

CHAPTER 2.0 DESCRIPTION OF ALTERNATIVES AND MANAGEMENT ZONES

A discussion of alternatives is a critical component of a GMP/EIS (the plan) and is necessary to provide decision-makers with sufficient information to evaluate various management options. Section 1505.1 (e) of NEPA requires that a “range of alternatives” be discussed in an EIS. The range of alternatives includes those reasonable alternatives that are evaluated throughout the document, as well as all considered alternatives that were eliminated from detailed study. The NPS Director’s Order on Park Planning (DO-2) provides further guidance that a GMP/EIS should first define what kind of resource conditions and visitor experiences should be maintained in the park and then apply those definitions to all actions that are subsequently taken in the park. DO-2 also recommends that alternative concepts be fundamentally distinct among competing sets of resource conditions and visitor experiences.

The park investigated ten preliminary alternative scenarios during the development of the GMP/EIS. In a newsletter that was published in November 2003 (Newsletter 2), three of the GMP alternatives were carried forward and presented for public evaluation. Subsequent to public and agency comments that were received, as well as additional review by the internal planning team, these alternatives were revised to two consolidated alternatives that were presented and evaluated in the June 2005 Draft GMP/EIS.

The Draft GMP/EIS was released for public comments in Fall/Winter 2005. Following more than 190 public and agency comments that were received, NPS revised the two alternatives. The following is a summary of the two revised alternatives that are described in greater detail later in this chapter:

- Alternative A (Continuation of Current Conditions) maintains the status quo in the park, and describes resource conditions where existing practices continue to guide park management.
- Alternative B (Preferred Alternative) would balance the protection of natural and cultural resources with the provision of a variety of recreational opportunities for visitors.

The alternatives present a reasonable array of management options, fulfill the park’s purpose and needs, and address the management concerns identified in Section 1.3.3, Issues and Concerns, of this document. To further describe the desired visitor experiences and resource conditions for various portions of the park, NPS developed Management Prescriptions under the preferred alternative (Alternative B).¹ The prescriptions help to establish the kinds of activities or facilities that the NPS considers suitable to achieve the visitor experiences and resource conditions that are sought under the preferred alternative. The Management Prescriptions are described in Section 2.3 of this document and mapped to specific areas of the park.

¹ A management prescription is an approach for administering or treating the resources or uses of a specified area that is based on desired outcomes. Management prescriptions include target goals or objectives for one or more resources and/or visitor experiences that are present within the prescription area.

CHAPTER 2

While developing the two alternatives, several others were also considered, as described in Section 2.4 of this document. However, these were eliminated from further consideration due to one or more of the following reasons: public or agency feedback; significant potential impact on the park's resources; or operational concerns.

Mitigation is another key element used in the development of the two alternatives. In the legislation that created the NPS, Congress charged it with managing lands under the stewardship "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations".² NPS routinely evaluates and implements mitigation measures if conditions occur that could adversely affect the sustainability of park resources. Mitigation and best management practices (BMPs) were included throughout the formulation of the alternatives identified in this plan.

² NPS Organic Act

2.1 DESCRIPTION OF ALTERNATIVES FOR EVALUATION

The two alternatives considered for Great Falls Park are conceptual and offer possibilities of how the park could be managed in the future. Under Alternative A, the NPS would continue current practices to manage the park, whereas, under Alternative B, the NPS would modify existing practices to pursue an overall goal of balancing opportunities for recreation while protecting sensitive natural and cultural resources. These alternatives are described below and summarized in Table 2.1, Description of Alternatives.

2.1.1 *Alternative A – Status Quo/Continue Current Management Practices*

The goals of Alternative A would be to preserve traditional visitor experiences and activities and maintain the park's natural, cultural, and scenic values in conformance with the provisions outlined in Section 1.4 of this document. Under this alternative, Great Falls Park would be managed as it is currently. There would be no major changes in resources management, visitor programs, or facilities, beyond regular maintenance (see Figure 2.1: Alternative A).

Cultural and Natural Resources

NPS would develop an Integrated Resource Management Plan (IRMP) to protect sensitive cultural resources from potential vegetation damage. Also, NPS would adopt best management practices (BMPs) to protect cultural resources, especially those that are either listed, or eligible for listing, in the National Register of Historic Places. Further, the park would provide additional protection to natural and cultural resources by implementing practices such as installing fences to offer greater protection to resources in high visitor use areas.

NPS would preserve existing scenic views from vantage points within the park, and from adjacent areas including the Potomac River and the C&O Canal NHP. Currently, the park evaluates potential impacts on scenic views as part of its project environmental review process. This policy would continue under Alternative A.

Recreation Management

Under Alternative A, the types and levels of recreational opportunities in the park would continue similar to current management practices, as described below.

- *Climbing:* Climbing activities within the park would continue. The NPS would continue to issue annual permits to businesses that organize rock climbing activities in the park and would continue to encourage climbers to register at the visitor center or the lower parking lot. The routes currently available for climbing would remain available on a first-come first-served basis.
- *Trails:* Under Alternative A, the NPS would evaluate existing undesignated trails and eliminate those that adversely impact natural or cultural resources. The current pattern of trail use would continue, including access to pedestrians, bikers, and horseback riders from adjacent trails and properties. The park would improve signage to identify allowable uses on trails. The park would also allow the proposed CCT, PHNST, and GPT to connect to existing trails within Great Falls Park.

- *Whitewater Kayaking:* Under Alternative A, access to the Potomac River for whitewater kayaking would remain available from Fisherman's Eddy (located between Overlooks 2 and 3) and AA Gorge (located to the south of Overlook 3, along River Trail).
- *Fishing:* Access to the Potomac River for fishing would remain available at Fisherman's Eddy and other locations, such as near the Aqueduct Dam and AA Gorge, to visitors with a Virginia or Maryland fishing license.

Visitor and Administrative Services

Under Alternative A, the levels of interpretation and educational programs, as well as park facilities would remain similar to existing conditions.

- *Interpretation:* The existing 70-seat auditorium and the 2,000 square foot exhibit area on the second floor of the visitor center would remain the primary spaces where the park would provide interpretative and educational programs. Also, ranger-led programs that provide visitors with opportunities to learn about the park's resources would continue.
- *Facilities:* Minor improvements would be made to the visitor center where its appearance (including the courtyard) would be enhanced, the interior spaces would be configured more efficiently, and one of the entrance ramps would be modified to meet Americans with Disabilities Act (ADA) requirements. No changes are proposed to the existing food concession stand. NPS would also rehabilitate the existing restroom facilities at the visitor center and the existing comfort facility to the south of the picnic area. The offices for the park's management and ranger staff would remain at the lower level of the visitor center.

Similarly, offices and storage areas related to park maintenance would remain in the existing facility near the entrance station. The United States Park Police (USPP) would retain a trailer adjacent to the maintenance facility which would continue to serve as an office. Also, the USPP would continue to rent space for their horses in an existing facility outside the park.

The park would continue its use of the existing well water system, including the holding tank on Jackson Lane, for potable water supply.

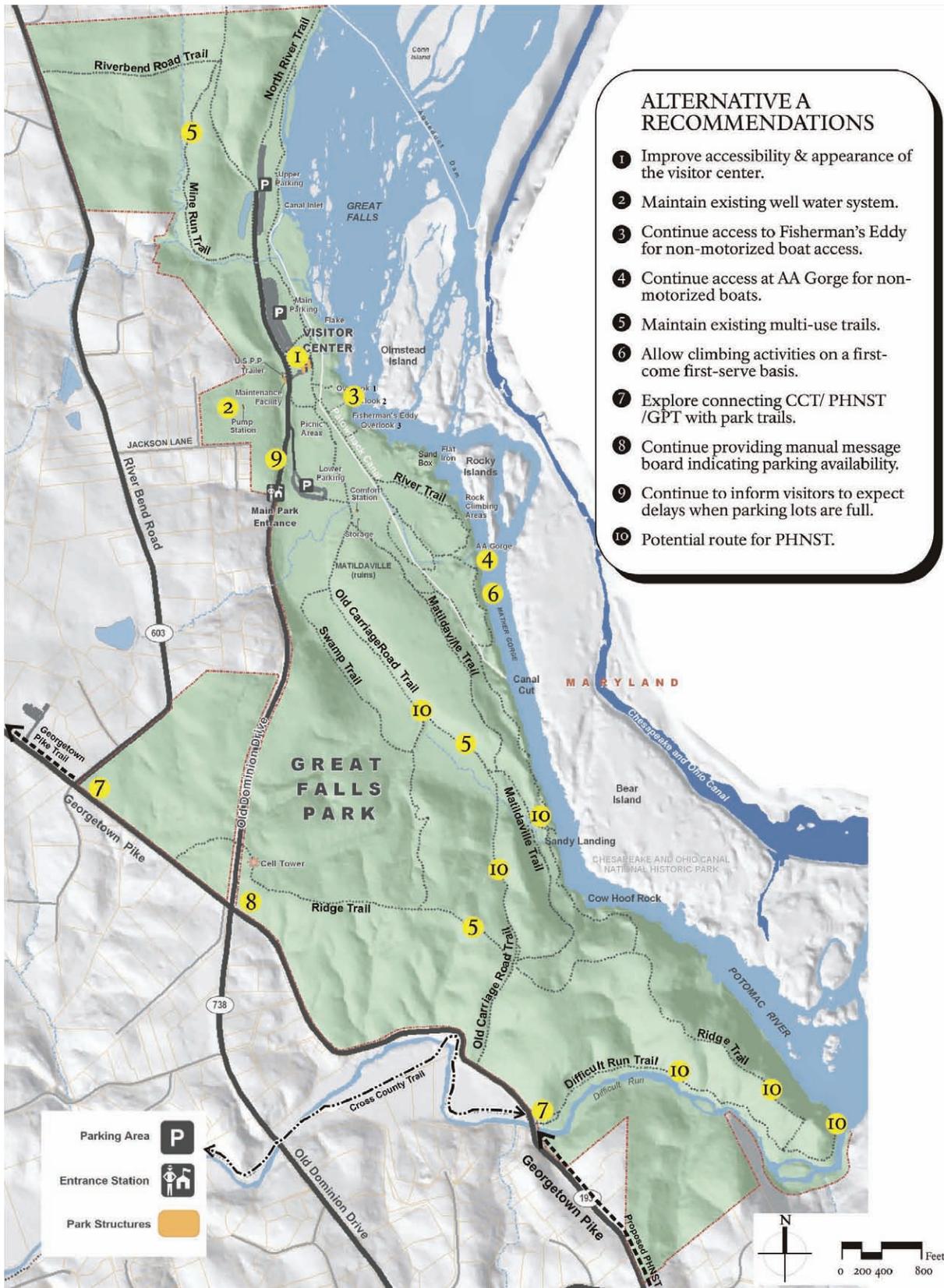


Figure 2.1: Alternative A (Continue Current Management Practices)

Traffic Management

Under Alternative A, the NPS would consider introducing technology that expedites payment and other operational functions at the entrance station to provide more efficient visitor entry into the park. During busy periods (currently several weekends per year) park staff would periodically check parking lots and inform visitors, waiting in line along Old Dominion Drive, to expect delays. When the parking lots are fully occupied, entry into the park would be suspended. During these periods, only emergency vehicles would be allowed access into the park. Other vehicles would be allowed access only when there are vehicles exiting the park, and would be managed based on parking availability. The park would continue to provide a manual message board, at the intersection of Georgetown Pike and Old Dominion Drive, which would inform visitors of entrance conditions to the park.

The park would maintain current public vehicular access points and would not develop new vehicular access points into the park. Also, the park would continue to provide emergency access at Sandy Landing.

Partnerships

To continue engaging the public in its decision-making process, the NPS would routinely conduct meetings, publish newsletters, and post updates on its website. These meetings, newsletters, and web postings would provide an update on actions recommended in the Final GMP/EIS and would be utilized to solicit individual opinions on specific issues.

Boundary Changes

NPS would encourage boundary changes where there is an interested property owner and land can be added to the park through acquisition, donation, or other mechanisms (such as conservation easements). The land addition would be based on the following criteria:

- The land parcel is contiguous to the park;
- It helps to reduce fragmentation by connecting separate portions of the park;
- It is the site of sensitive cultural resources that may not be identified currently; or
- It benefits the preservation of a sensitive natural resource such as Mine Run or Difficult Run.

2.1.2 Alternative B – Preferred Alternative (Modified)

The preferred alternative is based on an overall goal for the park of balancing opportunities for recreation at the park while protecting sensitive natural and cultural resources. The preferred alternative described in the Draft GMP/EIS has been modified based on public and agency comments that were received, as well as additional review by the internal planning team. The revised preferred alternative is described as follows, and illustrated in Figure 2.2: Alternative B.

Cultural Resource Management

As discussed in Chapter 1 of this document, NPS management policies require that the park preserve and foster appreciation of the cultural resources in its custody. Further, one of the park's mission goals is to protect, preserve, and maintain cultural resources in a good condition, and manage them within their broader cultural context.

Under Alternative B, cultural resource management would include preparing a plan to stabilize Matildaville, as well as managing visitor access in areas where sensitive cultural resources are present. During the preparation of the Trails Management Plan (TMP), existing designated and undesignated trails would be assessed for their impacts on cultural resources. It is anticipated that in some cases, the undesignated trails would be eliminated. Designated trails to resources for interpretative purposes would be redesigned to minimize the potential for visitor-related impacts.

Also, in most cases, NPS would not disturb existing ruins and other potential cultural sites that are buried in order to protect these sensitive sites. In a few locations, the park may uncover the resource for the primary purpose of interpretation provided such measures do not damage the resource.

NPS would develop an IRMP to protect sensitive cultural resources from potential vegetation damage. Also, NPS would adopt BMPs which may include maintenance and removal of vegetation that endangers the integrity of cultural resources, especially those listed, or eligible for listing, in the National Register of Historic Places.

The park would also prepare a Viewshed Management Plan that would identify important scenic views from vantage points within the park, from adjacent areas (including the Potomac River and the C&O Canal NHP) and of adjacent areas from the park. The plan would develop policies for the preservation and, if necessary, restoration of these scenic views.

Natural Resource Management

As discussed in Chapter 1 of this document, NPS management policies require that the park preserve its natural resources, processes, systems, and values in an unimpaired condition, to perpetuate their inherent integrity and to provide present and future generations with the opportunity to enjoy and learn about them.

Under Alternative B, natural resource management would include improved interpretation of the natural systems present within the park and their linkages to resources outside the park's boundary. The park would develop a technical assistance program where it would demonstrate

best practices in water resource management within the park, and convey this information to visitors and park neighbors. Such demonstrations would include the use of storm water management techniques to reduce run-off and improve water quality during the construction of the replacement operations facility (at the existing maintenance facility site), as well as other projects that the park may undertake.

Between the southern end of Overlook #3 and the Sand Box climbing area, the park is concerned with potential impacts from foot traffic on the globally rare Central Appalachian/Piedmont riverside prairie. This area contains State listed rare plant species. To avoid potential damage to this resource, the park would designate an access trail through this area. On a trial basis, until the park prepares a Climbing Management Plan (CMP), as discussed later in this section under Recreation Management, visitors seeking to engage in climbing, fishing, or scientific research would be allowed into this area with an access pass. The purpose of the pass would be to discourage casual visitors from entering this area, as well as for the park staff to provide visitors with educational information about appropriate recreational practices in the area. NPS anticipates that this access pass would be issued seasonally, in unlimited quantities, and free-of-charge.

The park would also prepare a TMP, as discussed later in this section under Recreation Management, where existing designated and undesignated trails would be assessed for their impacts on sensitive resources. It is anticipated that in some cases, the undesignated trails would be eliminated. Designated trails to resources for interpretation purposes would be redesigned to minimize the potential for visitor related impacts.

Recreation Management

As discussed in Chapter 1 of this document, NPS management policies require that NPS promote and regulate appropriate use of the parks, and provide the services necessary to meet the basic needs of park visitors and to achieve each park's mission. Further, management policies require NPS managers to "protect park resources and values, and a responsibility to actively manage all park uses and, when necessary, to regulate their amount, kind, time, and place."

Under Alternative B, the NPS would continue to provide recreational opportunities in the park with an emphasis on reducing potential conflicts with sensitive natural and cultural resources. Various recreational activities would be managed as follows:

- *Climbing:* The NPS would continue to provide climbing opportunities in Great Falls Park and would prepare a CMP to manage climbing activities in the future, as well as adopt temporary measures (as described below) on a trial basis until the CMP is prepared.
 - *Climbing Management Plan*—The park will prepare the CMP in partnership with the public and the climbing community, to ensure that climbing as a traditional visitor use continues in the park in a manner that is consistent with NPS's responsibility of protecting park resources. NPS has recently initiated a study to

assess the impacts that climbing may have on cliff habitat and rare plant species.³ This study would provide an assessment of impacts related to climbing. The CMP would be based on the information gathered for this study and would determine appropriate strategies to manage climbing activities. In general, the CMP is anticipated to address the following:

- Examine climbing routes on a case-by-case basis and recommend whether the climbing areas should be expanded, kept the same, or reduced.
 - Examine access to the climbing areas from adjacent trails. In areas where access is provided on undesignated trails, the park would explore designating the trail, or developing alternative access routes in situations where the trail adversely impacts sensitive resources.
 - Recommend best practices, especially in areas within or adjacent to sensitive resources. These practices could include the limited use of fixed anchors or an access pass for specific areas if necessary to avoid sensitive resources.
 - Potentially close specific areas on a temporary, periodic, or permanent basis, if necessary for resource protection, along with describing the process that would be undertaken if such closure is recommended.
- *Temporary Measures* – Prior to preparing the CMP, the park would implement the following measures on a trial basis. These measures would be reexamined during the preparation of the CMP:
- As discussed above under Natural Resource Management, the park is concerned with potential impacts from foot traffic on the globally rare Central Appalachian/Piedmont riverside prairie located between the southern end of Overlook #3 and the Sand Box climbing area. To avoid potential damage to this resource, the park would designate a trail to access three climbing routes (Gorky Park, Microdome, and Flat Iron) located in this area. Climbers would be allowed to access this area with an access pass as described above (under Natural Resource Management).
 - Also, as a temporary measure, the park would formalize an existing undesignated trail used commonly by climbers as the only access route to the Sand Box climbing area. Visitors seeking to access the Sand Box area would be required to enter and exit using the designated route.
 - The park would install a fence along the River Trail to preclude visitors from entering the area other than at the designated trail head. In addition, the park would use signage to inform visitors that an ‘access pass’ is required to use the trail, as well as identify the level of difficulty of the trail, and whether it is open or closed for access due to river conditions.

³

"Assessment of Climbing Impacts on Cliff Habitat and Rare Plant Species at Great Falls Park, Virginia and C&O Canal National Historical Park, Maryland"; The principal research investigator is Dr. Jeffrey L. Marion, Research Biologist, U.S. Geological Survey, Patuxent Wildlife Research Center, Virginia Tech Field Station, and co-investigators are Mr. Charlie Davis, Ecologist/Botanist, located in Lutherville, MD; Dr. Steve Lawson, Assistant Professor, Virginia Tech Department of Forestry; and Dr. Lynn Resler, Assistant Professor, Virginia Tech Department of Geography. Study scheduled to be completed by 2009.

- *Trails:* Under this alternative, the park would prepare a Trails Management Plan (TMP), in conjunction with the public including the local horseback riding, hiking, mountain biking, and rock climbing communities, as well as park neighbors. The purpose of the TMP would be to ensure that horseback riding, hiking, and mountain biking activities, as well as access to key areas for other activities such as climbing or interpretation, continue on designated trails in the park in a manner that is consistent with NPS's responsibility of protecting park resources. As part of the TMP, the park would conduct a study to evaluate impacts of trail activities on sensitive natural and cultural resources.
 - *Trails Management Plan* – In general, the TMP is anticipated to address the following:
 - Examine the existing system of designated and undesignated trails on a case-by-case basis.
 - Recommend whether the designated trail system should be expanded, realigned, kept the same, or closed in segments where resource impacts are identified.
 - Potentially close specific trails on a temporary, periodic, or permanent basis, if necessary for resource protection.
 - Focus on reducing the number of undesignated trails in the park, and adopting practices to avoid the creation of new undesignated trails. Also, designate those existing undesignated trails, that are found appropriate, to provide access to key areas such as climbing or for interpretation without impacting sensitive resources.
 - Recommend best practices, especially in areas where trails are located within or adjacent to sensitive resources. Such practices could include requiring an access pass for specific areas or uses if necessary, or fencing off areas to avoid sensitive resources.
 - Discuss the reasons why the management strategies are necessary, including evidence of impacts if appropriate.

Specific use of trails for various user groups would be managed as follows:

- *Horseback Riding:* Opportunities for horseback riding on designated trails would remain available. Portions or entire trails may be redesigned, realigned, or closed to riding in areas where the TMP identifies adverse impacts to a sensitive resource. For example, Mine Run Trail could either be realigned in the vicinity of Clay Pond and Mine Run, or closed, depending on the impact on these water resources from horseback riding.
- *Mountain Biking:* Opportunities for mountain biking on designated trails would also remain available. Portions or entire trails may be realigned or closed to biking in areas where the TMP identifies impacts to a sensitive resource.

- *Hiking:* Opportunities for hiking on designated trails would remain available with adjustments where the TMP identifies adverse impacts to the resources.
- *Regional Trail Connections:* The proposed CCT, PHNST, and the GPT would be connected to existing trails within the park. These existing trails within the park would be identified by their original names, as well as the name(s) of the regional trails that would connect to them. For example, the existing Difficult Run Trail within the park would also be named the Cross County Trail to indicate that the trail functions both as the Difficult Run Trail and as a route for the CCT. Potential routes for the regional trails through the park are illustrated in Figure 2.2: Alternative B.
- *Whitewater Boating and Kayaking:* Access to the Potomac River for whitewater boating and kayaking would remain available from Fisherman’s Eddy (located between Overlooks 2 and 3) and AA Gorge (located to the south of Overlook 3, along River Trail).
- *Fishing:* Access to the Potomac River for fishing would remain available to visitors with a Virginia or Maryland fishing license, from Fisherman’s Eddy and other locations including near the Aqueduct Dam and AA Gorge. Visitors seeking to access the river between Overlook 3 and the Sand Box area would be required to obtain an access pass (as described above under Natural Resource Management).
- *Nature Study:* Access to the park for nature study would remain available similar to existing conditions. Visitors seeking to access the shoreline between Overlook 3 and the Sand Box area would either be required to accompany a park ranger or obtain an access pass (as described above under Natural Resource Management).

Visitor and Administrative Services

As discussed in Chapter 1 of this document, NPS management policy for Interpretation and Education requires that NPS “instill in park visitors an understanding, appreciation, and enjoyment of the significance of parks and their resources.” Further, NPS management policies for Park Facilities requires that amongst others, visitor and administrative facilities be harmonious with park resources, aesthetically pleasing, universally designed, and as welcoming as possible to all segments of the population. One of the park’s mission goals is to ensure that, “visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities” (Service Mission Goal IIa). The following actions are aimed to support these policies.

- *Interpretation:* Management under Alternative B would focus on efforts to improve visitor understanding of the park’s sensitive resources and how to safely and responsibly enjoy the park. The interpretive programs would be expanded and designed to enhance visitor experience and understanding of the cultural and natural features that contribute to the park’s significance. These features include the Patowmack Canal, Matildaville, the Potomac Gorge, presence within the Potomac River watershed and the linkage to the area’s American Indian heritage. The programs would also focus on promoting safety and providing guidance on how to recreate in a manner that minimizes impacts on the park’s resources. The existing interpretation programs would be enhanced with

additional educational materials and exhibits that would be located at the visitor center and on-site at some of the resources.

- *Facilities:* The current maintenance facility and adjoining USPP trailer would be replaced with a new facility that would accommodate operations and maintenance functions. Park staff offices would be relocated from the visitor center to the new replacement facility, although park staff would continue to be present in the visitor center. The space currently occupied by the park staff would be converted for visitor use and may include new exhibits and classrooms. Also, the appearance of the visitor center (including the courtyard) would be enhanced, the interior spaces would be configured more efficiently, and one of the entrance ramps would be modified to meet ADA requirements. NPS would also rehabilitate existing restroom facilities, both at the visitor center, and the remote comfort facility to the south of the picnic area.

The new replacement facility would accommodate most park staff, including maintenance staff, as well as USPP staff. The new facility would also accommodate maintenance equipment. Since the site is already disturbed, the potential to impact sensitive resources is least at this location. However, since the existing maintenance facility borders the western edge of the Potomac River's 100-year floodplain, the park would undertake a detailed study of this site to identify the extent of the floodplain. If possible, the new facility would be located outside the floodplain. If the floodplain covers most of this site such that portions of the new facility would be within the 100-year floodplain, the facility would be designed in a sustainable manner such that habitable space would be located above the flood zone, and mitigation measures would be identified to minimize potential loss of property during a flood event. The new facility would also be designed in an aesthetically sensitive manner to enhance a visitor's entrance experience into the park.

NPS would consider accommodating USPP horses within the park, at a site off Jackson Lane. This site consists of approximately 7.2 acres, including approximately two acres of cleared area where NPS may construct stables and a paddock area to accommodate up to three horses. Before finalizing such a decision, NPS would undertake further studies of the site including additional environmental documentation and a survey for potential archaeological resources.

The park would also continue its use of the current well-based water system. An existing holding tank that stores water from an on-site well near Jackson Lane would be expanded. The additional capacity that would be added to the tank would be determined on further study. Also, if necessary in the future, NPS would explore extending public water to the park's facilities.

Traffic Management

NPS would maintain current public vehicular access points and would not develop new vehicular access points into the park. In addition, the NPS would consider introducing technology that expedites payment and other operational functions at the entrance station to provide more efficient visitor entry into the park. Also, NPS would provide traffic and parking message boards at satellite locations along transportation routes leading to the park, as needed.

Signs along Georgetown Pike would be sensitively designed in recognition of the road's scenic byway designation.

Further, NPS would provide a periodic radio announcement to inform visitors about traffic conditions at the entrance station. During severe crowding, the park would initiate a one vehicle in, one vehicle out policy.

Partnerships

To continue engaging the public in its decision-making process, the NPS would routinely conduct meetings, publish newsletters, and post updates on its website. These meetings, newsletters and web postings would provide an update on actions recommended in the Final GMP/EIS and would be utilized to solicit individual opinions on specific issues.

Boundary Changes

NPS would encourage boundary changes where there is an interested property owner and land can be added to the park through acquisition, donation, or other mechanisms (such as conservation easements). The land addition would be based on the following criteria:

- The land parcel is contiguous to the park;
- It helps to reduce fragmentation by connecting separate portions of the park;
- It is the site of sensitive cultural resources that may not be identified currently; or
- It benefits the preservation of a sensitive natural resource such as Mine Run or Difficult Run.

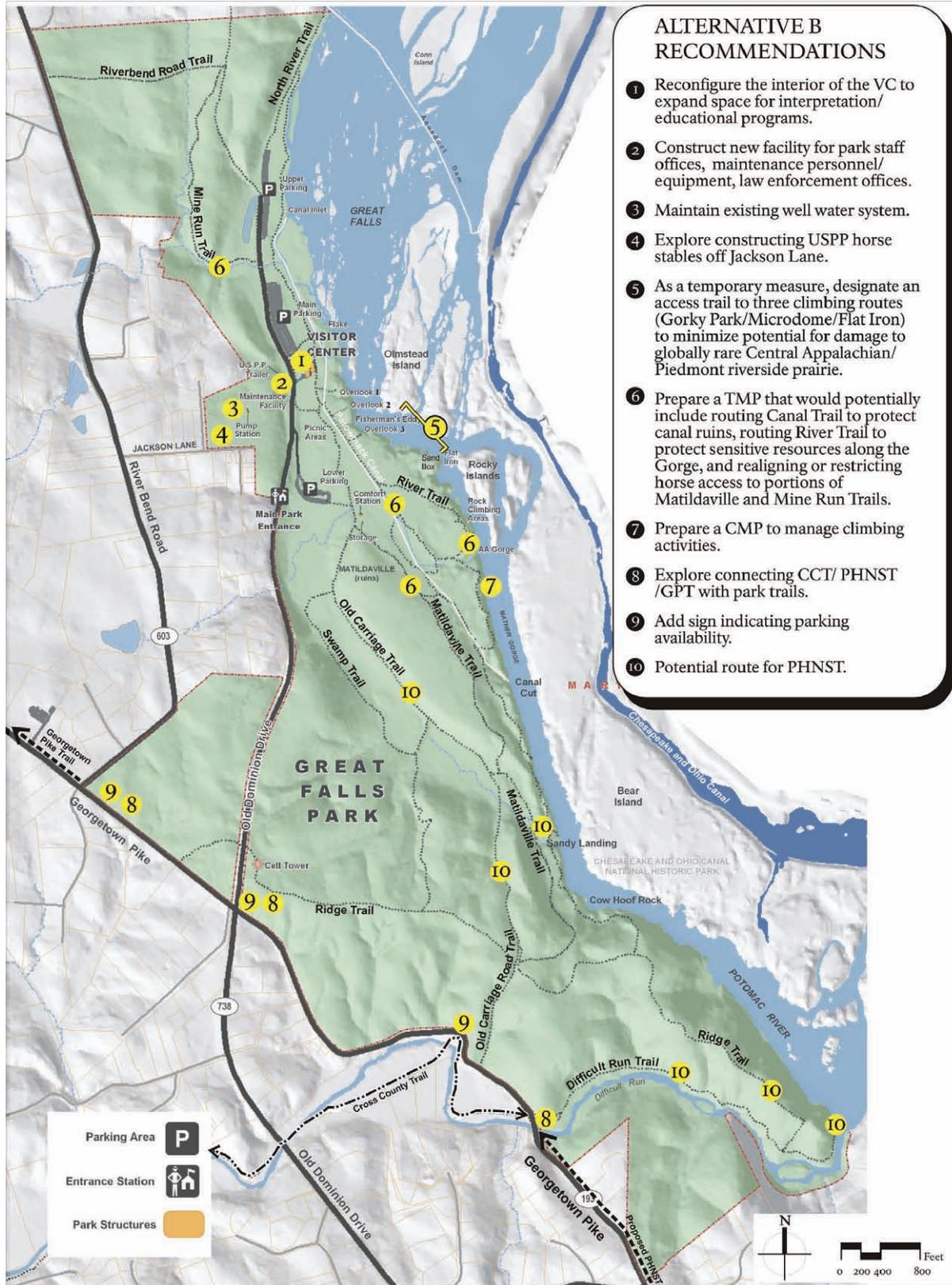


Figure 2.2: Alternative B (Preferred Alternative)

Table 2.1: Description of Alternatives

	Alternative Concept A: Continuation of Current Conditions	Alternative Concept B: Preferred Alternative
Description	<i>Continue current management practices.</i>	<i>Balance the protection of natural and cultural resources with the provision of a variety of recreational opportunities for visitors.</i>
Natural/Cultural Resource Management	Preserve unexposed cultural resources by leaving them in place, below the surface.	Preserve unexposed cultural resources by leaving them in place, below the surface except in a few locations where uncovering them would significantly benefit interpretation at the park and not damage the resource. Improve interpretation related signage at the visitor center (VC) and at resources.
	Develop an Integrated Resource Management Plan (IRMP) to protect sensitive cultural resources from potential vegetation damage. Also, adopt best management practices (BMPs) to protect cultural resources, especially those that are either listed, or eligible for listing, in the National Register of Historic Places.	Same as Alternative A.
	Continue existing policies to manage Matildaville.	Develop a plan to stabilize Matildaville.
	Continue current policies regarding maintaining existing viewsheds.	Prepare a Viewshed Management Plan to preserve, maintain or restore sensitive viewsheds.
	Continue existing water resource management policies.	Provide technical assistance to neighbors on water resource management, including stormwater management techniques aimed to reduce run-off from impervious surfaces and improve water quality. Demonstrate the use of these techniques within the park when enhancing the VC or constructing the new operations facility (at the existing maintenance facility site).
Recreation Management	Evaluate existing undesignated trails and eliminate any that adversely impact resources. Maintain existing multi-use trails. Allow access to pedestrians, bikers, and horse-riders into the park from adjacent trails/properties.	Prepare a Trail Management Plan (TMP), in partnership with the public, to ensure that horseback riding, hiking and mountain biking activities, as well as access to key areas for other activities such as climbing or interpretation continue on designated trails in the park in a manner that is consistent with NPS's responsibility of protecting park resources. In general, the TMP is anticipated to address the following: <ul style="list-style-type: none"> o Examine the existing system of designated and undesignated trails and recommend whether the designated trail system should be expanded, realigned, kept the same, or closed in segments where resource impacts are identified. o Potentially close specific trails on a temporary, periodic, or permanent basis, if necessary for protection of cultural and natural resources. o Focus on reducing the number of undesignated trails in the park, and adopting practices to avoid the creation of new undesignated trails. Designate those undesignated trails that are found appropriate to provide access to key areas. o Recommend best practices, especially in areas where trails are located within or adjacent to sensitive resources. Such practices could include requiring an access pass for specific areas or uses if necessary, or fencing off areas to avoid sensitive resources. o Discuss the reasons why the management strategies are necessary, including evidence of impacts if appropriate.
	Connect park trails to the Cross County Trail (CCT), Potomac Heritage National Scenic Trail (PHNST), and Georgetown Pike Trail (GPT).	Same as Alternative A.

	Alternative Concept A: Continuation of Current Conditions	Alternative Concept B: Preferred Alternative
Recreation Management (cont.)	Continue to allow climbing activities on a first-come first-serve basis.	<p>Prepare a Climbing Management Plan (CMP) in partnership with the public and the climbing community, to ensure that climbing as a traditional visitor use continues in the park in a manner that is consistent with NPS's responsibility of protecting park resources. In general, the CMP is anticipated to address the following:</p> <ul style="list-style-type: none"> ○ Examine climbing routes on a case-by-case basis and recommend whether they should be expanded, kept the same, or reduced. ○ Examine access to the climbing areas from adjacent trails. In areas where access is provided on undesignated trails, the park would explore designating the trail, or developing alternative access routes in situations where the trail adversely impacts sensitive resources. ○ Recommend best practices, especially in areas within or adjacent to sensitive resources. These practices could include the limited use of fixed anchors or an access pass for specific areas if necessary to avoid sensitive resources. ○ Potentially close specific areas on a temporary, periodic, or permanent basis, if necessary for resource protection, along with describing the process that would be undertaken if such closure is recommended. <p>On a trial basis, prior to the preparation of the CMP, designate an access trail to three climbing routes (Gorky Park, Microdome and Flat Iron) to minimize potential for damage to globally rare Central Appalachian/ Piedmont riverside prairie located between the southern end of Overlook #3 and the Sand Box climbing area. An 'access pass' will be issued on a trial basis requiring all visitors to use this access trail. During issuance of the access pass, visitors would be provided with educational information regarding particular resource concerns, as well as safety information. This pass would be provided seasonally, in unlimited quantities, and free of charge.</p>
	Continue access to Fisherman's Eddy/AA Gorge for non-motorized boats, while protecting the Forge site.	Same as Alternative A.
Visitor Services	The VC would function similar to existing conditions, with educational and food facilities.	Rehabilitate VC to improve exhibits and establish an educational component that would focus on resource interpretation, as well as providing information on safe and responsible use of park resources for recreation.
	Rehabilitate restroom facilities.	Rehabilitate and expand existing restroom facilities at current locations.
	Maintain seasonal food service concession at current levels.	Evaluate existing services provided by the concessionaire to determine whether to expand or reduce services.

DESCRIPTION OF ALTERNATIVES

	Alternative Concept A: Continuation of Current Conditions	Alternative Concept B: Preferred Alternative
Traffic Management	Check parking lots and inform visitors waiting in line to expect delays when Old Dominion Drive experiences back up because the park is full. When parking lots are full, suspend entry into the park and allow only emergency vehicles to enter.	Same as Alternative A.
	Introduce technology that expedites payment and other operational functions at the entrance station to provide more efficient visitor entry into the park.	Same as Alternative A.
	Continue to provide manual message board at the intersection of Georgetown Pike and Old Dominion Drive.	Provide traffic and parking message boards at satellite locations along transportation routes leading to the park, as needed. Ensure that signs located along Georgetown Pike are sensitively designed in recognition of the road's scenic byway designation. Provide a radio announcement that informs visitors about traffic conditions at the entrance station.
Administration	Maintain staff offices at the visitor center. Retain USPP facilities at the current trailer.	Demolish existing maintenance/US Park Police (USPP) facility and construct a replacement facility at the same location. Locate maintenance personnel/equipment and law enforcement staff offices at this replacement facility. Relocate staff offices from the VC to this replacement facility.
	Continue renting stables for USPP horses outside the park.	Explore constructing USPP stables within the park, off Jackson Lane.
	Maintain existing use of well-based water system with existing holding tank on Jackson Lane.	Maintain existing use of well-based water system with an expanded holding tank on Jackson Lane. If necessary in the future, explore bringing public water to the park's facilities.

2.2 SUMMARY OF IMPACTS

The following table provides a summary of impacts of the two alternatives on various resources. Chapter 4 (Environmental Consequences) of this document provides a more detailed discussion of these impacts.

Table 2.2: Summary of Impacts

	Impacts of Alternative A: Continuation of Current Conditions	Impacts of Alternative B : Preferred Alternative
Land Use and Socio-Economic Conditions	No impacts on surrounding land uses.	Potential minor, short-term adverse impacts on surrounding uses from potential simultaneous construction activities within the park and construction of proposed regional trails outside the park.
	Land uses within the park function similar to existing conditions.	Land uses within the park function similar to existing conditions.
	Minimal visitation change anticipated in the short term. Over the long term, potential adverse impact from increase in visitation due to regional increase in population.	Minimal visitation change anticipated in the short term. Over the long term, potential adverse impact from increase in visitation due to regional increase in population.
	Minor, short-term impacts on visitors due to renovation of VC and restrooms. However, the long-term impacts would be positive. Minor positive impact on visitor experience due to improved orientation and reduction of user conflicts resulting from improved trail signage. No impacts on neighboring population and neighboring socio-economic conditions. No cumulative impacts on land use and socio-economic resources are anticipated.	Minor, short-term adverse impacts on visitors due to renovation of VC and restrooms, as well as demolition/construction activities at the maintenance facility. Positive impact on visitor experience due to: expansion of interpretive programs at the VC; and increased interpretation of Matildaville and other resources. Potential impacts on trail users would be determined during the preparation of the Trails Management Plan (TMP). In accordance with NPS Management Polices, the park may have to close specific areas on a temporary or permanent basis to prevent adverse impacts on natural and cultural resources. The TMP will provide guidance in determining unacceptable levels of impacts to park resources or values, and will identify which designated or undesignated trails will be modified. The park will work with the public to prepare the TMP and to develop measures that minimize any adverse impacts on trail use. Potential impacts on climbers would be determined during the preparation of the Climbing Management Plan (CMP). The park will work with the public to prepare the CMP and to develop measures that minimize any adverse impacts. Potential positive impact on emergency access due to reduced back-ups along Old Dominion Drive resulting from technological improvements at the entrance station, message boards and radio announcement.

	Impacts of Alternative A: Continuation of Current Conditions	Impacts of Alternative B : Preferred Alternative
Cultural Resources	<p>Potential positive impact on cultural resources from development of an Integrated Resource Management Plan and Best Management Practices.</p> <p>Additional protection from practices such as adding fences along trails adjacent to sensitive resources are anticipated to result in a positive impact.</p> <p>Positive impact due to elimination of undesignated trails in conflict areas.</p> <p>Potential adverse impact due to continued trail use for horseback riding in the vicinity of sensitive resources.</p>	<p>Potential positive impacts due to:</p> <ul style="list-style-type: none"> • Preparation of a TMP that would eliminate undesignated trails in conflict areas, restrict new undesignated trails and explore recommend best practices such as adding fences along trails adjacent to sensitive resources; • Creation of an education component at the visitor center focused on responsible use of park resources for recreation; • Continued preservation of buried ruins; • Plan to stabilize/protect Matildaville; and, • Preparation of an Integrated Resource Management Plan and Best Management Practices.
	<p>No change to existing viewsheds.</p> <p>No cumulative impacts on cultural resources are anticipated.</p>	<p>A positive impact due to preparation of a Viewshed Management Plan that would identify policies for preserving/restoring important scenic views.</p> <p>Potential positive impact at the park entrance due to new facility at location of maintenance building.</p> <p>No cumulative impacts on cultural resources are anticipated.</p>
Natural Environment	<p>No impacts on geophysical resources.</p> <p>The VC and two northern parking lots would continue to function in the 100-year floodplain.</p> <p>Existing trails would continue to experience erosion-related impacts from current uses.</p> <p>Potential positive impact on natural resources from development of an Integrated Resource Management Plan and Best Management Practices.</p> <p>Additional protection from practices such as adding fences along trails adjacent to sensitive resources are anticipated to result in a positive impact.</p> <p>Positive impact due to elimination of undesignated trails in conflict areas.</p> <p>Potential adverse impact due to continued trail use for horseback riding in the vicinity of sensitive resources.</p>	<p>Potential minor adverse impact on vegetation if stables and paddock area for USPP horses are located near Jackson Lane.</p> <p>Potential minor adverse if portions of the new operations facility are located within the 100-year floodplain. In accordance with the Chesapeake Bay Preservation Act, the amount of impervious surface within the floodplain would be kept the same as current conditions.</p> <p>Potential positive impact due to:</p> <ul style="list-style-type: none"> • Creation of an education component at the VC focused to provide classes/ information about responsible use of park resources for recreation. • Enhanced resource interpretation. • Designating a trail to access area between Overlook #3 and the Sand Box climbing area, and issuance of an access pass on a trial basis. • Preparation of a CMP that would recommend recreational practices in areas where climbing occurs adjacent to sensitive resources. • Preparation of a TMP that would recommend elimination of undesignated trails, as well as redesign designated trails, in areas where these adversely impact sensitive resources. • Use of BMPs in the construction of the new replacement facility to reduce stormwater run-off and improve water quality.

	Impacts of Alternative A: Continuation of Current Conditions	Impacts of Alternative B : Preferred Alternative
Natural Environment (cont.)	Potential minor positive impact on localized air quality due to reduction in vehicular back-ups resulting from technological improvements at the entrance station.	Minor short-term adverse impacts on air quality due to demolition of maintenance facility and construction of new replacement facility. Potential minor positive impact on localized air quality due to reduction in vehicular back-ups resulting from technological improvements at the entrance station.
	Temporary, minor short-term adverse impact from noise due to renovation of the visitor center.	Minor short-term adverse impact from noise due to demolition of maintenance facility and construction of new replacement facility.
	Potential adverse cumulative impacts from additional traffic or usage due to population growth in the region.	Potential temporary cumulative impacts due to construction activities within the park and construction of trails segments outside the park for the CCT, PHNST, & Georgetown Pike Trail.
Transportation System	Continued minor adverse impact on visitor access when parking lots are full and entry into the park is suspended. Continued adverse impact on properties along Old Dominion Drive when traffic to park is backed up. Positive impact on visitor access to the park due to technological improvements at the entrance station. Potential adverse cumulative impacts from additional traffic due to population growth in the region.	Continued minor adverse impact on visitor access when parking lots are full and entry into the park is suspended. Continued adverse impact on properties along Old Dominion Drive when traffic to park is backed up. Positive impact on visitor access to the park due to technological improvements at the entrance station. Potential positive impact on vehicular access due to proposed dynamic message boards/radio announcement. Potential temporary cumulative impacts due to construction-related vehicles on area roadways and from additional traffic due to population growth in the region.
Site Utilities	Negligible impacts on water and sanitary sewer systems due to improvements to existing restrooms.	Negligible impacts on water and sanitary sewer systems due to improvements to existing restrooms. Positive impact on water supply from expanded water tank off Jackson Lane.

2.3 POTENTIAL MANAGEMENT PRESCRIPTIONS

This section defines all of the Management Prescriptions that would be applied to Great Falls Park under Alternative B (Preferred Alternative). The Management Prescriptions define the desired resource conditions and visitor experiences, including the appropriate kinds and levels of management, use, and development. Under Alternative B (Preferred Alternative), Great Falls Park would contain four Management Prescription Zones - Canal, Cultural and Natural, Mather Gorge, and Developed Zones. These are described below and illustrated on Figure 2.3: Alternative B (Application of Management Prescriptions).

2.3.1 *Canal Zone*

The Canal Zone would include those areas of Great Falls Park that contain remnants of the historic Patowmack Canal, Matildaville, and related structural features listed on the NPS's List of Classified Structures (LCS). This zone would be managed with the principal focus being the preservation of historic canal resources. Visitor use would be limited to staying on maintained trails and learning about canal features and ruins from brochures, printed materials, exhibit panels and ranger led tours.

Visitor Experience

Visitors would be offered opportunities to observe and learn about the park's significant cultural resources through wayside exhibits, formal interpretive walks, and informal interaction with regularly roving rangers. The probability of encountering other visitors, both individuals and groups, would be high.

Resource Condition or Character

Areas would be managed with an emphasis on preserving cultural resources and settings, including significant viewsheds. Management actions would focus on trail management, stabilization, and restoration of cultural resources, visitor/interpretation waysides, and public safety efforts.

Appropriate Kinds of Activities or Facilities

This zone would include significant cultural resources present in the park associated with the Patowmack Canal. An unpaved pedestrian trail system would allow visitors to observe the cultural resources. No administration or operational facilities would be constructed in these areas. Vehicular access for operations and emergency purposes would be provided such that the impact on cultural resources would be minimal. Bike trails and horse-riding trails would not be permitted and there would be no areas designated for picnicking and incidental sports.

2.3.2 *Cultural and Natural Zone*

The Cultural and Natural Zone would be those areas of the park that have any archeological, cultural, or ethnographic resources related to the park's prehistoric and historic periods, as well as those areas of the park that have any natural resources related to the diversity of fauna and flora in the Great Falls of the Potomac region. This zone would be managed with the primary

goal of preserving a variety of cultural and natural resources, some of which include unexcavated archeological sites, the Old Graveyard, the Native American Indian Stout site, wetland areas, wildlife habitats, and areas containing rare plant communities. Visitor access and use would be regulated and mainly dependent upon cultural and natural resource preservation needs.



Matildaville Ruins (Springhouse) - part of the proposed Canal Zone



Northern portion of the park - part of the Cultural and Natural Zone

Visitor Experience

Visitors would be offered an opportunity to pursue recreation activities such as hiking, horseback riding, and biking on designated trails. There could be limited opportunities for visitors to experience the sensitive cultural and natural resources due to their fragile condition and the need to protect them. There would be some interpretation of the cultural and natural resources through addition of wayside exhibits. Additional interpretation opportunities would primarily focus on orienting the visitor to the historic roads and trails, their length, difficulty and location in the park. The probability of encountering other visitors would be moderate to low.

Resource Condition or Character

Areas would be managed with an emphasis on preserving both the cultural and natural resources and settings, including significant viewsheds. Management actions would focus on trail management, stabilization, and restoration of cultural resources, visitor/interpretation waysides, and public safety efforts.

Appropriate Kinds of Activities or Facilities

Visitors would be required to stay on designated trails to protect cultural and natural resources. The park environment could be modified for essential visitor and park operation needs, such as the provision of comfort stations and boardwalks provided these are located in areas where there are no impacts on cultural or sensitive natural resources. All changes would be designed to fit within the natural environment. Access to the Potomac River could include areas designated for activities such as fishing and boating.

2.3.3 Mather Gorge Zone

This zone would be located within Mather Gorge of the Potomac River, including the adjacent cliffs and shoreline. The zone would be managed to mainly preserve important cultural and natural resources and to promote safe recreational practices. The cliffs, Gorge, and river have inherent natural dangers and are popular areas for recreational users who must have special skills (i.e., white water kayaking, rafting, and technical rock climbing). Visitors would be restricted to designated special use areas and alerted to potentially hazardous conditions and dangerous locations.

Visitor Experience

The Mather Gorge Zone would provide visitors with opportunities to view the Potomac River, as well as to pursue recreational activities such as rock climbing, hiking, boating, and fishing in designated areas. Visitors would also experience the diverse natural resources located within this zone through wayside exhibits and ranger-led programs. The probability of encountering other visitors would be high.

Resource Condition or Character

Areas within this zone would be managed with an emphasis on protecting natural and cultural resources while providing visitor access along trails to designated activity areas. Management

actions would include natural and cultural resource management, public safety efforts, and maintenance of trails and viewing areas.

Appropriate Kinds of Activities or Facilities

This zone would include pedestrian trails, designated areas for rock climbing and fishing, and could have location(s) for putting non-motorized boats such as kayaks, canoes, and rafts into the river. Emergency access to the river would be maintained.

2.3.4 Developed Zone

This zone is where administrative, maintenance, parking, and visitor facilities for Great Falls Park would be located. The developments in this zone would serve the needs of park management and park visitors (i.e., administrative facilities, maintenance facility, park water system, and visitor center). These developments would be located to minimize impacts on cultural, ethnographic, and natural resources in the park and provide basic visitor services. The public use areas of this zone would receive high visitation on a seasonal basis while other areas within this zone would be restricted to official use only.

Visitor Experience

The Developed Zone would provide a high degree of orientation and interpretation of the park's primary resources. Facilities would be conveniently located and accessible, and would preserve and enhance existing viewsheds. The probability of encountering other visitors or NPS staff would be very high as this area would be seasonally crowded.

Resource Condition or Character

Resources would be modified for visitor and park operational needs, while providing protection for natural and cultural resources. Visitors and facilities would be highly managed for resource protection and visitor safety. Buildings, structures, and other improvements may be constructed to enhance the visitor experience, and protect resources.

Appropriate Kinds of Activities or Facilities

This zone would include visitor facilities and park administrative and maintenance facilities such as a visitor center, restroom facilities, food concession operations, entrance station, access roads, paved trails, visitor parking areas, constructed overlooks, picnic/incidental play areas, NPS staff offices, USPP offices and horse stables, storage areas for maintenance equipment and materials, storage facilities for administration needs, volunteers and education materials and exhibits, utility facilities, communication facilities, and parking for NPS staff and maintenance vehicles. There would be a high degree of pedestrian access to visitor services with pedestrian trails that would meet ADA accessibility guidelines. Limited access may be provided to bicyclists and horseback riders.



Mather Gorge – part of the Mather Gorge Zone



Maintenance Facility – part of the Developed Zone

2.3.5 Application of Management Prescriptions

In accordance with this plan, the 800-acre park would be managed as four separate zones under Alternative B (Preferred Alternative). The locations of these zones are summarized below and illustrated in Figure 2.3: Alternative B (Application of Management Prescriptions).

- **Canal Zone:** This zone would occupy approximately 71 acres (8.9 percent) of the park. It would encompass the Patowmack Canal, along with structures listed on the NPS's List of Classified Structures (LCS). The zone would extend from the Wing Dam to the north, to the AA Gorge and Canal Cut area to the south.
- **Cultural and Natural Zone:** This zone would occupy approximately 656 acres (82 percent) of the park. It would be the largest zone in the park and would encompass most of the area to the north and west of the upper parking lot, the area to the west of Old Dominion Drive, and most of the southern portion of the park. This zone would include culturally sensitive sites and natural areas.
- **Mather Gorge Zone:** This zone would occupy approximately 36 acres (4.5 percent) of the park. It would extend along the Potomac River, from approximately the third (southern) overlook to Cow Hoof Rock, and would include portions of the River Trail, Sandy Landing, and rock climbing areas.
- **Developed Zone:** This zone would occupy approximately 37 acres (4.6 percent) of the park. It would include the visitor center, entrance station, parking areas, maintenance facility, existing well water system and the overlooks.

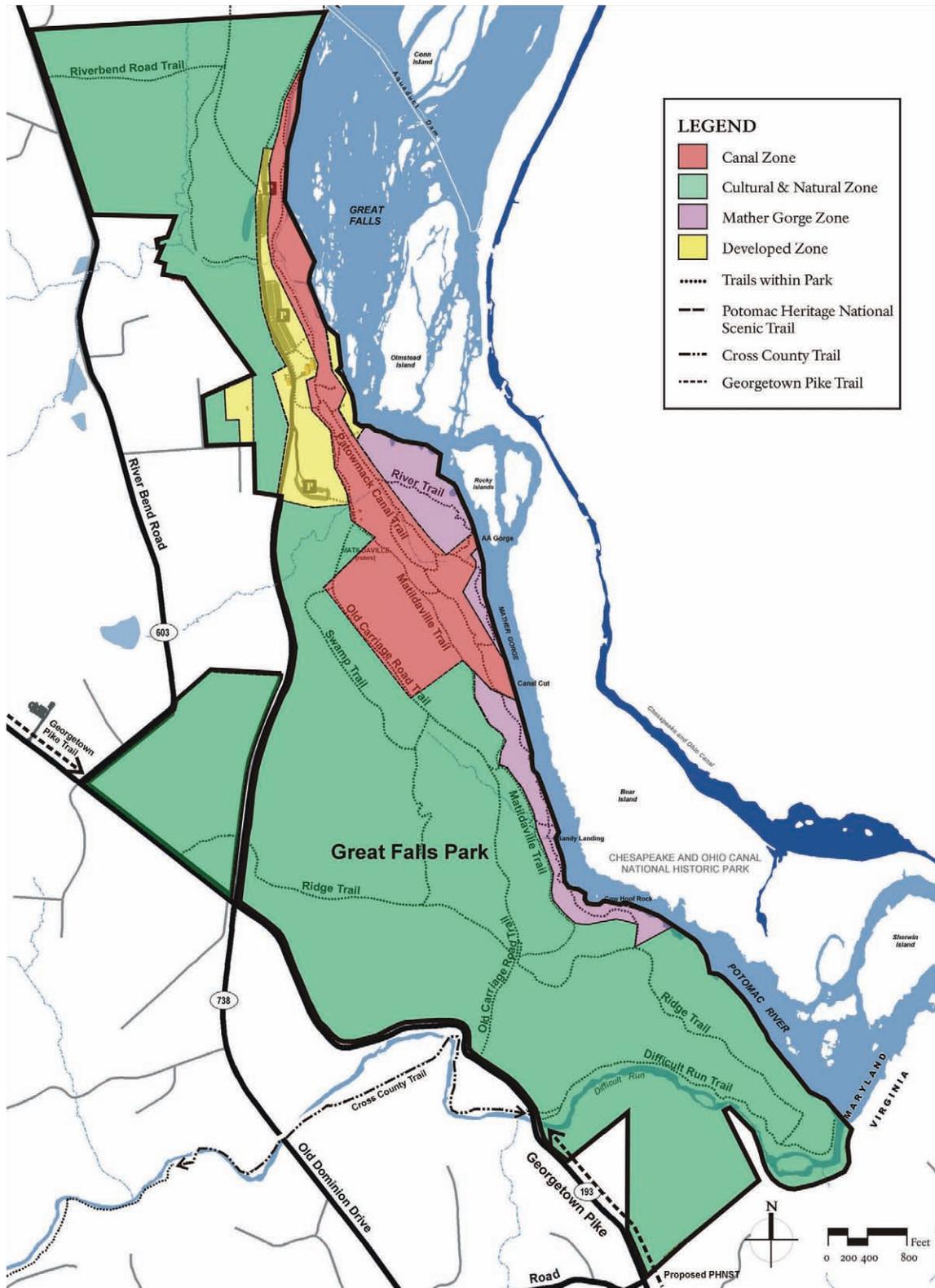


Figure 2.3: Alternative B (Application of Management Prescriptions)

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED

Several additional management alternatives were developed for the park. These alternatives were eliminated from further consideration due to either public feedback, significant potential impact on the park's resources, or operational concerns. These alternatives are briefly discussed below.

2.4.1 Establish Additional Visitor Nodes

This alternative examined establishing an additional visitor node with parking and visitor service facilities within the smaller parcel to the northwest of the intersection of Old Dominion Drive and Georgetown Pike. The purpose of this alternative was to distribute visitors to additional parts of the park by providing parking and visitor services closer to Georgetown Pike, while reducing traffic along Old Dominion Drive.

The alternative was eliminated from further consideration due to potential impacts on natural resources. The park is predominantly wooded towards the west, and creating a new visitor node would require clearing some of the wooded area. Also, providing a new node adjacent to the intersection of Old Dominion Drive and Georgetown Pike, would greatly reduce waiting space for vehicles wanting to access the new parking and would result in vehicle back-ups along Georgetown Pike.

2.4.2 Establish an Additional Access Road to the Park

This alternative examined establishing a vehicular access road to the park off Georgetown Pike by improving Old Carriage Road Trail. The purpose of this alternative was to provide a second vehicular access to the park. The alternative was eliminated from further consideration due to its potential impacts on Old Carriage Road Trail, a culturally important park resource, as well as the lack of sufficient sight distance along Georgetown Pike to establish a safe access road.

2.4.3 Provide a Shuttle to the Park

This alternative examined adding a shuttle service from satellite locations to the park during peak visitation periods. The purpose of this alternative was to provide visitors with an alternative mode of transportation. There were two potential scenarios discussed:

- I. Establish satellite parking off-site, and provide a shuttle that would connect the park to the satellite parking. As part of this concept, existing parking at the park would be reduced.

This scenario was eliminated from further consideration at this time due to its operational burden on the park, and potential impact on visitation. For this scenario to be effective, shuttle buses would have to operate regularly and at fairly frequent intervals. It would add considerable travel time for visitors, and given the presence of other parks in the area, may dissuade visitors from coming to the park. If the demand for visiting this park increases significantly in the future, or if a regional strategy is developed to connect parks with a shuttle system, similar to the Tourmobile (a shuttle service on the National Mall), the alternative may be re-examined.

2. Eliminate the existing visitor center and establish another center outside the park with smaller visitor nodes within the park. As part of this concept, existing parking at the park would be eliminated.

This scenario was eliminated from further consideration due to its operational difficulty and potential impact on visitation. An alternative location for a visitor center and parking would require splitting staff between the visitor center and the park, adding to operational costs. Also, similar to the previous scenario, it would add considerable travel time for visitors who would park at a satellite location and then use shuttles from the parking location to the park. Given the presence of alternative parks in the area, the added travel time might dissuade visitors from coming to the park.

2.4.4 Eliminate Bicycles and Horses from the Park's Trail System

This alternative examined limiting the existing trails in the park to pedestrians, and eliminating horse and bike access. The purpose of this alternative was to minimize potential for damage to sensitive natural and cultural resources within the park. This alternative was eliminated from further consideration as it would have reduced some of the recreational opportunities identified as important by the public.

2.4.5 Provide Car-Top Boat Access at Sandy Landing and Parking at the Quarry

This alternative examined providing car-top boat access at Sandy Landing for non-motorized boats and adding a parking area, controlled by concessions, at the Quarry for boaters and horse trailers. The purpose of this alternative was to provide additional recreational opportunities including increased access to the river for boating. The alternative was eliminated from further consideration due to its potential for damage to the Old Carriage Road Trail, a culturally important park resource, and the Quarry site.

2.4.6 Construct a Second New Facility for Maintenance Staff, Materials, and Equipment

This alternative examined constructing two new facilities: one for park staff and USPP; and, the second for maintenance staff, materials and equipment. The first would be located at the site of the existing maintenance facility. The second facility was proposed north of the lower parking lot. The alternative was eliminated from further consideration since the second facility would have required disturbing an area that is currently undisturbed. In addition, locating a maintenance facility adjacent to the lower parking lot could potentially result in conflicts between maintenance vehicles and visitors in a heavily used portion of the park.

2.4.7 Construct a New Trail parallel to Old Dominion Drive and Georgetown Pike

This alternative examined constructing a new trail segment adjacent to Old Dominion Drive and another adjacent to Georgetown Pike for the purpose of extending the proposed CCT and the PHNST to the main entrance of the park.

Preliminary analysis conducted indicated that a proposed trail along Old Dominion Drive (between Georgetown Pike and the entrance station) would be approximately 4,700 feet long, of which approximately 600 feet would be in the form of a boardwalk. Assuming that this trail

would be eight feet wide, parallel on the east side of Old Dominion Drive, and built for the use of bikes and pedestrians (since horses would not use the boardwalk portion), it has the potential to result in the following impacts:

- Require the removal of 37,600 square feet of vegetation (4,700 feet by 8 feet). A considerable amount of trees along Old Dominion Drive would need to be removed to establish this trail.
- Approximately 75 percent of this trail would be on land with more than 12 percent slope.

Similarly, preliminary analysis conducted for the segment along Old Georgetown Pike between Old Dominion Drive and the southeastern boundary of Great Falls Park (excluding the triangular portion that does not belong to NPS) indicated that this trail would be approximately 5,400 feet long, of which approximately 550 feet would be in the form of a boardwalk. Assuming that this trail would be eight feet wide, parallel on the north side of Georgetown Pike, and built for the use of bikes and pedestrians, it has the potential to result in the following impacts:

- Require the removal of 43,200 SF of vegetation (5,400 feet x 8 feet). A considerable amount of trees along Old Georgetown Pike would need to be removed to establish this trail.
- Impact approximately 4,400 SF of area identified as ‘Plant Species of Concern.’
- Approximately 2,800 SF of the trail would be constructed in the 100-year floodplain.
- Approximately 75 percent of this trail would be on land with more than 12 percent slope.

Therefore, this alternative was eliminated from further consideration due to potential impacts on the park’s natural resources.

2.5 ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969, which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that, the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in Section 101 of National Environmental Policy Act, which considers:

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

Alternative B (the Preferred Alternative) is identified as the environmentally preferred alternative. By protecting the sensitive natural and cultural resources while also providing opportunities to recreate, the park would meet its responsibility as a “trustee of the environment for succeeding generations;” assure “for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;” attain “the widest range of beneficial uses of the environment without degradation, risk of health or safety;” and preserve “important historic, cultural and natural aspects of our national heritage.”