 33 Part 323 requires a permit from the Corps if construction of a project results in the discharge of any fill material into Jurisdictional Waters of the US. Typically, a Corps Nationwide Permit (NWP) would be required to fulfill any wetland and stream impact requirements for a project that has 0.5 acre impact or less. Transportation-related projects (i.e., roads) impacting Waters of the US would be permitted through a NWP 14, which authorizes temporary structures, fills, and work necessary to construct transportation projects. As part of the Section 404 permit process, it would also be necessary to evaluate avoidance and minimization of impacts to streams and wetlands. In the event that wetland and stream are greater than the NWP thresholds, the Corps would require an Individual Permit (IP) where wetland impacts are greater than 0.5 acre and the linear stream impact is greater than 300 linear feet at anyone crossing. Mitigation for jurisdictional impacts would be required for both the NWP and IP.

The GA DNR-Environmental Protection Division (GA DNR-EPD) requires a stream buffer variance application where land disturbing activities encroach within the 25-foot stream buffer of non-trout streams/open waters and the 50-foot buffer of trout streams/open waters in accordance with Erosion and Sedimentation Act of 1975, as amended, O.C.G.A. 12-7-6(b)(15).

However, certain activities are exempt and do not require an application or approval from the GA DNR-EPD. A roadway drainage crossing is exempt where the structure must be constructed within the 25-foot buffer of any state water or the 50-foot buffer of any trout stream. As shown in Table 5, the proposed action would adversely impact 0.79 acres (300 linear feet of jurisdictional stream), so a stream buffer variance would be required for project implementation.

4.6.1 Floodplains

Executive Order 11988 directs Federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. Agencies are required to make a finding that there is no practicable alternative before taking action that would encroach on a base floodplain of a 100-year flood (7 C.F.R. 650.25).

Floodplains are defined in Executive Order 11988 as “the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year;” (i.e., the area that would be inundated by a 100 year flood).

According to the FEMA Flood Insurance Rate Map (FIRM) of the project study area, the 100-year floodplain is located within the project study area (see Figure 5). The GA DNR and FEMA-Region IV were contacted via letters on April 22, 2008. A copy of the correspondence is located in Appendix D.

4.7 Water Resources Management

Four watersheds are located in Columbia County: upper Savannah River watershed, Little River watershed, Middle Savannah River watershed, and Brier Creek watershed. The project study area is located within Hydrologic Unit Code 03060105 of the Little River Watershed. Strom Thurmond Lake is identified on the 2008 Lakes Supporting Designated Uses list issued by the GA DNR-EPD. No Section 303(d) listed streams are located within the project study area.

The 70,000-acre J. Strom Thurmond Lake was built between 1946 and 1954. The original authorized uses of the lake were for flood control, hydropower, and navigation; however, recreation, water quality, water supply, and fish/wildlife management were subsequently added as authorized uses (Corps 2008). The normal pool elevation is 330 feet mean sea level and the shoreline encompasses 1,200 miles. Accessibility to public parks, campgrounds, and marinas makes J. Strom Thurmond Lake one of the top ten most visited Corps lakes. Activities occurring within government fee lands (lake and surrounding upland buffer) are managed by the Thurmond Dam and Lake Project Office.

Wildwood Park is one of the many public access parks located adjacent to J. Strom Thurmond Lake. The park currently offers recreational access to the lake, providing a beach area and eight boat ramps.

4.7.1 Water/Wastewater Infrastructure/Treatment

Except for a small number of water customers in rural areas, Columbia County supplies residents with the majority of water and wastewater services. Wildwood Park uses Columbia County water, but not wastewater services. Due to the expense associated with installing sewer lines for wastewater service in the area, the park uses septic systems for wastewater disposal at the current facilities. Some of the proposed new facilities at the Park may require new septic systems for wastewater disposal. A new small wastewater treatment package plant would be needed for full implementation of the proposed Wildwood Park Conceptual Master Plan. This project is not expected to precipitate a need for changing Capital Improvement Planning for the Columbia County Water Utility.

4.8 Facilities

Currently, Wildwood Park contains a gatehouse, 61 campsites, eight boat ramps (6-mega ramp system), the home of the National Disc Golf Headquarters and Hall of Fame, a disc golf course, a beach area, picnic area, four covered pavilions, a small playground and several miles of equestrian, hiking and mountain biking trails.

Public facilities and services at the Park and the surrounding area are limited, given the area's rural nature. Water and sewer services are provided on-site for the existing facilities by way of county water and on-site septic systems. Emergency services are

Final Environmental Assessment Wildwood Park

provided in the area by the Columbia County Fire Department and Sheriff's office. Private roads, such as Dogwood Lane are maintained by the Columbia County Department of Construction & Maintenance Division.

4.9 Socioeconomics

The existing Park is a contributor to the economic activity in Columbia County. The day users and overnight campers expend funds for supplies, boosting the local economy. Bass tournament fishing events provide a substantial short-term surge in expenditures in the local area.

The impact analysis of the expected direct, indirect and cumulative socioeconomic effects will examine the following items: water/wastewater infrastructure and treatment, solid waste, income, utilities, population, employment and environmental justice.

4.9.1 Income

The 2000 census states that Columbia County had a population of 89,288 residents. The per capita income in the County has been rising since 2002, and reached \$36,172 in 2006. Additionally, the County has the highest average household income in the three-county region. The median household income in Columbia County is \$55,682, which is 30 percent higher than the State of Georgia median income of \$42,433 and 51 percent higher than the MSA median income of \$36,933. Both Richmond County and McDuffie County have median household incomes below the state of Georgia's median.

Looking at income distribution, there are households with all ranges of income living in Columbia County. The largest grouping of household income occurs in the \$40,000-\$100,000 range. However, the 2000 Census stated that there were also almost 6,000 "workforce" households, in the \$15,000- \$35,000 range.

Of Columbia County's 25,453 families in 1999, about 4.2% of these families, or 1,069 families, had incomes below the poverty level. Most families below the poverty level had children less than 18 years of age.

4.9.2 Utilities

Wildwood Park is currently serviced by the Georgia Power Company for electric needs, BellSouth for telephone service, Columbia County Water Utility for water needs and Advanced Disposal Service (a private company contracted through Columbia County) for garbage needs. The park does not currently use cable services. No city or county sewer lines are available for this remote area of the county, so facilities such as the onsite office, bathrooms, campground dumping stations and the police officer's house use individual septic systems.

4.9.3 Population

Based on the 2000 census, Columbia County has 89,288 residents. The largest racial and ethnic groups were White at approximately 83 percent, Black or African American at 11 percent, Asian at three percent, and Hispanic or Latino of any race at three percent.

Columbia County has 31,120 households out of which approximately 44 percent had children less than the age of 18 living with them, 68 percent were married couples living together, 11 percent had a female householder with no husband present, and 19 percent were non-families. Approximately 15 percent of all households were made up of individuals and five percent had someone living alone who was 65 years of age or older. The average household size was 2.85 and the average family size was 3.18.

The County's population was spread out with approximately 30 percent under the age of 18, seven percent from 18 to 24, 31 percent from 25 to 44, 24 percent from 45 to 64, and eight percent who were 65 years of age or older. The median age was 35 years.

The Augusta–Richmond County Metropolitan Statistical Area (MSA), as defined by the United States Census Bureau, is an area consisting of six counties in the Central Savannah River Area (CSRA), anchored by the City of Augusta, Georgia. As of the 2000 census, the MSA had a population of 499,684 (though a July 1, 2008 estimate placed the population at 534,218). Of the six counties in the MSA, four are in Georgia and consist of Burke, Columbia, McDuffie and Richmond counties. The remaining two are Aiken and Edgefield counties located in South Carolina. As of the 2000 census, there were 499,684 people, 184,801 households, and 132,165 families residing within the MSA. The racial makeup of the MSA was 60.81% White, 35.09% African American, 0.32% Native American, 1.42% Asian, 0.08% Pacific Islander, 0.85% from other races, and 1.43% from two or more races. Hispanic or Latino of any race made up 2.40% of the population.

The median income for a household in the MSA was \$36,933, and the median income for a family was \$42,869. Males had a median income of \$34,574 versus \$22,791 for females. The per capita income for the MSA was \$17,652. Augusta in Richmond County, Georgia is the principal city with more than 100,000 habitants. Wildwood Park is located approximately 21 miles northwest of Augusta.

4.9.4 Employment

Based on the 2000 census, Columbia County has 89,288 residents, with employment steadily rising for a decade; reaching 57,086 County residents employed in 2007. The County's 2007 unemployment rate was 3.7 percent out of a labor force of 59,278 who are employed or actively seeking employment. This rate was the lowest in Columbia County since 2005. It was also lower than the Columbia Area unemployment rate of 5.4 percent in 2007.

Final Environmental Assessment Wildwood Park

As of 2008, the park has two full time employees and three part time employees. Park staff anticipates the staffing needs would increase upon implementation of the plan. The increase would be based on need and available funding for additional employees. While the addition of even one employee would substantially increase the size of the park staff, the increase would provide a negligible change in the overall employment statistics of Columbia County.

4.10 Environmental Justice

To address environmental justice (EJ) concerns, the President issued Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, on February 11, 1994 requiring each federal agency to “make the achievement of environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health and environmental effects on minority and low-income populations.” The primary objective of an environmental justice analysis is to ensure that vulnerable populations do not bear a disproportionately high and adverse share of human health or environmental effects from proposed federal actions.

According to the EPA’s EnviroMapper (EPA 2008), Wildwood Park is not located in a census blockgroup containing a high number of minority or low-income populations (see Figure 6: Percent Minority Population in the Project Study Area and Figure 7: Percent Below Poverty Level in the Project Study Area).

4.11 Protection of Children

Protection of Children guidelines are specified in Executive Order (EO) 13045, Protection of Children from Environmental Health Risks and Safety Risks. This 1997 EO requires that federal agencies shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that policies, programs, and standards address disproportionate risks to children that result from environmental health or safety risks.

Figure 6: Percent Minority Population in the Project Study Area

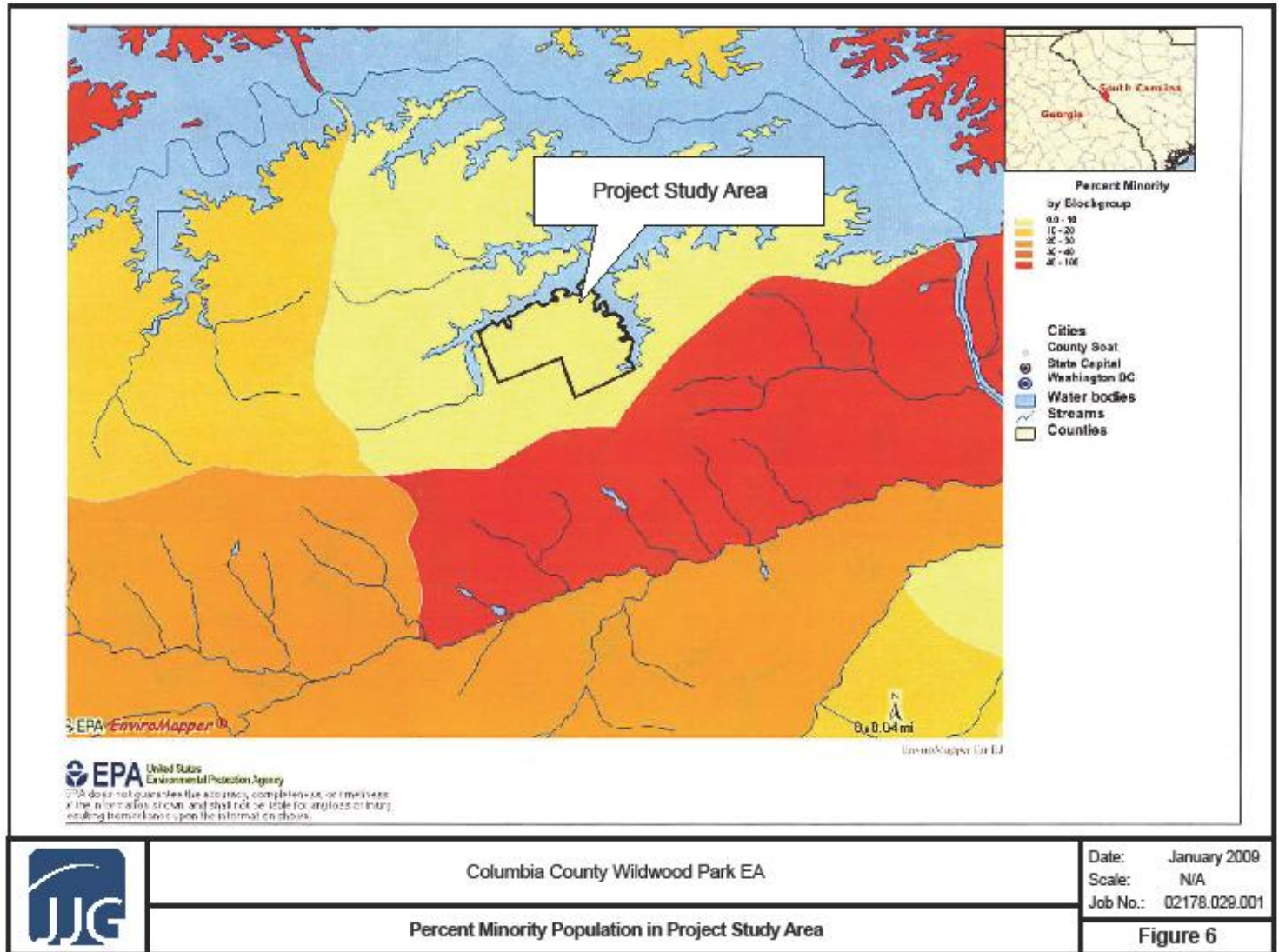
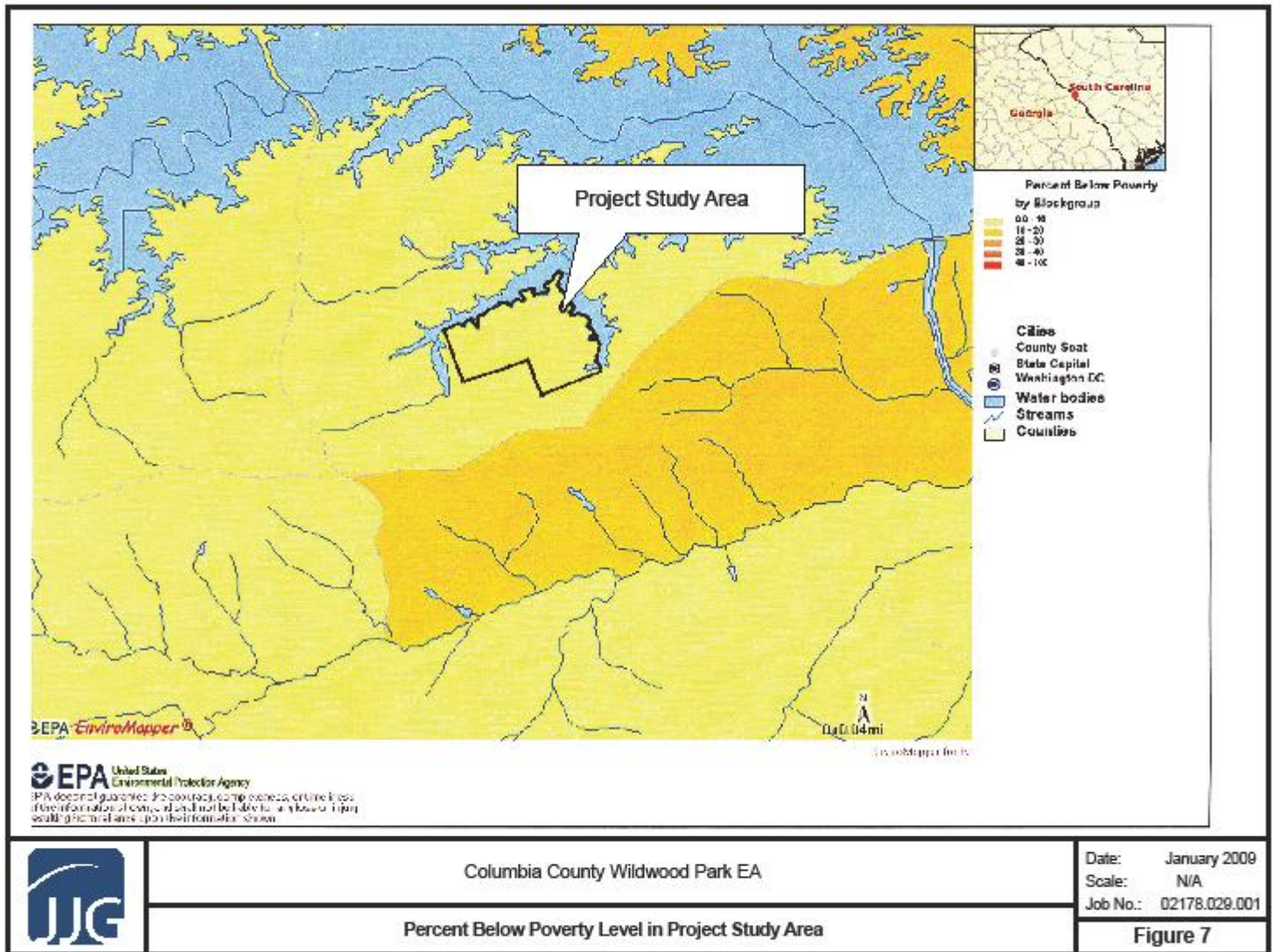


Figure 7: Percent Below Poverty Level in the Project Study Area



4.12 Energy

Energy consumption is a major infrastructure and budgetary challenge. The generation, transmission, and use of power have significant economic, environmental, and mission implications. An assessment of project impacts should consider the expected effects on energy use during both the construction phase and the operational phase. Any effects on energy generation or transmission should also be identified. Measures that would be included to conserve energy should be identified.

A qualitative energy assessment of the proposed project suggests that the construction of a park facility would likely demand larger than normal expenditures of energy resources both in the fabrication of construction materials and in the actual construction process. Increased amounts of electricity are anticipated to be used in the preparation and fabrication of materials, whether derived from hydro or fossil fuel (coal or natural gas) sources.

Operation and maintenance of the proposed 100-room lodge/restaurant/meeting facility and cabins would result in increased energy usage over the current conditions. Although detailed design is not complete, the proposed lodge will be constructed to Leadership in Energy and Environmental Design (LEED) standards. LEED is an internationally-recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across several important metrics: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. So the proposed lodge/restaurant/meeting facility would include numerous energy saving features.

4.13 Land Use

Wildwood Park is located on J. Strom Thurmond Lake, which is known regionally for its great fishing and boating amenities. J. Strom Thurmond Lake is approximately 78,000 acres and has played host to major fishing tournaments and other sporting events. J. Strom Thurmond Lake was previously known as Clarks Hill Lake prior to 1988. The park has recently become home to the headquarters for the International Disc Golf Center and Hall of Fame managed by the PDGA.

The Park is situated on approximately 975 acres of land and offers a diverse range of recreational activities that attracts both local and regional visitors. The Park currently provides two boat ramp areas, including a mega boat ramp/dock area with eight docks, numerous picnic areas, 61 campsites, a sand beach area, small playground and covered pavilions, and several miles of hiking, mountain bike and equestrian trails.

Final Environmental Assessment Wildwood Park

Based on **Figure 8: Columbia County Existing Land Use Map**, the park's current land use is designated as recreation-passive and the land surrounding the park consists of undeveloped-water, recreational-passive, recreational-active, residential, commercial and undeveloped vacant land. Lands within and surrounding the Park are also managed for wildlife and forestry. Ecological field surveys confirmed that Thurmond Lake is situated to the north, east and west of the Park, woodlands exist along a majority of the southern boundary, and SR 47 abuts the southwestern boundary of the Park. As with the much of the privately-owned land surrounding Thurmond Lake, the area surrounding Wildwood Park is a popular vacation spot. Land use controls on private lands in the area around Wildwood Park are imposed by local government.

Among the covenants and restrictions are limits on the minimum size of a dwelling, dwelling height, and distance to lot lines. In addition, Architectural Control Committee approvals of individual subdivisions are required for dwelling unit and lot improvements.

The Plan would include improvements to Wildwood Park that will accommodate the County's new visions and programs for the Park, while maintaining its valuable existing features. The features of the Plan include a Visitor's Center building with a 25-space parking lot, Outdoor Amphitheater with fixed and lawn seating, Equestrian Campground, Super-Playground, Day Use Area/Beach Relocation, Lodge and Cabins, Team Building Area, 12 Miles of Hiking Trails, 2.6 Miles of Mountain Bike Trails, 6.1 Miles of Equestrian Trails, 8.1 Miles of 12-foot wide Paved Multi-Use Trails and Natural Areas that will be preserved both for wildlife and aesthetic reasons.

The current land use would be consistent with the proposed features of the park and would not change the current land use designation as depicted in **Figure 9: Columbia County Future Land Use Map**.

Figure 8: Columbia County Existing Land Use Map

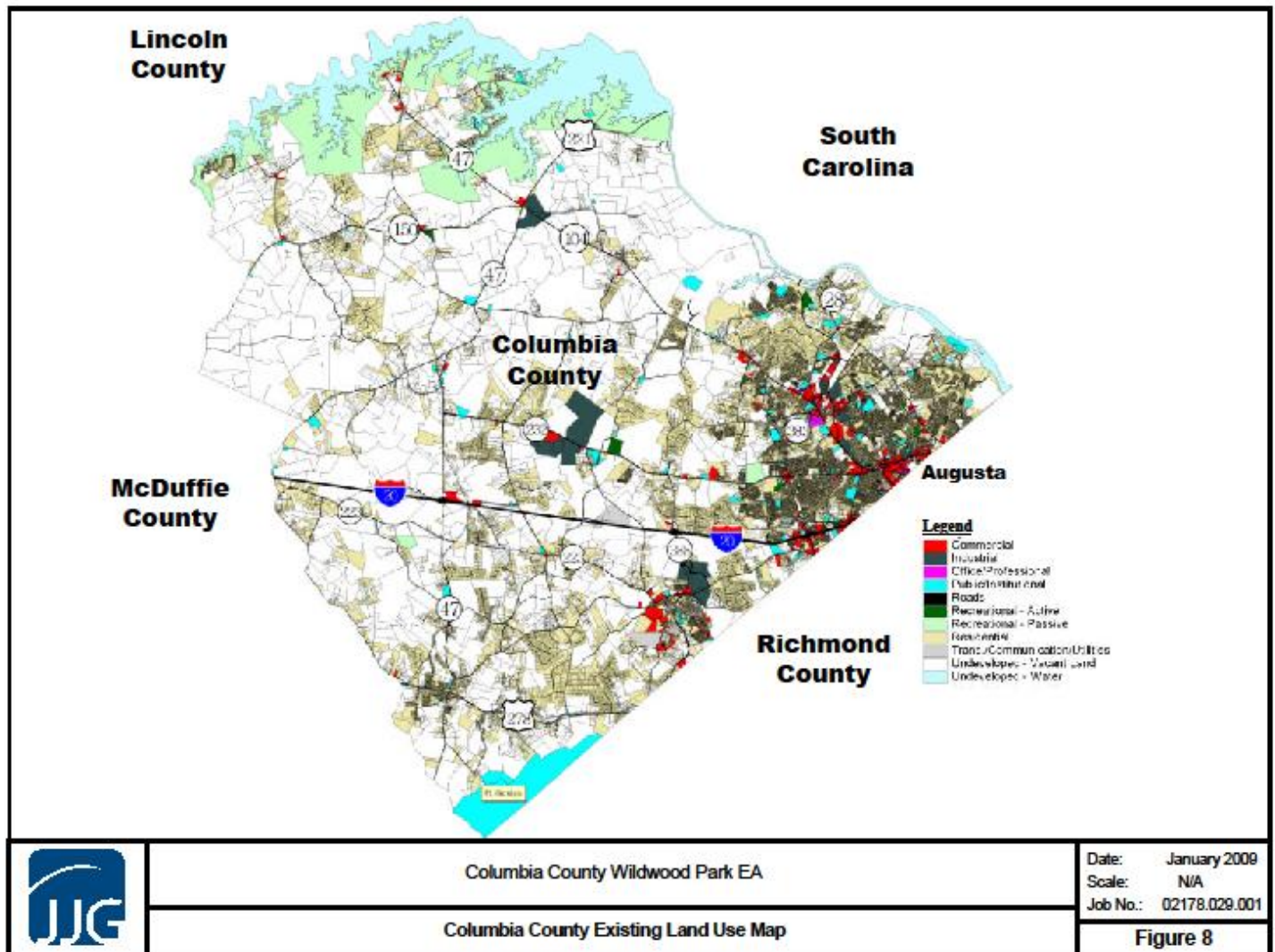
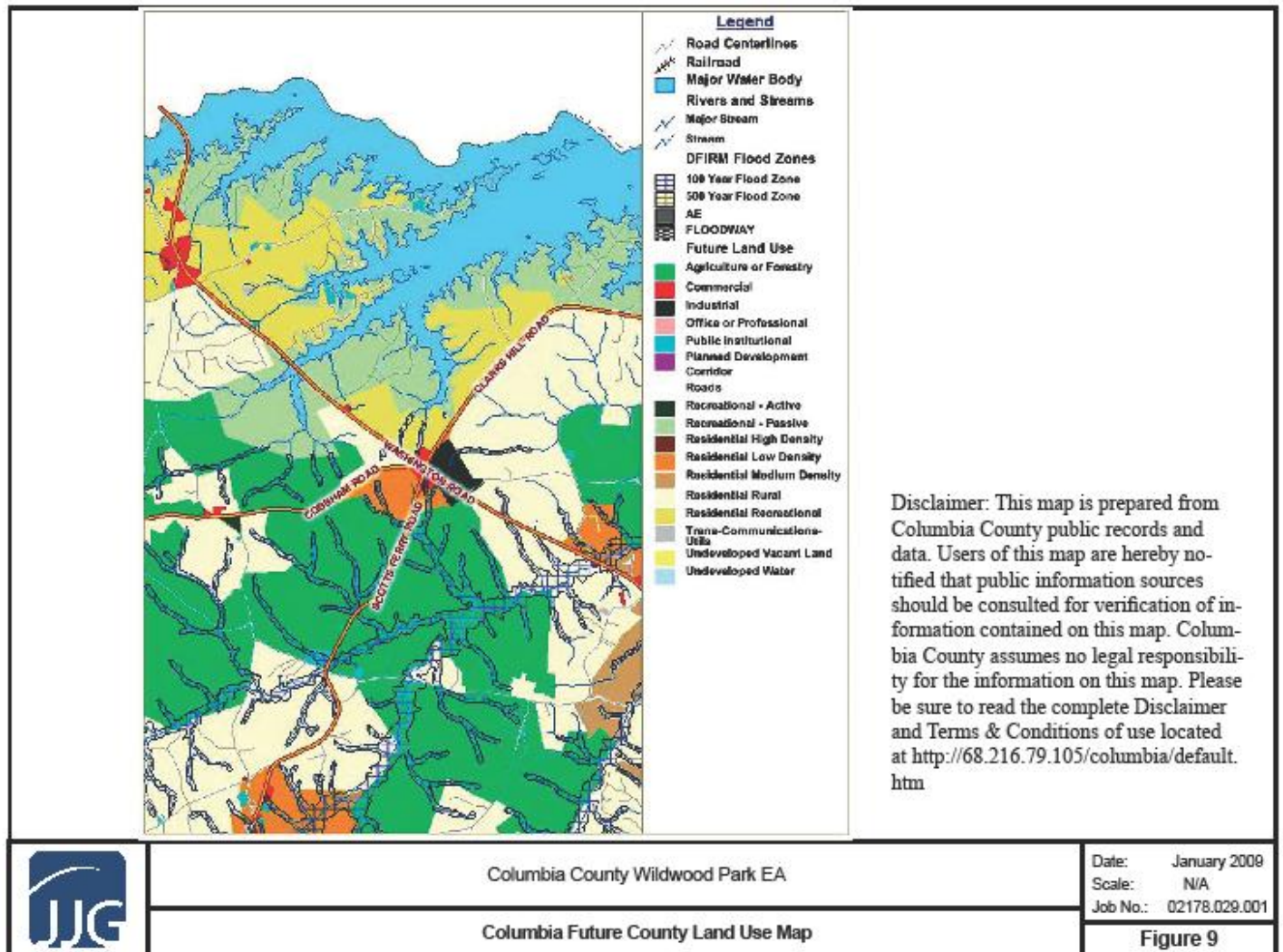


Figure 9: Columbia County Future Land Use Map



4.14 Hazardous Materials/Hazardous Wastes

4.14.1 Hazardous Waste / Hazardous Materials

Consideration of Hazardous Materials / Hazardous Waste includes the use of hazardous substances in households, maintenance of facilities, and training and the generation of hazardous wastes through disposal of unused or contaminated material, air and water pollution control (for example, paint booth filters or wastewater sludge), cleanup of spills, and remediation of historic soil and groundwater contamination. Although household hazardous substance use and hazardous waste generation are typically exempt from regulation, the amounts of products used and waste generated can have significant and measurable impacts to air and water quality and waste management and disposal. Hazardous Materials are defined as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that may cause an increase in mortality, a serious irreversible illness, incapacitating reversible illness, or pose a substantial threat to human health or the environment. Hazardous waste is defined as any solid, liquid, contained gaseous, or semi-solid waste, or any combination of wastes that poses a substantial present or potential hazard to human health or the environment (Canter 2007).

Sites listed on the GA DNR-EPD Hazardous Site Inventory (HSI), Underground Storage Tank (UST), and Leaking Underground Storage Tank (LUST) databases were identified within a one-mile radius of the project study area. The HSI sites were researched on the EPD hazardous waste website (GA DNR-EPD 2008) and the UST and LUST sites were researched on the EPD land protection website (GA DNR-EPDa 2008). In addition, multi-activity, superfund, toxic release, water discharger, air emission, and hazardous waste sites regulated by the EPA were researched using EPA's Enviromapper tool (EPA 2007).

The HSI list includes sites that have potentially released regulated, hazardous materials or solid waste that pose a threat to human health and the environment above the reportable quantity into the soil or groundwater. According to the GA DNR-EPD, there are no sites currently listed on the HSI list within a one-mile radius of the project study area (GA DNR-EPD 2008).

The UST database lists sites that store hazardous substances and petroleum products in underground storage tanks; and the LUST database identifies sites with releases of hazardous substances and petroleum products from the USTs. There are 19 sites listed on the UST database and 11 sites listed on the LUST database within a ten-mile radius of Wildwood Park. The sites were mapped in relation to the project study area; and one site is listed on both the UST and LUST databases within one mile of the project study area. The site is located at the intersection of Georgia Highway 47 and 150. The site is listed as having a confirmed release in December 2000.

Using the Enviromapper tool, one EPA regulated site was identified within a one-mile radius of the project study area. Pollard Lumber Company, Inc. is located at 5863 Washington Road. The site is listed in the Resource Recovery and Conservation Act

Final Environmental Assessment
Wildwood Park

Small Quantity Generator (active) (RCRA-SQG), Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS), Toxic Release Inventory System (TRIS), and Geographic Environmental Information Management System (GEIMS) databases. Five USTs are listed at the site in addition to saw and planning mills and wood preserving.

Descriptions of the statutes concerning hazardous waste and materials are included below in **Table 5: Hazardous Materials, Pollution Prevention and Solid Waste Laws.**

Table 5: Hazardous Materials, Pollution Prevention and Solid Waste Laws		
Statute	Regulation	Oversight Agency
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (as amended by the Superfund Amendments and Reauthorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992) [42 U.S.C. 9601-9675]	40 C.F.R. parts 300, 311, 355, and 370	Environmental Protection Agency
Pollution Prevention Act of 1990 [42 U.S.C. 1310-1319]	CEQ Memorandum on Pollution Prevention and the National Environmental Policy Act, January 12, 1993 (58 FR 6478)	Council on Environmental Quality Environmental Protection Agency
Toxic Substances Control Act of 1976, as amended (TSCA) [15 U.S.C. 2601-2692] [PL 94-469]	40 C.F.R. parts 761 and 763	Environmental Protection Agency
Resource Conservation and Recovery Act of 1976 (RCRA) [PL 94-580, as amended by the Solid Waste Disposal Act of 1980 (SWDA), PL 96-482, the Hazardous and Solid Waste Amendments of 1984, PL 98-616, and the Federal Facility Compliance Act of 1992, (FFCA) PL 103-386] [42 U.S.C. 6901-6992(k)]	40 C.F.R. parts 240-280	Environmental Protection Agency
Executive Order 12088, Federal Compliance with Pollution Control Standards, October 13, 1978 (43 FR 47707), amended by Executive Order 12580, January 23, 1987 (52 FR 2923) January 29, 1987		Environmental Protection Agency
Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements (58 FR 41981, August 3, 1993)		Environmental Protection Agency
Executive Order 12580, Superfund implementation, amended by Executive Order 13016 and 12777		

Final Environmental Assessment Wildwood Park

There are a number of minor ongoing operations at Wildwood Park with hazardous materials/wastes that are either stored on or generated onsite on a regular basis. Wildwood Park currently has a maintenance shop where gas and diesel are stored in 5 gallon and 2.5 gallon plastic jugs. The jugs are placed inside a metal building near the general shop building. The gas and diesel are used to fuel equipment such as trucks, tractors, lawn mowers, chainsaws, and leaf blowers for general ongoing operations in the park. A number of materials such as paint (latex and oil based), paint-thinner, Round-Up, Scythe, WD-40, ant killer, Clorox, Liquid Plumber, flying insect killer, motor oil, gas, and diesel are also stored onsite in standard retail-size containers. Chemicals such as Round-Up are used for weed control, ant killer for pest control and insect killer for insect control.

4.14.2 Solid Waste

All garbage collection and recycling in Columbia County are managed through private carriers. A series of private landfills located inside and outside the County accept solid waste. Privately-operated landfills must comply with all of Columbia County's land use and environmental protection laws. Private garbage, recycling collection, and landfill operation has provided a satisfactory solution to residential and commercial solid waste disposal needs. Wildwood Park uses waste receptacles and dumpsters placed around the Park to collect solid waste generated by park visitors and operations. The waste is collected and taken to a landfill for disposal. As of 2008, the park does not have a recycling program as part of their solid waste management program.

4.15 Traffic and Transportation

The Wildwood Park office is located at 6212 Holloway Road and the park entrance is located at the intersection of Dogwood Lane and SR 221/47. The closest major highway is Interstate 20 (I-20) which is approximately ten miles south of the Wildwood Park entrance. Travelers from east or west utilize I-20 and depart the highway at Exit 183. SR 221/47 provides access from the north and south.

Because of the current low recreational use of Wildwood Park, traffic mostly occurs as a result of surrounding residential, commercial and agricultural use. Traffic in and around Wildwood Park is generally light and comprised mostly of a mix of commercial and non-commercial vehicles. SR 221/47 is a two-lane, asphalt road through generally rolling terrain accessing a relatively sparsely populated residential area with low traffic volumes. This road provides direct access to Wildwood Park. Traffic estimates based on data provided by Georgia Department of Transportation (GA DOT) on SR 47 between the intersection at Ray Owens Road and the intersection at Dogwood Lane indicated that as of 2006, existing average annual daily traffic (AADT) is 4,850. SR 47 in this area is proposed to be widened from Pollards Corner in Columbia County to Lincolnton in Lincoln County, Georgia (GA DOT Project STP00-0000-00(477), P.I. No. 0000477). This is the only other transportation project in the area as of November 2008 based on research completed on GDOT's TREX website (GDOT 2008).

According to the Wildwood Park Visitations Estimation Reporting System (PERS), a total of 57,013 visitors (averaging 4,751 visitors) came to the park in 2008 to 2009. Although no traffic studies have been conducted at the Park, it is assumed that traffic levels are fairly low relative to highway traffic levels and that the greatest source comes from automobile traffic entering and exiting the park and boat activities during events within the park itself. As previously noted in Table 2a, a number of events are planned by the Park during the 2010 year. The peak season for boat and vehicle traffic is in the months from April to September. The peak occurs during May due to tournaments and the beginning of summer vacation. One of the more notable boating events that occur at the park annually is the ESPN/BASS Masters fishing tournament that takes place in late spring/early summer for four days. Approximately 100 to 125 boats participate in this event. However, no specific traffic studies have been conducted. It is assumed that although project implementation would potentially result in an increase in traffic levels at the Park, these would remain fairly low and would occur seasonally during Park events. This additional traffic could affect air quality in the project study area, but this potential increase in traffic is only anticipated to occur for only a few days at a time (i.e., weekends) and for only a portion of the time within that timeframe (i.e., day light hours).

5.0 Environmental Consequences

The Corps must evaluate any action that may affect the human health and the environment (C.F.R. 32 Part 651.1). This includes facility development actions that are subject to Corps approval. Part of that evaluation requires the Corps to assess a proposed action's direct and indirect impacts on a particular resource. The other part of the NEPA evaluation requires the Corps to consider those effects in combination with the effects on the same resource due to other past, present, and reasonably foreseeable actions also known as cumulative effects.

Indirect, direct and cumulative effects are distinctively different from one another. Indirect effects are caused by the action, although they may occur later in time or be further removed in distance from the proposed action, while direct effects are caused by the action and occur at the same time and place. Cumulative effects are resource-related and consider actions taken in the past or present or those that are reasonably foreseeable in the future regardless of the entity taking the action. The cumulative effects to be analyzed are the effect to resources, while indirect effects are caused by the proposed action. Only those past, present, and future actions that incrementally contribute to the cumulative effects on resources affected by the proposed action will be considered. For each environmental category of this section, an assessment of direct, indirect and cumulative effects is provided.

Specific mitigation measures are discussed in each environmental category (where applicable) which would reduce or eliminate anticipated environmental impacts for each of the alternatives, where applicable. The no action alternative establishes the baseline impact level for the environmental consequences analysis.

5.1 Air Quality

5.1.1 Alternative C (Preferred Alternative)

Direct

Based on information from EPA's Green Book Nonattainment Areas for Criteria Pollutants (EPAb 2008), Columbia County, has been designated as an "Attainment area" for all of the criteria pollutants.

The proposed action is likely to result in additional vehicle emissions due to increased park use. Those increases are anticipated to be variable, with more use during weekends and during large fishing tournaments. Park use is also anticipated to be seasonal, with more park use expected during summer months. This additional traffic may directly affect air quality in the project study area but this potential increase in traffic is only anticipated to occur in short segments (i.e., weekends) and for short periods of time (i.e., day light hours). The additional emissions are not expected to result in the County becoming a "Non-Attainment Area".

Construction of the proposed action is also expected to directly impact air quality. Portions of the Park would be cleared and excavated during construction. A direct effect of this will be short term air impacts related to excavation and land clearing activities from the associated fugitive dust and emissions from construction equipment. To mitigate short term impacts to air quality, BMPs will be used during the excavation process, such as watering down dirt roads. In addition, the phasing of the project will also spread out the air impacts by extending the construction over a longer period.

Indirect

Park visitation is anticipated to increase as a result of the proposed action. As a result of increase park visitation, vehicular traffic will increase as well. Even though visitation/traffic will increase, it is not anticipated to affect the attainment level status of Columbia County.

Cumulative

The proposed park expansion would conform to Georgia's SIP because the project is located within Columbia County, a NAAQS attainment area. The direct impacts from construction equipment would be intermittent and temporary. The indirect impacts from the anticipated increase in park use are likely to be variable and seasonal with minor concentrations of vehicle emissions intermittently increased during these periods. Both of those impacts would be minimal. Impacts to air quality from other activities in the area are not expected to be significant. Therefore, no significant cumulative impacts to air quality are anticipated from the proposed action.

5.1.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Air Quality.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Air Quality.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Air Quality.

5.2 Cultural Resources

5.2.1 Alternative C (Preferred Alternative)

5.2.1.1 Historic Buildings

Direct

The potential impact area was field surveyed for historic resources in compliance with Section 106 of the National Historic Preservation Act of 1966. No historic resources were identified within the impact area, so no direct effects are expected on historic resources. In the event of an inadvertent discovery during the proposed construction, all work must cease. The Corps' Thurmond Project Office must be notified immediately and work may not continue within the area of the finding until the site is examined and the Corps has given approval to proceed.

Indirect

Since no historic resources were identified within the impact area, no indirect effects are expected on historic resources from implementation of the proposed action.

Cumulative

Since no direct or indirect impacts to historic resources are expected, implementation of the proposed action would not result in any adverse cumulative impacts to historic resources.

5.2.1.2 Archeological Resources

Direct

A Phase I survey was conducted of all potentially impacted areas. The proposed work includes a 100-foot buffer around the two potentially-eligible archaeological sites -- the cemetery and the old Keg Creek State Park. Avoidance buffers and active involvement and monitoring during the final design and construction process will protect the archaeological sites and cemetery. With this protective buffer, no direct adverse impacts to archaeological resources are expected. The proposed additional development of the Park will have no effect on the characteristics that might qualify Keg Creek State Park for the NRHP under Criterion A. The GA SHPO has been asked to review and comment upon this determination.

In the event of an inadvertent discovery during the proposed construction, all work must cease. The Corps' Thurmond Project Office must be notified immediately and work may not continue within the area of the finding until the site is examined and the Corps has given approval to proceed.

Indirect

With the 100-foot protective buffer, no indirect adverse impacts to archaeological resources are expected.

Cumulative

The characteristics of the two identified environmentally sensitive resources would not be altered. Those resources would not be disturbed as part of project implementation. Those resource areas have been marked and the project has been specifically designed to avoid these areas with a minimum of a 100-foot buffer. Any physical changes to the surrounding area or its setting would not affect these resources.

5.2.1.3 Native American Resources

Direct

A Phase I archeological survey of the area did not identify any Native American Resources within the Park. A historic resource survey was conducted on the proposed impact area; it did not identify any Native American Resources within the site. Based on those surveys, no direct impacts to Native American Resources are anticipated from the proposed action. In the unlikely event that an inadvertent discovery of previously unknown Native American resources are uncovered during construction, all work must cease in the affected area, the discovery must be protected, and the Corps' J. Strom Thurmond Lake project manager and the Georgia State Archaeologist must be contacted immediately.

Indirect

Since no Native American resources were identified within the potential impact area, no indirect are not anticipated from the proposed action.

Cumulative

Since no direct or indirect impacts to Native American resources are expected, the proposed action would not produce any cumulative impacts to these resources.

5.2.2 No Action Alternative

5.2.2.1 Historic Buildings

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Historic Buildings.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Historic Buildings.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Historic Buildings.

5.2.2.2 Archeological Resources

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Archeological Resources.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Archeological Resources.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Archeological Resources.

5.2.2.3 Native American Resources

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Native American Resources.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Native American Resources.

Final Environmental Assessment
Wildwood Park

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Native American Resources.

5.3 Noise

5.3.1 Alternative C (Preferred Alternative)

Direct

Noise emissions from equipment during construction periods would be intermittent and temporary. The other potential increase in noise levels would be from the expected increase in park use. However, these increases are anticipated to be seasonal (e.g., increased park use during summer months versus winter months) as well as intermittent (e.g., increased park use during weekend days versus weekday use). The additional noise levels would not be sustained for long periods of time and since there are very few private residences in the immediate vicinity of Wildwood Park noise impacts would be minor.

Indirect

No indirect effects from noise impacts are anticipated from the proposed action because no unacceptable noise levels are expected beyond the boundary of the Park.

Cumulative

Noise levels below 65 DNL are generally acceptable with most land use types. Construction noise will be generated by various work vehicles and other heavy equipment that will be used to transport materials and construct the infrastructure. This equipment is similar to those used during construction of highways and range in noise levels from 70 – 92 dBA at 50 feet according to information published by the FHWA. Construction noise associated with the Park expansion will be temporary and minor due to project design and should not go beyond the proposed boundary of the site. Therefore, no reasonably foreseeable cumulative noise impacts are anticipated from the proposed action.

5.3.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Noise.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Noise.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Noise.

5.4 Soils

5.4.1 Alternative C (Preferred Alternative)

5.4.1.1 Soils

Direct

Soils in the area of the Wildwood Park include Appling sandy loam (AmB and AmC), Cecil sandy clay loam (CfB2, CfC2, and CfE2), Enon sandy loam (EnD), Georgeville fine sandy loam (GcB), Georgville clay loam (GdC2 and GdE2), Toccoa loam (Tv), and Wedowee loamy sand (WeC and WeD). Hydric soils were not identified within Wildwood Park based on soil mapping. All of these soil series are upland soils. All of these soil series will be directly impacted by the proposed action. BMPs will be included in the design of the paved multi-use path that would be located close to the lake to minimize run-off and soil erosion. A Stormwater and Erosion Control Plan will be prepared and implemented during construction to minimize erosion during the construction period.

Indirect

No indirect impacts to soils are anticipated due to the proposed action.

Cumulative

Field surveys within Wildwood Park boundary did not identify any severe erosion areas. The soils distributed throughout the park appear to be quality soil that should be able to support the proposed construction. Fill material may be required to construct portions of the proposed roads and building sites when on-site material is not available.

BMPs will be implemented during construction to ensure that soil erosion is minimized and maintained. With the BMPs and compliance with the Stormwater and Erosion Control Plan and Permit, the proposed action would have only minor reasonably foreseeable cumulative effects to the soils in the area.

5.4.1.2 Farmland

Direct

The proposed action will directly impact 94.9 acres of designated farmland and/or farmland of statewide importance. Of the 94.9 acres, 39.7 acres are designated as prime farmland and 55.2 acres are designated as farmland of statewide importance. Of the total 975 acres within the project study area, 191.8 acres is designated as prime farmland, 384.7 acres are designated as farmland of statewide importance and the remaining 398.5 acres are designated as not farmland. Figure 4 shows the farmland areas within the project study area. Construction in farmland areas will consist of trails, roads and structures. Because farmland resources will be converted to trails, roads and structures, adverse impacts will occur to farmlands.

Final Environmental Assessment Wildwood Park

The USDA-NRCS determined that the FPPA applies to the proposed action. Columbia County completed a Farmland Conversion Impact Rating form AD-1006 for the proposed action and submitted it to the NRCS office in Athens, Georgia for review. The NRCS provided a response on January 23, 2009 (see Appendix D). The remaining portions of the form were then assessed and completed. The NRCS scored the “Relative Value of Farmland To Be Converted” at 54 points out of a scale of 0 to 100 points. The “Total Site Assessment” was scored at 86 points out of a scale from 0 to 160 points. The two values were added together to make up the “Total Points” for project which was scored at 140 points. According to C.F.R. 658.4, the score the agency calculates will be able to identify the effect of its project/program on farmland, and make a determination as to the suitability of the site for protection as farmland. The USDA recommends that sites receiving a total score of less than 160 points need not be given further consideration for protection and no additional sites need to be evaluated; therefore no further evaluation is required per C.F.R. 658.4 (c)(2).

Indirect

Construction of trails and roads will dissect currently contiguous areas of farmland present within the project study area (see Figure 4). This dissection of contiguous farmland may indirectly affect farmland because the conversion would restrict access, or acres planned to receive services from an infrastructure project. Wildwood Park is designated as recreational passive and is owned by the Corps so it would be unlikely that the park would be used in the future as traditional crop land (e.g., corn crops). In addition, the dissection will generally occur due to the proposed trail system which will attempt to use a minimal construction impact approach. For example, trails will be routed around existing trees to the best extent practical and all attempts will be employed to leave as much existing vegetation in place as possible. Compared to a traditional power line right-of-way and other similar linear routes, trails would be considered minor alteration of the existing landscape. Therefore, the proposed action may indirectly affect farmland resources due to potential future dissection of contiguous areas.

Cumulative

Direct impacts will occur to farmland as well as minor indirect effects will occur as a result of the proposed action. The dissection of contiguous farmland area may promote further dissection in the future if the park undergoes additional expansion.

Direct and indirect impacts will cumulatively have some effect on farmland resources within the Park and the county area. In looking at changes from the past, the present and into the future, development in the county is occurring, and this is one of many projects on going in Columbia County. The combination of other development projects in the county could have the potential for adverse cumulative impacts on farmland resources. This development trend will continue to occur over time regardless of whether or not the project is constructed. However, the proposed action would contribute to this trend. Therefore, the proposed action could have reasonably foreseeable cumulative effects to farmland resources.

5.4.1.3 Geology/Topography

Direct

Direct impacts to the topography at proposed action site include minor alterations of the existing grades. These areas include proposed facilities, roadway and trails. Underlying rock formations at Wildwood Park should not be impacted and the existing topography ranges at the park will only be altered slightly.

Indirect

No indirect impacts to geology/topography are anticipated.

Cumulative

Field surveys within Wildwood Park did not identify any sites with severe erosion. The soils distributed within the area of the proposed action appear to be quality soil that should be able to support the proposed construction. BMPs will be implemented during construction to ensure that soil erosion is minimized and maintained. Therefore, project implementation would have only minor reasonably foreseeable cumulative effects to the geology and topography because of minor grading changes.

5.4.2 No Action Alternative

5.4.2.1 Soils

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Soils.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Soils.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Soils.

5.4.2.2 Farmland

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Farmland.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Farmland.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Farmland.

5.4.2.3 Geology/Topography

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Geology/Topography.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Geology/Topography.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Geology/Topography.

5.5 Threatened and Endangered Species

5.5.1 Alternative C (Preferred Alternative)

Direct

No observations of the 14 protected species known to occur in Columbia County, Georgia were made during the field investigation. Potential habitat was identified for bald eagle, Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily. No observations of these species were made during field efforts. Follow up surveys will be completed prior to construction during the flowering or fruiting periods of Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily to confirm their presence/non-presence. If specimens of these species are identified during those follow up surveys, mitigation for the species may include re-design of the proposed site plan and/or relocation of those species to a suitable area.

According to early coordination with the GA DNR-WRD, there are no known occurrences of State or Federally protected species within a three-mile radius of the project study area.

Therefore, the proposed action should have no adverse effect on protected species.

Indirect

Indirect impacts to the shoals spiderlily habitat could occur offsite from construction of the proposed action, through impacts on water quality. Such impacts are not expected. The potential for such impacts would be minimized by use of BMPs and implementation of a Stormwater and Erosion Control Plan. In addition, continued growth in the County could also lead to additional water quality degradation.

Final Environmental Assessment
Wildwood Park

Cumulative

No critical habitat has been identified within the project study area for any State or Federally protected species. In addition, no species were identified during protected species surveys in 1999 and 2005 (see Appendix E). Suitable habitat was found for the bald eagle, Dixie mountain breadroot, Georgia aster, Ocmulgee skullcap, and shoals spiderlily. Areas of suitable habitat for the shoals spiderlily will not be directly impacted by construction; however, follow up surveys would identify the presence/non-presence of the species. If specimens are found, mitigation measures such as species relocation (only in extreme cases would this be considered) or site re-design would occur to avoid adverse environmental impacts. All follow up studies and agency coordination would take place prior to any construction action that could impact a listed species. However, it is unlikely that the species will be found in the project study area. Therefore, no reasonably foreseeable cumulative impacts to rare, threatened and endangered species are anticipated by the proposed action. Should any threatened, endangered or protected species be discovered during construction, all activities within the area must cease and the Thurmond Project Office must be notified immediately. Activities within the immediate vicinity of the species will not proceed until the area is surveyed and approval is provided by the Thurmond Project Office.

5.5.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Threatened and Endangered Species.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Threatened and Endangered Species.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Threatened and Endangered Species.

5.6 Wetland Resources

5.6.1 Alternative C (Preferred Alternative)

5.6.1.1 Water Resources

Direct

Direct impacts are those which will result in the taking of all or a portion of Waters of the US through either dredging or filling of the area. Ecological field studies identified the presence of one open water, 21 jurisdictional streams, 7 jurisdictional wetlands, and 29 ephemeral streams (see Appendix C). Of the 58 jurisdictional features identified, only ten of the features would be impacted by the proposed action. The remaining features are located within the limits of Wildwood Park, but would not be impacted by construction.

Implementation of the project would have a direct impact to 0.217 acres and 571 linear feet of stream/wetland as a result of road construction.

Jurisdictional impacts will occur as a result of new road construction. Footbridges will be constructed to avoid stream impacts associated with trail construction. In wetlands, boardwalks will be constructed to avoid impacts. Please refer to **Table 5: Summary of Potential Jurisdictional Impacts** for a summary of potential impacts associated with road construction.

Table 6: Summary of Potential Jurisdictional Impacts					
Jurisdictional Area	Proposed Crossing Action	Anticipated Impacts		USGS Stream I.D. Association	Cowardin Classification
		Length (ft)	Area (ac)		
Streams					
Stream 1	road crossing	78	0.024	unnamed tributary to Clarks Hill Lake	lower perennial R2UB1234
Stream 1	road crossing	54	0.027	unnamed tributary to Clarks Hill Lake	lower perennial R2UB1234
Stream 2	road crossing	55	0.009	unnamed tributary to Clarks Hill Lake	intermittent R4SB456
Stream 4	road crossing	63	0.006	unnamed tributary to Clarks Hill Lake	intermittent R4SB456
Stream 11	road crossing	50	0.013	unnamed tributary to Clarks Hill Lake	lower perennial R2UB234
Ephemeral Channels					
EPH 5	road crossing	56	0.016	unnamed tributary to Clarks Hill Lake	NA
EPH 6	road crossing	51	0.016	unnamed tributary to Clarks Hill Lake	NA

Table 6: Summary of Potential Jurisdictional Impacts					
Jurisdictional Area	Proposed Crossing Action	Anticipated Impacts		USGS Stream I.D. Association	Cowardin Classification
		Length (ft)	Area (ac)		
EPH 17	road crossing	53	0.034	unnamed tributary to Clarks Hill Lake	NA
EPH 23	road crossing	61	0.057	unnamed tributary to Clarks Hill Lake	NA
EPH 24	road crossing	50	0.015	unnamed tributary to Clarks Hill Lake	NA
Total Stream Impacts		300	0.079		
Total Ephemeral Impacts		271	0.138		
Cumulative Impacts		571	0.217		

Indirect

Indirect impacts are those which occur as a result of the construction of the project, but which do not directly result in the filling, dredging, or draining of a Waters of the U.S. The proposed action will cause an increase in the area of impervious surfaces which in turn causes an increase in the amount of surface runoff being discharged into Waters of the US. However, these impacts would be mitigated with the use of BMPs and proper engineering design. Design criteria would follow the stormwater discharge permit specifications from the GA DNR-EPD. Therefore, no unacceptable indirect impacts are anticipated from the implementation of the proposed action.

Cumulative

Increased growth and development in Columbia County is occurring and the proposed amenities offered by the project will contribute to this growth. Therefore, the project is considered to have a reasonably foreseeable cumulative impact to Waters of the US. However, the County follows state and federal regulations for impacts to jurisdictional Waters of the US. Therefore, minor and acceptable reasonably foreseeable cumulative impacts to these resources are anticipated as a result of this project.

Mitigation

The Corps typically permits minor impacts to jurisdictional areas for recreational facilities such as trails under Nationwide Permit (NWP) 42 (recreational facilities). In this case, impacts associated with trail construction are expected to be avoided. The Corps typically permits minor impacts associated with road construction under NWP 14 (linear transportation projects). However, the Nationwide permits do not specifically apply to Corps civil works actions such as this. For this Federal action, the project will mitigate for these adverse impacts.

Final Environmental Assessment Wildwood Park

The Corps would use the Savannah District March 2004 Regulatory Standard Operating Procedures to quantify the mitigation that is required for these adverse impacts. The project would mitigate for these impacts through purchase of an appropriate number of mitigation credits from a nearby mitigation bank that has been approved to service Columbia County. Columbia County would acquire those credits before it could implement the proposed action.

In addition to the above requirements, the USACE generally requires installation of arch-span bottomless culverts, bridges, or culverts buried to a depth of 20 percent of the culvert diameter on any perennial stream crossing. If those measures are not practicable, then an alternatives analysis must be approved by the Corps. Where adjacent floodplain is available, flows exceeding bankfull should be accommodated by installing culverts at the floodplain elevation.

5.6.1.2 Floodplains

Direct

The proposed action would not involve filling or encroachment of the 100- year floodplains. As such, the proposed action would not impact any floodplains.

Indirect

The proposed action would not indirectly support secondary development within a base floodplain nor otherwise significantly impact a base floodplain. As viewed in Figure 5, the 100-year floodplain is located just inside the southern portion of project area and there is no indirect connection to surface water runoff from the proposed action towards the floodplain.

Cumulative

The proposed action would not result in adverse effects to natural and beneficial floodplain values or result in increased runoff from impermeable surfaces to floodplains, alteration of hydrologic patterns, induced secondary development, or construction impacts. Therefore, the proposed action would have no cumulative impact on floodplains.

5.6.2 No Action Alternative

5.6.2.1 Water Resources

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Water Resources.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Water Resources.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Water Resources.

5.6.2.2 Floodplains

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Floodplains.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Floodplains.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Floodplains.

5.7 Water Resources Management

5.7.1 Alternative C (Preferred Alternative)

5.7.1.1 Water Resources Management

Direct

Direct impacts are those which will result in impacts to the water resources provided by Thurmond Lake. The lake is managed for flood control, hydropower, navigation, recreation, water quality, water supply, and fish/wildlife management. The project would benefit the authorized recreational use of the lake and its surrounding lands. The increased development of the Park for recreation would reduce its value for wildlife management.

Indirect

Indirect impacts are those which occur as a result of the construction of the project, but which do not directly change the water resource management of the lake. The proposed action will increase the area of impervious surfaces, which in turn causes an increase in the amount of surface runoff being discharged into the lake. However, these impacts would be mitigated with the use of BMPs and proper engineering design. Design criteria would follow the stormwater discharge permit specifications from the GA DNR-EPD.

Cumulative

The proposed action will not contribute to changes in hydropower, flood control, navigation, or water supply. Impacts to other project purposes would be minimal and not significant when combined with similar impacts that would result from nearby projects.

5.7.1.2 Water/Wastewater Infrastructure/Treatment

Direct

Implementation of the proposed action would directly impact Columbia County water infrastructure by increasing the Park's demand for potable water over current baseline usage. Installation of the outdoor amphitheater, equestrian campground with amenities, super-playground with a restroom, and the lodge and cabins would require additional infrastructure for potable water delivery. Subsequently, the need for wastewater treatment would also increase and would be addressed through either septic systems or a small on-site wastewater treatment package plant, depending on when the features are constructed. An on-site wastewater treatment package plant would be needed before the amphitheater or lodge could be put into service. The specific location of any new septic system or on-site wastewater treatment package plant would require the prior approval of the Thurmond Lake Project Manager.

Indirect

The indirect effects study area for Water/Wastewater Infrastructure/Treatment is Columbia County. Installation of the additional facilities at the park should increase visitation at the park. Additional visitors would result in increased water demand and the need for wastewater treatment. Therefore, project implementation is anticipated to have some indirect effects to Columbia County's Water/Wastewater Infrastructure/Treatment.

Cumulative

The cumulative effects study area for Water/Wastewater Infrastructure/Treatment is Columbia County. While the proposed park improvements should not be the sole reason for increased treatment capacity, it may be a slight contributing factor when taken in conjunction with additional county expansion. In the past, expansion of the wastewater infrastructure has been cost prohibitive in relation to demand. However, if the Park continues to expand in conjunction with the surrounding area, providing the Park with wastewater infrastructure and service in the future may become economical. Therefore, project implementation is anticipated to have slight, reasonably foreseeable cumulative effect on Columbia County's Water/Wastewater Infrastructure/Treatment. Any wastewater treatment facility that the County proposes to locate in Wildwood Park would service only the Park, not also any adjacent private lands.

5.7.2 No Action Alternative

5.7.2.1 Water Resources Management

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Water Resources Management.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Water Resources Management.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Water Resources Management.

5.7.2.2 Water/Wastewater Infrastructure/Treatment

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Water/Wastewater Infrastructure/Treatment.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Water/Wastewater Infrastructure/Treatment.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Water/Wastewater Infrastructure/Treatment.

5.8 Facilities

5.8.1 Alternative C (Preferred Alternative)

Direct

New facilities would be constructed with the implementation of the proposed action. Columbia County is experiencing increased growth; however, in this rural area of the County the growth is not as rapid as in other areas. The proposed new facilities would add to that trend of expansion. However, the proposed action is not acquiring new property to do so, as the entire Park expansion would occur within existing property boundary.

Final Environmental Assessment
Wildwood Park

Indirect

All of the proposed facilities would be constructed within Wildwood Park property, so no indirect impacts to local community facilities are anticipated.

Cumulative

The community and the Columbia County Government have agreed that expanding Wildwood Park would benefit the local community and the County. No major controversies regarding the Wildwood Park expansion were identified during the planning of the County's 2002 Recreational Master Plan (see Appendix B). Since the proposed action's amount of new facilities is in line with local community expansion and the Park expansion would occur within existing park boundaries, no cumulative effects are anticipated with the implementation of the proposed action.

5.8.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Facilities.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Facilities.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Facilities.

5.9 Socioeconomics

5.9.1 Alternative C (Preferred Alternative)

5.9.1.1 Socioeconomics

Direct

Implementation of the proposed action would beneficially impact the local economy through increased tourism and increased Park revenue. Those benefits would result from the additional opportunities for recreation and expected greater use of the Park. Benefits would be proportional to the actual number of people visiting Wildwood Park. In addition, there would be an expected beneficial impact to nearby residents from additional recreational opportunities and education through construction of new facilities.

Indirect

The increase level of visitation expected at the Park may also result in those visitors patronizing surrounding businesses, which would benefit those businesses. The expected beneficial effects of the proposed action are not expected to be sufficient to stimulate new commercial or residential growth in the local area.

Final Environmental Assessment
Wildwood Park

Cumulative

No significant cumulative impacts to income are expected to occur if this proposed action is implemented in concert with other actions that may occur within the immediate vicinity.

5.9.1.2 Income

Direct

Implementation of the proposed action should not have a substantial long term direct effect on income of county residents.

Indirect

The increased recreational use of the Park should also increase the number of visitors that patronize surrounding businesses. That additional visitation should increase the revenues of those businesses.

Cumulative

No significant cumulative impacts to income are expected to occur if this proposed action is implemented in concert with other actions that may occur within the immediate vicinity.

5.9.1.3 Utilities

Direct

Implementation of the proposed action would directly impact Columbia County utilities by increasing the Park's need for additional electrical and telephone. Utility services may temporarily be interrupted during construction. Additional utility service will need to be installed within the Park for the proper functioning of some proposed Park additions, such as the lodge and amphitheater.

Indirect

If the County provides additional utility services to the Park as a result of the expected increased use of the Park resulting from this proposal, additional impacts could occur from that construction of those new facilities. Those impacts are expected to be minor, as they would have to be separately permitted by Government agencies.

Cumulative

The increased use of the Park expected to result from this proposal may be sufficient, when added to other demands for utility services, for the County to construct new facilities to meet those additional demands.

5.9.1.4 Population

Direct

Implementation of the proposed action would have no significant direct effect on the residential population of Columbia County.

Indirect

The indirect effects study area for Population is Columbia County. Implementation of the proposed action would have negligible indirect effects to the population of Columbia County.

Cumulative

Similar to indirect effect analysis, implementation of the proposed action would not have a reasonably foreseeable cumulative effect on the population of Columbia County.

5.9.1.5 Employment

Direct

Implementation of the proposed action should not have a significant direct long term effect on employment levels of County residents. Some short term employment would be provided by the proposed construction. Some long term employment opportunities would occur from operation of some of the additional facilities (lodge).

Indirect

No significant indirect impact is expected on employment levels.

Cumulative

No significant cumulative impact is expected on employment levels.

5.9.2 No Action Alternative

5.9.2.1 Socio-economics

Under the No Action Alternative, no changes or impacts would occur to Socioeconomics.

5.9.2.2 Income

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Income.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Income.

Final Environmental Assessment
Wildwood Park

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Income.

5.9.2.3 Utilities

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Utilities.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Utilities.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Utilities.

5.9.2.4 Population

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Population.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Population.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Population.

5.9.2.5 Employment

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Employment.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Employment.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Employment.

5.10 Environmental Justice

5.10.1 Alternative C (Preferred Alternative)

Direct

Implementation of the proposed action should not have a notable direct effect on EJ populations because there are no EJ populations within or immediately adjacent to Wildwood Park.

Indirect

The indirect effects study area for EJ is the project study area and neighboring census block groups. Implementation of the proposed action may have a slight, positive, indirect effect on EJ populations. These populations will have access to additional recreational, educational, and employment opportunities through the proposed action improvements.

Cumulative

Implementation of the proposed action may cause a reasonably foreseeable, positive, cumulative effect for EJ communities. Recreational, educational, and employment opportunities that are closer to the community could result in improved quality of life for current and future EJ populations.

5.10.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur concerning Environmental Justice.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur concerning Environmental Justice.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur concerning Environmental Justice.

5.11 Protection of Children

5.11.1 Alternative C (Preferred Alternative)

Direct

Safety measures to protect children would be implemented during construction. As a result, children visiting Wildwood Park would not be disproportionately directly impacted by the proposed action.

Final Environmental Assessment
Wildwood Park

Indirect

Safety measures to protect children would be implemented during construction. As a result, children living in the vicinity of Wildwood Park would not be disproportionately indirectly impacted by the proposed action.

Cumulative

Similar to the indirect effect analysis, implementation of the proposed action would not disproportionately cumulatively impact children.

5.11.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur concerning Protection of Children.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur concerning Protection of Children.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur concerning Protection of Children.

5.12 Energy

5.12.1 Alternative C (Preferred Alternative)

Direct

The construction of the proposed action will demand larger than normal expenditures of energy resources both in the material fabrication and in construction. The use of increased amounts of energy for construction would likely require the consumption of crude oil and other fossil fuels. Operation and maintenance of the proposed 100-room lodge/restaurant/meeting facility and cabins would increase energy usage over the current conditions. Although detailed design is not complete, the proposed lodge would be constructed to Leadership in Energy and Environmental Design (LEED) standards. LEED is an internationally-recognized green building certification system, providing third-party verification that a building or community is designed and built using strategies aimed at improving performance across several important metrics: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. So the proposed lodge/restaurant/meeting facility would include numerous energy saving features.

Indirect

The proposed action would have no indirect effects on the supply of energy supplies.

Cumulative

Although energy use would increase over the present condition, no significant cumulative adverse effects on energy or mineral resources would occur as a result of the proposed action.

5.12.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Energy.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Energy.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur to Energy.

5.13 Land Use

5.13.1 Alternative C (Preferred Alternative)

Direct

A review of the Columbia County Future Land Use Map (see Figure 9) indicates that the project study area will remain as recreational-passive use with some low to medium density residential areas planned for areas surrounding the Park. The proposed action is not expected to change those planned uses. The project would convert some forested lands within the park that now provide wildlife habitat to more open lands that primarily provide recreational services. Wildlife habitat within the Park would decrease as a result of the proposed action.

Indirect

Rapid growth has transformed the County from a rural neighbor of Augusta to the major suburban county in the second largest metropolitan area in Georgia. Approximately \$1.2 million has been spent on greenspace land acquisitions and a goal is in place to protect 20% of the County in greenspace, which is approximately 37,000 acres. Approximately 10,057 acres are currently in greenspace inventory. The new Columbia County Visitors Center has had over 13,000 guests since opening in July 2004 where individuals have travelled from 40 states and 13 countries. Savannah Rapids Pavilion has had more than 1.4 million guests since its opening in 1993. The County manages over 1,400 acres of parkland. The Recreation Department registers over 5,000 participants annually. The new public library has over 110,000 books in inventory. Currently, there are six County park projects underway. The County Extension Service receives over 14,000 inquiries annually.

Final Environmental Assessment Wildwood Park

The improvements to Wildwood Park will add to the County's growing attraction as a suburban county with a countryside-type atmosphere which has the potential to increase the number of residential developments and related suburban-type community resources in the area. The proposed action has the potential to influence the rate of and change the location or pattern of development in the area. It is likely that some County residents may not support the conversion of a countryside-type atmosphere to a more suburban atmosphere. Indirect, minor effects to land use are anticipated as a result of the proposed action.

Cumulative

Direct and indirect impacts are going to affect land use in the area. Land use in the County was historically rural (i.e., vacant undeveloped) but is now becoming more suburban. As previously mentioned, Wildwood Park has recently become home to the headquarters for the International Disc Golf Center and Hall of Fame managed by the PDGA. This has the potential to promote the development of service-oriented commercial facilities such as hotels, motels and restaurants to service the growing visitor population anticipated in the area. In general, Columbia County, with its affordable land and open spaces, draws a large number of people looking to reside in a suburban setting. Developments such as the proposed action will contribute to land use becoming more suburban. Therefore, in looking at changes from the past, the present and into the future, the area is becoming more suburban and will continue to change over time. Development in the County is expected to continue to occur with or without the proposed action. The proposed action will continue this trend, along with other proposed recreational projects planned in the vicinity of the project study area. Therefore, the proposed action will have reasonably foreseeable cumulative impacts on land use in the surrounding area of Columbia County.

5.13.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur concerning Land Use.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur concerning Land Use.

Cumulative

Ongoing developments within the County are contributing to land use becoming more suburban. This trend is expected to continue over time.

5.14 Hazardous Materials/Hazardous Wastes

5.14.1 Alternative C (Preferred Alternative)

5.14.1.1 Hazardous Materials/Hazardous Wastes

Direct

No known hazardous materials are located in the project study area. The UST/LUST site at the intersection of SR 47 and SR 150 is approximately 0.75-mile away and the Pollard Lumber Yard (listed on RCRA-SQG, AIRS, AFS, TRIS and UST databases) is approximately one mile away from Wildwood Park and would not directly impact the park. Additional development of the Park is likely to result in use and temporary storage of additional small amounts of materials such as cleaning supplies, motor oils, etc, that accompany operation of lodges, cabins, restaurants and similar facilities. These materials would be stored at the Park in small volumes that do not require special agency approvals. Columbia County would prepare a Hazardous Materials Plan and provide it to the Corps to demonstrate how their operations comply with Federal and State hazardous materials and hazardous waste regulations.

Indirect

No anticipated waste disposal and/or management practices for the proposed action would directly impact or be added to any Federal or State hazardous assessment database. Therefore, indirect effects from hazardous materials/ hazardous wastes are not anticipated from the implementation of the proposed action.

Cumulative

The proposed action is anticipated to increase operations and usage at the Park which will likely increase solid waste material. However, the proposed action is not anticipated to create any hazardous, toxic or radioactive material. Therefore, the proposed action is not anticipated to induce any cumulative effects from hazardous materials/hazardous materials.

5.14.1.2 Solid Waste

Direct

An increase in solid waste is anticipated from implementation of the proposed action through increased park use and construction activities. This additional waste volume would directly impact Columbia County by increasing the Park's need for solid waste collection over the current baseline. Collection services would need to expand to provide receptacles during construction and for the long-term. Construction waste would be only temporary in nature and would be disposed of properly. Impacts from these waste resources are anticipated to be minor in nature.

Final Environmental Assessment
Wildwood Park

Indirect

The indirect effects study area for Solid Waste is the footprint of Wildwood Park. Increased visitor usage would likely increase solid waste generation at the Park by both County and non-county residents. Since solid waste is disposed of at landfills both inside and outside County boundaries, the proposed action is likely only to have a slight indirect impact on solid waste.

Cumulative

Implementation of the proposed action would cause a reasonable foreseeable cumulative effect for solid waste generation. Additional solid waste generated by the Park would need to be disposed of with solid waste produced as a result of current and future growth in Columbia County. This impact could be mitigated by the incorporation of recycling into the Park's solid waste management program.

5.14.2 No Action Alternative

5.14.2.1 Hazardous Materials/Hazardous Wastes

Direct

Under the No Action Alternative, no direct changes or impacts would occur concerning Hazardous Materials/Hazardous Wastes. The County's present operations at the Park result in the use and temporary storage of small amounts of materials such as cleaning supplies, motor oils, etc. These materials are stored at the Park in small volumes that do not require special agency approvals.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur concerning Hazardous Materials/Hazardous Wastes.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur concerning Hazardous Materials/Hazardous Wastes.

5.14.2.2 Solid Waste

Direct

Under the No Action Alternative, no direct changes or impacts would occur concerning Solid Waste.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur concerning Solid Waste.

Cumulative

Under the No Action Alternative, no cumulative changes or impacts would occur concerning Solid Waste.

5.15 Traffic and Transportation

5.15.1 Alternative C (Preferred Alternative)

Direct

Expansion at Wildwood Park is expected to result in additional recreational opportunities and attracts additional persons to the Park. That additional visitation will increase traffic and possibly demand for associated infrastructure on local roads. Transportation resources are likely to be directly affected by the proposed action; however, these impacts are only anticipated to be minor direct impacts because the rural nature of the area.

Indirect

Because of the current low recreational use of Wildwood Park, traffic mostly occurs as a result of surrounding residential, commercial and agricultural use. Traffic levels increase when fishing tournaments occur at the Park. As previously noted, the County is rapidly growing. With the increasing rate of residential development in the area, traffic in and around Wildwood Park is anticipated to increase. Traffic volumes on both SR 221/47 and I-20 which provide direct access to Wildwood Park area are also anticipated to increase. SR 47 in this area is proposed to be widened from Pollards Corner in Columbia County to Lincolnton in Lincoln County, Georgia, in anticipation of increased transportation demands in the area. Wildwood Park is a major attractive recreation resource for Columbia County; however, this section of the county is one of the most rural settings so implementation of the proposed action will only result in minor foreseeable indirect impacts.

Cumulative

Vehicular traffic is likely to increase in the County due to expected continuing increases in population and increasing demand for outdoor recreation opportunities by its residents. Direct and indirect impacts are cumulatively going to affect transportation in the area. The Columbia County Long Range Transportation Plan (LRTP) is a culmination of efforts by county staff, ARTS (Augusta Regional Transportation Study), the Georgia Department of Transportation, and HNTB Consulting to review the transportation needs of the County over from 2000 to 2025. In 2005, the Board of Commissioners included the Plan in the 2005 Growth Management Plan Update. The transportation needs were outlined in the study and were proposed to be incorporated into the capital improvements program of the County and, for regionally-significant roads, into the ARTS Transportation Improvements Program and Long Range Transportation Plan, currently under development. These transportation improvements are an apparent anticipation of growing development in the area and the proposed improvements to Wildwood Park will contribute toward the development in the area. Therefore, the proposed action will have

Final Environmental Assessment
Wildwood Park

reasonably foreseeable minor effects on traffic and transportation as a result of the proposed action.

5.15.2 No Action Alternative

Direct

Under the No Action Alternative, no direct changes or impacts would occur to Traffic and Transportation.

Indirect

Under the No Action Alternative, no indirect changes or impacts would occur to Traffic and Transportation.

Cumulative

Under the No Action Alternative, vehicular traffic is expected to increase in the County as a result of continuing increases in population and increasing demand for outdoor recreation opportunities.

6.0 Conclusions

The table on the three following pages provides a summary comparison of the alternatives (Preferred Alternative and No Action Alternative) with respect to the resources discussed in this EA.

Based on a review of the information in this document, Alternative C appears to be the best course of action and is the Preferred Alternative. The proposal would increase development of Wildwood Park to accommodate Columbia County's new visions and programs for the site. The improvements would increase the recreational opportunities and services provided by the Park, while maintaining its valuable existing features. The proposed action and the corresponding modification to the J. Strom Thurmond Lake Master Plan are not major Federal actions within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. Accordingly, preparation of an Environmental Impact Statement is not required.

Table 7
Summary of the Findings and Impacts

Resources	Alternative C (Preferred Alternative)	No Action Alternative
Air Quality		
Direct	Short term construction impacts	No impact
Indirect	Minor adverse impacts	No impact
Cumulative	Minor adverse impacts	No impact
Cultural Resources Historic Buildings		
Direct	No Historic Properties affected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Archeological Resources		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Native American Resources		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Noise		
Direct	Minor adverse effects	No impact
Indirect	No effects expected	No impact
Cumulative	Minor adverse effects	No impact
Soils Soils		
Direct	Minor effect expected	No impact
Indirect	No effects expected	No impact
Cumulative	Negligible effect expected	No impact
Farmland		
Direct	Minor effect expected	No impact
Indirect	No effects expected	No impact
Cumulative	Negligible effect expected	No impact
Geology/Topography		
Direct	Minor effect expected	No impact
Indirect	No effects expected	No impact
Cumulative	Negligible effect expected	No impact
Threatened and Endangered Species		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Wetland Resources Water Resources		
Direct	Impact to 0.217 AC of wetland and 571 LF of stream	No impact

Final Environmental Assessment
Wildwood Park

Indirect	No effects expected	No impact
Cumulative	Minor adverse effect	No impact
Floodplain		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Water Resources Management		
Water Resources Management		
Direct	Minor beneficial effect	No impact
Indirect	No effects expected	No impact
Cumulative	Minor beneficial effect	No impact
Water/Wastewater Infrastructure/Treatment		
Direct	Minor adverse effect	No impact
Indirect	No effects expected	No impact
Cumulative	Minor adverse effect	No impact
Facilities		
Direct	Minor positive effect	No impact
Indirect	No effects expected	No impact
Cumulative	Negligible effects expected	No impact
Socioeconomics		
Socioeconomics		
Direct	Minor positive effect	No impact
Indirect	Minor positive effect	No impact
Cumulative	Negligible effects expected	No impact
Income		
Direct	Minor positive effect	No impact
Indirect	Negligible effects expected	No impact
Cumulative	Negligible effects expected	No impact
Utilities		
Direct	Minor adverse effect	No impact
Indirect	No effects expected	No impact
Cumulative	Minor adverse effect	No impact
Population		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Employment		
Direct	Minor positive effect	No impact
Indirect	Negligible effects expected	No impact
Cumulative	Negligible effects expected	No impact
Environmental Justice		
Direct	Minor positive effect	No impact
Indirect	Minor positive effect	No impact
Cumulative	Negligible effects expected	No impact
Protection of Children		
Direct	No effects expected	No impact
Indirect	No effects expected	No impact
Cumulative	No effects expected	No impact
Energy		

Final Environmental Assessment
Wildwood Park

Direct	Minor adverse effect	No impact
Indirect	No effects expected	No impact
Cumulative	Minor adverse effect	No impact
Land Use		
Direct	Minor adverse effect	No impact
Indirect	Negligible adverse effect	No impact
Cumulative	Negligible adverse effect	No impact
Hazardous Materials/Hazardous Wastes Hazardous Materials/Hazardous Wastes		
Direct	Minor adverse effect	No impact
Indirect	Negligible adverse effect	No impact
Cumulative	Negligible adverse effect	No impact
Solid Waste		
Direct	Minor adverse effect	No impact
Indirect	Minor adverse effect	No impact
Cumulative	Negligible adverse effect	No impact
Traffic and Transportation		
Direct	Minor adverse effect	No impact
Indirect	Minor adverse effect	No impact
Cumulative	Minor adverse effect	No impact

7.0 References

- Canter, Larry, Chawla, Manroop, Webster, Ron. 2007. *NEPA Analysis Guidance Manual, Final*. US Army Environmental Command, <http://aec.army.mil/usaec/nepa/nepa-agm.pdf> (December 18, 2008).
- City-Data.Com. 2008. *Evans, Georgia*. <http://www.city-data.com/city/Evans-Georgia.html> (December 18, 2008).
- Fonferek, William J. 2008. *Permitting*. US Army Corps of Engineers. <http://www.sas.usace.army.mil/Permits.htm> (December 18, 2008).
- Georgia Department of Natural (GDNR). 1997. *Geologic Map of Georgia*. Williams & Heintz Map Corporation, Capitol Heights, Maryland.
- GDNR-Environmental Protection Division (EPD). 2008. *Land Protection Branch-Underground Storage Tank Site*. http://www.gaepd.org/Documents/regcomm_lpb.html#ust. August 13, 2008.
- GDNR-EPD a. 2008. *Hazardous Waste Management in Georgia*. http://www.gaepd.org/Documents/index_haz.html. August 13, 2008.
- GDNR-Historic Preservation Division (HPD). 2007. *Natural, Archeological, and Historic Resources Geographic Information System (NAHRGIS) File Review*, <https://www.itos.uga.edu/nahrgis>, October 5, 2007.
- Georgia Department of Transportation (GDOT). 2008. *TREX Transportation Explorer*. http://app5-trex-web.dot.state.ga.us/trex_external/viewer.htm. November 2008.
- Roberts, David C. 1996. *A Field Guide to Geology, Eastern North America-Peterson Field Guide Series*. Illustrated by W. Grant Hodsdon. Houghton Mifflin Company. Boston New York.
- US Army Corps of Engineers, Savannah District (Corps). 2008. *J. Strom Thurmond Dam & Lake*. <http://www.sas.usace.army.mil/lakes/thurmond> (December 18, 2008).
- US Department of Agriculture (USDA). 2008. *Natural Resource Conservation Service Soil Data Mart*. <http://soildatamart.nrcs.usda.gov> (July 15, 2008).
- US Department of Transportation (USDOT). 2008. Federal Highway Administration. *Special Report: Highway Construction Noise: Measurement, Prediction and Mitigation*. <http://www.fhwa.dot.gov/enviroMent/noise/highway/hcn06.htm> (December 18, 2008).
- US Environmental Protection Agency (EPA). 2008. *Enviromapper Storefront*. <http://www.epa.gov/enviro/html/em/> (November 3, 2008).

Final Environmental Assessment
Wildwood Park

EPA. 2008. *The Green Book Nonattainment Areas for Criteria Pollutants: 8-Hour Nonattainment Areas*. <http://www.epa.gov/air/oaqps/greenbk/o8index.html> (August 15, 2008).

U.S. Geologic Survey (USGS). 1985. *Leah, Georgia quadrangle 7.5 minute series*. Department of the Interior, Washington, D.C.

8.0 List of Preparers

Name	Affiliation/Company	Professional Discipline	Degree	Years of Experience
Roger Bledsoe	Jordan, Jones & Goulding	Ecologist	B.S. Forest Resources-Wildlife Management	2
Andrea Greco	Jordan, Jones & Goulding	Project Manager	M.L.A Landscape Architecture	13
Susan Hobgood	Jordan, Jones & Goulding	Senior Ecologist	M.S. Biology	11
Katherine Lewis	Jordan, Jones & Goulding	Project Environmental Scientist	B.S. Environmental Health, M.P.A. Public Administration	10
Jennifer Mathis	Jordan, Jones & Goulding	Project Environmental Scientist	B.S. Chemistry	5
Kevin Mullinax	Jordan, Jones & Goulding	Project Environmental Scientist	B.S. Wildlife Biology	7
Erin Murphy	Jordan, Jones & Goulding	Historic Preservation Specialist	M.S. Heritage Preservation	3
N. Marie Njie	Jordan, Jones & Goulding	Project Environmental Scientist	Ph.D. Environmental Science	7
Sean Wallace	Jordan, Jones & Goulding	Discipline Lead/Project Environmental Scientist	B.A. Environmental Studies	16
Charlotte Weber	Jordan, Jones & Goulding	Historic Preservation Specialist	M.S. Heritage Preservation	9
William Bailey	US Army Corps of Engineers, Mobile District	Physical Scientist	M.S. Civil Engineering B.S. Biology	30

The following Appendices can be found on the accompanying DVD:

Appendix A: 2007 Wildwood Park Conceptual Master Plan

**Appendix B: Columbia County Parks and Recreation System
Comprehensive Master Plan**

Appendix C: Ecology Report

Appendix D: Correspondence

Appendix E: 1999 and 2005 Protected Species Surveys

Appendix F

Modification to the J. Strom Thurmond Master Plan

Final Environmental Assessment Wildwood Park

The existing Master Plan for the J. Strom Thurmond Lake was prepared in June 1995. Pages A-93 and A-94 deal specifically with Wildwood Park. The information on Page A-93 is shown below:

Wildwood Park (Plate 2), (Site 101)

I. General Description

This 991 acre park is subleased from the State by Columbia County. The park is just off Georgia Highway 104 on the Keg Creek portion of the lake.

II. Site Analysis

Erosion is minimal on this heavily wooded site.

III. Existing Facilities

Existing facilities include 60 campsites with water and electrical hookups, 60 picnic sites, 2 ramps with parking for 40 trailers, 2 playgrounds, a beach, 2 shower washhouses, 1 flush toilet, and 2 residences for park personnel.

IV. Design Intent

Columbia county will continue to operate this park.

V. Proposed facilities

None.

This information would be revised to read as follows if the proposed action is approved:

Wildwood Park (Plate 2), (Site 101)

I. General Description

This 957-acre park is subleased from the State by Columbia County. The park is just off Georgia Highway 104 on the Keg Creek portion of the lake.

II. Site Analysis

Wildwood Park is a moderate to heavily-wooded site with moderate recreational development. Portions of the site that are heavily-wooded consist of minimal development, such as hiking and biking trails. Vegetation on the site consists primarily of mature mixed pine-hardwood forest on moderately sloping topography. Erosion on the site is minimal to moderate, with the potential for more significant erosion within developed areas of the park.

III. Existing Facilities

Existing public facilities within the park include 61 campsites with water and electrical hookups, 61 picnic sites, a 6-lane boat ramp with a 180-space parking area, 2 additional small boat ramps, 3 floating courtesy docks, 1 small playground, a beach, 2 comfort stations with showers, 1 additional restroom facility, the Professional Disc Golf Association's International Disc Golf Center and Hall of Fame, 3 disc golf courses, four pavilions/picnic shelters, dry storage area,

Final Environmental Assessment

Wildwood Park

gatehouse, 8 miles of hiking/biking trails and 12 miles of equestrian trails. In addition to the above public facilities, the park includes a residence for park personnel, a maintenance shop, and a storage building associated with the Professional Disc Golf Association.

IV. Design Intent

Columbia County will continue to operate this park.

V. Proposed facilities

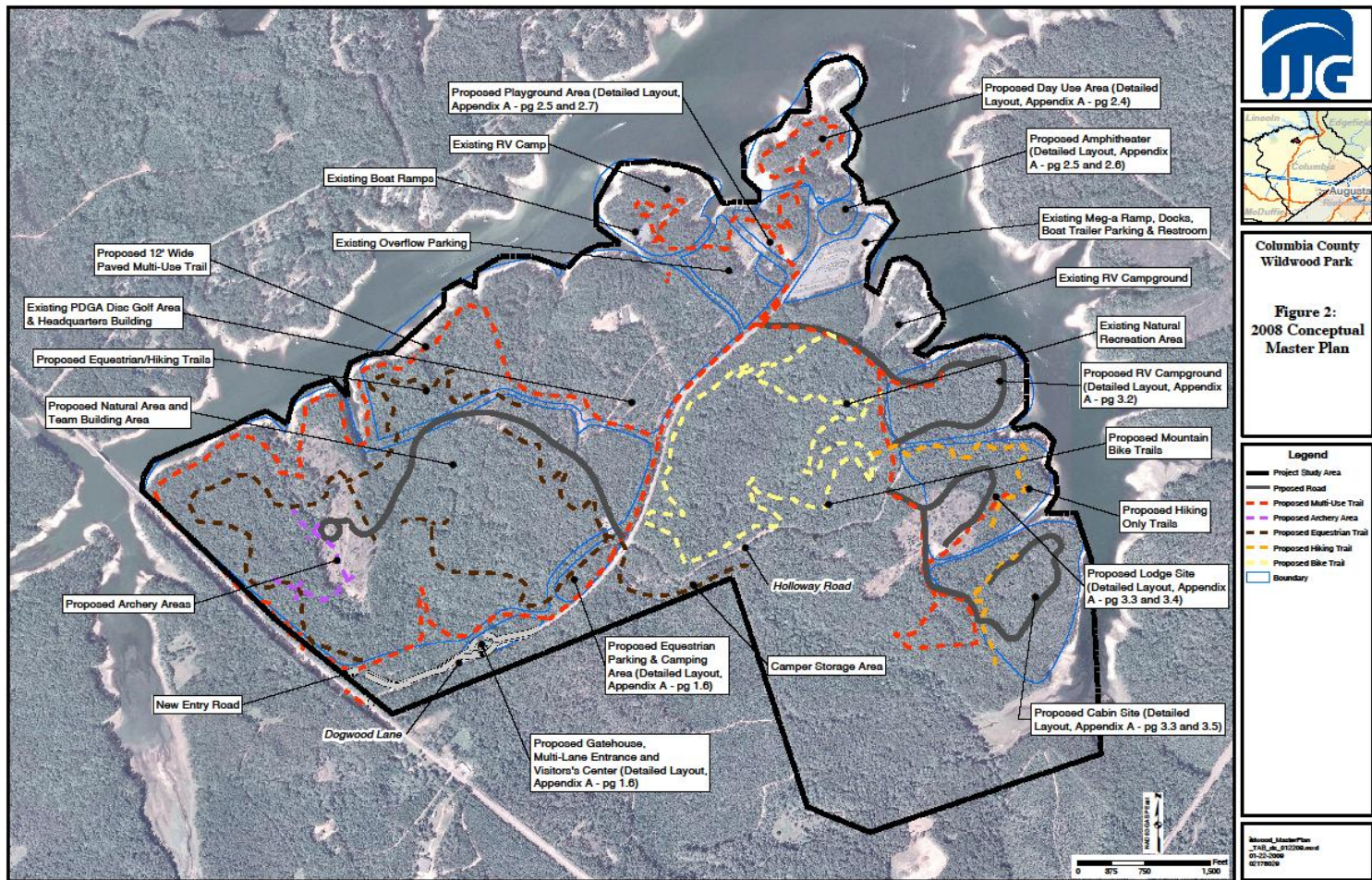
Columbia County has proposed improvements to Wildwood Park that would accommodate their new visions and programs for the park, while maintaining its valuable existing features. Savannah District has approved their development plan, which includes the following new features:

- **New Gatehouse:** primary gatehouse building with three entry lanes
- **Visitor's Center:** 1,600 square foot building with a 25-space parking lot adjacent to the new gatehouse
- **Outdoor Amphitheater:** fixed seating for 650 and lawn seating for 350 persons
- **Equestrian Campground:** 11-acre site with camping amenities, restrooms, campfire ring, picnic pavilion, trail access, and spaces for approximately 10 horse trailers and future room for 5 additional spaces
- **Super-Playground:** 2-acre site built to the standards of the American Disability Act, 20-space parking area, small restroom building and drop off area
- **Day Use Area / Beach Relocation:** 26-acre site including beach pavilion with showers, picnic pavilion, picnic area, 50-car gravel parking area in the woods (expandable), open play area and improved beach area
- **Lodge Site:** 100-room lodge with a restaurant and meeting facilities with lakefront views, gift/general store, parking for 40 boat trailers with electric hookups and guard and parking for 135 cars
- **Cabin Site:** 42-acre site that includes 24 cabins and parking for each cabin
- **Natural and Team Building Area:** 264-acre site which includes rope courses, wilderness training, team building area and other low impact outdoor group activities
- **Archery Areas:** approximately 2,200 linear feet of relocated archery ranges being moved from other areas of the park
- **12 Miles of Hiking Trails**
- **2.6 Miles of Mountain Bike Trails**
- **6.1 Miles of Equestrian Trails**
- **8.1 Miles of 12-foot wide Paved Multi-Use Trails.**

Page A-94 (Plate 2) in the 1995 Master Plan is a map showing the facilities that are approved for Wildwood Park. That plate is shown on the following page. If the proposed action is approved, the Corps will update that page to include the facilities that Columbia County has proposed to construct on the site, which are shown on the subsequent page.

[illegible]

Final Environmental Assessment Wildwood Park



Proposed Development