

# Chattahoochee River

National Park Service  
U.S. Department of the Interior

National Recreation Area  
Georgia



## Orrs Ferry Site Management Plan

---

November 2025

This page intentionally blank.

## CONTENT

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Chapter 1: Background .....                                             | 1   |
| Project Area.....                                                       | 1   |
| Project Purpose and Need .....                                          | 2   |
| Next Steps in the Planning Process.....                                 | 2   |
| Chapter 2: Proposed Action.....                                         | 3   |
| Description of Current Management .....                                 | 3   |
| East Side.....                                                          | 4   |
| West Side .....                                                         | 6   |
| Proposed Action .....                                                   | 8   |
| Actions Occurring on both the West and East Side .....                  | 8   |
| East Side Actions .....                                                 | 14  |
| West Side Actions .....                                                 | 16  |
| Implementation .....                                                    | 18  |
| Actions Considered but Dismissed .....                                  | 18  |
| Chapter 3: Public Involvement and Consultation With Other Agencies..... | 20  |
| Public Involvement.....                                                 | 20  |
| Consultation with Agencies and Tribes .....                             | 20  |
| US Fish and Wildlife Service.....                                       | 20  |
| Georgia Department of Natural Resources .....                           | 20  |
| State Historic Preservation Office.....                                 | 21  |
| Tribal Consultation.....                                                | 21  |
| Appendix A: Impact Analysis.....                                        | A-1 |
| Appendix B: Impact Topics Dismissed From Detailed Analysis.....         | B-1 |
| Appendix C: Indicators and Thresholds .....                             | C-1 |
| Appendix D: Visitor Capacity.....                                       | D-1 |
| Appendix E: References .....                                            | E-1 |

## FIGURES

|                                                                                  |     |
|----------------------------------------------------------------------------------|-----|
| Figure 1. Project Area within Orrs Ferry Unit .....                              | 1   |
| Figure 2. East Side Current Conditions .....                                     | 5   |
| Figure 3. West Side Current Conditions.....                                      | 7   |
| Figure 4. Desired Condition Map .....                                            | 11  |
| Figure 5. Proposed Zoning .....                                                  | 13  |
| Figure 6. East Side Actions Site Plan .....                                      | 15  |
| Figure 7. West Side Actions Site Plan.....                                       | 17  |
| Figure 8. Analysis Areas for Orrs Ferry Visitor Capacity .....                   | D-2 |
| Figure 9. Counters in and Closest to Orrs Ferry .....                            | D-3 |
| Figure 10. Average Hourly Trail Counts at Orrs Ferry Trail Counters.....         | D-4 |
| Figure 11. Monthly Trail Use on Orrs Ferry Trails (sums of all 4 counters) ..... | D-5 |

## TABLES

|                                                                                                                                                                        |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Table 1: Extraordinary Circumstances Review Checklist .....                                                                                                            | 1    |
| Table 2. Soil Groups within Project Area .....                                                                                                                         | 10   |
| Table 3. Federally Endangered, Threatened, and Candidate Species That May Occur in Chattahoochee River National Recreation Area Orrs Ferry (as of February 2025) ..... | B-3  |
| Table 4. Existing Indicators, Thresholds or Standards, and Monitoring Priority. ....                                                                                   | C-2  |
| Table 5. Platoon-adjusted Level of Service Criteria for Walkways (TRB, 2016) .....                                                                                     | D-8  |
| Table 6. Assumptions and People at one Time Allocations for Dwelling Areas.....                                                                                        | D-8  |
| Table 7. Assumptions and People at one Time Allocations for Dwelling Areas North of Crayfish Creek .....                                                               | D-11 |

# CHAPTER 1: BACKGROUND

## PROJECT AREA

The project area for this plan is four distinct parcels within the Orrs Ferry Unit of the Chattahoochee River National Recreation Area (“the park”). The project area includes riverfront access on the east and west side of the Chattahoochee River. Except for the Anderson Tract (CHAT-113-67), which was acquired in 2016, three of these four parcels were recently acquired by the NPS, including the Hice Tract (CHAT-113-33, acquired 2023), the James Creek Tract (CHAT-113-34, acquired 2019), and the Goff Tract (CHAT-113-62, acquired 2023). Throughout this plan, the project area will be referred to as Orrs Ferry East and Orrs Ferry West, as shown in Figure 1 below.

The Orrs Ferry Unit is located in the northern reaches of the park, adjacent to Georgia State Highway 20, and bisected by the Chattahoochee River. Approximately 45 miles northeast of downtown Atlanta, the Orrs Ferry Unit is surrounded by suburban development. Steep riverbanks give way to lush tree canopies on the eastern side, while the western side features a mix of woodlands and disturbed grasslands and wetlands.

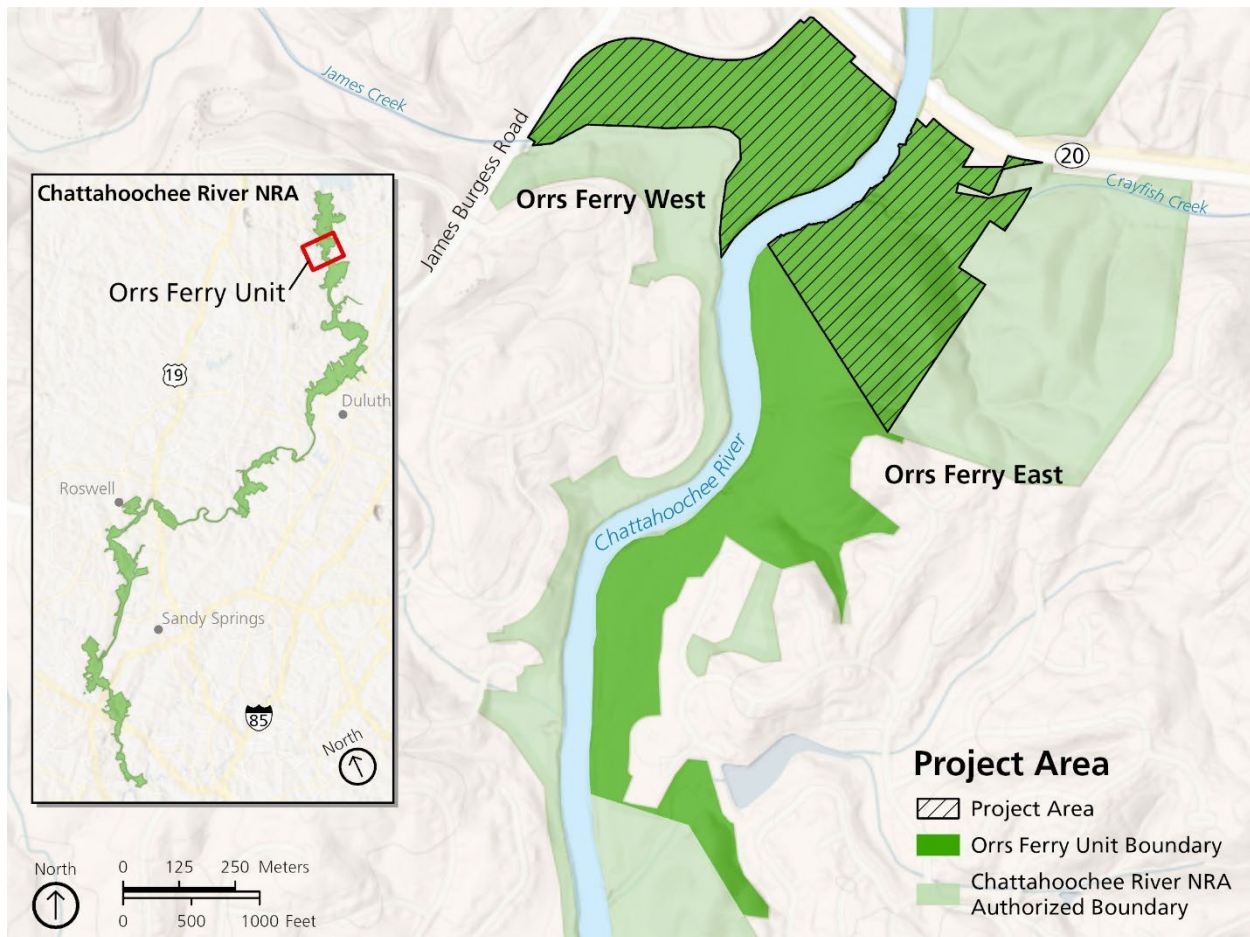


FIGURE 1. PROJECT AREA WITHIN ORRS FERRY UNIT

This Site Management Plan (“the plan”) will provide direction for resource protection and visitor use for the parcels outlined in the project area. This plan will act as a general management plan update for the new lands, which were not part of the park when the existing general management plan was finalized. General management planning is required for every unit of the national park system, and the plan will ensure that the park has a defined direction for resource protection and visitor use. This plan does not provide planning guidance for the original lands in the Chattahoochee River National Recreation Area. This plan includes guidance related to management zoning; historically and culturally sensitive infrastructure improvements and adjustments; natural resource protection; and appropriate visitor capacities, access, and use. This plan was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 and implementing regulations, 40 CFR Parts 1500-1508 and NPS Director’s Order (DO) 12, and the NPS NEPA Handbook (NPS 2015a).

## **PROJECT PURPOSE AND NEED**

The purpose of the site management plan is to provide long-term guidance for public access, visitor experience, operations, and preservation of the Orrs Ferry Unit. Building off the General Management Plan and Comprehensive Trails Management Plan, this plan will outline an approach for site development that integrates the natural and cultural resource protection goals of the park. Additionally, the plan aims to emphasize Orrs Ferry as a unit within the larger National Recreation Area (NRA) by highlighting and interpreting the site’s unique features to the public. This plan will also identify appropriate visitor opportunities, incorporating public, partner, and stakeholder interests wherever possible, to foster regional connectivity and achieve shared goals while adhering to the park’s mission.

The site management plan is needed to:

- develop and establish management direction for the newly acquired lands, including expanding and defining the desired conditions for visitor opportunities, and protecting and interpreting sensitive ecological and cultural resources;
- assess infrastructure needs to identify necessary infrastructure improvements, reductions, and demolitions to support visitor experience, maintenance needs, and other operations; and
- and integrate sustainable practices into all aspects of future development, operations, and maintenance to ensure environmental responsibility and long-term financial viability.

## **NEXT STEPS IN THE PLANNING PROCESS**

Approval of this plan does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Implementation of the approved plan would depend on future funding and could be affected by factors such as NPS staffing changes, visitor use patterns, and unanticipated environmental changes. Full implementation could be many years in the future. Once the plan has been approved, more detailed planning and environmental compliance may be needed before certain components of the proposed action can be carried out. Cultural resources including archeological sites exist within the plan areas; actions described in this plan that may affect cultural resources will require additional documentation, consultation, and review under Section 106 of the National Historic Preservation Act and 36 CFR Part 800 before implementation. All actions will be reviewed prior to implementation to determine whether further design and compliance is required.

## **CHAPTER 2: PROPOSED ACTION**

### **DESCRIPTION OF CURRENT MANAGEMENT**

The management direction established in the General Management Plan and Comprehensive Trails Management Plan would carry on and the NPS would continue to operate with its existing facilities and management strategies. This management includes no new development or improvements to the park, maintaining current operational deficiencies, visitor access issues, and allowing physical conditions to continue to degrade. While minor upgrades may be made (such as minimally stabilizing the existing structures by boarding up doors, windows, and any other access points to prevent public entry for safety and public health), the park would make no further modifications to parking, trail alignment, or facilities. In addition, the park would continue operating without an administrative area in the near vicinity.

Natural resource inventory, monitoring, and protection activities would continue. These activities include monitoring resources through surveys, game cameras, and Automated Recording Devices (ARD)s; water quality monitoring with the Chattahoochee Stream Steward volunteer program and partners such as Chattahoochee Riverkeeper that use the Chattahoochee Aquatic Sensor System Integrated (CASSI); the second phase of restoration at Crayfish Creek; and other inventory and monitoring activities east of the Chattahoochee River. This land may contain additional buried artifacts and historic objects. Archeological resources would be monitored for protection and preservation. Volunteers-In-Parks (VIP) opportunities, such as Sweep the Hooch (STH), Chattahoochee Stream Stewards, trash clean-ups, and Crayfish Creek workdays would also continue.

Under the trails management plan (TMP), a number of actions at Orrs Ferry were analyzed and approved for implementation. The park intends to implement these actions once feasible to do so.

These actions are a component of the current conditions, but have yet to occur:

- Outdated trail access signage removed to reduce confusion
- New interpretive media and updates to the NPS mobile app developed to inform visitors about river buffer protections, ongoing riparian rehabilitation efforts at Crayfish Creek, and the presence of sensitive plant species in the area
- Increased signage clearly delineating NPS property lines from adjacent residential and private lands
- New wayfinding signs at the main trailhead to guide visitors toward Orrs Ferry trails and the nearby Bowmans Island
- A natural surface trail system constructed to improve access to the river and Crayfish Creek area from the new Highway 20/Cumming Highway trailhead
- Bridges built at stream crossings to prevent erosion and protect the ecosystem
- Trails for fishing access formalized, with clear signage indicating entry points to river shoals suitable for recreational fishing
- Partnerships with the Georgia Department of Natural Resources, Gwinnett County, and the City of Sugar Hill strengthened to ensure adequate emergency and law enforcement access to the trails
- Explore options for expanded trail access and connectivity for NPS property along Highway 20 during future site planning efforts
- Social trails that are not part of the formal trail system restored to their natural state

- Work with the City of Sugar Hill to investigate potential connections to upcoming segments of the Sugar Hill trail network, enhancing the regional trail network

### **East Side**

The east side would continue to provide parking via the Georgia Department of Transportation (GDOT) parking lot and would continue to host educational programming with community partners on a limited basis at Crayfish Creek. With the implementation of the TMP at this unit, opportunities would continue to include formalized trails for hiking and one overlook for two fishing/pedestrian river access points. Access to the Chattahoochee River would continue to be available via a social trail beginning on the sidewalk adjacent to the highway 20 bridge and paralleling the river (to be formalized). The Crayfish Creek trail access would remain unchanged, following the old roadbed from the GDOT parking lot, past the driveway gate, and to the front of the existing House before meandering to the creek banks. Please refer to the image below (Figure 2) for more details on the current conditions of the east side.

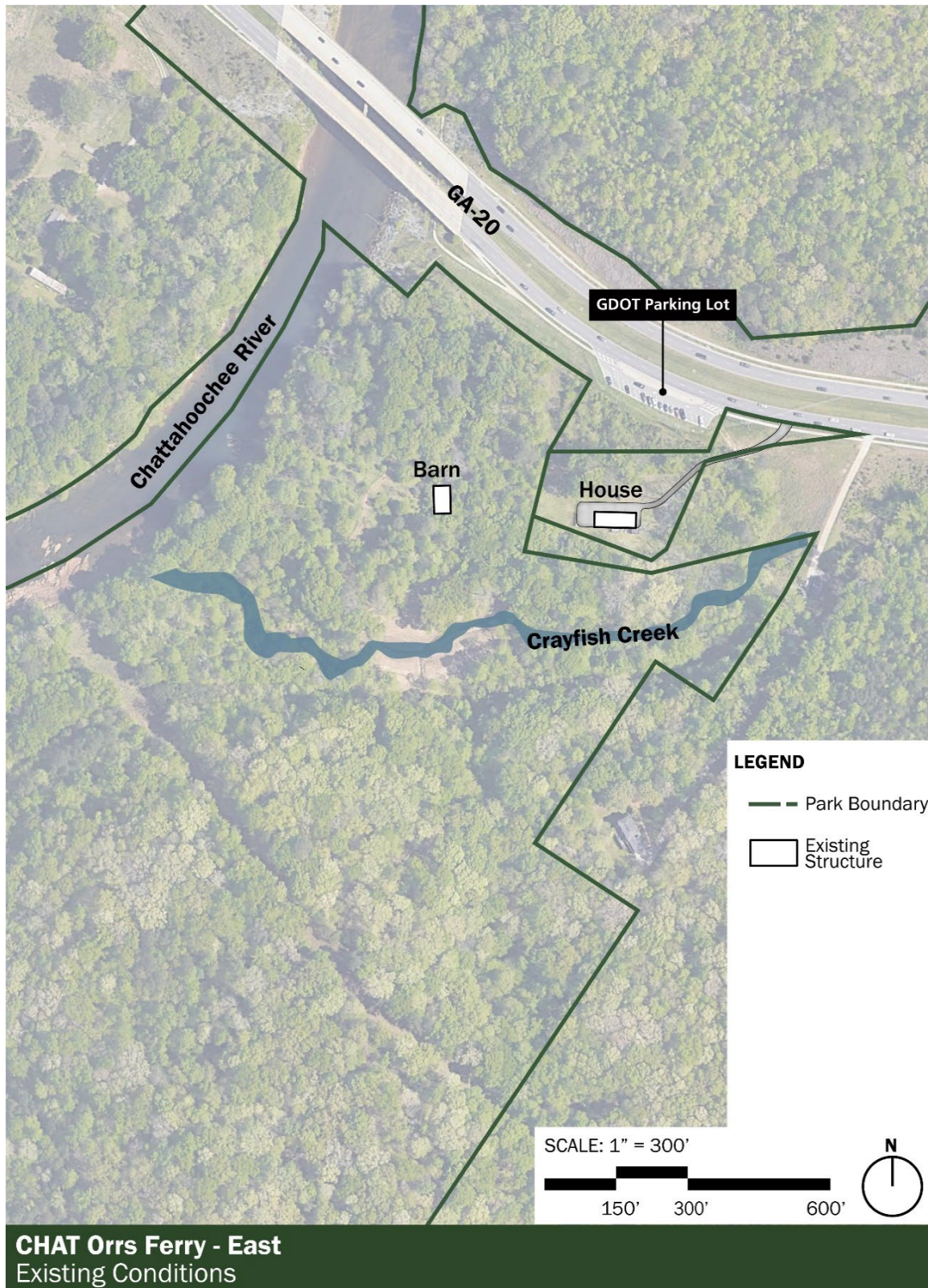


FIGURE 2. EAST SIDE CURRENT CONDITIONS

## **West Side**

The west side would continue to provide neither parking nor interpretive programming. Access to the west side would continue to occur via a short residential driveway off Ruth Lane, accommodating a maximum of three vehicles at a time. The area is closed via the Superintendent's Compendium. Please refer to the image below (Figure 3) for more details on the current conditions of the west side.

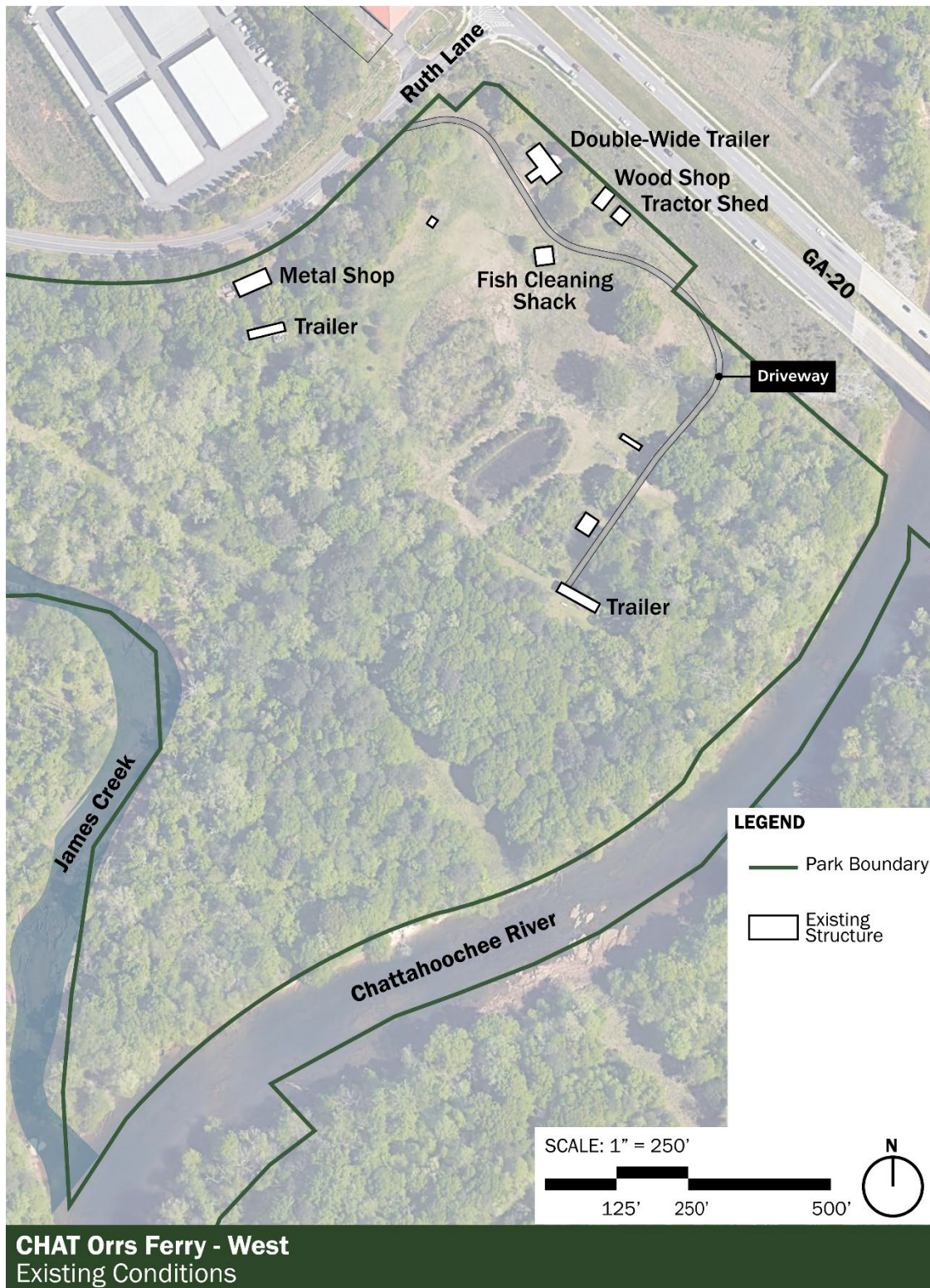


FIGURE 3. WEST SIDE CURRENT CONDITIONS

## PROPOSED ACTION

The proposed action would improve the efficiency of existing structures, develop needed structures, improve resource protection, and enhance visitor experiences and accessibility. This section is organized by general actions for both sides of the river, and then more specific actions for each side. Site drawings are provided after the narrative to help illustrate the changes proposed under the proposed action.

### Actions Occurring on both the West and East Side

Features of interest and trails throughout the area would be clearly marked to increase awareness of entering an NPS site, support wayfinding, and provide basic rules and regulations. Interpretive panels would be installed to educate visitors about resources and values in the area.

Interpretive signage would be strategically placed along trails and at overlooks to highlight biodiversity, conservation, historic and archeological significance, historical points of interest, and visitor safety.

A substantial number of outdated structures would be removed across the site, including nine outdated buildings. Removing this surplus infrastructure would support grassland and wetland restoration and improve the viewshed.

Trails would be developed using natural surfaces to avoid sensitive resources. Bridges would be constructed where needed to protect trails and preserve wetland functionality. Structures such as fencing would be used as needed to keep visitors on formal trails and protect sensitive resources. Trail access to the river would be formalized to reduce riverside erosion and ensure visitor access to the river.

All modified and newly constructed facilities, including parking areas, restrooms, routes, picnic facilities, gathering spaces, and river access points would need to meet accessibility standards as outlined in ABAAS and ICC Standards. Exceptions are provided in situations where terrain and other factors make compliance impracticable. Park managers would strive to make these supporting facilities accessible, regardless of the accessibility of the trails they are serving.

This plan incorporates aspects of the Interagency Visitor Use Management Council (IVUMC) Visitor Use Management Framework (<https://visitorusemanagement.nps.gov>) to develop long-term strategies for monitoring and managing visitor use within the project area. Key elements integrated into the proposed action include the identification of desired conditions, zones, priority indicators for monitoring, and visitor capacities. High-level descriptions are provided below with references to appendixes that give more information.

- **Desired Conditions.** These outline the vision for resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area. Desired conditions are provided below.
- **Zoning.** Park managers use zoning to delineate geographic areas for which desired conditions and appropriate management actions differ. The 2022 Trails Management Plan amended the 2009 General Management Plan zoning scheme at Orrs Ferry. This plan would further refine the current zoning and zoning boundaries. The proposed zoning better aligns with current park management and provides direction for future management. The updated zoning scheme is provided below.

- **Indicators and Thresholds.** Monitoring in this plan would be accomplished by adhering to the indicators and thresholds identified in the park’s general management plan (“GMP”, 2009) and trails management plan (“TMP,” 2022). This Orrs Ferry Site Management Plan does not establish any new or additional indicators or thresholds. Indicators are specific resources or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed. Thresholds are the minimum acceptable conditions associated with each indicator. Indicators and thresholds provide park managers with monitoring strategies to ensure that desired conditions for resources and visitor experiences are achieved and maintained over time. Please refer to Appendix C for an analysis of the previously identified indicators and their applicability to planning and management at Orrs Ferry. The appendix ultimately identifies some indicators as priorities for monitoring on a scale of high, medium, and low. Many previously identified indicators are not a priority at all for monitoring at Orrs Ferry.
- **Visitor Capacity.** This is the maximum amount and types of visitor use that an area can accommodate while sustaining desired resource conditions and visitor experiences consistent with the purpose for which the area was established (IVUMC 2016). Pursuant to Director’s Order 2: Park Planning, site management plans are considered implementation-level plans that meet the legal requirement for general management plans (54 USC 100502) to identify and implement visitor capacities for all areas of a system unit. While previous planning efforts have established visitor capacities for other areas within the park, this plan addresses capacities specific to site development at Orrs Ferry. By establishing visitor capacities and implementing them with appropriate management strategies, the National Park Service can help ensure resources are protected and visitors have opportunities for a range of high-quality experiences. See Appendix D for the visitor capacities identified in this plan.

Visitor use management is an iterative process in which management decisions are continuously informed and improved through monitoring to determine the most effective way to manage visitor use. Assessing the outcome of management actions is necessary to ensure that management actions are having their intended effects and that desired conditions are maintained. As the monitoring of conditions continues, managers may decide to modify or add indicators and/or thresholds if better ways are found to measure important changes in resource and experiential conditions. Likewise, visitor capacities may need to be adjusted over time in response to improved understanding of the relationship between visitor use and impacts on desired conditions. The rationales to adapt any indicators, thresholds, or visitor capacities would be documented appropriately, undergo any necessary additional compliance reviews, and be made available to the public.

## Desired Conditions

Desired conditions are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area. They help park managers answer the question, “What are we trying to achieve?”

According to NPS Management Policies 2006, “Through its planning processes, the Park Service will determine the desired future conditions for natural and cultural resources for each park unit and identify a strategy to achieve them” (4.1) (NPS 2006b). This plan establishes desired conditions for visitor experience and resource conditions for the project area within the Orrs Ferry Unit. The following desired conditions are based on guidance from previous planning efforts—including the

general management plan, trails management plan, interdisciplinary discussions, and the park's foundation document and are an update to those desired conditions listed in the general management plan. These desired conditions are based on the park's fundamental resources and values, associated visitor experience opportunities, and the types and levels of management, development, and access that are appropriate in different locations. Desired conditions updated during this planning process guided the development of the management actions and visitor use management strategies included in this plan.

### *Orrs Ferry Project Area Desired Conditions*

Visitors to the Orrs Ferry unit can immerse themselves in the tranquil surroundings of the Chattahoochee River and Crayfish Creek, including open meadows, rolling hills, tall tree canopies, and forested riparian areas, all in contrast to nearby busy access routes. Visitors can easily recognize the site as part of the national park system, feel welcomed, and receive relevant information about the park. Recreational experiences vary, depending on which side of the river visitors explore and how far south they travel.

As visitors move south from the north access points along a major highway, they are gradually enveloped by the peacefulness of the forested riparian landscape. In contrast to the northern areas, the southern portions of the unit offer visitors a closer connection to nature, with fewer anthropogenic sights and sounds, encounters with other people, and administrative or maintenance areas. The eastern side caters to those seeking a quieter atmosphere and offers visitors opportunities to fish, walk in the woods and along the riverbanks, cross Crayfish Creek, and immerse themselves in a natural space where sights and sounds of nature predominate. Compared to the eastern parts of the unit, the west side of the river offers visitors a more social experience characterized by the sights and sounds of other visitors, accessible trails, picnic opportunities, and relaxation at scenic spots.

Pedestrian trails to the river focus on noncommercial recreation. Facilities in the area enhance support for operations, allowing park managers to operate more proactively. Facilities also provide opportunities for education and the interpretation of natural and cultural resources for large and small visitor groups. Natural-surface trails reflect the unit's tranquil character and minimize disturbances to sensitive resources such as wetlands. Trail routes on the eastern side are designed to avoid other sensitive resources.

Activities consistent with desired conditions in this unit include hiking, fishing, educational programming, environmental restoration, accessible recreation opportunities, and NPS operations.

### *Area-Specific Desired Conditions*

Numbered locations are described below.

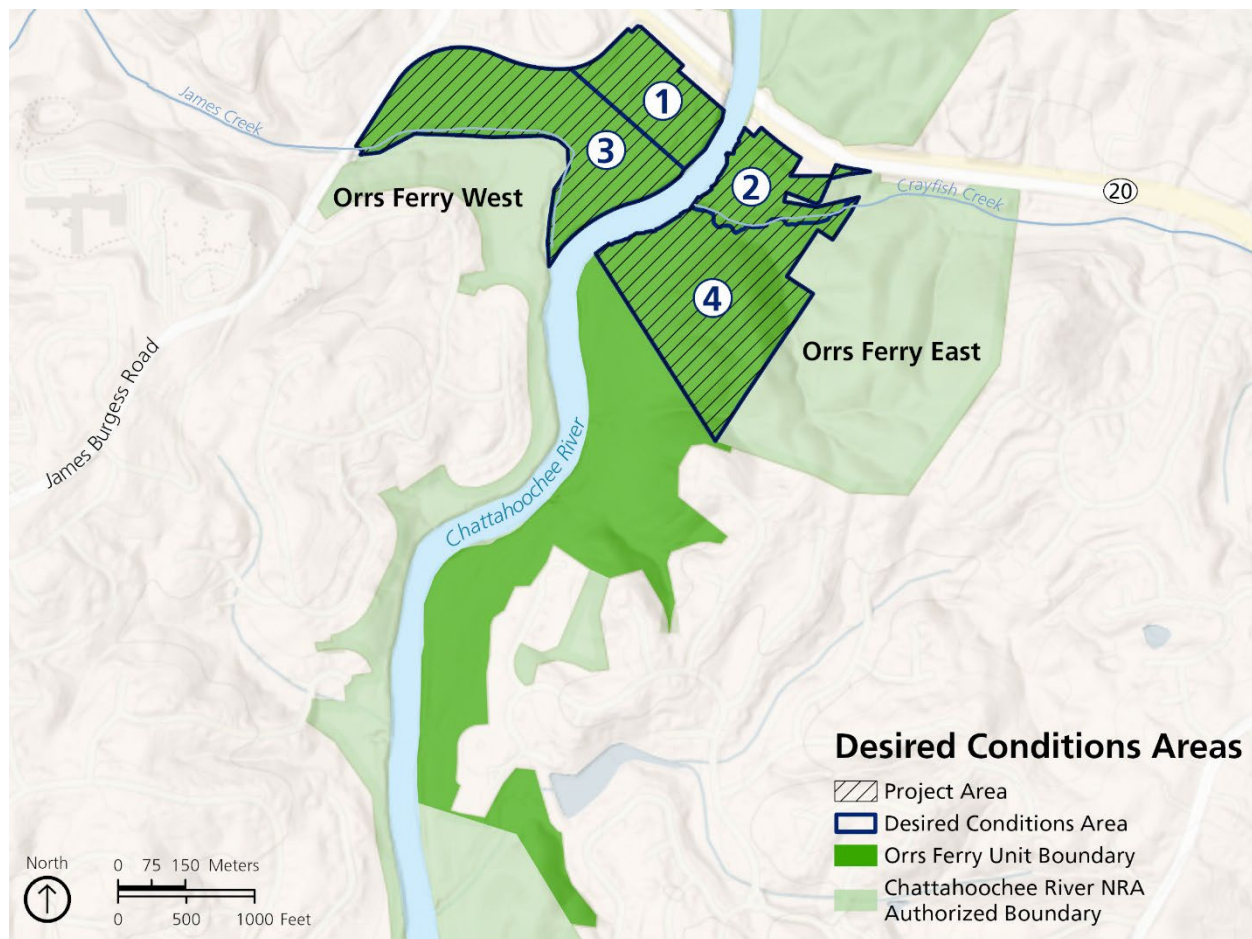


FIGURE 4. DESIRED CONDITION MAP

### Quadrant 1

The area along Highway 20 west of the river provides a transition from the large-scale suburban development along Highway 20 and Ruth Lane to James Creek. The area itself may have a functional or developed feeling associated with NPS operations. The soundscape may include mostly human-caused sounds, such as traffic and park operations. Activities consistent with desired conditions in this area include NPS administration, picnicking, and accessible trail opportunities.

### Quadrant 2

The area north of Crayfish Creek provides a welcoming and inviting entry into the Orrs Ferry unit. This area focuses on interpretation, education, trail access to popular fishing spots, accessible trail opportunities, and occasional large groups associated with environmental education programming. Visitors entering Orrs Ferry through this area transition from a travel and transportation corridor along Highway 20 and through a trail into the site to an orientation, exploration, and learning area. Environmental restoration along Crayfish Creek provides a quality learning environment. Crayfish Creek will be the primary attraction and destination in this area and a focal point of ecological restoration and interpretation. However, this area will also serve as an entry point to longer trails south of Crayfish Creek.

### Quadrant 3

The area north of James Creek emphasizes environmental recovery due to a history of agricultural use. This area offers a pastoral and serene environment where families and schools can enjoy a self-directed learning experience about stream buffers and environmental recovery and accessible opportunities. Visitor activities are generally directed away from the river, creek, and wetlands to prevent erosion and degradation. Visitors can expect fewer visitors in this area and should be prepared for limited interpretive materials and facilities.

### Quadrant 4

The area south of Crayfish Creek offers visitors opportunities to embrace natural quiet and solitude. Visitors can enjoy the scents of the river, plants, earth, and forest while experiencing the peaceful surroundings and variations in temperature between riverside, open, and forested areas. Visitors can connect with the river while perched on rock outcrops or gazing from picturesque overlooks. Limited on-site interpretation enhances visitors' understanding of the area's history and raises awareness of both native and nonnative species present in the area.

### **Zoning**

The 2022 trails management plan amended the original Orrs Ferry zoning scheme from the 2022 general management plan. This plan would refine the current zoning and zoning boundaries. The proposed zoning better aligns with current park management and provides direction for future management.

Under the 2022 TMP, most of the unit was rezoned to the Natural Zone from the Natural Area Recreation Zone. The area south of State Route 20 and north of Crayfish Creek remained in the Natural Area Recreation Zone. The rezone from Natural Area Recreation to Natural aligned with the desired trails conditions of preserving Orrs Ferry as a critical buffer zone and protecting sensitive plant species and wildlife habitats.

Under this plan, the zoning scheme from the TMP would be further refined by zoning all of the east side of Orrs Ferry south of Crayfish Creek as Natural Zone and all of the west side and east side of Orrs Ferry north of Crayfish creek as Natural Area Recreation Zone (Figure 5).

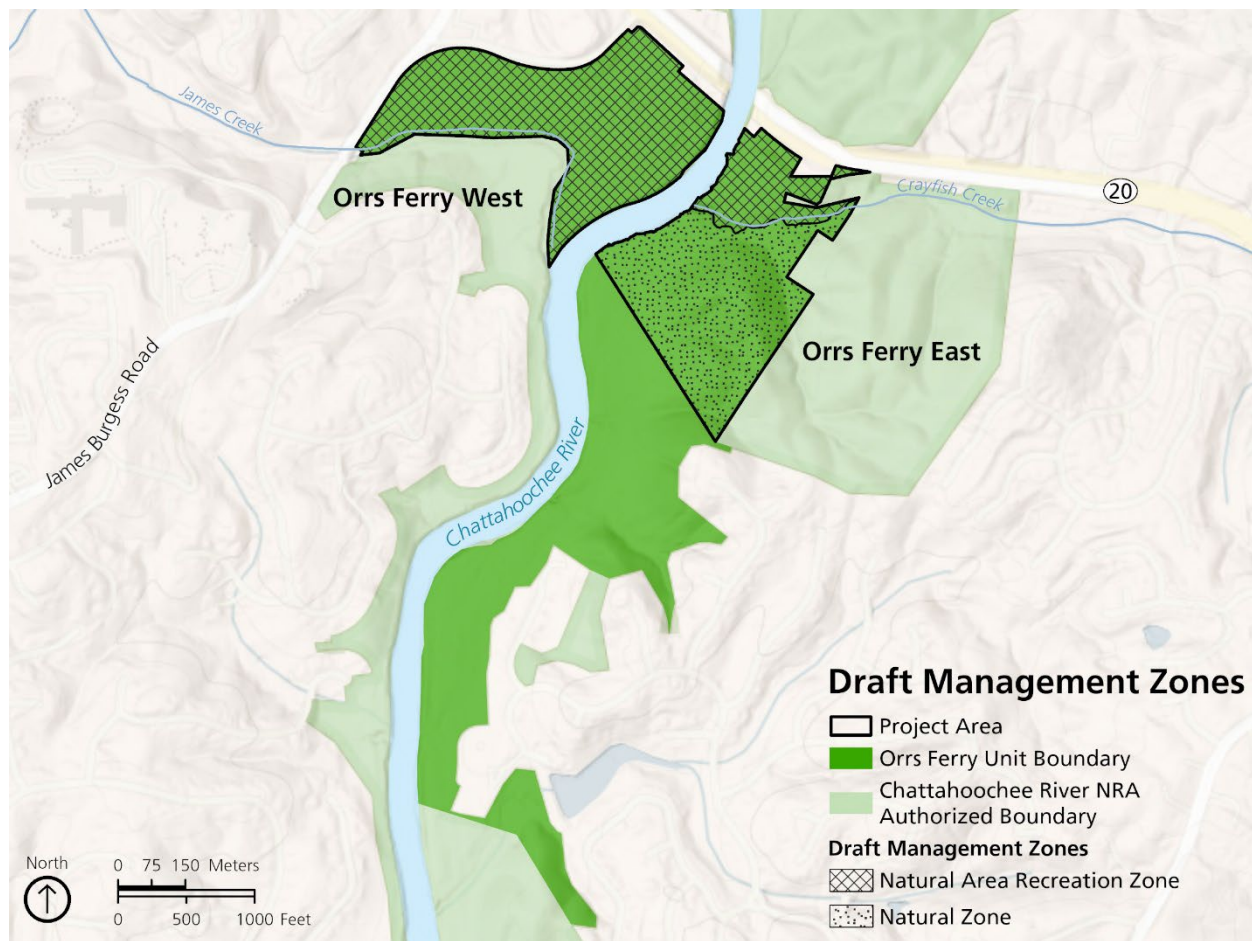


FIGURE 5. PROPOSED ZONING

The GMP defined the Natural Zone as “a relatively undisturbed environment that visitors interested in nature and natural settings could enjoy. Visitors would experience a relatively natural environment with a relatively low probability of encountering many people during a given visit to the park. Hiking on unpaved trails and nature observation would be typical activities. Visitors in this zone would feel farther away from comforts and conveniences.” Activities include day hiking, picnicking (without facilities), and fishing. No off-road bicycling or equestrian use is allowed. Facilities only include primitive trails, footbridges, and kiosks. There are no new river access facilities, visitor or administrative facilities, parking areas, picnic areas, restrooms, or roads.

In the Natural Area Recreation Zone, the probability of encountering other visitors would be moderate to high and at certain times of the day or season, opportunities for solitude would occur. The degree of isolation and feeling of closeness to nature would be low to moderate and would be limited by the presence of other people. A high diversity of experiences would be possible. Activities include day hiking, picnicking, and fishing. Facilities include unpaved trails only, river access facilities, visitor and administration facilities limited in size and impact, parking areas, picnic areas, restrooms, roads (limited access), bridges (for nonmotorized vehicles and pedestrians), kiosks.

## East Side Actions

Due to steep terrain constraints and sensitive natural and cultural resources, development on the east side of the river would be minimal and the resources would be protected.

The existing House would be demolished, and in its place, a new gathering area would be developed to support interpretive programs. The new gathering area would be large enough for school groups.

West of the gathering space, the Barn would be demolished. This structure would be removed outside of relevant species' nesting seasons, and the approximately 2,100 square foot landscape returned to natural habitat.

Educational programming and interpretive signs on the east side would focus on the archeological site and the Crayfish Creek ecological restoration and monitoring site.

New trails on the east side would connect to the City of Sugar Hill trail system, enhancing regional trail connectivity. A trail on the southern part of the unit would provide pedestrian access from the Sugar Hill visitor center to NPS trails along the river and Crayfish Creek confluence area. Total trail mileage on the east side would increase from 0 miles to .72 miles. Trails on the east side would be approximately 3 feet wide. Trail construction would avoid impacts to sensitive ecological zones, cultural resources, and areas of high biodiversity. Park managers would continue collaborating with the City of Sugar Hill and Georgia Department of Transportation about trail connectivity in this area. In the future, the NPS would consider partnering with Sugar Hill for new parking opportunities.

A bridge would be constructed over Crayfish Creek to provide a scenic viewpoint of the confluence and minimize the impact of informal creek crossings. The approximate location of the bridge is shown in the site plan, but the specific location will be refined during further development. Compliance for this bridge will be addressed under a separate effort. All trails and the new bridge over Crayfish Creek would be carefully designed to prevent further streambank erosion.

Educational signs would be installed at key locations, particularly along the Crayfish Creek trail and at the Crayfish Creek bridge. Erosion-control measures would be utilized to prevent social trails to the river at the approved angler access along the east shore from the TMP. Avoidance and monitoring measures would be implemented to protect cultural resources. Two water access points would be constructed with natural material to provide easier access north and south of Crayfish Creek.

If additional parcels are acquired in the future and if visitor demand increases, the park would consider adding bus parking, turnaround, and a seasonal restroom in this area, as topographic limitations allow. Separate compliance would occur for any development on future parcels.

Please refer to the site drawing below (Figure 6) for more details on the east side actions.

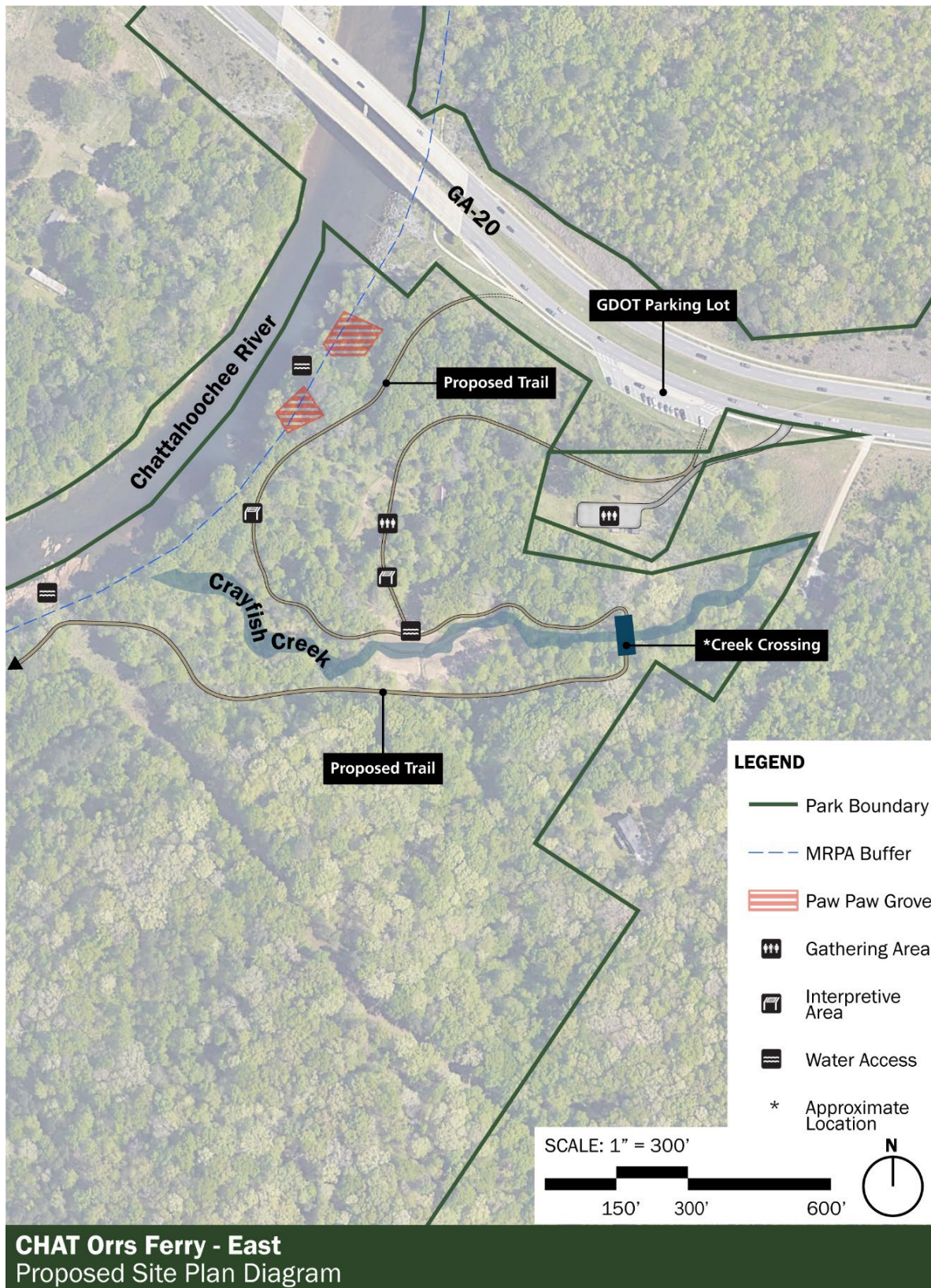


FIGURE 6. EAST SIDE ACTIONS SITE PLAN

## West Side Actions

Development on the west side of the river would focus on balancing accessible visitor access with environmental protection.

A new parking area would be developed to function as the primary parking for Orrs Ferry. The new parking area would include parking for 43 cars, 2 accessible spots, and three buses. The lot would also include a large pullout area to accommodate larger vehicles and one-way traffic, ensuring safe vehicular circulation and pedestrian access to recreational opportunities. This parking area would be approximately 44,000 square feet, with 22,000 feet of it being pervious planter. This parking lot would have a gravel surface and be accessible.

Adjacent to the main parking lot, a 6-stall restroom with plumbing and electricity would be developed. This restroom would meet accessibility standards and accommodate high visitor volumes. The restroom would be approximately 525 square feet.

The existing Fish Shack would be repurposed to serve as an interpretative center with exhibits. The locally cherished structure would be used to educate visitors about the park's cultural and natural history, including past and present activities related to fishing, native species and pollinators, and river management in the community.

A new open-air pavilion would be developed to serve as a space for gathering and interpretative programming. Similarly to the Fish Shack, this structure would be used to educate visitors about the park's cultural and natural history, including past and present activities related to fishing and river management in the community. This sheltered structure would have seating large enough to accommodate multiple school groups (approximately 120 students) and would contain 4 picnic tables. A minimum of 20%, but no less than 2, picnic tables will be accessible per the Architectural Barriers Act Accessibility Standards. The pavilion would be approximately 1,800 square feet.

New trails would be developed to areas of interest. An accessible trail with interpretive signage and seating areas at scenic overlooks would be built to enhance visitor engagement with the natural landscape. This accessible trail would travel from the parking lot to James Creek, extending approximately 0.6 miles. The trail network would formalize a loop around the west side of Orrs Ferry. Total trail mileage on the west side would increase from 0 miles to 1.28 miles. Trails on the west side would be approximately 3 to 8 feet wide. Erosion control measures would be implemented along James Creek and other erosion-prone areas, and a water access point would be constructed with natural material to provide easier access to the river.

Separate from the new parking area for visitors, administrative access would be retained at the existing metal shop. The existing metal shop would be repurposed to support park operations as a storage and maintenance facility. Space planning inside the metal shop would occur to ensure staff and equipment needs are accommodated effectively. The structure would not be used for any office operations. Repurposing this structure as described would reduce drive times of NPS staff and increase the effectiveness of maintenance and management efforts in this area and beyond. A new gate would be installed at the metal shop to limit public access to this administrative use area.

The open area in the northern section of the west side would be restored as a native habitat for birds and pollinators. This approximately 81,500-square-foot area would be designated within the park mow plan to allow for growth of native grasses and flowers. The resulting area would be managed as a natural resource and interpreted for its value to pollinators and pollinators' critical role in our food production system.

Please refer to the site drawing below (Figure 7) for more details about actions on the west side.

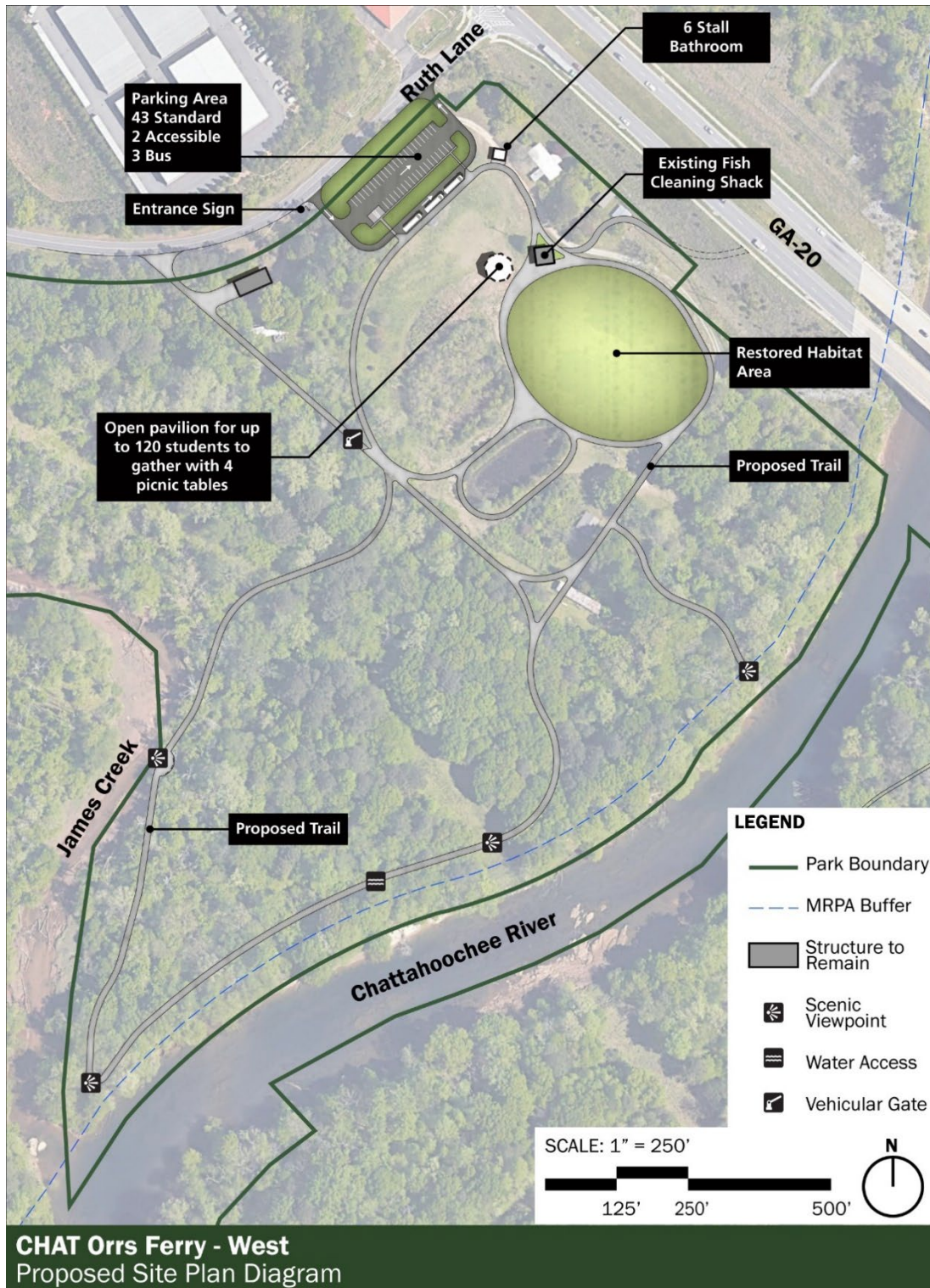


FIGURE 7. WEST SIDE ACTIONS SITE PLAN

## Implementation

New site development and the restoration of degraded areas would proceed as funding and staffing levels permit. Following the completion of this planning effort, park staff would develop an implementation strategy to guide a phased approach for these efforts. This strategy could be adjusted over time based on available resources, including funding, staffing, and equipment, as well as opportunities to collaborate with user groups and partner organizations on site development and restoration.

The implementation of the proposed action would depend on available resources and take place incrementally. Park staff would prioritize high-need development projects and collaborate with partners, particularly the Chattahoochee National Park Conservancy (CNPC), which serves as the primary philanthropic partner and the sole organization authorized to raise funds directly for the park in accordance with DO-21. CNPC could play a key role in fundraising, securing in-kind contributions (such as materials, supplies, or equipment), and engaging volunteers to support site maintenance and restoration efforts.

## ACTIONS CONSIDERED BUT DISMISSED

The planning team considered other potential actions, including those identified through civic engagement, that were determined infeasible and/or not responsive to the purpose and need for action. These actions and the rationale for not carrying them forward for further analysis are summarized below.

1. **Expanding the GDOT Parking Lot.** Given that Crayfish Creek serves as both a riparian restoration site and an educational resource, the expansion of the nearby parking lot in collaboration with Georgia Department of Transportation (GDOT) was considered, along with plans for a safer bus turnout, restrooms, and a sheltered pavilion to better accommodate visitors and school groups. This option was ultimately dismissed due to several safety concerns, incomplete land ownership, and conflicts with the desired conditions for the eastern part of the Orrs Ferry unit.

Analysis of the steep terrain between Highway 20 and the existing House and the adjacent GDOT parking lot revealed that it hinders the establishment of a safe bus turnout alignment. A sizable drainage area was identified where the grade drops off and there are three culverts crossing the road, directing water just south of the existing parking lot. While this expansion could theoretically increase capacity by approximately 14 spaces—effectively doubling the current size—it would necessitate further engineering assessments and potentially a retaining wall. Increasing the size of the parking lot without an adequate bus turnout would also complicate efforts to control access to areas where high visitation is not desired without adequate restroom and shelter facilities in place. Because this parking lot is owned by GDOT, not NPS, any modifications would only be possible with their permission and cooperation, and potential land exchange.

Lastly, expanding parking capacity would contradict the desired conditions in the area, which aim to “cater to those seeking a quieter atmosphere, offering visitors opportunities to fish, walk in the woods and along the riverbanks, cross Crayfish Creek, and immerse themselves in a natural space where sights and sounds of nature predominate.” Should the park acquire adjacent lands in the future, the potential for developing these facilities to enhance existing educational programs on the east side could be revisited.

2. **Boat Launch at Orrs Ferry.** A boat launch at Orrs Ferry was considered to provide safe boating access to visitors. This action was ultimately dismissed because the topography of the river along the NPS land at Orrs Ferry is not suitable for a boat launch, without involving a costly and disruptive infrastructure project. Additionally, safety concerns contributed to the decision, as swimming and tubing is not encouraged at Orrs Ferry. A more suitable location for a boat launch was identified at Settles Bridge, north of Orrs Ferry. However, the park is open to exploring opportunities to collaborate with other public-service agencies beyond park boundaries to meet the need for a boat launch in the area. Adjacent lands beyond NPS-owned units may be suitable for a boat launch and are outside of the scope of this plan.
3. **Bike Use.** Members of the public requested recreational opportunities for biking within the Orrs Ferry Unit. Bicycle use within the NPS is regulated under 36 CFR 4.30 (the Bicycle Rule). The Bicycle Rule establishes different procedures for authorizing bicycle use on existing trails, new trails in developed areas, and new trails outside of developed areas. Chattahoochee River NRA amended the special regulations with a final rule effective January 22, 2025, to allow bicycling on 20.6 miles of trails within the park. The rule aligns with identified multi-use trails and Chattahoochee Greenway segments analyzed and reflected in the 2022 Comprehensive Trails Management Plan. Orrs Ferry unit was not identified for bicycle use in the park Trails Plan, because it did not meet the desired conditions and resource protection goals established for the area.

## **CHAPTER 3: PUBLIC INVOLVEMENT AND CONSULTATION WITH OTHER AGENCIES**

### **PUBLIC INVOLVEMENT**

Civic engagement began in 2025. From April 15 to May 15, the National Park Service invited the public to provide input as part of a civic engagement process for the development of this plan. The purpose of this civic engagement period was to obtain public feedback on preliminary management strategies to inform plan development; comments received in this process informed the creation of preliminary strategies. The public was invited to submit written comments by mail, by email, and on the project website at <https://parkplanning.nps.gov/OrrsFerrySiteManagementPlan>.

The National Park Service held an open house public meeting to discuss the development of the site management plan and answer questions about the project. The public meeting was held on Thursday, April 24 at 4:00 p.m. (EST). In addition to the meeting, the National Park Service developed a StoryMap and recorded a video titled “Introduction to the Site Management Plan” to provide background information on the project. Both resources were posted to the project homepage. The public was invited to submit comments on the site management plan on the project website at <https://parkplanning.nps.gov/OrrsFerrySiteManagementPlan>. The public was also directed to the project StoryMap (<https://bit.ly/orrsferrymap>), which provided additional context on the plan, including proposed management zones and desired conditions for those areas.

By the close of this comment period, the Park Service received 25 correspondences on the project website. In addition, the project StoryMap logged more than 1,140 page visits. Of the 25 correspondences submitted on the project website, 96% came from Georgia residents and one correspondence came from a resident of Utah. The plan reflects the suggestions shared by the public in the last round of civic engagement to the extent practicable. This plan reflects some minor site facility changes that occurred after the public involvement period to better protect resources.

### **CONSULTATION WITH AGENCIES AND TRIBES**

The park consulted with several agencies regarding this plan. Consultation will continue into the future as each component of the project is implemented.

#### **US Fish and Wildlife Service**

Via the Information for Planning and Consultation website for the US Fish and Wildlife Service, the National Park Service requested the most recent list of species and their designated critical habitat protected under the Federal Endangered Species Act that may be impacted by projects in the Orrs Ferry Unit of Chattahoochee River National Recreation Area. This action served as a record that the National Park Service initiated informal consultation with the US Fish and Wildlife Service pursuant to the requirements of the Endangered Species Act and NPS management policies. A letter was sent to USFWS on September 5, 2025, for informal consultation.

#### **Georgia Department of Natural Resources**

The park informally consulted with the Georgia Department of Natural Resources (GADNR) throughout the planning process. National Park Service staff included GADNR representatives on

distribution lists related to public comment periods for the various drafts of the plan (and resulting public comment summary documents).

### **State Historic Preservation Office**

Chattahoochee River National Recreation Area staff informed the Georgia State Historic Preservation Office (Georgia SHPO) about the planning effort and, what was at the time proposed to be an environmental assessment, in a letter dated August 1, 2025. The letter stated that the National Park Service did not anticipate the site management planning effort to engage a Section 106 review process under the National Historic Preservation Act and its regulations in 36 CFR 800, as the plan is not an undertaking that would effect historic properties or other cultural resources. Actions identified in the site management plan would be subject to Section 106 review.

In a reply dated August 13, 2025, the Georgia SHPO confirmed receipt of the NPS correspondence that described the site management planning effort. The Georgia SHPO will review the final plan.

### **Tribal Consultation**

The process of consultation and coordination is an important component of this plan. Chattahoochee River National Recreation Area initiated Tribal consultation for the site management plan on July 21, 2025. To initiate consultation, the National Park Service sent letters to the following Native American Tribes affiliated with the Chattahoochee River National Recreation Area:

- Absentee Shawnee Tribe
- Alabama-Coushatta Tribe of Texas
- Alabama-Quassarte Tribal Town
- Cherokee Nation
- Coushatta Tribe of Louisiana
- Eastern Band of Cherokee Indians
- Kialegee Tribal Town
- Muscogee (Creek) Nation
- Poarch Band of Creek Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Shawnee Tribe
- Thlopthlocco Tribal Town
- United Keetoowah Band of Cherokee Indians of Oklahoma

## APPENDIX A: IMPACT ANALYSIS

### INTRODUCTION

This section describes the NEPA compliance pathway and the analysis of resources that could be affected as a result of implementing the proposed action. The proposed action considered in this plan is evaluated against existing conditions to determine associated impacts and combined impacts from the actions as they relate to the impact topics.

### NEPA COMPLIANCE

During the course of this project, the National Park Service adopted several new Categorical Exclusions, including CE B.5, which more accurately aligns with the scope and scale of the proposed actions—prompting a reevaluation and subsequent shift from an Environmental Assessment to a Categorical Exclusion as the appropriate NEPA pathway. The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with B.5:

*Approval of land management plans where implementation will only result in minor construction activities and resultant increased operation and maintenance activities. [NPS cannot not use this CE to cover visitor managed access plans.] [90 FR 24644]*

This categorical exclusion is appropriate in this situation because per NPS directives, the term “land management plans” covers site-specific plans. As a site-specific plan, this plan fits under the parameters for the B.5 categorical exclusion. The Orrs Ferry Site Management Plan is a land management plan that proposes only minor construction activities such as trails, a parking lot, pavilion, and restroom. The resultant increase in operational responsibilities is modest and within existing NPS capacity. The proposed actions do not constitute major new infrastructure and are expected to result in only minimal environmental impacts. Further, this categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 43 CFR Part 46.215 will apply. The nature of the activities was considered, and no significant impacts are expected.

TABLE 1: EXTRAORDINARY CIRCUMSTANCES REVIEW CHECKLIST

| Extraordinary Circumstances                                                                                                                                                                       | Yes/No | Explanation                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------|
| A. Have significant impacts on public health or safety.                                                                                                                                           | No     | The proposed parking lot, removal of unused structures, and new wayfinding signs will improve the safety of visitors.               |
| B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic | No     | The proposed plan is designed to prevent impacts to the site's cultural resources and does not involve actions that would result in |

|                                                                                                                                                                                                                          |    |                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands; floodplains; national monuments; migratory birds; and other ecologically significant or critical areas.</p> |    | <p>significant adverse effects on the listed resource types or protected areas. Any implementation actions that could affect sensitive resources will be subject to additional environmental and cultural compliance, as appropriate.</p>                   |
| <p>C. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.</p>                                                                                      | No | <p>The proposed actions are limited in scope and do not involve highly uncertain or potentially significant environmental effects. Archaeological surveys will be conducted prior to any ground disturbance to avoid unknown environmental risks.</p>       |
| <p>D. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.</p>                                                          | No | <p>Any future actions beyond the scope of this plan would undergo separate environmental review and compliance.</p>                                                                                                                                         |
| <p>E. Have a direct relationship to other actions that implicate potentially significant environmental effects.</p>                                                                                                      | No | <p>The proposed actions do not have a direct relationship to other actions with potentially significant environmental effects. They are independent in scope and implementation, with no connected or cumulative impacts anticipated.</p>                   |
| <p>F. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.</p>                                                               | No | <p>Through Section 106 consultation and appropriate avoidance measures, no significant impacts to historic properties are anticipated.</p>                                                                                                                  |
| <p>G. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species.</p>            | No | <p>The proposed actions are not expected to have significant impacts on any listed or proposed endangered or threatened species, nor on designated critical habitat. No such species or critical habitats have been identified within the project area.</p> |
| <p>H. Significantly limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian</p>                                                                                                             | No | <p>This planning effort included Tribal engagement and recognizes the importance of this place to our</p>                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                        |    |                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| religious practitioners or significantly adversely affect the physical integrity of such sacred sites                                                                                                                                                                                                                                  |    | Tribal partners. No Tribal access will be restricted nor will the site's physical integrity be negatively impacted.                                                                                                                                                        |
| I. Contribute to potentially significant effects resulting from the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or from other actions that promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act). | No | Appropriate best management practices—including equipment cleaning, use of weed-free materials, and site monitoring—will be implemented during construction and maintained through ongoing resource management to prevent the establishment or spread of invasive species. |

The topics presented below are those related to the key issues that could inform the NPS decision about how to manage the Orrs Ferry Unit. The descriptions of the resources provided in this section serve as baseline conditions against which potential effects of the proposed actions can be compared. Included in this analysis are visitor use and experience, wetlands, floodplains, soils, and archeological resources.

The impact analysis was prepared in expectation of an EA. The conclusions of the impact analysis support the determination that there would be no potential for significant impacts and no extraordinary circumstances exist.

## **VISITOR USE AND EXPERIENCE**

### **Current and Expected Future Conditions of Resource if No Action is Taken**

Under current management, park visitors would continue to have relatively few opportunities to access and experience the Orrs Ferry unit. The west side would continue to be closed via the Superintendent's Compendium, meaning no authorized visitor use or experience would occur there. On the east side, visitors would continue to access the unit via the GDOT parking lot and school groups can participate in occasional educational programming with partners at Crayfish Creek.

Upon implementation of the comprehensive trails management plan, visitors would have some improved opportunities to access and experience the east side of the unit, including on formalized trails and fishing/pedestrian river access points. The existing social trail beginning near the highway 20 bridge would be formalized and would provide an improved opportunity to access experiences along the river. This trail currently serves between 25 and 45 visitors per day on the typical busy day (i.e. 75<sup>th</sup> to 90<sup>th</sup> percentile day) and would likely serve many more given this formalization. The Crayfish Creek trail, however, would remain unchanged, travelling to the front of the existing House before meandering to the creek banks. This House would continue to deteriorate and introduce new health and safety hazards to visitors on the east side.

Facilities to support visitor experiences would continue to be limited, contributing to a poor visitor experience. For example, visitors who choose to visit would continue to access the Orrs Ferry site

without bathroom facilities which could lead to uncomfortable and unpleasant visitor experiences, foul odors, and public health concerns.

Adverse trends related to visitor perceptions would continue. Park staff believe that many current visitors do not understand or appreciate the area as a unit of the national park system upon arriving to this site due to a lack of signage, parking, and NPS-branded infrastructure. Visitors may also have limited awareness of the resources and values that the Orrs Ferry unit offers. Due to the lack of supporting infrastructure, abandoned and deteriorating buildings including the barn, a general unkempt appearance, and lack of formalized opportunities, they may even perceive Orrs Ferry to be an unsafe, inaccessible, or unwelcoming place to visit. The abandoned and deteriorating buildings would also continue to adversely impact the scenery visitors encounter at the site.

Under current management, the Chattahoochee River at Orrs Ferry would continue to be subject to rapid changes in water level as the US Army Corps of Engineers (USACE) releases water from Lake Lanier at the Buford Dam upstream. The USACE would continue to make use of a siren system that makes visitors in the area aware of the coming rise in waters. However, due to the limited amenities and access at the site under current management, visitation remain low and safety concerns from rapid water releases would be limited to the few anglers that access the river in this area.

With the projected continued growth in surrounding communities, the inadequacy of the facilities in this unit would become increasingly obvious. The site would increasingly not set the stage for meaningful and enjoyable visitor experiences, and on the west side, no visitor access would be permissible. New visitors to the unit would potentially be unaware of the site's status, resources, and values as a national park unit. Under current management, the Orrs Ferry unit would continue to lack on-site features that establish park identity and effectively communicate essential information regarding park resources, safety, and site-specifics to visitors.

### **Effects of the Proposed Action**

Under the proposed action, there would be a dramatic increase in visitor access and expanded recreational opportunities as compared to current management. This increase would beneficially impact visitor use and experience. New facilities, including signage, interpretation, parking, restrooms, trails, picnic tables, educational facilities, and related improvements would increase the formalization of access and make it clear to potential visitors the range of opportunities that are available, beneficially impacting both the ability of visitors to access the site (i.e. visitor use) and the quality of the experience once they visit.

Overall, the degree of intentionality in how the Orrs Ferry Unit is managed would improve substantially under the proposed action. The refinement of clear desired conditions, refined zoning, commitment to monitoring priority indicators, and appropriate visitor capacities would provide a well-thought-out range of opportunities for potential visitors. On the east side, visitors would find more rustic opportunities, with minimal development. On the west side, more opportunities for introductory-type visitor experiences would be provided to appeal to visitors less experienced in outdoor recreation. This intentional range of opportunities would improve the odds that a potential Orrs Ferry visitor would find an experience aligned with their interests, a greatly beneficial impact to the quality of the experience.

Under the proposed action, the signage identifying the site as a unit of the national park system would be greatly improved, increasing visitor awareness for the types of opportunities and experiences available. This signage would also improve visitor wayfinding as features of interest and trails throughout the area would be clearly marked. Interpretive panels and exhibits highlighting the

area's history, biodiversity, archeology, natural resources and conservation successes would be installed in several locations throughout Orrs Ferry to educate visitors, increasing their understanding and appreciation for the site and inspiring more meaningful visits for some. Overall, these panels and exhibits would improve the spiritual and emotional connections that visitors can make to the site.

Visitors' perceptions of the safety and quality of a potential visit to Orrs Ferry would be improved by the removal of several unused and outdated buildings including the House, trailers, sheds, outbuildings; the removal of farm implements and evidence of former habitation; and the cleanup of trash and debris that has been dumped on the site. These elements would persist and deteriorate under current management, but under the proposed action, their removal would likely improve the quality of the scenery visitors experience, as well as visitors' overall perspective of the site, potentially affecting how visitors perceive it as a place worth protecting, and in turn improving the overall quality of the site.

While very few facilities that support a visit are included under current management, the proposed action would substantially improve the ability of visitors to access the site through the construction of a new parking area with restrooms. The size of the new parking lot would greatly increase the number of vehicle-based visitors that can visit the site at one time from roughly 20 vehicles' worth to over 60. A six-stall modern restroom would improve visitor comfort, convenience, and help prevent the unpleasant experiences associated with human waste issues.

The accessibility of the site would also be improved under the proposed action, improving the ability of people with disabilities to access and have enjoyable experiences at the site, while also providing ancillary benefits to those without disabilities. The parking areas, restrooms, routes, picnic facilities, gathering spaces, and river access points would all be made accessible, providing a great breadth of recreational opportunities to all visitors.

While current management would include the construction of a section of formalized trail on the east side under the TMP, the proposed action would greatly expand the trail-based recreational opportunities available. About 2 miles of trail would be available to visitors under the proposed action, including options for several different loops and out-and-back routes to destinations of interest along the riverbank. Trail access to the river would also be formalized and ensure visitor access to the river.

The educational opportunities for school groups would be greatly expanded under the proposed action, primarily through the construction of large facilities purpose-built to accommodate large groups of children. The west side parking lot would include 3 spaces for buses, modern restrooms acceptable to all, and a large sheltered, but open air, pavilion sufficiently sized to accommodate up to 120 students at one time. These facilities would make it possible to host large school groups and reach this audience with educational information related to the interpretive themes of the park. Similarly, a new gathering area large enough for school groups on the east side would support interpretive programs in that area, particularly those related to Crayfish Creek ecological restoration and archeological resources.

There would be some adverse impacts associated with the proposed action. For some visitors, the increased formalization of facilities would not be viewed as an improvement. Some visitors in local neighborhoods have become accustomed to a "private backyard park"-type experience and would be adversely affected by the increase in visitor use of the site. Similarly, the formalization of angler access points to reduce erosion could be perceived as an adverse impact for some anglers accustomed to informally accessing a variety of locations along the river as desired.

An additional adverse impact to visitor safety may stem from the increase in recreational development and use by school groups along this section of river which is close to the Buford Dam. As described under current management, this section of river is subject to rapid changes in water level due to dam releases. The proposed action would increase the proximity of people, including children, to the rapid surge flows of the river. While this does present the potential for drownings and other water-related injuries and deaths, the proposed action sites most of the facilities well away from the river. Facilities that would be developed near the river include a few scenic viewpoints and a step-down style water access. Most visitors, particularly school children, would likely not come into close contact with the river. Those that access the water, primarily anglers, would be more likely to be prepared for these sudden water level changes. Signage related to the risks of water level changes would be included to mitigate safety risks. Current management describes that streambank fishing would occur on both on the east side of the river and upstream at Bowmans Island. The marginal increased risk to visitor safety from added facilities under the proposed action would be negligible.

The development of more formalized visitor facilities at Orrs Ferry would occur under the proposed action against the backdrop of increased development happening all along the Chattahoochee River as a result of the TMP, the RiverLands Greenway development, and the nearby development of the Sugar Hill land. The overall combined effects of these developments mean there would be fewer opportunities for primitive recreation in undeveloped forested areas along the river in the Atlanta metropolitan area. This adverse effect would not eliminate this opportunity in the area altogether, however. The potential connectivity between the Orrs Ferry Unit trails and other park units such as Bowmans Island and Sugar Hill would also create opportunities for visitors to connect multiple disparate areas into one cohesive trail-based experience.

## **Conclusion**

While a few adverse impacts to visitor use and experience would occur under the proposed action, namely for visitors seeking spaces with few other visitors, unmanaged angling, and undeveloped spaces as well as a visitor safety concern, these impacts ultimately would not be significant as they would affect only a small minority of potential visitors. Overall, the increased management intention, the improved signage, improved awareness of the site as an NPS unit, better wayfinding and perceptions of safety, accessibility improvements, increased interpretation, improved support facilities, expansion of available trail opportunities, and educational programming facilities would greatly improve the quality of visitor use and experience at Orrs Ferry.

## **WETLANDS**

### **Current and Expected Future Conditions of Resource if No Action is Taken**

Wetlands at Chattahoochee River National Recreation Area are located along the Chattahoochee River floodplain and at seeps along the lower slopes of the valley walls and along tributaries (NPS 2009). These wetlands serve as natural water purifiers, maintain flow regimes, provide flood control, offer recreational opportunities, and provide important habitat for many fish, wildlife, and plant species (NPS 2009).

The National Wetlands Inventory, maintained by the US Fish and Wildlife Service, depicts wetlands throughout the project area. According to this dataset, within the project area, three wetland types are present and described below (USFWS 2021).

- Riverine systems include all wetlands and deepwater habitats contained in natural and artificial channels containing periodically or continuously flowing water or which form a connecting link between the two bodies of standing water.
- Freshwater Forested / Shrub Wetland is dominated by woody vegetation, such as trees or shrubs, and periodically or permanently saturated with freshwater. These support species like willows, alders, and red maples. They play a key role in flood control, water filtration, and wildlife habitat.
- Palustrine emergent wetland is a freshwater wetland characterized by non-tidal, shallow water and standing or slow-moving water, where the dominant vegetation is herbaceous (non-woody) plants that emerge above the water surface.

There is currently no infrastructure or visitor access that directly affects wetlands within the project area, and the unit remains largely undeveloped. Natural surface flows appear unaltered, and hydrological connectivity to the Chattahoochee River remains functional.

The primary threat to wetlands in the project area is continued streambank erosion and riverbank erosion. Due to the steep topography, erosion is common along the Chattahoochee River, Crayfish Creek, and James Creek, which contributes to degraded ecological function and loss of habitat quality. In addition, these wetland systems are largely intact but vulnerable to encroachment from invasive species such as Japanese stiltgrass (*Microstegium vimineum*) and Chinese privet (*Ligustrum sinense*), which are present in the understory and along trail edges. In addition, occasional trampling in the wetland has occurred but is not expected to continue into the future. Lastly, ongoing and increased development and the resultant adverse impacts to water quality threatens wetland functionality (NPS 2017). The increasingly urbanized landscape surrounding the park results in elevated bacterial contamination, which can fluctuate in severity within the park due to streamflow, season, stormflow, and land use and development patterns (NPS 2017).

Past and future development in the project area include utility line expansion and maintenance projects, such as the forthcoming AGL pipeline, and excavation for AGL's directional line drilling on the west side of the project area. The AGL project would be analyzed under a separate compliance pathway. These types of development are expected to continue into the future as the southeast continues to grow. These past and future development projects will continue to adversely impact wetlands through vegetation clearing, soil compaction, altered hydrology, sedimentation, and the potential introduction of invasive species, all of which can degrade wetland function and reduce habitat quality over time.

### **Effects of the Proposed Action**

Under the proposed action, the construction of new facilities and trails would primarily be sited on upland areas away from known or potential wetlands and would occur on well-drained soils. No direct filling, draining, or conversion of jurisdictional wetlands is proposed. Avoiding wetlands was prioritized during design, and alignments have been reviewed to ensure buffers are maintained where wetlands are present. The construction of new trails and facilities would involve additional vegetation clearing and ground disturbance in some areas. Before any construction occurs, a soil investigation would be conducted to confirm soil-bearing capacity and drainage characteristics and wetlands would be avoided in final trail alignment to the extent possible.

If such an investigation reveals soil conditions indicative of wetlands, alternative locations would be assessed. All attempts would be made to avoid or minimize impacts to wetlands. If no alternative non-wetland sites were located, then additional compliance (e.g., a wetlands statement of findings) would be done to assess impacts to wetlands and ensure no net loss of wetland area.

The park would obtain all required permits to adhere with the Clean Water Act Section 404 and Section 10 of River and Harbors Act requirements. With the implementation of best management practices and adherence to federal Clean Water Act Section 404 and 401 requirements, no significant adverse impacts to wetland structure, function, or hydrology are expected. Erosion and sediment control measures, such as silt fencing, staged clearing, and stabilized construction entrances, would be employed to prevent offsite sedimentation into wetland areas during construction. Removal of trees of substantial size would be avoided to the extent possible to avoid impacts to natural resources. Therefore, the actions proposed would not be expected to impact the long-term viability of wetlands in the park.

The proposed parking lot would be permeable surface but could increase the amount of pollutant runoff into the watershed. In the long term, wetlands in the Orrs Ferry Unit are expected to remain largely undisturbed and continue providing valuable ecosystem services. The proposed action could have indirect benefits to wetland health by channeling visitor access to designated trails and parking areas, reducing the likelihood of off-trail trampling or informal paths that could encroach upon sensitive riparian areas. The Crayfish Creek bridge would help reduce trampling in the stream, help keep sediments out of the stream and minimize informal creek crossings. On the west side, meadow restoration would help the wetland ecosystem by improving ecological function, hydrology, and habitat quality. Ongoing invasive species management and targeted ecological restoration may further improve the quality of wetland-adjacent buffers.

## **Conclusion**

Given the avoidance of direct wetland disturbance and application of conservation measures, the expected future condition of wetlands within the project area is stable, with potential for incremental improvement through habitat restoration and improved visitor management. Potential impacts to wetlands would be mitigated by adhering to best management practices. Upon final design and if warranted, a formal delineation and any applicable Clean Water Act permitting would occur before groundbreaking.

## **FLOODPLAINS**

### **Current and Expected Future Conditions of Resource if No Action is Taken**

The project area lies within the 1% annual chance flood hazard zone, as identified by Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). The floodplain in this area functions as a natural flood storage and conveyance zone, supporting periodic inundation, groundwater recharge, and sediment deposition. The site contains a combination of riparian woodlands, low-gradient terrain, and ephemeral stream channels, all of which contribute to the ecological and hydrological integrity of the floodplain.

On the east side, the area around Crayfish Creek is within the 1% annual chance flood hazard. On the west side, the area around James Creek is within the 1% annual chance flood hazard, and 0.2% annual chance flood hazard. The floodplain on the west side of the project area extends farther from the centerline of the creek than on the east side. The area is largely undeveloped, and floodplain processes currently function with minimal human interference. There is no major infrastructure within the mapped flood zone, and surface flows remain generally unimpeded. The floodplain also plays an important role in supporting habitat connectivity and buffering wetlands and aquatic resources. Existing floodplain functions currently remain unmodified, and no impacts to flood

storage, conveyance, or water quality are projected. Natural floodplain dynamics are expected to continue without change.

Past and future development in the project area include utility line expansion and maintenance projects, such as the forthcoming AGL pipeline, and excavation for AGL's directional line drilling on the west side of the project area. The AGL project would be analyzed under a separate compliance pathway. These types of development are expected to continue into the future as the southeast continues to grow. These past and future development projects will continue to adversely impact floodplains through vegetation clearing, soil compaction, altered hydrology, sedimentation, and the potential introduction of invasive species, all of which can degrade floodplain.

### **Effects of the Proposed Action**

Under the proposed action, the construction of new facilities and trails would be primarily located in upland areas; however, some elements of the project are sited within mapped flood hazard zones. Portions of the trails and the scenic overlook are located within areas with a 1% annual chance of flooding, according to FEMA Flood Insurance Rate Maps (FIRM). On the west side, some trails, and a small portion of the parking lot are within the Federal Flood Risk Management Standard (FFRMS) floodplain areas, 0.2% annual chance flood. The proposed parking area on the west side would be surfaced with gravel.

Overall, impacts to flood hazard areas under the proposed action are expected to be minor and localized. Trails would consist of narrow, permeable surfaces and would not involve permanent structures within the highest-risk flood zones. Trail construction would involve minimal grading and would be designed to maintain natural hydrology, avoiding any obstruction of flood flows or reduction in floodplain storage capacity. Best management practices—including stormwater management, erosion and sedimentation controls, and native vegetation stabilization—would further minimize potential adverse effects on floodplain function and water quality.

In accordance with Executive Order 11988 (Floodplain Management), and because the proposed improvements are recreational in nature, non-intensive, and designed to be resilient to periodic inundation, they are considered appropriate uses within the floodplain context. The proposed action also includes adaptive management provisions, such as trail monitoring and realignment if needed, to respond to changing floodplain dynamics or erosion concerns.

In the long term, the proposed project may reduce the likelihood of informal visitor-created trails that often develop near the riverbank and within sensitive floodplain zones. By channeling access to designated and sustainably designed infrastructure, the proposed action may contribute to preserving floodplain integrity and enhancing ecological resilience.

### **Conclusion**

The proposed action would result in negligible to minor impacts on floodplains in the project area. Most of the proposed development would avoid significant encroachment into flood-prone areas, and floodplain functions—including conveyance, storage, and habitat support—would remain intact. With appropriate design and implementation of mitigation measures, the floodplain is expected to retain its current ecological and hydrological role, and no significant adverse impacts are anticipated.

## SOILS

### Current and Expected Future Conditions of Resource if No Action is Taken

Soils at Chattahoochee River National Recreation Area are generally loamy, with soils in areas adjacent to creeks being sandier, and soils in areas farther from water bodies are mixed with rocks, boulders, and stones (NPS 2019). Per the United States Department of Agriculture Natural Resources Conservation Service web soil survey mapping tool, the soil composition for the project area is provided in the table below (USDA 2025).

TABLE 2. SOIL GROUPS WITHIN PROJECT AREA

| Soil Group      | Map Units Included                                                                                                                     | Total Acres | % of Soil Area (91.5 ac) |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------|
| Sandy Soils     | Buncombe loamy fine sand (Ba, Bfs), Madison sandy clay loam (MiF2), Pacolet sandy clay loam (PgD2, PgE2), Toccoa fine sandy loam (ToA) | 26.6        | 29.1%                    |
| Loamy Soils     | Chewacla silt loam (Cd, Cfs), Congaree (Ce, Cus), Wehadkee silt loam (Wa)                                                              | 38.9        | 42.5%                    |
| Clayey Soils    | Cecil clay loam (CaD3), Gwinnett clay loam (GeE2), Lloyd clay loam (LfC2)                                                              | 7.8         | 8.5%                     |
| Complex / Mixed | Ashlar-Rion complex (LeC2), Pacolet-Saw complex (PsF), Rion and Bethlehem soils (RNF)                                                  | 17.8        | 19.5%                    |

Overall, the east side of the project area shows a more complex mix with several eroded or sloped units like Pacolet and Rion series. Loamy soils make up the largest share (42.5%) of the total soil area, offering good productivity and moisture balance. Sandy soils remain significant at 29.1%, indicating a need for erosion control and nutrient management on these lands. Clayey and complex soils together account for about 28%, often requiring tailored conservation strategies due to erosion or drainage concerns. In addition, a number of the soil types identified have steep slopes (up to 45 percent) and are identified as moderately eroded (USDA 2025). The topography of the project area ranges from roughly 900 feet to 1080 feet in elevation. Upland soils are located on steep slopes and are highly erodable, shallow, and rocky (NPS 2009). Bottomland soils are highly erodable, and uncontrolled exposure of these soils often results in attendant sediment and siltation in the Chattahoochee River.

Primary threats to soils include erosion, compaction, visitor-created trails, and ongoing and increasing development (NPS 2009). Soil erosion is compounded with increased visitor use on unsustainable trail alignment where trails follow steep slopes. Visitor-created social trails also reduce vegetative cover and, in effect, reduce soil stability and increase soil erosion and compaction (NPS 2017). Soil erosion due to visitor-created trails is especially evident in steeper areas. Visitor-created trails have proliferated as hikers venture “off-trail” to explore, take photographs, and/or engage in

other off-trail activities. Trail braiding and widening often occur in spot-locations as trail users avoid wet, muddy, rutted, or rocky areas on trails, compacting and eroding soils next to trails. Soil erosion near waterbodies results in further adverse impacts on aquatic life and water quality (NPS 2009). Development contributes to the creation of visitor-created trails from adjoining residential areas and increases runoff of pollutants into the park which can affect the soil chemistry (NPS 2009).

Past and future development in the project area include utility line expansion and maintenance projects, such as the forthcoming AGL pipeline to be analyzed under a separate compliance pathway. These types of development are expected to continue into the future as the southeast continues to grow. These past and future development projects will continue to adversely impact soils through erosion caused by staging and access.

### **Effects of the Proposed Action**

Under the proposed action, the construction of new facilities and trails would result in permanent adverse impacts to approximately 3.8 acres of soil. On the east side of the project area, development would occur primarily on minimally disturbed loamy soils, while the west side would see activity on heavily disturbed soils that are a mix of sandy and loamy soils. Although most of the affected areas would remain natural and permeable, a small portion—less than 0.05 acres—would be paved, beneath the new pavilion. This paved area would experience reduced nutrient availability and possible changes in soil pH. Minor increases in surface runoff could occur near this structure, but such effects are expected to be minimal due to the pavilion's limited size.

The proposed action also includes two miles of new trails, which would require soil disturbance and compaction. The majority of these trails would be up to 4 feet in width, and the 0.6 mile accessible section of trail would be up to 8 feet in width, each with a two-foot buffer on either side, consistent with the specifications in the park's TMP. These activities would lead to a permanent reduction in soil productivity along the trails. Additionally, construction-related work would temporarily disturb less than 0.08 acres of soil beyond the main development footprint.

Some beneficial effects are also expected. On the east side, the removal of an old barn would allow about 0.05 acre to return to a natural condition. A new gathering area would be constructed where a house currently stands on already disturbed and compacted soil, resulting in negligible additional impact. The compliance for demolishing the unused buildings would be addressed in a separate compliance effort. Further, restoration of a loamy fine sand meadow with native topsoil and plantings would help control erosion and enrich the soil. New trails would be designed using natural materials and structural features, such as edging and fencing, to prevent trail braiding and unauthorized use on sensitive areas like banks. The trails would follow the “half-rule” design standard (i.e., the trail slope is no more than half the side slope), which has been shown to reduce erosion risks (IMBA 2004). Adaptive management techniques—such as installing split-rail fencing or modifying trail borders—would be employed if needed to direct visitor use and protect the surrounding soils.

However, with new trail infrastructure comes the likelihood of increased visitation, which may result in long-term soil compaction and trail widening. During construction, some areas could experience topsoil loss up to 6 to 8 inches as trail benches are created, with displaced soil cast downslope, potentially contributing to erosion. Increased soil disturbance during construction could also affect water quality, aquatic life, and encourage the spread of invasive species.

To mitigate these potential impacts, several best management practices and mitigation strategies described in Chapter 2 of the plan would be implemented. These include using USDA Natural Resources Conservation Service (NRCS) soil survey data, conducting detailed site evaluations,

rehabilitating trails, improving signage, and establishing clear trail borders. Park staff would also monitor trail conditions and address social trails, as outlined in the park's TMP, to prevent further soil degradation from visitor-created paths.

In total, when accounting for the acreage of restored trails, the proposed action would result in adverse impacts to approximately 3.8 acres of soils. Best management practices would be implemented to reduce adverse impacts to soils from these actions. Therefore, the actions proposed under the proposed action would not be expected to impact the long-term viability of soils in the park. When combined with past, present, and reasonably foreseeable future actions, the actions under the proposed action are expected to have negligible impacts to soils. The new facilities and trails would provide more structure for visitors to access the area, thereby reducing impacts to soils.

## **Conclusion**

Under the current management, impacts on soils would remain the same as described in the current and expected future conditions section. Actions proposed would result in adverse impacts to up to five acres of undisturbed soils. Construction of the new facilities would have minor short-term impacts during construction and minor long-term impacts on the soils within the project area. Overall, intentional facility placement and construction would help concentrate use and reduce soil erosion. With the implementation of best management practices and trail construction guidelines from the park's trails management plan, the impacts to soils would be minor because topsoils would be salvaged, soils would be stabilized during and after construction, and soil conditions would be considered when determining the final layout of a trail.

## **ARCHEOLOGICAL RESOURCES**

### **Current and Expected Future Conditions of Resource if No Action is Taken**

Archeological resources are considered a fundamental part of Chattahoochee River National Recreation Area, as noted in the park's Foundation Document (NPS 2017). These resources attest to millennia of cultural continuity and change and the adaptations of various peoples to the landscape, including the area's earliest human occupants to the Muscogee (Creek) and Cherokee Nations and European-descended farmers and industrialists. Known sites are abundant throughout the river corridor and include ceramic scatters, lithic scatters, and historic artifact scatters, as well as rock shelters, village sites, Civil War-era landscape features, and historic spring houses. Most of the park has not been systematically surveyed or inventoried for archeological resources, and precise information about the location, characteristics, and significance of most known archeological resources is incomplete. Approximately 200 known archeological sites exist, and likely many more, remain undiscovered as of June 2025. In the Orrs Ferry Unit, 10 distinct cultural resources surveys have been completed within the east and west side of the unit.

In the 1980s two broad overarching surveys were completed and many of the sites that would be evaluated later were initially located during these surveys. In the late 1990s more surveys were completed around the unit to permit development. While the sites located were not directly within the current unit, they provided a broad picture of land use within the vicinity and along the Chattahoochee River. Utility and highway development provided several more Phase I surveys of the unit. Several important sites were investigated and evaluated for National Register of Historic Places eligibility.

Structures are present on both sides of the river. Property records, aerial imagery, and deeds provide dates for the properties. On the east side of the unit, in Gwinnett County, there are two non-historic

structures, a house constructed in 1973 and a barn (first identified in an 1978 aerial image). The Forsyth County, or west side of the unit, has several modern manufactured homes, with the earliest dating to the 1980s. Numerous sheds and outbuildings constructed by the previous property owners (1973 to 2024) relate to storage. An open-air wood building for gutting and packing fish caught in the ponds is extant from the mid-1990s.

Visitor-caused impacts, including vandalism, looting, the creation of unauthorized social trails and development inside and outside of the park (including private inholdings) have impacted the Orrs Ferry Unit's archeological resources. Archeological sites in the unit have been excavated by previous landowners and visitors, leading to looting in these locations. These illegal activities have diminished the integrity of some of the sites.

Past actions relevant to the current project include multiple construction projects that have moved the earth in the Orrs Ferry Unit and diminished the integrity of known archeological sites in the area. These include the installation of an Atlanta Gas Light (AGL) natural gas pipeline, the development of a sand harvesting operation, and the establishment of a 20-acre trout farm hatchery, which resulted in the excavation of five large oblong ponds. The construction of the Georgia State Highway 20 bridge, as well as an earlier widening of the highway, also caused ground disturbance impacts and damage to known sites throughout near the highway along the boundary of the Orrs Ferry Unit.

Projected environmental trends suggest the potential for long-term adverse impacts on archeological resources. These resources are susceptible to multiple stressors, including natural forces such as wind and water erosion, as well as impacts from visitor use. Extreme weather events can result in floods. Should these events increase in frequency and severity, adverse effects on archeological resources could also increase, as more precipitation and/or heavier precipitation could exacerbate archeological site erosion from overflow (Rockman et al. 2016).

The actions described under the current management, would not alter, either beneficially or adversely, the current impacts on the archeological resources in the Orrs Ferry Unit. Law enforcement and resource management staff would continue to monitor archeological resources under current management to ensure the resources' protection and preservation. While AGL is expected to construct an additional pipeline in Orrs Ferry, the utility provider would conduct surveys to provide the necessary information to protect or mitigate damage to archeological resources in the project's area of potential effect. All archeological resources would remain preserved *in situ* (in place) throughout the Orrs Ferry unit to the extent possible. No management strategies would be implemented, and no interpretation of these resources would be provided.

### **Effects of the Proposed Action**

Under the proposed action, changes to existing infrastructure would be made throughout the Orrs Ferry Unit. Ten outdated, non-historic structures would be demolished across both the east and the west side. Structures slated for removal include the house and the barn in Orrs Ferry East. A new parking area and a new open-air pavilion would be constructed on the west side. Building activities associated with developing these new structures would likely not impact archeological sites. The one known site in the Orrs Ferry unit is in the vicinity of AGL's new gas pipeline. The utility provider would conduct surveys prior to beginning their work and the information collected from these surveys would be shared with NPS staff. Should mitigations for this site be needed, AGL would engage in the 4-step Section 106 process.

Other impacts associated with implementing the proposed action would be more beneficial. Interpretation of archeological resources would increase in both the east side and the west side

under the proposed action. New initiatives would include the addition of educational programming and the installation of new signs in the east and the installation of new exhibits in the refurbished fish shack in the west. Providing more education about archeological resources could help reduce looting as visitors experience increased sense of ownership or social pressure to respect and protect these resources.

The impacts from past, present, and reasonably foreseeable future actions are described in “Current and Expected Future Condition of Archeological Resources if No Action is Taken.” Under the proposed action, surveys would be conducted to ensure that the construction of new structures in Orrs Ferry West would avoid causing adverse impacts on archeological resources to the extent possible. The demolition of older structures in Orrs Ferry East would avoid archeological resources. Archeological resources would also be monitored to ensure their condition does not degrade. Additional interpretation of archeological resources would occur in both the east and the west sides of Orrs Ferry. When the impacts of the proposed action are combined with the impacts of past, present, and reasonably foreseeable actions, the overall combined impacts on archeological resources would be minimal.

## **Conclusion**

Under current management, impacts on archeological resources would remain the same as described in the current and expected future conditions section. The actions proposed, including the construction of new infrastructure, would produce ground disturbance activities that could damage or destroy archeological resources. Surveys would be conducted to ensure that archeological resources are avoided during this work to the extent possible. Educational programming would also be developed, and new signs would be installed in the east, along with new exhibits in the west, to provide interpretive information on archeological resources. Overall, the use of surveys to inform construction work and the development of additional interpretation would help ensure that impacts to archeological resources under the proposed action would be minor.

## **APPENDIX B: IMPACT TOPICS DISMISSED FROM DETAILED ANALYSIS**

The following impact topics are not analyzed because they do not exist in the project area; would not be affected by the proposal or the likelihood of impacts are not reasonably expected; through the application of mitigation measures, there would be no potential for significant effects; and/or comments from the public or agencies did not warrant retaining these topics for analysis.

### **SOCIOECONOMICS**

Based on an evaluation of preliminary impacts tied to the socioeconomic environment, visitor populations, and the regional economy, it was determined that this impact topic could be dismissed from further analysis. No noticeable difference would occur in socioeconomic effects between Alternative A and Alternative B, and further analysis of this topic would not influence the selection of a preferred alternative.

In 2023, 3.2 million park visits to Chattahoochee National Recreation Area occurred, indicating the park as a whole is a substantial recreational amenity in the area. However, visitor use levels to the greater Atlanta region and demographics of the area would not be substantively changed from current conditions given the changes to Orrs Ferry outlined in the plan. The improvements under Alternative B would likely lead to some marginal increase in park visitation, but that change would be small enough that it would be difficult to discern among the year-to-year fluctuations in visitation. Should use levels approach visitor capacities or thresholds in the future, management strategies could be implemented to redistribute use across space and time, although these actions would be unlikely to appreciably affect overall visitor use levels or demographics.

Visitors to Chattahoochee as a whole spent around \$161 million in 2023, supporting around 2,150 jobs in the local economy. This indicates that visitors spend approximately \$50 per visit, and many livelihoods are supported by park visitation. While this spending is a valuable return on the roughly \$4 million invested in the park given its base budget in 2023 (roughly \$40 returned for every \$1 spent), it is a proverbial ‘drop in the bucket’ when compared to the economy of Gwinnet County, which had a gross domestic product of \$68.1 billion in 2023 (roughly 0.2%). Implementation of Alternative B would provide a slight marginal beneficial impact to the economy of the area due to increases in potential employment opportunities associated with contracted construction and maintenance. Any increase in workforce and revenue, however, would be temporary, lasting only as long as phased project work. Any increase would also be miniscule in comparison to the size of the greater Atlanta area’s economy. Because the impacts to the socioeconomic environment would be negligible and not measurable, this topic has been dismissed from further consideration.

### **AIR QUALITY**

The Clean Air Act of 1963 was established to promote the public health and welfare by protecting and enhancing the nation’s air quality. National Park Service Management Policies 2006 directs parks to seek the best air quality possible to “preserve natural resources and systems; preserve cultural resources; and sustain visitor enjoyment, human health, and scenic vistas.” The development of a site management plan at Orrs Ferry would not contribute to long-term impacts on air quality at the park. Construction activities, including operating equipment and hauling materials, could result in temporary increases in vehicle exhaust and emissions as well as inhalable particulate matter. In various isolated areas, construction activities would have localized effects on air quality. However, the impact to air quality would be rapidly dissipated through air movement, and the effects would be

minimal and localized. In addition, the park is in a non-attainment zone, so the impacts from this plan would be minimal. Therefore, air quality was dismissed as an impact topic.

## **WATER QUALITY**

The Clean Water Act of 1972 was established to regulate discharges of pollutants into US waters and regulate quality standards for surface waters. The Metropolitan River Protection Act of 1973 established a buffer that protects a 48-miles stretch of the Chattahoochee River between Buford Dam and Peachtree Creek. National Park Service Management Policies 2006 requires protection of water quality consistent with the Clean Water Act. The development of a site plan in the Orrs Ferry Unit would not contribute to long-term impacts on water quality at the park. New infrastructure, including trails, gathering spaces, and a parking lot, would not compete with or dominate hydrologic activity. The impacts of building the new infrastructure would be so minor that they would be negligible when compared to the greater impacts of other projects outside of this trails plan. Erosion control methods would be used during ground disturbing construction, which would minimize the amount of sediment that reaches the Chattahoochee River and its tributaries. Impacts to wetlands are assessed separately. Similarly, social trailing could impact water quality, which is assessed separately under the “Soils” impact topic. The Crayfish Creek restoration efforts are covered under a separate plan. While water quality could be affected by stormwater runoff because of parking lot expansion, where contaminants such as grease, oil, and antifreeze could be flushed into waterways by rainfall events, best management practices would reduce overall impacts to stormwater so that the remaining impacts are minor, resulting in a negligible impact. Therefore, water quality was dismissed as an impact topic.

## **LIGHTSCAPES**

In accordance with NPS Management Policies 2006, the National Park Service strives to preserve natural ambient lightscapes, which are natural resources and values that exist in the absence of human-caused light. Park managers are also committed to following the more rigorous NPS Sustainable Outdoor Lighting Principles. Park staff strive to limit the use of artificial outdoor lighting to what is necessary for building security and human safety. Park staff also strive to ensure that all outdoor lighting is shielded to the maximum extent possible to keep light on the intended subject and out of the night sky. The proposed development under this plan would include light fixtures. All new lights and fixtures would direct light at intended targets, would not overlight the area, and would be shielded to prevent light from scattering beyond horizontal lines of sight. The overall impact of these local, short-term night illuminations would have a minor adverse effect on the night sky. As a result, lightscape was dismissed from further analysis.

## **SOUNDSCAPES**

National Park Service Management Policies 2006 and Director’s Order 47: Soundscape Preservation and Noise states that the preservation of natural soundscapes associated with national park units is an important component of the NPS mission. The development of a site management plan at Orrs Ferry would not contribute to long-term impacts on the acoustic environment and soundscapes at the park for several reasons. First, while motorized use may increase at the new parking lot, the impact to soundscape would be concentrated at the parking lot and would not permeate into the recreational areas. Second, the current soundscape already has numerous human influences, such as the noise from Highway 20. Third, new infrastructure construction impacts such as human-caused sounds from equipment, vehicular traffic, and trail crews, would be localized and of short duration, typically less than a couple weeks in any given location. After completion of construction, visitor use on trails and in gathering areas would begin. The presence of visitors would have a negligible impact

on natural soundscapes, as the sound of voices rarely carries for any significant distance. The park's location in a growing urban area makes it difficult to manage soundscape. Therefore, acoustic environment and soundscapes was dismissed as an impact topic.

## SPECIES OF CONCERN

A variety of sources were referenced to determine the presence of threatened and endangered species within the project area, including US Fish and Wildlife (USFWS) Services Information for Planning and Consultation (USFWS 2025) and the Chattahoochee River NRA NPS species list (NPS 2025). The species considered in this plan are provided in Table 3 below.

**TABLE 3. FEDERALLY ENDANGERED, THREATENED, AND CANDIDATE SPECIES THAT MAY OCCUR IN CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA ORRS FERRY (AS OF FEBRUARY 2025)**

| Common Name       | Scientific Name             | Federal Status          | Potential for Species or Habitat in Planning Area | Proposed Designated Critical Habitat Present in Planning Area |
|-------------------|-----------------------------|-------------------------|---------------------------------------------------|---------------------------------------------------------------|
| Tricolored Bat    | <i>Perimyotis subflavus</i> | Proposed Endangered     | Yes                                               | No                                                            |
| Whooping Crane    | <i>Grus americana</i>       | Experimental Population | No                                                | No                                                            |
| Monarch Butterfly | <i>Danaus plexippus</i>     | Candidate               | No                                                | No                                                            |

At the time of this writing, the tricolored bat has not been observed, and no suitable roosting habitat has been identified within the project area. The whooping crane has been observed within the park, but there is no whooping crane habitat within the park. While the Monarch butterfly is periodically observed within the park, but its host plant milkweed is not within the project area; the species is therefore dismissed. Over the long term, the project area would become more pollinator friendly, especially in the restored meadow. Future surveying would occur before construction, large trees would not be removed, and construction would not occur during species-specific sensitive times. As a result, all federally listed species were dismissed from further analysis.

## VEGETATION

Because the scale of vegetation disturbance would be limited, temporary in nature, and actively mitigated, no significant or long-term adverse impacts to vegetation are anticipated. The proposed project footprint has been carefully sited to avoid impacts to high-quality native plant communities and areas with sensitive or rare plant species. The affected areas consist primarily of previously disturbed or developed lands, such as old roadbeds, maintained clearings, and edges of secondary growth forest. Where trail corridors pass through wooded areas, minimal clearing of understory vegetation would be required, and no tree removal is anticipated beyond selective pruning for visitor safety and trail clearance. Additionally, the park would implement best management practices during construction, including site-specific vegetation protection measures, such as installing protective fencing around adjacent vegetation, minimizing soil disturbance, and promptly reseeding disturbed areas with native, non-invasive species. The proposed action also includes habitat restoration

components—such as invasive species removal and replanting with native vegetation—that would result in a net benefit to the ecological condition of the site over time. Lastly, restoring the meadow would be a positive impact to vegetation. Therefore, vegetation was dismissed as an impact topic.

## **WILDLIFE**

According to NPS Management Policies 2006, the National Park Service strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of animals. The project area includes disturbed and edge habitats, such as open clearings, utility corridors, and secondary growth woodlands adjacent to existing access roads. These areas provide general habitat for common urban and suburban wildlife species (e.g., white-tailed deer, raccoons, squirrels, and common bird species), but do not contain critical habitat or known nesting or denning sites for sensitive or rare wildlife. Construction activities may result in temporary disturbance to wildlife due to increased noise and human presence. However, these effects are expected to be localized and short-term, with wildlife likely to avoid active construction areas and return post-construction. No long-term habitat fragmentation or significant barriers to wildlife movement would occur, as trails would be relatively narrow and sited to avoid key habitat features. In addition, the park would apply best management practices to minimize impacts to wildlife, including limiting key vegetation removal, avoiding construction during peak breeding seasons where feasible, and restoring disturbed soils with native plantings to maintain ecological function. Because the project would not result in the loss of important habitat, does not intersect known sensitive wildlife areas, and incorporates measures to reduce short-term impacts, no significant effects to wildlife are anticipated. Therefore, wildlife was dismissed as an impact topic.

## **CULTURAL LANDSCAPES**

NPS Director's Order #28: Cultural Resource Management defines cultural landscapes as “settings that [human beings] have created in the natural world. . . [They] are intertwined patterns of things both natural and constructed.” Multiple cultural landscapes have been designated at Chattahoochee River National Recreation Area, including the Allenbrook House and associated mill ruins, Hyde Farm, and Sope Creek paper mill ruins. The Orrs Ferry Unit was evaluated for the presence of cultural landscapes, and it was determined that none exist in this area.

Several cultural landscape characteristics, including archeological resources, buildings and structures, and natural systems and features exist in the project area. As documented in chapter 3, impacts to the Orrs Ferry Unit's archeological resources are analyzed in this plan. Two structures, a house and a barn, exist in the east unit. Both structures have been evaluated for their eligibility for inclusion in the National Register of Historic Places and both were determined to be ineligible. Removing these two structures under the proposed action would not be detrimental to the integrity of the larger landscape. While some vegetation would be removed to construct new infrastructure and trails under the proposed action, these impacts would be small in scale. Care would be used during siting to ensure that culturally significant vegetation is not impacted. Because the project area's cultural landscape characteristics would incur only negligible impacts due to the proposed actions, cultural landscapes were dismissed from further analysis.

## **APPENDIX C: INDICATORS AND THRESHOLDS**

Monitoring at Chattahoochee River National Recreation Area is accomplished with “indicators” and “thresholds” identified in the park’s general management plan (GMP, 2009) and trails management plan (TMP, 2022). This Orrs Ferry Site Management Plan does not establish any new or additional indicators or thresholds. This appendix analyzes the previously identified indicators and their applicability to planning and management at Orrs Ferry and ultimately identifies some indicators as priorities for monitoring on a scale of high, medium, and low. Many previously identified indicators are not a priority at all for monitoring at Orrs Ferry.

### **DEFINITIONS**

Indicators are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed. In this way, indicators translate desired conditions into something that can be tracked over time to evaluate management’s effectiveness. Indicators help identify when a level of impact becomes cause for concern and when additional management action may be needed.

Thresholds represent the minimum acceptable condition for each indicator. Although defined as “minimally acceptable,” thresholds still represent acceptable conditions. Thresholds do not imply that no action would be taken before it is reached. Thresholds identify when conditions reach unacceptable levels and accordingly serve as a proverbial “line in the sand,” letting managers and the public know that corrective action must be taken to maintain acceptable conditions.

Together, indicators and thresholds provide park managers with a monitoring framework to ensure desired conditions for resources and visitor experiences are achieved and maintained over time. These are a critical component of the Visitor Use Management (VUM) framework described in Chapter 2.

### **BACKGROUND**

The park’s GMP identified six issues or topics for indicators to monitor. For each topic, the plan included one or two indicators, associated “standards” (synonymous with thresholds), a few examples of how monitoring could occur, and several management strategies to correct conditions should they approach the standards.

The park’s TMP similarly identified five indicator topics, each with one or two indicators, associated thresholds, a rationale for selecting the indicator and threshold, a monitoring strategy, and several management strategies to correct conditions should they approach the standards.

In general, the indicator topics between the two plans are aligned. However, the trails management plan includes much greater detail in terms of why the indicator was selected, how it would be monitored, and what would be done should thresholds be approached. While the GMP’s indicators are still valid, in cases where the two plans have overlapping indicators, the TMP generally provides greater specificity and prescriptiveness, and is considered the priority for monitoring efforts. However, some of the GMP indicators may still be useful and should be given some prioritization for monitoring. Table 4 includes both plans’ indicator topics, indicators, thresholds or standards, and identifies priority indicators for monitoring at Orrs Ferry. If no priority designation is provided for an indicator, it is not relevant or of any priority to Orrs Ferry. The rationale for the monitoring priority is included below in the “Application of Indicators at Orrs Ferry” section below.

TABLE 4. EXISTING INDICATORS, THRESHOLDS OR STANDARDS, AND MONITORING PRIORITY.

| Indicator Topic                              | GMP Indicators                                                                                                                                                                                             | GMP Standards                                                                                                                                                                         | TMP Indicators                                                                                                                                    | TMP Thresholds                                                                                                                | Priority for Monitoring at Orrs Ferry                                                                                                            |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Parking                                      | 1. Amount of time (duration) parking lots are full<br>2. Number of times (frequency) parking lots are full                                                                                                 | 1. A parking lot is full f<br>2. A parking lot is full twice a week                                                                                                                   | Number of days when incidents of unauthorized parking occur                                                                                       | Incidents of unauthorized parking occur on no more than 10 % of days in a given month per lot.                                | Medium: Number of days when incidents of unauthorized parking occur (TMP)                                                                        |
| Unauthorized Trails                          | 1. Total length of all una<br><br>2. Number of unauthorized trails branching off from designated trail system                                                                                              | 1. Unauthorized trails do not<br><br>2. Two intersections within 100 feet of designated trail                                                                                         | Number of social trails                                                                                                                           | No more than two social trails intersecting any half-mile stretch of designated trail                                         | High: Number of social trails (TMP)                                                                                                              |
| Damage to Cultural Resources                 | 1. Number of unauthorized trails leading to, through, and from site<br>2. General damage or defacement of historic structures, ruins, and exposed surface archeological sites not caused by natural forces | 1. Two unauthorized trails leading to a resource site<br>2. No artifacts, ruins and historic structures, or exposed surface archeological sites with evidence of damage or defacement | Number of incidences of damage (i.e., vandalism, graffiti) at cultural resources (i.e., historic structures, archeological ruins, historic sites) | No more than two incidents of damage to cultural resources per year, unless specifically stated for individual sites or areas | High: Number of incidences of damage at cultural resources (TMP)<br>High: Number of unauthorized trails leading to, through, and from site (GMP) |
| Visitor Conflicts/Visitor Experience on Land | 1. Number of reported visitor incidents on land                                                                                                                                                            | 1. Three reported incidents per quarter in a land unit<br>2. Zero accidents in a land unit                                                                                            | 1. Number of visitor complaints for bicycle/pedestrian conflicts                                                                                  | 1. The monthly number of visitor complaints of bicycle/pedestrian conflicts increases no                                      | Low: Number of visitor complaints for conflicts with dogs (TMP)                                                                                  |

|                                 |                                                                                                   |                                                                                              |                                                                  |                                                                                                                                                                                                                              |                                                                                    |
|---------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                 | 2. Number of reported visitor accidents on land                                                   |                                                                                              | 2. Number of visitor complaints for conflicts with dogs          | more than 25% compared to the baseline 12-month average<br>2. The monthly number of visitor complaints about user conflicts with dogs increases no more than 25% compared to the baseline 12-month average                   |                                                                                    |
| Trail Condition                 | N/A                                                                                               | N/A                                                                                          | 1. Change in trail width<br>2. Presence of cross-slope on trails | 1. Trail width increases no more than 25% from baseline conditions and does not exceed maximum trail width defined for its trail class and zone<br>2. At least 95% of surveyed trails have cross-slope and positive drainage | High: Change in trail width (TMP)<br>High: Presence of cross-slope on trails (TMP) |
| River Access                    | Length of time watercraft user must wait from arrival at launch until launch is available for use | Waiting times do not exceed 10 minutes more than 10% of the time.                            | N/A                                                              | N/A                                                                                                                                                                                                                          | None                                                                               |
| Visitor Experience on the River | 1. Number of reported visitor incidents on the river.                                             | 1. Three reported incidents per quarter in a land unit.<br>2. Zero accidents in a land unit. | N/A                                                              | N/A                                                                                                                                                                                                                          | None                                                                               |

|  |                                                            |  |  |  |  |
|--|------------------------------------------------------------|--|--|--|--|
|  | 2. Number of<br>reported visitor<br>accidents on the river |  |  |  |  |
|--|------------------------------------------------------------|--|--|--|--|

## **APPLICATION OF INDICATORS AT ORRS FERRY**

This section describes the rationale for the relative priority levels given to each indicator in Table 4. All these indicators apply under both alternatives as they were included in previous planning, however, some may be more relevant under Alternative B. The following sub-sections describe how the indicators under each indicator topic area apply to Orrs Ferry and why those indicators are of high, medium, or low priority.

### **Parking**

Incidents of unauthorized parking is an indicator of medium importance to monitor in the immediate future, and it may become increasingly important as use levels increases. Under Alternative A, parking only occurs on the east side. The unauthorized parking that does occur on the east side is outside of NPS jurisdiction along Georgia Highway 20. While unauthorized parking is known to occur there on occasion, there is not much NPS can do about it beyond education around trip planning.

Under Alternative B, parking would occur on both sides, with no change to the east side and a new 45-stall parking area on the west side. The new parking on the west side should be sufficiently sized to avoid the need for unauthorized parking at least in the immediate future. However, parking demand is not known since recreational opportunities on the west side are limited, and demand may increase rapidly, potentially pulling use from the east side, making this indicator more relevant to monitor as unauthorized parking begins to occur.

### **Unauthorized Trails**

The number of social trails is a highly important indicator to monitor at Orrs Ferry. While there are some unauthorized social trails in the unit currently, they are not as prevalent here as in other units where there are well-developed networks. Under Alternative B, as more designated trails are constructed, the opportunity for more unauthorized trails would increase.

Perhaps the greatest impetus for social trailing in the Orrs Ferry unit would be the “call of the river” as visitors and anglers seek spots along the river. This is a difficult impetus to control, as acknowledged in the TMP. However, under Alternative B, river access points for both viewing and angling would be constructed. Given this infrastructure, the considerable effort that has gone into restoration of the Crayfish Creek area, and the limited extent of social trailing currently, monitoring of this indicator to prevent the proliferation of social trails before they become well established is a high priority.

### **Damage to Cultural Resources**

The number of incidences of damage at cultural resources and the number of unauthorized trails leading to, through, and from these sites are both a highly important indicators to monitor at Orrs Ferry. Under Alternative B, more people in the area could threaten the condition of historic and archeological resources as it increases the potential for vandalism, graffiti, theft, and similar forms of intentional damage and defacement. Alternative B does make efforts to avoid providing access directly to the most sensitive sites, reducing the potential threat.

The threshold for the incidences of damage indicator is “No more than two incidents of damage to cultural resources per year, unless specifically stated for individual sites or areas.” For the Orrs Ferry unit, park management would be triggered to discuss potential changes in management approach by

any incident of damage in Orrs Ferry. The number of unauthorized trails lead to, through, and from sites is perhaps an even earlier warning sign of potential problems. Potential responses might include closing off sensitive areas within Orrs Ferry, removing trails that are too close, or altering interpretive approaches. Notably, improved interpretation that highlights sites as a resource worth protecting may be considered.

### **Visitor Conflicts/Visitor Experience on Land**

The number of visitor complaints for conflicts with dogs is an indicator of low importance to monitor at Orrs Ferry. While dogs are allowed in Orrs Ferry, it is not likely that dog-walking would be a significant use under either alternative given the focus on fishing and interpretation and education. Monitoring of these indicators is more likely to be focused on other units of the park. The number of visitor complaints for bicycle/pedestrian conflicts indicator is not relevant in Orrs Ferry as no biking is allowed under either alternative.

### **Trail Condition**

The indicators related to trail width and cross-slope are highly important indicators to monitor at Orrs Ferry. Under Alternative A, a trail will be constructed on the east bank of the river. Under Alternative B, a more extensive trail system would be constructed on both sides of the river. Both areas are relatively flat, and in some areas, wet. Maintaining cross-slope so the trails drain properly is important and would contribute to maintaining trails at the prescribed width. Maintaining trails in good condition contributes to resource protection as trail users are more likely to remain along the designated trail corridor when they are dry. Wet trails can force users to make their way around muddy or wet sections—impacting trailside vegetation.

### **River Access**

The length of time watercraft users wait to launch boats is not relevant at Orrs Ferry under either alternative as neither includes a boat launch facility.

### **Visitor Experience on the River**

The two indicators related to the number of reported visitor incidents and accidents on the river is not relevant at Orrs Ferry under either alternative as neither includes a boat launch facility and the plan is generally not focused on river use.

## **APPENDIX D: VISITOR CAPACITY**

### **INTRODUCTION**

Visitor capacity is a component of visitor use management defined as “the maximum amount and types of visitor use that an area can accommodate while sustaining desired resource conditions and visitor experiences consistent with the purpose for which the area was established” (IVUMC 2019). By identifying and implementing visitor capacities, the National Park Service can help ensure that resources are protected and that visitors have the opportunity for a range of meaningful and enjoyable experiences.

In addition to being an effective management tool, identifying visitor capacities addresses the legal requirement of the National Parks and Recreation Act of 1978 to identify and implement commitments for visitor capacities for all areas of a park unit (1978 NPRA; 54 USC 100502). Orrs Ferry and other units within Chattahoochee River National Recreation Area have plans that address these requirements. The trails management plan includes a capacity analysis for the trails described in that plan at Orrs Ferry (NPS 2022). However, the National Park Service has recently acquired new parcels in the Orrs Ferry Unit, and this site management plan re-envisioned the future of Orrs Ferry including changes to the zoning and desired conditions. Consequently, this plan outlines much more facility development on both sides of the river than were identified in the TMP. Therefore, a new visitor capacity analysis for the portions of Orrs Ferry affected by this plan is needed. This analysis replaces the visitor capacity analysis in the TMP for the northern portion of Orrs Ferry.

Visitor capacities are management decisions based on the best available data and other factors, including professional judgment, staff experience and expertise, lessons learned, and public input. Visitor capacity identifications, like other management decisions, provide direction. Visitor capacities can be adjusted with appropriate environmental compliance as new information becomes available through further study, analysis, and monitoring.

### **PROCESS**

This analysis is based on the principles outlined in the Interagency Visitor Use Management Council’s (IVUMC) Visitor Use Management Framework and Visitor Capacity Guidebook (IVUMC 2019). Both documents, along with additional background materials, are available on the council's website: [IVUMC Visitor Use Management](#). The analysis follows these four guidelines:

1. Determine the analysis area
2. Review existing direction and knowledge
3. Identify the key attribute
4. Establish visitor capacity

#### **Determine the Analysis Area**

To determine the analysis areas, the planning team considered the most meaningful way to understand the relationship between geography, existing and potential visitor use patterns, desired conditions, management areas, current and potential infrastructure, and the goals and objectives for the park’s planning and development.

Considering the desired conditions and zoning for Orrs Ferry, plans for management and development of the unit, visitor access, and potential developments on surrounding lands, the planning team elected to identify visitor capacities for the three analysis areas identified in the drawing below (Figure 8). This approach allows for a forward-looking evaluation of visitor capacity in relation to both existing conditions and anticipated changes in land use.

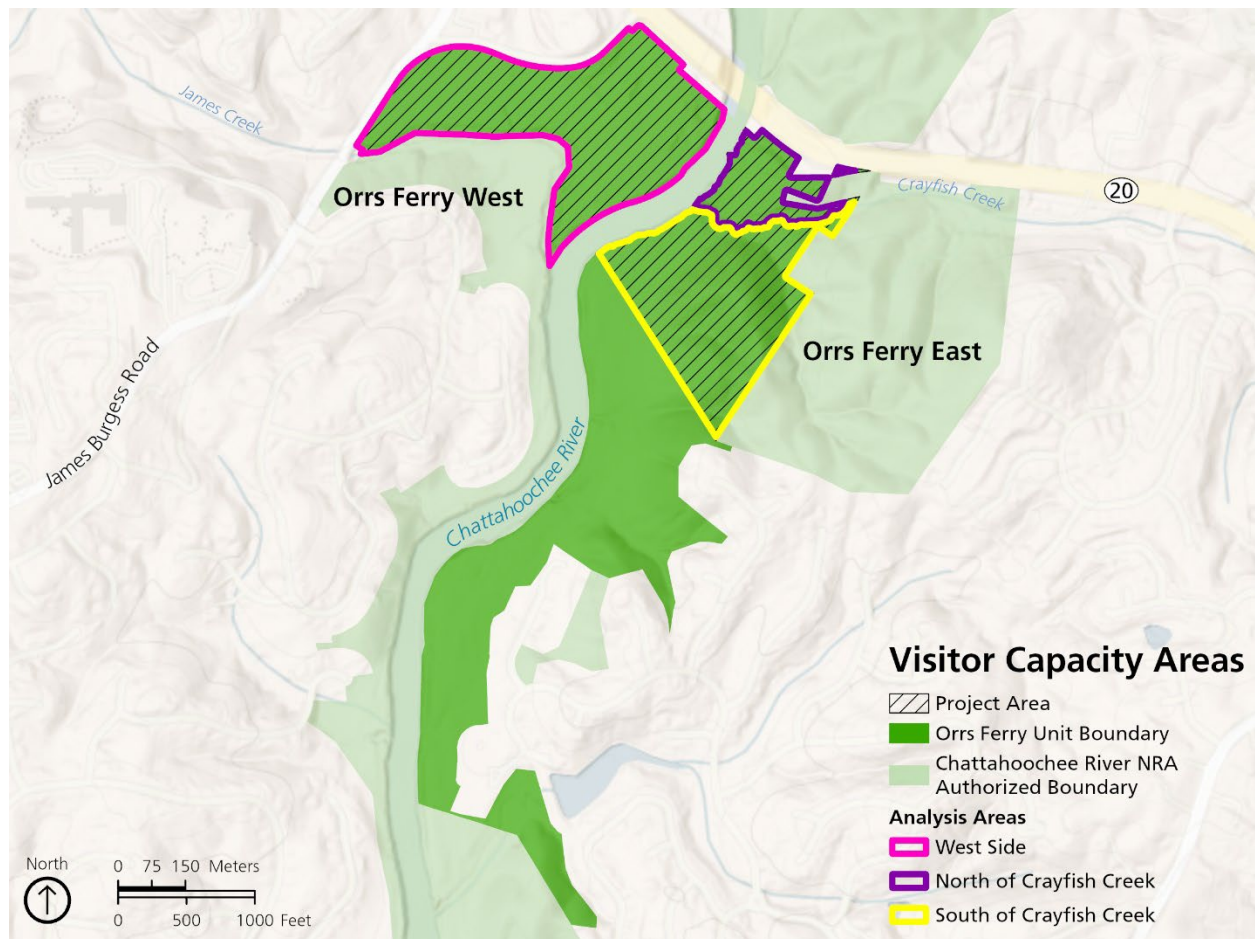


FIGURE 8. ANALYSIS AREAS FOR ORRS FERRY VISITOR CAPACITY

## Review Existing Direction and Knowledge

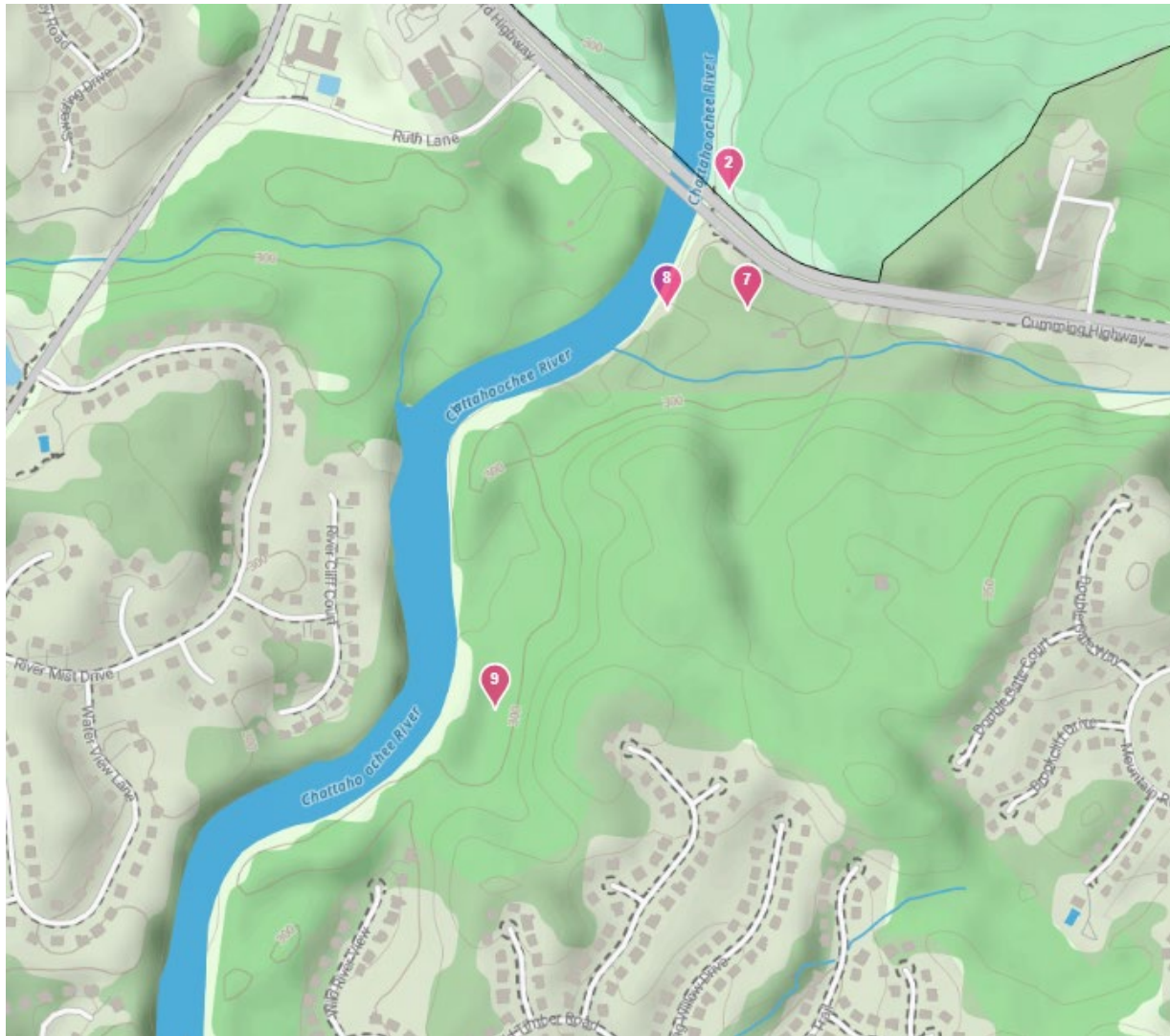
The existing direction and knowledge section of each analysis area reviews known information about the amount, type, timing, and distribution of visitor use that is specific to each analysis area, as well as key information about the desired conditions for the area, which are described in Chapter 2. The known information about the amount, type, timing, and distribution of visitor use comes principally from visitor use statistics as reported on the Integrated Resource Management Application at <https://irma.nps.gov/Stats/Reports/Park/CHAT>, trail counter data collected by park staff, and staff experience and expertise.

## Current Visitor Use Discussion

From 2010 through 2023, park-wide visitation has hovered around 3 to 3.5 million annual visits. Given visitor use patterns throughout the Chattahoochee River National Recreation Area, use levels

are expected to be slightly elevated from May through November, and use approximately 25% lower from December through April. Additionally, improvements that enhance the area's appeal and better connect it to neighboring areas such as formalized trail alignments, creek crossings, wayside exhibits, and gathering areas may contribute to an overall increase in visitation throughout the year.

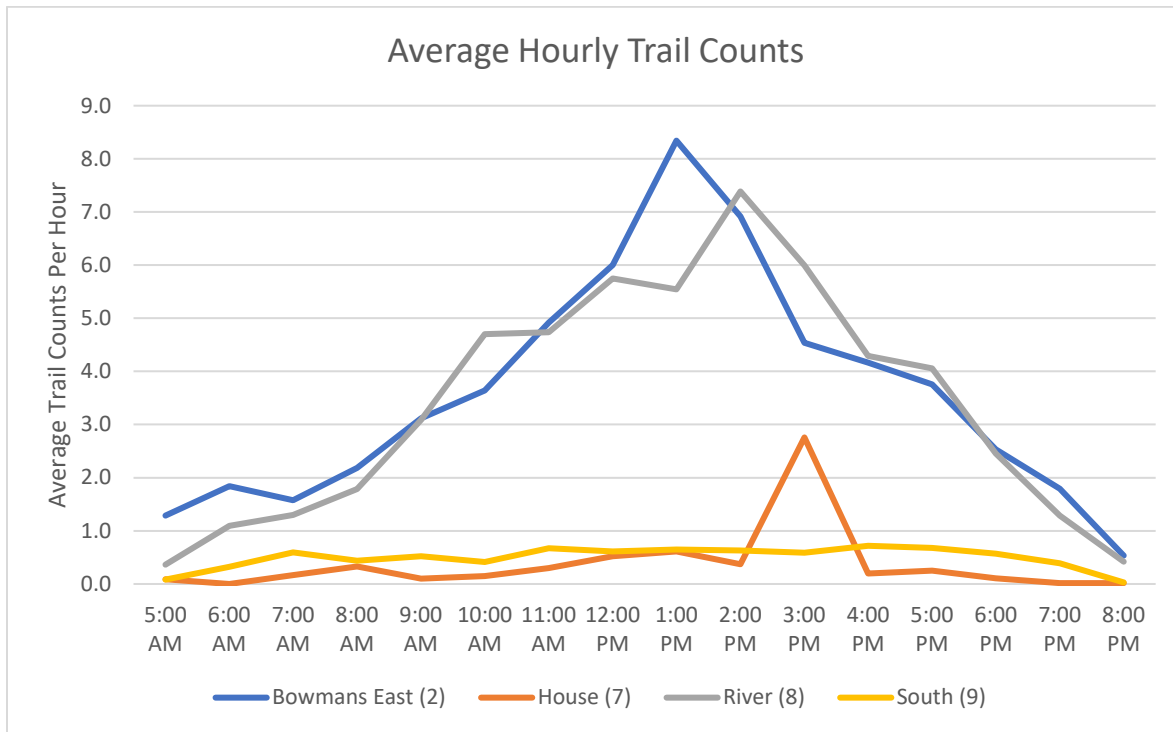
Orrs Ferry is currently one of the park's less visited units. In fact, Orrs Ferry visitation was historically assumed to be small enough that it does not factor into the park's visitor use counting procedures in effect since 2017. To address this gap in knowledge, four trail counters were installed in March 2024 and deployed through November of the same year. Their locations are shown in Figure 9. Three counters (7, 8, and 9) are located within the Orrs Ferry Unit. One additional trail counter (2) is located nearby in Bowmans Island East.



**FIGURE 9. COUNTERS IN AND CLOSEST TO ORRS FERRY**

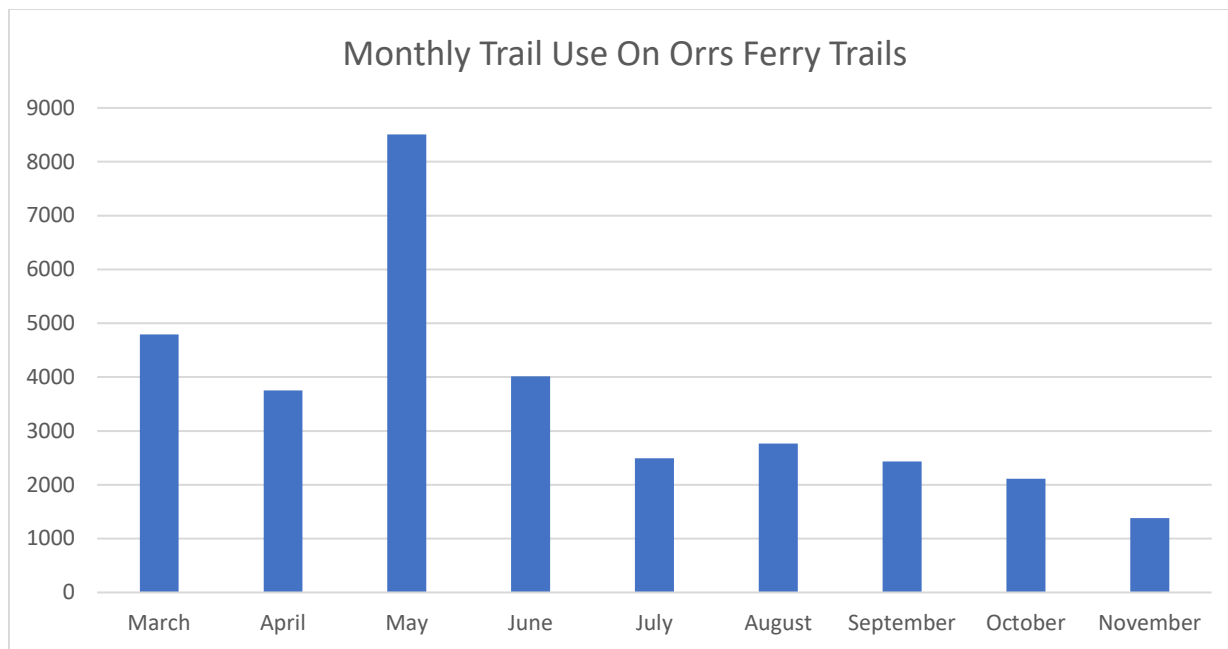
Average daily traffic at the Bowmans East counter (2) is 58, at the river (8) it is 55, at the south counter (9) it is 8, and at the house (7) it is 5. Visitation across all counters peaked mid-day between 11 a.m. and 3 p.m. (Figure 10). It should be noted that Counter 9 may not be capturing all visitors

passing through the area as there are several social trails that parallel each other that visitors could be using instead, so these numbers likely do not reflect all traffic through this area.



**FIGURE 10. AVERAGE HOURLY TRAIL COUNTS AT ORRS FERRY TRAIL COUNTERS**

Weekends accounted for nearly half of the trail use at Orrs Ferry, with Saturdays accounting for 21% of weekly visitation and Sundays accounting for 24% of weekly visitation. Weekend days were, on average, twice as busy as weekdays. It also seems that some of the counters, particularly those near the river and parking (counters 2 and 8), receive much more visitation on days after significant releases from the upstream dam. The spring months were the busiest on the Orrs Ferry trails, with total use on the four counters reaching over 8,000 for the month of May (Figure 11). This is slightly different than the parkwide trend, which tends to experience slightly elevated use during the summer months.



**FIGURE 11. MONTHLY TRAIL USE ON ORRS FERRY TRAILS (SUMS OF ALL 4 COUNTERS)**

While the trail counters deployed during 2024 do help address a gap in knowledge, it should be noted that upon implementation of the plan, the Orrs Ferry Unit would look much different than it does today. Additional access via a new parking lot, a fully developed and designed trail system, and attractive visitor destinations would all change the overall amount and distribution of visitation significantly (possibly by an order of magnitude). The timing of use may also shift.

### **Identify the Key Attribute**

The key attribute is the condition of concern, threshold, or issue that most affects an analysis area's ability to accommodate visitor use while achieving and/or maintaining desired conditions. For example, a key attribute might be encounters with other groups traveling along a trail, a historic bridge's structural integrity and ability to accommodate a volume of trail uses, or trampled vegetation. The limiting or constraining attribute varies from analysis area to analysis area. Identification of the key attribute is an important step, as it connects the most important resources and visitor experiences to on-the-ground conditions with the identified visitor capacity.

### **Identify Visitor Capacity**

Visitor capacity contains two parts. First is the identification of the visitor capacity (maximum amounts and types of use). Second is the identification of management strategies and/or actions that could be taken to implement visitor capacity to ensure the amount of visitor use is managed to achieve and maintain desired conditions.

### **Maximum Amounts and Types of Use**

To identify the appropriate amounts and types of use for each of the analysis areas, the previous steps were reviewed to understand what amount of use could be sustained while still achieving desired conditions. Based on those desired conditions, a visitor capacity number is identified.

Visitor capacities are not use level goals but rather a maximum amount of visitor use that is consistent with desired conditions. Supporting infrastructure such as parking lots may not be built to accommodate visitor capacity use levels if current or projected use doesn't warrant such construction, the cost is prohibitive, or other factors make it infeasible. In addition, alternative means of arrival (e.g. school buses) may make larger supporting infrastructure unnecessary.

## **Implementation Strategies**

A combination of management strategies would be used to implement the visitor capacities. These include education and enforcement strategies described in the comprehensive trails management plan (NPS 2022, page E-128), and carried forward under Alternative B, including leave no trace messaging, voluntary redistribution of use to off-peak times, encouraging parking in designated areas, parking enforcement, use of technology to inform trip planning, and group size management. These also include engineering strategies described under Alternative B such as parking lot construction, bathroom installation, surface hardening, boardwalks, trails, pavilions, and similar facilities that improve the area's ability to accommodate higher levels of visitor use.

## **VISITOR CAPACITY IDENTIFICATION**

### **West Side**

#### **Analysis Area**

This analysis area includes the entire Orrs Ferry Unit that is west of the Chattahoochee River.

#### **Existing Direction and Knowledge**

The west side area currently receives little to no visitor use as it was only recently acquired from a private owner and no facilities exist to provide visitor access. Upon implementation of the plan, park managers expect that this area will be the busiest part of Orrs Ferry as it can accommodate more educational programming and attract individuals and groups looking for an introductory experience to nature. The area is expected to be popular for fishing, picnicking, family gatherings and group outings, educational programming as well as some birding, wildlife photography, and hiking. Given these activities, the riverside area is expected to be the most popular, with visitors enjoying fishing, bird watching, and relaxation along the bank. The James Creek Confluence may be a popular destination as well.

Desired Conditions for Orrs Ferry describe the west side offering "a more social experience" than the east side. In general, visitors should experience a transition from the large-scale suburban development along Highway 20 and Ruth Lane to the more pastoral and serene environments along James Creek and the river. The west side is entirely in the natural area recreation zone, which includes a "relatively undisturbed natural environment" and a "relatively high amount of visitor use" and only moderate opportunities for experiencing solitude. In addition, "the degree of isolation and feeling of closeness to nature would be low to moderate," due to the presence of others. As the sights and sounds of people would be evident on the west side, the area requires a high degree of management to protect resources and visitors, although there would be a "low tolerance for natural resource degradation."

Upon implementation of the plan, potential management concerns on the west side include unauthorized parking and the associated impacts on infrastructure and vegetation, concern for pedestrian-vehicle conflicts and accidents, difficulty with access and egress, and visitor conflicts;

excessive use of support facilities such as restrooms; vandalism, trash dumping, and other illegal and after hours uses; resource impacts associated with fishing such as branch clearing, denuded vegetation; off-leash dogs; and illegal camping.

### **Key Attribute**

The attribute that most constrains the west side's ability to accommodate visitor use is the protection of the site's natural resources from social trailing, vegetation removal and denudation, and a general sense of being overrun. While it may be many years before the west side starts to see significant visitation, eventually, if enough visitation does occur in the area, the desired condition that there is a "low tolerance for natural resource degradation" could become threatened. The threats would include trails widening from heavy use, especially in wetland areas, social trailing that crisscrosses the area near the pond, and denuded areas created from heavy use by people, groups, and anglers. This is related to the opportunities to experience more tranquil or serene environments along James Creek and the Chattahoochee River. As more use occurs on the west side, the transition away from the large-scale urban development becomes less clear and more difficult to experience.

### **Visitor Capacity**

To identify a visitor capacity that represents the maximum amount of use the west side can accommodate without excessive social trailing, vegetation removal and denudation, and a general sense of being overrun, three factors are considered:

1. Use at a comparable area of Chattahoochee River National Recreation Area
2. Pedestrian Level of Service on the area's trails
3. Allocations for the visitor dwelling areas.

### *Comparable Area*

Upon implementation of the plan, park managers anticipate the area will be similar to the Sibley Pond area of the Cochran Shoals Unit. Park managers believe that with the planned developments in place, the west Side could accommodate use levels similar to the Sibley Pond area on a busy day and the area would not see the natural resource impacts described in the key attribute as inconsistent with desired conditions. Based on Sibley Pond trail counter data collected in August and September 2021, a typical busy weekend day will see as many as 60 people per hour on the trails.

### *Pedestrian Level of Service*

The planning team considered the Transportation Research Board's platoon-adjusted level of service criteria for pedestrian walkways (TRB, 2016; Figure 5). The level of service criteria allow the planning team to translate qualitative descriptions of pedestrians' ability to travel their desired path, adjust their path, and avoid conflicts to quantitative measures of the average amount of space required per person.

Considering desired conditions and key attributes, the planning team considers Pedestrian Level of Service B, with its "occasional need to adjust path to avoid conflicts" to be consistent with the desired conditions for the west side which describe "a more social experience," a "relatively high amount of visitor use," and "only moderate opportunities for experiencing solitude." The 500 square feet per person required to achieve the upper end of this level of service is thought to be consistent with the key attribute. At this density of visitor use, the area may "begin to feel overrun."

TABLE 5. PLATOON-ADJUSTED LEVEL OF SERVICE CRITERIA FOR WALKWAYS (TRB, 2016)

| Level of Service | Average Space: ft <sup>2</sup> /person | Related Measure Flow Rate <sup>a</sup> : Person/(min ft) <sup>b</sup> | Comments                                                          |
|------------------|----------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------|
| A                | > 530                                  | ≤ 0.5                                                                 | Ability to move in desired path, no need to alter movements       |
| B                | > 90-530                               | > 0.5-3                                                               | Occasional need to adjust path to avoid conflicts                 |
| C                | > 40-90                                | > 3-6                                                                 | Frequent need to adjust path to avoid conflicts                   |
| D                | > 23-40                                | > 6-11                                                                | Speed and ability to pass slower pedestrians restricted           |
| E                | > 11-23                                | > 11-18                                                               | Speed restricted, very limited ability to pass slower pedestrians |
| F                | ≤ 11                                   | > 18                                                                  | Speed severely restricted, frequent contact with other users      |

<sup>a</sup> Rates in the table represent average flow rates over a 5 min period. Flow rate is directly related to space; however, level of service is based on average space per pedestrian.

<sup>b</sup> Pedestrians per minute per foot of walkway width.

The west side development plans include 6,754 feet of trail and walkway. Assuming an average width of 6 feet (the trail may vary from 3 to 8 feet in width), the total area of walkway available is 40,524 square feet. With 500 square feet per person, this provides space for roughly 80 people at one time comfortably on the trails and walkways.

### *Dwelling Areas*

In addition to the trails and walkways, there are a number of areas where visitors may congregate on the west side. These include the picnic area, pavilion and various scenic viewpoints. Assumptions about the reasonable allocation of visitors include an average group size of 2 (based on the park's people per vehicle multiplier), a preference to have a small scenic viewpoint to one's own party while larger ones may be shared by four parties, and use of the pavilion by large school groups associated with three buses. Table 6 indicates allocations for each of the dwelling areas within the west side, along with the assumptions that inform those allocations.

TABLE 6. ASSUMPTIONS AND PEOPLE AT ONE TIME ALLOCATIONS FOR DWELLING AREAS

| Dwelling Area     | Assumptions                                                                                            | Resulting Allocation (People at one Time) |
|-------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Scenic Viewpoints | 2 large scenic viewpoints, 8 people per viewpoint<br>2 small scenic viewpoints, 2 people per viewpoint | 20 PAOT                                   |
| Picnic Area       | 4 tables, 2 people per table                                                                           | 8 PAOT                                    |

|                     |                                                                                                                   |          |
|---------------------|-------------------------------------------------------------------------------------------------------------------|----------|
| Pavilion            | Mostly used by Large School Groups, 3 buses of 40 people each                                                     | 120 PAOT |
| Total Combined Area | Sum of the Above                                                                                                  | 148 PAOT |
| Total Allocation    | Assumes 85% utilization of the total combined area to account for empty spaces consistent with desired conditions | 130 PAOT |

### *Conclusion*

The sum of the number of people at one time on the trails and walkways and the dwelling areas brings the total to roughly 210 people at one time in the west side. It is challenging to predict visitation patterns at a site that has not yet been developed, but reasonable assumptions can be made given the layout of the larger dwelling areas and trails. Park managers estimate that during times of visitation that approach the 210 PAOT level, the number of people per hour along the designated trails and walkways along the Chattahoochee River and James Creek would be around the 60 people per hour mark, consistent with the Sibley Pond area's level of trail use. The assumption here is that the average person will take a little more than an hour to see the 1.3 mile trail system to yield the 60 PPH on the trails.

Therefore, the visitor capacity of the west side analysis area is identified at 210 people at one time.

### **North of Crayfish Creek**

#### **Analysis Area**

This analysis area includes lands within the Orrs Ferry Unit that are east of the Chattahoochee River and south of Highway 20 down to and including Crayfish Creek.

#### **Existing Direction and Knowledge**

This area receives some visitation throughout the year despite not having any official trails. Anglers access this area from the GDOT parking lot and sidewalk that are adjacent to Highway 20 and connect to social trails parallel to the Chattahoochee River. School groups access the area via a driveway leading to an old house and a social trail that leads south to Crayfish Creek. Upon implementation of the plan, this area is expected to be substantially less busy than the west side and accommodate about the same number of visitors throughout the year as it currently does.

Desired conditions for the area north of Crayfish Creek on the east side of the Chattahoochee River focus on interpretation, education, trail access to community-favorite fishing spots, and occasional large groups associated with environmental education programming. In general, visitors should experience a transition from a travel and transportation corridor along Highway 20 to an orientation, exploration, and learning area along Crayfish Creek and its confluence with the Chattahoochee River. This area is in the natural area recreation zone, which includes a "relatively undisturbed natural environment" and a "relatively high amount of visitor use" and only moderate opportunities for experiencing solitude. This is an area where interpretation and education will take place and where community-favorite fishing spots will be accessible by trail. The environmental restoration along Crayfish Creek provides a quality learning environment while the trails to the Chattahoochee River provide anglers with a clear river entry point. The area north of Crayfish Creek would also serve those seeking a quieter atmosphere compared to the west side and as a gateway to longer trails south of Crayfish Creek. In addition, "the degree of isolation and feeling of closeness to nature

would be low to moderate,” due to the presence of others. Although the area would have a low tolerance for natural resource degradation, it would require less management to protect resources and visitors since the number of visitors and the sights and sounds associated with them would be less evident than on the west side.

Upon implementation of the plan, primary management concerns include human waste, social trailing, trampled vegetation, and erosion along the river. Many of these concerns stem from the focus on angling in this area, and the impacts of footprints as anglers find fishing spots and cut into the riverbank, cross the creek, and recreate. Another primary concern is the number of informal crossings of Crayfish Creek, which has historically been tied to the use of the area by school groups for resource education, though that use will likely decline in the future. Vandalism of structures that are slated for removal is another concern.

### **Key Attribute**

The attributes that most constrain this area’s ability to accommodate visitor use are the protection of the site’s natural resources from social trailing to the Chattahoochee River and excessive stream crossings along Crayfish Creek. The desired condition that there is a “low tolerance for natural resource degradation” could become threatened should visitors create social trails to reach the river or cross Crayfish Creek in places other than the designated routes. These key attributes are closely tied to the primary uses of the area north of Crayfish Creek—angling and resource education by school groups.

### **Visitor Capacity**

To identify a visitor capacity that represents the maximum amount of use the area north of Crayfish Creek can accommodate without excessive social trailing to the Chattahoochee River, and crossing along Crayfish Creek, the Pedestrian Level of Service along trails and allocations for dwelling areas are considered.

#### *Pedestrian Level of Service*

Considering desired conditions and key attributes, the planning team considers Pedestrian Level of Service B, with its “occasional need to adjust path to avoid conflicts” to be consistent with the desired conditions for the area north of Crayfish Creek which focus on interpretation, education, angler access, and only occasional large groups associated with environmental education programming. The 500 square feet per person required to achieve the upper end of this level of service is thought to be consistent with the key attribute. At this density of visitor use, the area may start showing signs of social trailing.

The development plans north of Crayfish Creek include 3,016 feet of trail and walkway. Assuming an average width of 3 feet, the total area of walkway available is 9,048 square feet. With 500 square feet per person, this provides space for roughly 18 people at one time comfortably on the trails.

#### *Dwelling Areas*

In addition to the trails, there are two areas where visitors may congregate north of Crayfish Creek. These include the gathering area at the site where the House would be demolished, the gathering area uphill of Crayfish Creek and the wayside exhibits by the Chattahoochee River and near Crayfish Creek. Assumptions are the same as those described for the west side, with the exception that the gathering areas one North of Crayfish Creek would be used infrequently compared to those on the

west side. Table 6 indicates allocations for each of the dwelling areas within this area, along with the assumptions that inform those allocations.

**TABLE 7. ASSUMPTIONS AND PEOPLE AT ONE TIME ALLOCATIONS FOR DWELLING AREAS NORTH OF CRAYFISH CREEK**

| <b>Dwelling Area</b>           | <b>Assumptions</b>                                            | <b>Resulting Allocation (People at one Time)</b>                                          |
|--------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Gathering Areas                | 2 large gathering areas, roughly 60 people per gathering area | 120 PAOT only on days where school groups are present (infrequent, approximately monthly) |
| Wayside Exhibits               | 2 wayside exhibits, 2 people per exhibit                      | 4 PAOT                                                                                    |
| Total Combined Area Allocation | Sum of the Above                                              | 4 PAOT, or 124 PAOT only on days where school groups are present (infrequent)             |

### *Conclusion*

The sum of the number of people at one time on the trails and walkways (18) and the dwelling areas brings the total to roughly 22 people at one time in the area north of Crayfish Creek on a day without school groups and 142 on a day where school groups are present, which is expected to be an infrequent use (approximately monthly). It is challenging to predict visitation patterns at a site where trails have not been formalized, but reasonable assumptions can be made given the layout of the smaller dwelling areas and trails. Park managers estimate that during times of visitation that approach the 22 PAOT level, the number of people per hour along the designated trails and walkways along the Chattahoochee River and Crayfish Creek would not exceed the 20 people per hour mark.

Therefore, the visitor capacity of the North of Crayfish Creek analysis area is identified at 22 people at one time. On days when school groups use this area, the visitor capacity is identified as 242 people at one time. To maintain desired conditions, this is expected to be an infrequent use.

## **South of Crayfish Creek**

### **Analysis Area**

This analysis area includes the lands within the Orrs Ferry Unit that are east of the Chattahoochee River but south of Crayfish Creek.

### **Existing Direction and Knowledge**

This area receives a small number of visitors throughout the year as pedestrians access this area from the area north of Crayfish Creek and adjacent neighborhoods to the south. There are no facilities in this analysis area beyond trails. Upon implementation of the plan, park managers expect that this area will be the least busy part of Orrs Ferry as it would accommodate visitors who seek solitude, bird and other wildlife viewing or photography, and hiking. The area is expected to feature natural

quiet, as well as views of the tree canopy above and the water where the trail alignment is nearest to Crayfish Creek and the Chattahoochee River.

Visitor use patterns are anticipated to parallel those of the broader Chattahoochee River National Recreation Area, with a slight increase in visitation during the summer months. Should connectivity to neighboring areas improve, it may contribute to an overall increase in visitation throughout the year. If the current trend of development in the surrounding area continues, weekend visitation could also rise.

Desired conditions for south of Crayfish Creek on the east side of the river describe the area as a place offering visitors the opportunity to embrace natural quiet and solitude. In general, visitors primarily experience the natural scenery and wildlife, the scents and sounds of the river and woods and the variations in temperature in these areas. This analysis area is in the natural zone, which are described as a “relatively natural environment with a relatively low probability of encountering many people during a given visit. . .” where visitors “would feel farther away from comforts and conveniences.” Although the area would have a low tolerance for natural resource degradation, it would require less management to protect resources and visitors since the number of visitors and the sights and sounds associated with them would be less evident than on the west side and the area north of Crayfish Creek.

Upon implementation of the plan, potential management concerns south of Crayfish Creek include resource impacts such as vegetation damage, social trailing, and illegal activities such as looting and poaching, as well as social trailing in areas connected to adjacent neighborhoods.

### **Key Attribute**

The attribute that most constrains this area’s ability to accommodate visitor use is the limited number of fishing spots and trail overcrowding. While the desired conditions of the area emphasize fewer encounters, a closer connection to nature, a quieter atmosphere, solitude, and peaceful surroundings, they could become threatened as use increases and the atmosphere may become less serene, making it more challenging for visitors to experience the sights and sounds of nature.

### **Visitor Capacity**

To identify a visitor capacity that represents the maximum amount of use the area north of Crayfish Creek can accommodate without trails feeling congested or loud, two factors are considered:

1. Pedestrian Level of Service on the area’s trails
2. Allocations for the visitor dwelling areas

#### *Pedestrian Level of Service*

Considering desired conditions and key attributes, the planning team considers Pedestrian Level of Service A, with its “ability to move in desired path” and “no need to alter movements” to be consistent with the desired conditions for the area south of Crayfish Creek which describe “a place offering visitors the opportunity to embrace natural quiet and solitude.” To achieve this Pedestrian Level of Service comfortably, 600 square feet per person is assumed.

The development plans for the area south of Crayfish Creek include 600 feet of trail. Assuming an average width of 3 feet, the total area of walkway available is 1,800 square feet. With 600 square feet per person, this provides space for roughly 3 people at one time comfortably on the trails.

### *Dwelling Areas*

In addition to the trail, there is one wayside exhibit where visitors may congregate on the area south of Crayfish Creek. Assumptions are the same as those described for the west side, and thus 2 people at one time at this wayside.

### *Conclusion*

The sum of the number of people at one time on the trails and the dwelling areas brings the total to roughly 5 people at one time south of Crayfish Creek. It is challenging to predict visitation patterns at a site that has not yet been developed, but reasonable assumptions can be made given the layout of the smaller dwelling areas and trails. Park managers estimate that during times of visitation that approach the 5 PAOT level, the number of people per hour along the designated trails in the area south of Crayfish Creek would be around the 10 people per hour mark.

Therefore, the visitor capacity of the area south of Crayfish Creek is identified at 5 people at one time given that the area is within the Natural Area Zone, and its desired conditions call for lower numbers than the other two analysis areas.

## APPENDIX E: REFERENCES

### International Mountain Bicycling Association (IMBA)

- 2015 “A Comparison of Environmental Impacts from Mountain Bicycles, Class 1 Electric Mountain Bicycles, and Motorcycles: Soil Displacement and Erosion on Bike-Optimized Trails in a Western Oregon Forest.” Accessed February 16, 2022.  
<https://cdn2.assets-servd.host/material-civet/production/images/documents/A-Comparison-of-Environmental-Impacts-from-Mountain-Bicycles-Class-1-Electric-Mountain-Bicycles-and-Motorcycles.pdf>.

### Interagency Visitor Use Management Council (IVUMC)

- 2016 Visitor Use Management Framework: A Guide to Providing Sustainable Outdoor Recreation. Edition One. Lakewood, CO.  
[https://visitorusemanagement.nps.gov/Content/documents/VUM\\_Framework\\_Edition%201\\_508%20Compliant\\_IVUMC.pdf](https://visitorusemanagement.nps.gov/Content/documents/VUM_Framework_Edition%201_508%20Compliant_IVUMC.pdf).
- 2019 Visitor Capacity Guidebook: Managing the Amounts and Types of Visitor Use to Achieve Desired Conditions. Edition One. Lakewood, CO.  
[https://visitorusemanagement.nps.gov/Content/documents/IVUMC\\_Visitor\\_Capacity\\_Guidebook\\_newFINAL\\_highres.pdf](https://visitorusemanagement.nps.gov/Content/documents/IVUMC_Visitor_Capacity_Guidebook_newFINAL_highres.pdf).

### National Park Service (NPS)

- 2009 Chattahoochee River National Recreation Area Final General Management Plan/Environmental Impact Statement.
- 2017 Chattahoochee River National Recreation Area Foundation Document.
- 2019 Crooked Creek Hiking Trail within Holcomb Bridge Unit Environmental Assessment. Chattahoochee River National Recreation Area, National Park Service.
- 2022 Chattahoochee River National Recreation Area Comprehensive Trails Management Plan
- 2025 Chattahoochee River National Recreation Area Species List

### Rockman, Marcy, Marissa Morgan, Sonya Ziaja, George Hambrecht, and Alison Meadow,

- 2016 “Cultural Resources Climate Change Strategy.” Cultural Resources, Partnerships and Science and NPS Climate Change Response Program. Washington, DC.

### Transportation Research Board (TRB)

- 2016 “Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis.” The National Academy of Sciences, National Academies Press, Washington, D.C.

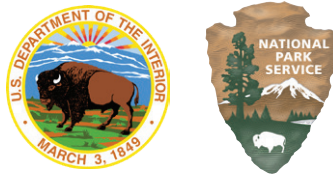
- 2010 “Highway Capacity Manual, Fifth Edition.” The National Academy of Sciences, National Academies Press, Washington, D.C.

United States Department of Agriculture (USDA)

- 2025 Natural Resources Conservation Service web soil survey mapping tool, accessed May 29, 2025. Available at <https://websoilsurvey.nrcs.usda.gov/app/>

United States Fish and Wildlife Service (USFWS)

- 2024 Information for Planning and Consultation iPAC. <https://ipac.ecosphere.fws.gov/>
- 2021 Wetlands data. <https://www.fws.gov/wetlands/data/Data-Download.html>.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

