



## CHAPTER 2

# ALTERNATIVES

CEDAR CREEK AND BELLE GROVE NATIONAL HISTORICAL PARK



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## 2.0 Alternatives

This chapter of the general management plan (GMP) for Cedar Creek and Belle Grove National Historical Park (NHP) describes the management alternatives considered for the park, compares their impacts, and identifies the preferred alternative. Data used to compare the impacts of each alternative – or what would happen if each alternative were adopted – are summarized from the detailed environmental impact analysis presented in Chapter 4 below, prepared pursuant to the National Environmental Policy Act (NEPA).

Because there are different approaches to park use, management, and development, the GMP planning process has investigated a range of feasible alternatives that may allow the park to achieve the purpose for which it was established. Four alternatives are addressed, including the Continuation of Current Management or “Status Quo” (Alternative A) and three action alternatives. Each alternative addresses the following elements required in a general management plan:

- an overall management concept
- management zones – identification of areas within the park where potential resource conditions and visitor experience opportunities should be emphasized
- area-specific management prescriptions that describe 1) the desired resource conditions and visitor experience opportunities within each area of the park, 2) the appropriate management practices, proposed development, and visitor uses, and 3) the actions necessary to achieve desired conditions
- projected costs

Future program and implementation plans, describing specific actions that managers intend to undertake and accomplish in the park, will tier from the desired conditions and long-term goals set forth in this plan. Additional feasibility studies and more detailed planning, environmental documentation, and consultations would be completed, as appropriate, before certain actions in the selected alternative can be carried out. The implementation of the approved plan will depend on future funding, and full implementation could be many years in the future.

Boundary modifications – also required to be addressed in GMPs – are discussed separately above in Section 1.11. In the future the NPS will complete a boundary study to determine if a park boundary adjustment is needed. Before this study can be completed additional resource studies are needed to better understand the occurrence and significance of related resources in proximity to the park.

### 2.1 Development of Alternatives

Development of the GMP alternatives occurred through a progression of planning steps involving frequent collaborative work sessions with the Cedar Creek and Belle Grove NHP Advisory Commission and the Key Partners, as well as input received

from the public during the scoping process and numerous meetings with stakeholders. Shortly after public scoping meetings were held in June 2006 in the communities near the park – Front Royal, Middletown, and Strasburg, Virginia – the GMP planning team prepared an initial set of alternative concepts. Following an initial NPS review, the alternative concepts were presented to the park's Advisory Commission and the Key Partners in September 2006. Comments received at those presentations led to revision of the alternative concepts, as well as the development of management prescriptions between October and November, followed by a second internal NPS review in December 2006. The revised alternatives were presented to the Park Advisory Commission in January 2007. Subsequent to those meetings, park staff presented the alternatives to many of the stakeholders contacted during the initial scoping meetings. A newsletter summarizing the alternatives was sent to all members of the public on the park's mailing list, including all individuals who signed in at the GMP public scoping meetings held in June 2006. Comments received at these meetings and in response to the newsletter led to further refinement of the alternatives over a period of six months.

The methodology used for developing the alternatives followed GMP planning guidelines contained in the NPS *Park Planning Sourcebook – General Management Plans* (NPS 2005). The park's *Foundation for Planning* (NPS 2006a), summarizing its purpose, significance, fundamental resources, other important values, interpretive themes, and special mandates, provided the general framework for developing the alternatives. The extensive GMP scoping meetings (see Section 5.1 below) revealed a range of interests and concerns concerning the park's future. Recorded scoping comments were compiled and analyzed, resulting in the identification of seven key decision points or questions to be answered in the GMP (see Section 1.8 above).

- How will the park's resources be protected?
- What will be the visitor's interpretive experience?
- What are the park's needs for visitor facilities and services?
- How will visitors access and move around the park?
- How will the park address related resources outside its boundary?
- How will the NPS and the Key Partners work together in managing the park?
- To what extent will the NPS provide technical assistance to others?

The GMP planning team considered various strategies for responding to each of the key decision points. These provided the basis for constructing the four alternatives, including identification of management actions common to all of the alternatives. Each alternative reflects a particular combination of actions and responsibilities for its implementation that distinguishes it from the other alternatives.

Four alternative concepts emerged, as generally described in Table 2.1. Table 2.2 summarizes how each of the alternatives responds to the seven key decision points.

**Table 2.1 Overview of the Four Alternative Concepts**

| Alternative   | Concept Overview  |
|---|---|
| <b>Alternative A</b><br><i>(Continuation of Current Management)</i> | <p>Visitors would experience the park at properties and lands owned and independently managed by the Key Partners.</p> <p>The NPS would provide technical assistance and bring national recognition and visibility to the park by virtue of being part of the national park system.</p>   |
| <b>Alternative B</b>  | <p>Visitors would experience the park at lands owned and independently managed by the Key Partners and through electronic media and NPS ranger led tours and programs.</p> <p>Visitors would access the park via existing auto-touring routes and a few trails located primarily on Key Partner properties.</p> <p>The primary NPS role would be to provide interpretive programs and technical assistance.</p> <p>Land protection and resource protection would occur primarily by the Key Partners.</p> <p>There would be increased coordination among the NPS and the Key Partners, with NPS serving as a facilitator for land and resource protection and other shared goals. Written agreements would guide special projects and various aspects of park management.</p>   |
| <b>Alternative C</b>  | <p>Visitors would experience the park at an NPS-managed visitor center (located either within or outside the park) and at focal areas owned and managed by the NPS and the Key Partners.</p> <p>The NPS and the Key Partners would coordinate interpretive programs.</p> <p>Visitors would access the park via several auto-touring routes and a system of non-motorized trails that provide opportunities for interpretation and that connect some focal areas.</p> <p>The NPS and the Key Partners would develop a coordinated land protection plan focused on acquisition of key historic sites that would become visitor focal areas. The NPS and the Key Partners would seek to acquire these key historic sites from willing sellers.</p> <p>Management efforts would seek to protect scenic and related resources outside the park.</p> <p>The NPS and the Key Partners would have a generally informal relationship with written agreements for special projects and management programs. The NPS would serve as a facilitator among the Key Partners for land and resource protection and other shared goals.</p>                    |
| <b>Alternative D</b><br><b>(Preferred)</b>                          | <p>Visitors would experience the park at an NPS-managed visitor center (located either within or outside the park) and at focal areas owned and managed by the NPS and the Key Partners.</p> <p>The NPS and the Key Partners would coordinate interpretive programs.</p> <p>Visitors would access the park via several auto-touring routes and a well-developed system of non-motorized trails that provide opportunities for interpretation, that connect focal areas, and that connect to communities and resources outside the park.</p> <p>The NPS and the Key Partners would develop a coordinated land protection plan focused on acquisition of cultural landscapes, sensitive natural resource areas, and lands providing connections between NPS and Key Partner properties. The NPS and Key Partners would seek to acquire these lands from willing sellers.</p> <p>Management efforts would seek to protect scenic and related resources outside the park.</p> <p>The NPS and the Key Partners would have formal agreements that define responsibilities for special projects, programs, events, and specific park operations.</p> |

**Table 2.2 Relationship of the Alternative Concepts to the GMP Decision Points**

| Decision Point<br>(key management issue)   | Alternative A  | Alternative B   | Alternative C  | Alternative D<br>(Preferred)  |
|--|--|---|--|---|
| <b>1</b> <i>How will the park's resources be protected?</i>  | Primarily the responsibility of Key Partners   | Same as Alternative A   | NPS and Key Partners focus land protection efforts on acquisition of key historic sites  | NPS and Key Partners focus land protection efforts on acquisition of cultural landscapes, sensitive natural resource areas, and lands providing connections between NPS and Key Partner properties                      |
| <b>2</b> <i>What will be the visitor's interpretive experience?</i>                                  | Occurs primarily at Key Partner's sites that are currently open to the public  | Coordinated interpretive plan; primarily Belle Grove, Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, Keister Tract, and reenactments; driving tours | Coordinated interpretive plan; NPS visitor center and additional interpretive sites; driving tours in partially protected landscapes; expanded trail network                                 | Similar to Alternative C with additional interpretation of the Shenandoah Valley Battlefields National Historic District  |
| <b>3</b> <i>What are the park's needs for visitor facilities and services?</i>                       | Existing Key Partner facilities remain open to the public  | Same as Alternative A   | NPS developed and managed visitor center (located either within or outside the park); additional facilities and services associated with acquired sites/focal areas and protected landscapes | Similar to Alternative C but with more NPS visitor facilities and with connections to trails outside the park   |
| <b>4</b> <i>How will visitors access and move around the park?</i>                                   | Primarily vehicular  | Primarily vehicular with a few non-motorized trails   | Primarily vehicular, with some non-motorized trails  | Vehicular and many non-motorized trails   |
| <b>5</b> <i>How will the park address related resources outside its boundaries?</i>                  | Reliance on interest groups, local governments, and others to protect thematically-related resources outside the park boundary | Same as Alternative A   | Proactive strategies to protect related lands, working with Key Partners, local governments, local landowners, and others  | Same as Alternative C   |
| <b>6</b> <i>How will the NPS and the Key Partners work together in managing the park?</i>            | NPS and Key Partners manage their lands independently; informal collaboration among the Key Partners and with NPS              | NPS facilitates shared strategies for implementing the GMP and operating the park; informal collaboration among the Key Partners and with NPS                                   | NPS facilitates shared strategies for implementing the GMP and operating the park; NPS and Key Partners would develop cooperative agreements to manage various aspects of the park           | NPS facilitates shared strategies for implementing the GMP and operating the park; NPS and Key Partners would have formal relationships defining a division of labor for certain park operations                        |
| <b>7</b> <i>To what extent will the NPS and Key Partners provide technical assistance to others?</i> | NPS and Key Partners provide technical assistance on issues affecting resources within the park boundary                       | Same as Alternative A   | NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities in support of the park's resources and viewsheds                    | NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities in support of the park's resources, viewsheds, and related resources outside the park boundary |

## **2.2 Alternative A (Continuation of Current Management)**

### **2.2.1 Concept (Alternative A)**

Under Alternative A, current management practices would generally continue as they are and visitors would experience the park as they do today with few management changes. Belle Grove Plantation and the Cedar Creek Battlefield Foundation visitor contact facility would be the primary destinations within the park. Occasional small group tours would be offered at Harmony Hall. Visitors would visit these sites and hear the stories of the Battle of Cedar Creek and antebellum plantation life. Some visitors would be interested in exploring the park, which they would do on their own using information obtained from sources other than the NPS. No wayfinding would be provided and because most land would remain in private ownership, visitors would not be able to view sites other than from public rights-of-way.

Visitors would generally not perceive the park as a unit of the national park system. The NPS would continue to minimally staff the park and maintain a small administrative office outside the park. The NPS's primary role would be to provide technical assistance to the Key Partners, the Community Partners, and private landowners regarding preservation of historic and natural resources within the park.

The Key Partners would independently assume responsibilities for interpretation, resource protection, and visitor services, and would maintain visitor contact facilities on their properties.

While there would be no limit to land acreage that could be acquired under this alternative (or any of the other alternatives), it is not expected that there would be a significant change in the amount of park land owned by the Key Partners or by the NPS.

### **2.2.2 Partnerships (Alternative A)**

**The NPS and the Key Partners would have an informal relationship.**

The NPS and the Key Partners would have an informal, collaborative relationship to share information, discuss issues of mutual concern, and coordinate responses to resource threats. The NPS and the Key Partners would manage their lands independently according to their own policies.

### **2.2.3 Land Protection (Alternative A)**

**The Key Partners would have primary responsibility for land acquisition and resource protection. The NPS would acquire land and interest in land by donation or from willing sellers as funds are available.**

In Alternative A, the NPS would accept donated lands and purchase land from willing sellers using appropriated funds, but would not actively seek to be an owner

of significant acreage within the park. Under this alternative, the Key Partners would continue to have the primary responsibility for land acquisition and resource protection of park lands. About a third of the land within the park would be owned and protected from development by the Key Partners. Assuming that existing funding levels for land acquisition continue, the NPS and the Key Partners would likely acquire an additional 200 acres of land within the park.

#### 2.2.4 Resource Management (Alternative A)

##### ■ Cultural Resource Management

In Alternative A, the NPS would manage the historic property that it owns in the park - Whitham Farm (c. 1840) – in accordance with the *NPS Management Policies* (NPS 2006d) and *NPS Cultural Resource Management Guidelines* (NPS 1998). As of the writing of this GMP, the Whitham Farm is leased for residential use, but that lease is ending in spring 2008. Within the timeframe of the GMP the NPS would likely rehabilitate and adaptively reuse the Whitham House (c. 1840) and farm-related outbuildings to support park operations and visitor interpretation. All management actions at Whitham Farm would be completed in accordance with the mitigation measures summarized below in Section 2.12.

The NPS would also complete a historic resource study for the park, including a study of all properties in the park that are either listed in the National Register or are eligible for listing. All cultural resources in the park would be managed as if they were eligible for National Register listing until determined otherwise.

In Alternative A, the NPS would acquire some property within the park using already appropriated funds and potentially through donations. Property that is acquired would likely have significant cultural resources. These properties would be managed in accordance with *NPS Management Policies* (NPS 2006d), *NPS Cultural Resource Management Guidelines* (NPS 1998), and Director's Order #28A: *Archeology*. The following actions would likely be implemented for properties acquired by NPS in the park:

- archeological resource surveys and site reconnaissance to identify, or determine the potential for, intact archeological resources that may be eligible for National Register listing and critical to achieving park purpose and significance
- cultural landscape inventory and cultural landscape report, as necessary, including documentary research and physical investigation necessary to support treatment; treatment plans for significant cultural landscapes
- treatment plans for significant historic structures

The NPS would identify and nominate cultural resources eligible for listing in the National Register of Historic Places. The NPS would also develop a collections

management plan for accession, cataloguing, preserving, protecting, and making available for access and use – in accordance with NPS standards and guidelines – the cultural and natural objects, artifacts, and archival materials relating to the park that are acquired. Collections would be housed in an NPS collections facility or possibly at facilities of the Key Partners through cooperative agreements. Finally, the NPS would update the 1969 National Historic Landmark documentation to incorporate the results of more recent cultural resource studies of the park.

The Key Partners would continue to manage their properties within the park in accordance with their organizational mission. Cultural resource treatments at Belle Grove Plantation, Harmony Hall, and the Heater House would be undertaken by the Key Partners, who would assume responsibility for compliance actions required by law. Where federal and state money is used to support specific projects at these historic sites the required compliance would include Section 106 coordination with the State Historic Preservation Officer and implementation of measures to avoid or mitigate adverse effects to cultural resources. The NPS would offer technical assistance to the Key Partners with cultural resources.

#### ■ **Natural Resource Management**

In Alternative A, the NPS would continue to manage natural resources at NPS-owned properties in accordance with the *NPS Management Policies* (NPS 2006). Development of new park facilities would be subject to environmental compliance requirements of NEPA and other applicable state and federal legislation. All management actions on park property would generally be completed in accordance with NPS Management Policies (NPS 2007) and the mitigation measures summarized below in Section 2.12.

In Alternative A the NPS would acquire property within the park using appropriated funds and potentially through donations. Acquired properties would be managed in accordance with the *NPS Management Policies* (NPS 2006) and other relevant NPS guidelines. Natural resources on NPS property would be managed to generally protect natural processes and species diversity. The types of management actions that could occur include the following:

- invasive plants that are not significant elements in the cultural landscape would be removed
- riparian habitat associated with Cedar Creek, the North Fork of the Shenandoah River, and their major tributaries in the park would be restored
- shale barrens would be protected from livestock grazing and visitor use impacts
- wetlands would be delineated and protected

- significant karst features would be surveyed and protected
- paleontological resources would be surveyed and protected
- unique habitats and plant assemblages would be protected
- special status species and their habitat would be surveyed and protected
- scenic views and associated vantage points would be identified and managed or protected, where appropriate
- the scenic qualities of Cedar Creek and the North Fork of the Shenandoah River that potentially qualify the streams for inclusion in the state's scenic river system would be identified and managed for enhancement, where appropriate
- consideration would be given to the removal of livestock grazing to protect native plant species and prevent the introduction of exotic species
- best management practices for agriculture would be used on lands leased for agriculture, particularly where prime farmland soils occur
- significant forested areas would be identified and managed in accordance with forest management plans

The NPS would also offer technical assistance to the Key Partners with identifying natural resources on their properties, conveying information about their significance, and assisting with resource management.

#### **2.2.5 Visitor Experience, Interpretation, and Education (Alternative A)**

**Visitors would experience the park at sites owned by the Key Partners.**

Visitors would experience the park at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract, as well as at reenactments. The Key Partners would have primary responsibility for interpretation; the interpretive emphasis would vary by site, as determined by the site owner.

#### **2.2.6 Park Facilities (Alternative A)**

**Facilities would be provided by the Key Partners.**

Facilities would be provided by the Key Partners at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. Trails, trailheads, and interpretive waysides would be developed by the Key Partners on land that they own as staffing and funding allow.

### **2.2.7 Transportation, Access, and Circulation (Alternative A)**

#### **Park access would be primarily vehicular.**

Interstate 81 and Valley Pike (Route 11) would provide regional access to the park. Once in the local area visitors would travel through the park on Valley Pike (Route 11) to access the network of rural county roads that would take them to the visitor contact facilities at the Key Partners' properties.

Visitors interested in exploring the park beyond the contact facilities of the Key Partners would rely on existing designated auto touring routes and directional signage. Trails would be limited to lands owned by the Key Partners. In accordance with NPS systemwide policies, recreational use of ATVs on trails would not be permitted within the park on lands that are owned by the NPS and the Key Partners.

### **2.2.8 Park Operations and Staffing (Alternative A)**

#### **Park staff and operations would focus on providing technical assistance.**

The NPS would employ three full-time employees, including the park superintendent, a community planner, and an administrative specialist. NPS staff would be focused on providing technical assistance to communities and the Key Partners. Park staff would rely on support from the NPS Regional and Washington offices. Volunteers would play a role in providing administrative help to the NPS. The staffing of the Key Partner organizations would not be expected to change substantially from its current levels.

The NPS administrative offices would be located in one of the park's adjacent communities, and possibly in the Whitham house within the park once that structure is appropriately rehabilitated. The offices of the Key Partners would continue to be located in their current locations: Belle Grove, Inc. at the Belle Grove Manor House; the Cedar Creek Battlefield Foundation in their visitor contact facility in Middletown, VA; the National Trust for Historic Preservation in Washington, D.C.; Shenandoah County in Edinburgh, VA; and the Shenandoah Valley Battlefields Foundation in New Market, VA.

### **2.2.9 Technical Assistance (Alternative A)**

#### **The park would provide technical assistance on issues affecting resources within the park boundary.**

The NPS and the Key Partners would provide technical assistance to one another, to private landowners, and to local governments in support of protecting resources within the park boundary (see Section 2.3, management element 9 for a complete description of technical assistance).

### 2.2.10 Related Resources (Alternative A)

**The park would rely on interest groups, local governments, and others to protect thematically-related resources outside the park boundary.**

The NPS and the Key Partners would collaborate with others to address threats to related resources outside the park as budgets and staffing allow. Related resources of interest would include scenic resources that provide the visual setting for the park, cultural resources that are thematically related to the park, and natural resources – such as hydrologic resources – that are functionally related to the park.

### 2.2.11 Costs (Alternative A)

Estimates of annual operating costs and one-time costs associated with Alternative A have been prepared using NPS and industry cost estimating guidelines (see Table 2.6 in Section 2.11 below). These costs are presented for comparative purposes only and will be refined at a later date based upon final design of facilities and other considerations. Actual costs will vary depending on if and when specific actions are implemented and on contributions by partners and volunteers.

#### ■ NPS Annual Operating Costs

NPS annual operating costs associated with Alternative A are estimated to be \$366,525. This includes the anticipated cost for staff salaries and benefits for 3 full-time equivalent staff, utilities, supplies, leasing (including leased park offices), and other materials needed for park maintenance and operations.

#### ■ NPS One-Time Costs

NPS one-time costs associated with Alternative A are estimated to be \$875,197 (2007\$), including one-time facilities costs and non-facilities costs. Facilities costs are those required for rehabilitation of structures at Whitham Farm. Non-facilities costs are those required for historic resource studies.

#### ■ Land Acquisition Costs

Under Alternative A, the estimated cost to acquire land and interests in land is \$4,000,000 (2007\$). The Key Partners would have the primary responsibility for acquiring land and interests in land. Land acquisition cost estimates are preliminary and intended solely for general planning purposes. Actual land acquisition costs would be determined by detailed appraisals when lands are considered for acquisition.

#### ■ NPS Deferred Maintenance Costs

There are no deferred maintenance costs associated with Alternative A. Existing park assets include the Whitham Farm; costs to be incurred for rehabilitation and adaptive reuse of the Whitham Farm are in the NPS one-time facilities costs presented above.

## 2.3 Management Elements Common to the Action Alternatives

Working cooperatively with the Park Advisory Commission and the Key Partners, the GMP planning team has identified ten management elements that provide overall direction for management and protection of resources within the park and the types of visitor experiences that would be offered. These management elements provide a common foundation for the three GMP action alternatives (Alternatives B, C, and D).

In the discussion of the following ten management elements the term “the park” is used interchangeably with “Cedar Creek and Belle Grove National Historical Park (NHP)” to describe the area of approximately 3,713 acres designated by Congress as a unit of the national park system.

### **Management Element 1. The NPS and the Key Partners would respond to opportunities to protect the park’s resources and values.**

The NPS and the Key Partners would proactively collaborate with one another, with local communities, and with other interested parties to protect park resources. The NPS and the Key Partners would establish priorities for cultural and natural resource protection; of particular concern are those sites at risk from land development and subdivision. Protection strategies would include, but not be limited to the following:

- encouraging preservation of the historic, natural, and scenic resources within the park by landowners, local governments, organizations, and businesses
- encouraging preservation of the historic, natural, and scenic resources in proximity to the park by landowners, local governments, organizations, and businesses
- providing technical assistance to local governments in cooperative efforts which complement the values of the park (pursuant to Section 10 of the park’s enabling legislation)
- maintaining collaborative relationships with private landowners to promote resource stewardship and conservation-based land use planning
- providing technical expertise regarding important cultural and natural resources within the park
- acquiring fee-title ownership and conservation easements from willing landowners
- assisting local governments, as requested, in adopting comprehensive plans and growth management tools that recognize park resources
- providing technical assistance, as requested, in reviewing subdivision and land development applications that may impact the park

- monitoring and evaluating land use and other trends impacting park resources

Additionally, Section 10 of the enabling legislation mandates that any federal entity conducting or directly supporting activities directly affecting the park shall coordinate its activities in a manner that is consistent with this general management plan, is not likely to have an adverse effect on park resources, and will provide for full public participation to consider all views.

**Management Element 2. The NPS and the Key Partners would acquire land and interests in land as opportunities arise and funding allows.**

Land protection within the park would occur through donation of lands or fee-simple acquisition from willing sellers. In the event that landowners are not interested in land donation or sale, conservation easements could also be donated by or purchased from willing sellers. Per Section 6 of the enabling legislation, viewshed protection outside the park on adjacent parcels would occur through the use of conservation easements that are either donated by landowners or acquired from willing sellers. While there is no limit to the amount of land that could be purchased under Alternatives B, C, and D, the focus and extent of land protection actions would vary among the alternatives as described below.

For lands that are not acquired, the NPS and the Key Partners would work with private landowners to foster a resource preservation ethic and to encourage appropriate stewardship of natural and cultural resources. Land trusts would assist the NPS in working with landowners to accomplish private land stewardship goals.

**Management Element 3. The NPS and the Key Partners would collaborate in providing multiple opportunities to experience all of the park's interpretive themes and stories.**

Six primary interpretive themes are proposed (see Section 1.6.4 above). All stories related to these themes would be told in the park wherever appropriate, including sites managed by the NPS as well as those managed by the Key Partners. The Key Partners would be encouraged to interpret all themes and to provide information on the interpretive programs of the other Key Partners and the NPS. Interpretive programs of the NPS and the Key Partners may require visiting one another's sites in order to tell various park stories

**Management Element 4. The existing visitor facilities in the park – the Cedar Creek Battlefield Foundation visitor contact facility and Belle Grove Manor House -- would remain open to the public, Harmony Hall would be open for occasional group tours, and new visitor facilities would be developed at the Keister Tract as proposed in the master plan for that site.**

Area-specific desired conditions and management actions for the existing facilities owned by the park's Key Partners as well as land owned by the NPS are described below in Section 2.5.

**Management Element 5. The park would serve as a focal point for important historical events and geographic locations within the Shenandoah Valley Battlefields National Historic District; interpretive media on the National Historic District would be accessible in the park.**

The NPS and the Key Partners would make available interpretive media on the important connections between the Shenandoah Valley's Civil War Battlefields and would provide information on heritage tourism sites throughout the National Historic District. The intent would be to provide information that complements interpretive programs and facilities throughout National Historic District so that visitors are inspired to seek out and visit these other sites.

**Management Element 6. The NPS and the Key Partners would develop written, shared strategies for implementing the general management plan and policies for operating the park.**

Upon completion of the GMP, the NPS and the Key Partners would collaborate to develop the following:

- branding, signage, and messaging plan (including the development of an appropriate park logo)
- land protection plan (which outlines priorities for land acquisition and conservation easements from willing sellers only)
- historic resources study and list of classified structures
- comprehensive interpretive plan
- trails plan
- collections management plan (once the park acquires collections)
- cultural landscape inventory and cultural landscape report,
- archeological survey/inventory plan and archeological site stewardship program

- vista management plan
- resource stewardship plan
- design guidelines for new park facilities
- implementation plans for NPS-owned focal areas and visitor services areas

Additionally, NPS and the Key Partners would develop written, shared strategies for managing the park's natural and cultural resources, including historic structures, cultural landscapes, soil, water, vegetation, wildlife habitat, and scenic resources. These would incorporate strategies for complying with legally mandated environmental reviews. They would also include mitigation measures and best management practices that would generally be applied to avoid or minimize potential impacts from implementation of future management actions in the park (as summarized in Section 2.11 below).

**Management Element 7. The NPS and the Key Partners would provide auto touring and non-motorized trail routes for visitors.**

Auto touring routes would be developed on existing roads. Trails would be developed on land owned by the NPS and the Key Partners, and on rights-of-way acquired from willing sellers. While the amount of trail development varies substantially between Alternatives B, C, and D, the goal under each action alternative is to provide a trail system that allows visitors to access and better understand park resources while providing protection of these resources.

In the future a trails plan would be prepared for the park that would address where trails would be located, how they would be designed, and the types of permitted uses. In general trails would be designed for low impact use, maximum protection of resources, and no motorized vehicles. In accordance with NPS systemwide policies, recreational use of ATVs on trails would not be permitted within the park on lands that are owned by the NPS and the Key Partners.

**Management Element 8. The NPS and the Key Partners would continue to foster their collaborative relationship to further the purposes of the park, with the NPS serving in a coordination and facilitation capacity for land and resource protection, and other shared goals.**

The NPS and the Key Partners would continue to collaborate to protect the park's natural and cultural resources and values, to provide appropriate and satisfying experiences for park visitors, and to address threats to park resources. The NPS would serve as a coordinator for resource and planning issues about which the agency has particular expertise or experience.

**Management Element 9. The NPS and the Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities in support of goals that further the purposes of the park.**

The park would partner with federal, state, and local entities to provide technical assistance to support resource protection and visitor use of the park. The types of technical assistance could include, but would not be limited to, the following:

- adjacent community planning
- rural land-use planning
- review of development applications within the park
- voluntary land conservation for private landowners
- documentation of historic properties and preparation of treatment plans
- agricultural best management practices
- design and implementation of mitigation measures to minimize resource and visitor experience impacts
- ecological restoration
- forest management
- interpretive programming and design of interpretive media
- educational programs
- park facility planning and design
- wayfinding signage design
- collections management
- grant writing and assistance seeking funding
- establishing an archeological site stewardship program
- financial assistance per cooperative agreements

The NPS would establish priorities for how technical assistance would be allocated. The first priority would be to support protection of the park's resources, followed by assistance with protection of park viewsheds and related resources near the park.

**Management Element 10. The NPS would form a friends group.**

A nonprofit friends group would be established to assist NPS with accomplishing its mission at the park. The first priority of the friends group would be to assist the NPS with land acquisition. The friends group would also benefit the park by providing volunteer services, assisting with resource management and preservation, conducting fundraising efforts, publicizing important issues, and other functions.

## 2.4 Management Zones

Management zones are used by the NPS to identify and describe the appropriate resource conditions and visitor experiences to be achieved in different areas of a park. The zones provide the basis for a shared understanding of how the park's resources would be managed, the experiences visitors would have, where these experiences would occur, and the general types and intensities of facility development that would occur. In partnership parks – such as Cedar Creek and Belle Grove NHP – where NPS and its partners are making management decisions, this shared understanding provides the basis for compatible facility development by the partners, evolution of an efficient circulation system, and general coordination of plans and activities. Management zones also help local governments make growth management and public investments decisions that support preservation of park resources and that are compatible with long-term plans for development of park facilities (such as road improvements and utility systems). Management zones also enable private landowners in the park to understand how the NPS and its partners plan to manage specific areas within the park. Management zones also provide a template of what should be done in areas of the park regardless of how much land the NPS and the Key Partners eventually own.

Delineating management zones is a two-step process. First a set of appropriate management zones is identified. Second the zones are allocated to geographic locations throughout the park.

The Cedar Creek and Belle Grove National Historical Park GMP planning team working cooperatively with the park's Advisory Commission and the Key Partners has identified six management zones for long-term management of resources and visitor use at the park (see Table 2.1). These include (1) Cultural Landscape Zone, (2) Sensitive Resource Zone, (3) Town and Countryside Zone, (4) Contemporary Settlement Zone, (5) Large Events Zone, and (6) Visitor Services Zone.

The GMP action alternatives – Alternatives B, C, and D described below in Sections 2.6, 2.7, and 2.8, respectively – would each incorporate this set of management zones. The allocation of zones is identical for the action alternatives (see Figure 2.1). **The alternatives differ in terms of the following:**

- the extent to which land within the zones are suitable for acquisition by the NPS and the Key Partners
- the extent to which potential management actions are implemented within the six zones
- the range of potential visitor experiences and facilities that are provided in the zones, and
- the management roles of the NPS and the Key Partners

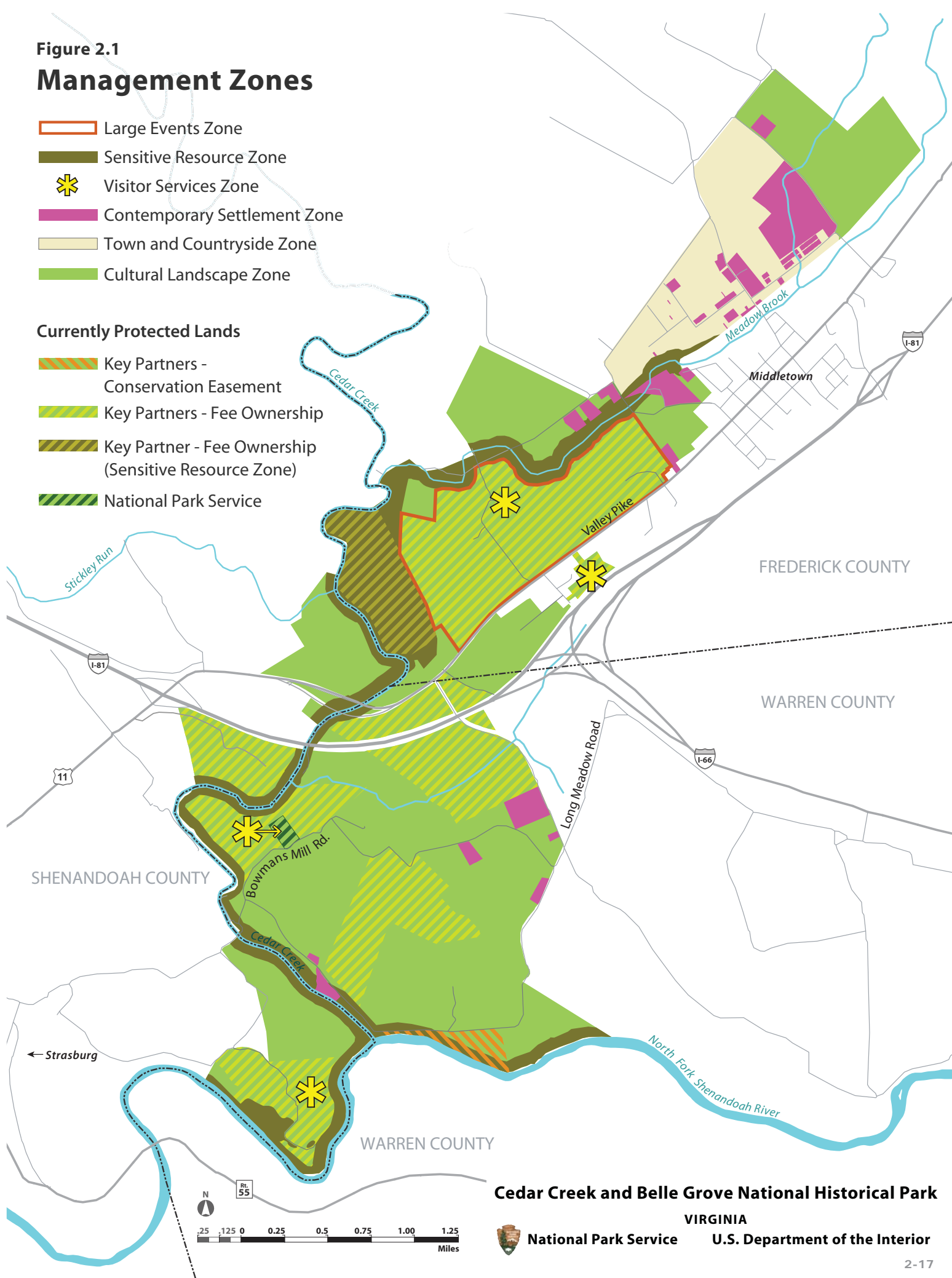
Figure 2.1

# Management Zones

- Large Events Zone
- Sensitive Resource Zone
- ✱ Visitor Services Zone
- Contemporary Settlement Zone
- Town and Countryside Zone
- Cultural Landscape Zone

## Currently Protected Lands

- Key Partners - Conservation Easement
- Key Partners - Fee Ownership
- Key Partner - Fee Ownership (Sensitive Resource Zone)
- National Park Service



**Cedar Creek and Belle Grove National Historical Park**

**VIRGINIA**



**National Park Service**

**U.S. Department of the Interior**



*Representative Cultural Landscape Zone Image – Longmeadow Farm*

**Cultural Landscape Zone.** The cultural landscape zone encompasses areas representative of the park’s cultural resources that include individual cultural sites and the larger landscapes that provide opportunities for visitors to access a diversity of cultural sites reflecting the park’s interpretive stories. Protection measures would focus on maintaining cooperative working relationships with private landowners, promoting conservation easements, and fee acquisitions from willing sellers where public access is desired. Park facilities could include a visitor center, administrative offices, and maintenance facilities.



*Representative Sensitive Resource Zone Image – Cedar Creek*

**Sensitive Resource Zone.** The sensitive resource zone encompasses the park’s stream corridors and other natural areas having high biodiversity or other natural resource values such as the Panther Conservation site and the Keister Tract. This zone would enable visitors to learn about the park’s natural landscapes and ecosystems, and their influence on the area’s cultural history. Management practices would seek to protect, stabilize, and restore functioning natural communities. Areas in this zone may also contain important cultural sites.



*Representative Town and Countryside Zone Image*

**Town and Countryside Zone.** The town and countryside zone encompasses areas in the park that may indirectly contribute to the visitor experience but generally have a lower protection priority because of fewer known cultural and natural resources, as well as existing land use and ownership patterns. Future resource studies may reveal certain sites within this zone that warrant higher protection priority. Management policies would encourage traditional town and country development patterns that would not adversely impact the park’s resources. Park facilities could include a visitor center, administrative offices, and maintenance facilities.

**Contemporary Settlement Zone.** The contemporary settlement zone encompasses areas scattered throughout the park, typically consisting of parcels whose uses are predominantly contemporary residences or suburban residential subdivisions. Unless findings of significance are determined by future study, areas in this zone would generally remain in private ownership, unless warranted by special circumstances. Through educational and technical outreach, efforts would be made to minimize the impacts of these areas through measures such as the use of earth-tone colors on structures and landscape screening. Park facilities could include a visitor center, administrative offices, and maintenance facilities.



*Representative Contemporary Settlement Zone Image*

**Large Events Zone.** The large events zone is an overlay zone encompassing areas within the cultural landscape zone that fulfills the park's legislative mandates to allow for large public events. It would accommodate the Battle of Cedar Creek reenactment hosted by the Cedar Creek Battlefield Foundation, as well as other events such as those held at Belle Grove Plantation. The zone would be managed to serve large numbers of visitors for relatively short time periods, while ensuring that such events would not impair park resources.



*Representative Special Events Zone Image-Scene from Battle of Cedar Creek Reenactment*

**Visitor Services Zone.** These are areas where visitors can learn about the park, contact staff of the NPS or Key Partners, and access restrooms and emergency assistance. Park facilities could include roads and parking areas, a visitor center or other visitor contact facilities, walkways, restrooms, emergency services, picnic areas, campgrounds, administrative offices, and maintenance facilities.



*Representative Visitor Services Zone Image – Belle Grove Manor House Parking Area*

**Table 2.3 Management Zones**

| Subject                             | Overall Concept   | Land and Resource Protection   |
|-------------------------------------|---|--|
| <b>Cultural Landscape Zone</b>      | Areas representative of the park's cultural resources, where visitors can gain an understanding and appreciation of the park's interpretive themes associated with the history of the Shenandoah Valley from early settlement through the Civil War and beyond. This is the largest zone within the park and encompasses many of the park's historic resources.   | As determined by the Land Protection Plan to be undertaken subsequent to the adoption of the GMP, efforts to protect these areas would employ a combination of fee acquisition, conservation easements, and cooperative arrangements with willing landowners. Emphasis would be placed upon fee acquisition for locations where public access is desired or resource protection goals warrant acquisition. A high priority would be given to maintaining cooperative working relationships with private landowners and providing technical assistance as requested. Such assistance would seek to identify resource preservation strategies that also address other landowner interests and concerns.  |
| <b>Sensitive Resource Zone</b>      | Areas encompassing the park's stream corridors and other important natural areas having high biodiversity or sensitive resources such as the Panther Conservation Site identified by the Virginia Department of Conservation and Recreation. Areas in this zone may also contain important cultural sites such as earthworks and troop stream crossings. Natural resource protection is the primary goal within this zone.  | Encompassing miles of riparian corridors associated with the North Fork of the Shenandoah River, Cedar Creek and its major tributaries within the park, protection strategies would employ an educational and conservation easement program focusing on the many landowners whose lands fall partly or entirely within this zone. Potential acquisitions of rights-of-ways or fee interest would be considered where public access is desired and/or fee ownership is desirable for resource management. This zone includes the Panther Conservation Site, most of which is owned by the Cedar Creek Battlefield Foundation, and the shale barrens on the Keister Tract, owned by Shenandoah County. These sites are believed to have unique plant communities, high biodiversity, and excellent water quality, thereby warranting further research and analysis and the development of a habitat management program, possibly through cooperative agreements between the landowner, the state, and the NPS. |
| <b>Town and Countryside Zone</b>    | Areas providing settings that contribute to the visitor experience but that generally have a lower protection priority because of existing land use and ownership patterns. Future resource studies may reveal certain sites within this zone that warrant higher protection priority.  | Protection strategies would be undertaken through education and technical assistance to landowners and local government to encourage consideration of resource preservation measures in land use planning and decision-making. These lands would be considered a lower priority for acquisition; the NPS and Key Partners would be more likely to accept donations of land or conservation easements rather than purchasing property unless warranted by special circumstances. Purchase of rights-of-ways or fee interest would be considered if required for trail rights-of-ways or other special purposes.   |
| <b>Contemporary Settlement Zone</b> | Areas scattered throughout the park, typically on relatively small ownership parcels whose current uses are predominantly rural residences or suburban residential subdivisions. Such areas may contain historic structures and/or represent locations of events of significance. Unless findings of significance are determined by future study, areas in this zone are considered most appropriate for remaining in private ownership.  | Educational and technical assistance would be made available to landowners in this zone whose lands may include Park-related resources. Emphasis would be placed upon measures to minimize the impacts of these areas on the park, e.g., by encouraging earth-tone colors on structures or by landscape screening. Unless warranted by special circumstances, the NPS and/or its partners would accept donations of conservation easements or fee-interest but not purchase them.  |
| <b>Large Events Zone</b>            | Areas designated for reenactments and other events requiring measures to accommodate relatively large numbers of visitors as well as accompanying actions to ensure that such events would not adversely impact the park's resources. This zone is an overlay in a designated area within the park's cultural landscape zone. It fulfills one of the park's special mandates to allow for battle reenactments. The zone would allow for other large events such as those held periodically at Belle Grove Plantation. | The NPS and the Key Partners would adopt policies and practices applicable to large event activities, to ensure the protection of cultural and natural resources. This zone may be especially suited for a landscape restoration program to represent conditions existing at the time of the Battle of Cedar Creek.  |
| <b>Visitor Services Zone</b>        | Areas where visitors can learn about the park, contact staff of the NPS or Key Partners, and access restrooms and emergency assistance. Visitor contact facilities would be in this zone.   | Visitor service zones would be limited in numbers, and sited, designed and maintained by the NPS or the Key Partners to minimize potential adverse impacts on park resources.  |

Table 2.3 Management Zones (continued)

| Subject                             | Desired Resource Conditions and Visitor Experience  | Appropriate Types and Levels of Management  | Appropriate Types of Visitor Facilities and Services   |
|-------------------------------------|---|---|--|
| <b>Cultural Landscape Zone</b>      | Visitors would have the opportunity to access a diversity of cultural sites reflecting the range of stories to be told in the park. Where possible, those sites would be located in larger protected field and woodland landscapes providing a broader understanding and appreciation of the park. Visitors would experience the park through a variety of interpretive media, including indoor and outdoor exhibits, self-guided tours, ranger contacts, and living history programs.  | Management strategies would seek to protect all park-related cultural resources in this zone, in accordance with the Secretary of the Interior's standards and guidelines for the treatment of historic properties and protection of cultural landscapes. Wherever feasible, those strategies would be undertaken to protect the integrity of park resources. | Facilities and services would generally include those required to support the visitor interpretive experience, such as waysides and interpretive trails. Picnic areas and trails may also be provided if designed in a manner compatible with the visitor interpretive experience and resource protection goals. A visitor center, administrative facilities, and/or maintenance facility could occur in this zone if site selection criteria are satisfied. |
| <b>Sensitive Resource Zone</b>      | Healthy natural communities and their habitats predominate. Visitors would have opportunities to access selected points along major waterways such as the North Fork of the Shenandoah River and Cedar Creek. Trails would be provided. Natural areas included in this zone, such as the Panther Conservation Site and the Keister Tract shale barrens, would enable visitors to obtain a broader understanding of the park's natural history and ecosystems and their strong relationships with the area's cultural history. | Best management practices would be used to protect, stabilize and restore naturally functioning ecological systems and promote native species and habitats. Cultural resources occurring in this zone would be treated in the same manner as in the cultural landscape zone.  | Facilities and services would be limited to the minimum necessary to allow visitor pedestrian access, primarily trails and directional and interpretive signage. Certain areas within this zone may be closed temporarily for resource protection and visitor safety. The existing road in the Panther Conservation Site would be maintained for administrative and fire fighting access.  |
| <b>Town and Countryside Zone</b>    | Visitors would experience this zone from public roads or trails. Lands in this zone would generally not be accessible to the public. However, certain locations may offer opportunities for interpretation, told through waysides or other interpretive media.  | Management strategies would be oriented towards promoting resource conservation planning associated with the design of land subdivision and development projects in this zone. Technical assistance would be provided to interested landowners and local government to promote compatible development and minimize adverse park impacts.                      | Visitor facilities and services would generally not be provided in this zone. The NPS or the Key Partners may provide technical assistance to others in designing interpretive waysides and trails contributing to or compatible with the park's purpose. A visitor center, administrative facilities, or maintenance facility could occur in this zone if site selection criteria are satisfied.  |
| <b>Contemporary Settlement Zone</b> | Desired conditions would be associated with the support of private landowners to manage their properties in a manner consistent with the park's purpose. This zone would generally not have public access because of existing private residential development. However the NPS would work cooperatively with owners of properties where the NPS seeks to locate interpretive media or to provide visitor access to a specific site where an historic event occurred.  | Technical assistance would be provided to interested private landowners in identifying and protecting park-related resources, and in managing their properties in a manner compatible with the park.  | Visitor facilities and services would generally not be provided in this zone. The NPS or the Key Partners may provide technical assistance to others in designing interpretive waysides and trails contributing to or compatible with the park's purpose. A visitor center, administrative facilities, or maintenance facility could occur in this zone if site selection criteria are satisfied.  |
| <b>Large Events Zone</b>            | Desired resource conditions would be associated with the management of large events in a manner that protects the zone's cultural and natural resources and causes minimum adverse impacts on adjoining management zones, as well as nearby areas outside of the park. Management of reenactments, e.g., providing necessary facilities and services would also seek to provide an immersion experience for reenactors and observers, with minimum intrusion from the outside world.  | Management strategies would focus on preparing resource protection standards that would serve as conditions for approval of all events occurring within this zone.  | Temporary facilities would be provided to accommodate events, including: tents, gravel roads, parking barriers, directional signage, and equestrian facilities. Temporary services would be provided during events, focusing on managing large crowds in a safe manner. Such services would include emergency services, traffic control, law enforcement, restroom facilities, and provision of food.  |
| <b>Visitor Services Zone</b>        | <i>Desired conditions would include the design and management of facilities and services that meet the needs of park visitors, including: park orientation, restrooms and other conveniences, and emergency services.</i>   | <i>Management strategies would be oriented towards research and on-site surveys of potential park-related resources and the incorporation of such findings into facility planning for this zone.</i>  | <i>Facilities and services may include: visitor contact facilities, roads and parking areas, walkways, restrooms, emergency services, picnicking areas, and campgrounds. This zone would focus on visitor convenience and access to services. It would be managed to accommodate large numbers of people during large events or other peak visitation periods.</i>   |

## **2.5 Appropriate Kinds and Levels of Management, Development, and Access**

### **2.5.1 Area-Specific Desired Conditions**

Area-specific desired conditions provide specific direction about the desired resource conditions, visitor experience opportunities, and appropriate kinds and levels of management, development, and access for particular areas of the park. Six areas of the park are addressed, including

- Belle Grove Plantation
- Cedar Creek Battlefield Foundation visitor contact facility
- Heater House
- Harmony Hall
- Keister Tract
- Whitham Farm

Table 2.4 provides a summary of the desired conditions within each of these six areas. The desired conditions statements focus on the park's fundamental and other important resources and values (see Table 1.2 above). They address the specific significant cultural and natural resources present at each site and the types of visitor experiences that would be offered.

The desired conditions for the six areas are common to Alternatives B, C, and D.

### **2.5.2 Area-Specific Needed and Allowable Changes**

Area-specific needed and allowable changes identify the kinds of changes needed to achieve desired conditions. They are identified by comparing the desired conditions to what currently exists.

Table 2.4 provides a summary of the types of actions and changes that would be needed to achieve the desired conditions within the six specific areas identified in the park. The actions are meant to be a range of strategies that the NPS and the Key Partners might implement at each site. Consideration of the actions identified would occur during subsequent project planning, including consideration of alternatives and compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, as appropriate.

The area-specific needed and allowable changes are common to Alternatives B, C, and D.

**Table 2.4 Area Specific Desired Conditions and Needed Changes (Common to All Action Alternatives)**

| Location   | Management Prescription(s)              | Desired Conditions   | Existing Conditions and Facilities   | Examples of the Types of Appropriate Actions and Needed Changes   |
|--|---|--|--|---|
| <b>Belle Grove Plantation</b><br><i>(owned by the National Trust for Historic Preservation and operated by Belle Grove, Inc.)</i>    | Cultural Landscape/<br>Visitor Services | <ul style="list-style-type: none"> <li>The Manor House, other historic structures, and the associated cultural landscape are preserved in good condition</li> <li>Visitors experience the life and times of the families and slaves who lived and worked at Belle Grove Plantation</li> <li>Visitors are oriented to the overall park</li> <li>Visitors can walk around the plantation as well as have access to the larger park trail system</li> <li>Visitation is moderate to extremely high during special events</li> <li>Collections are properly housed, curated, and made accessible for research</li> </ul>   | <ul style="list-style-type: none"> <li>Manor House (c.1797) largely restored to 1815 to 1825 period condition operated as a house museum and also includes gift shop, administrative offices, and collections of Belle Grove, Inc.</li> <li>Overseer's House, not restored, not open to the public</li> <li>Barn (c. early 1900), used for maintenance and storage</li> <li>Fields, leased for agriculture</li> <li>Visitor parking facilities</li> <li>Small picnic area</li> </ul>           | <ul style="list-style-type: none"> <li>Continue to operate the Manor House as a house museum, with other existing functions</li> <li>Consider rehabilitation and adaptive reuse of the Overseer's House</li> <li>Consider rehabilitation of the barn for adaptive reuses</li> <li>Implement other appropriate historic building and cultural landscape treatments</li> <li>Expand visitor contact to include orientation to the overall park</li> <li>Provide additional visitor facilities, such as a comfort station, parking, and picnicking facilities</li> <li>Develop a trail taking visitors to points of interest and that provides a connection to the larger park trail system</li> </ul> |
| <b>Cedar Creek Battlefield Foundation Visitor Contact Facility</b> <i>(owned and operated by Cedar Creek Battlefield Foundation)</i> | Cultural Landscape/<br>Visitor Services | <ul style="list-style-type: none"> <li>Visitors are oriented to the Battle of Cedar Creek and to the overall park</li> <li>Headquarters facilities for special events are provided</li> <li>Parking and comfort stations are provided during special events</li> <li>Visitation is moderately high to extremely high during special events</li> <li>Collections are properly housed and curated, and made accessible for research</li> </ul>   | <ul style="list-style-type: none"> <li>Building (c. 1970), used for visitor contact, museum, and bookstore; includes administrative offices of Cedar Creek Battlefield Foundation</li> <li>Visitor parking facilities</li> <li>Building and site used as headquarters during special events</li> </ul>   | <ul style="list-style-type: none"> <li>Continue to operate the building for existing functions</li> <li>Expand visitor contact to include orientation to the overall park</li> </ul>  |
| <b>Harmony Hall</b><br><i>(owned and operated by Belle Grove, Inc.)</i>  | Cultural Landscape                      | <ul style="list-style-type: none"> <li>Harmony Hall and the associated cultural landscape are preserved in good condition and reflect the mid-18<sup>th</sup> century in the Shenandoah Valley</li> <li>Visitors experience and learn about the life and times of families during the early settlement of the Shenandoah Valley in a quiet and contemplative setting</li> <li>Site setting is protected from over development of visitor facilities</li> <li>Visitors can walk around the property as well as have access to the larger park trail system</li> <li>Visitation is low to moderate during small special events</li> <li>Collections are properly housed and curated, and made accessible for research</li> </ul> | <ul style="list-style-type: none"> <li>Harmony Hall (c. 1755), recently stabilized through historically appropriate repairs; open to occasional small group tours</li> <li>Farmhouse, poor condition</li> <li>Very limited visitor parking</li> <li>Historically significant Bowman Cemetery</li> <li>Fields, leased for agriculture</li> <li>Cedar Creek flows along property boundary; riparian area seriously impacted by invasive Russian Olive (<i>Elaeagnus angustifolia</i>)</li> </ul> | <ul style="list-style-type: none"> <li>Continue to open the house to the public</li> <li>Restore the house and farmhouse to period condition</li> <li>Restore the adjoining cultural landscape to period condition</li> <li>Provide a small visitor parking facility and comfort station</li> <li>Provide shuttle service for visitors from off-site during small special events</li> <li>Install interpretive media</li> <li>Install an information kiosk orienting visitors to the overall park</li> <li>Restore riparian habitat along Cedar Creek</li> <li>Develop a trail that takes visitors to points of interest and that provides a connection to the larger park trail system</li> </ul>  |

**Table 2.4 Area Specific Desired Conditions and Needed Changes (Common to All Action Alternatives)** (continued)

| Location   | Management Prescription(s)                         | Desired Conditions   | Existing Conditions and Facilities  | Examples of the Types of Appropriate Actions and Needed Changes  |
|--|--|--|---|--|
| <b>Heater House</b><br>(owned by Cedar Creek Battlefield Foundation) | <b>Cultural Landscape/<br/>Large Event Overlay</b> | <ul style="list-style-type: none"> <li>Heater House and the associated cultural landscape are preserved in good condition and reflect the Civil War at the time of the Battle of Cedar Creek</li> <li>Visitors experience the life and times of families during the Civil War</li> <li>Visitors can walk around the site as well as have access to the larger park trail system</li> <li>Visitation is extremely low to high during special events</li> <li>Collections are properly housed and curated, and made accessible for research</li> </ul> | <ul style="list-style-type: none"> <li>Farmhouse, recently stabilized through roof and foundation repairs, interior in poor condition, not open to the public</li> <li>Spring house, in ruins</li> <li>Adjacent fields, leased for agriculture</li> </ul>   | <ul style="list-style-type: none"> <li>Restore house to period condition</li> <li>Restore the adjoining cultural landscape to period condition</li> <li>Open the house to the public and provide living history programs during special events</li> <li>Install interpretive media</li> <li>Develop a trail that takes visitors to points of interest and that provides a connection to the larger park trail system</li> </ul>  |
| <b>Keister Tract</b><br>(owned by Shenandoah County)                 | <b>Cultural Landscape/<br/>Visitor Services</b>    | <ul style="list-style-type: none"> <li>Visitor facilities provide opportunities for passive recreation</li> <li>Riparian and upland habitat is restored</li> <li>Visitors are oriented to the park and to the Battle of Cedar Creek</li> <li>Visitors can hike on a series of park trails as well as have access to the larger park and regional trail system</li> </ul>   | <ul style="list-style-type: none"> <li>Not currently open to the public</li> <li>Fields and woods, leased for agriculture (used for grazing)</li> <li>Farm buildings (3), abandoned and in poor condition</li> <li>North Fork of the Shenandoah River flows along property boundary; riparian area impacted by grazing and invasive plants</li> <li>Shale barrens, not protected</li> </ul> | <ul style="list-style-type: none"> <li>Remove cattle from the site</li> <li>Remove non-historic buildings</li> <li>Restore upland forest</li> <li>Restore riparian habitat along the North Fork of the Shenandoah River</li> <li>Develop visitor facilities as included in the <i>Keister Tract Master Plan</i> and open the site for public passive recreational use</li> <li>Implement actions to protect the shale barrens from visitor use impacts</li> <li>Install interpretive media</li> <li>Develop a trail system on-site that connects to trails in the park with trails in George Washington National Forest and the town of Strasburg</li> </ul> |
| <b>Whitham Farm</b><br>(owned by the National Park Service)          | <b>Cultural Landscape/<br/>Visitor Services</b>    | <ul style="list-style-type: none"> <li>Structures are rehabilitated and adaptively reused</li> <li>Site is interpreted</li> <li>Visitor facilities are provided</li> </ul>   | <ul style="list-style-type: none"> <li>Property leased for residential and agricultural use</li> <li>Farmhouse (c. 1840), fair condition with modern wing</li> <li>Fields, used for grazing</li> <li>No visitor facilities or site interpretation</li> </ul>  | <ul style="list-style-type: none"> <li>Rehabilitate farmhouse for adaptive reuse for park offices</li> <li>Rehabilitate and adaptively reuse outbuildings to support park maintenance operations</li> <li>Provide visitor parking, picnicking facilities, and vault toilet</li> <li>Install interpretive media</li> <li>Install an information kiosk orienting visitors to the overall park</li> <li>Develop a trail that takes visitors to points of interest and that provides a connection to the larger park trail system</li> </ul>   |

## 2.6 Alternative B

### 2.6.1 Concept (Alternative B)

In Alternative B, the cultural heritage and natural history stories of the park would be told through interpretive media and programs offered by the Key Partners and NPS at existing sites, with opportunities for visitors to explore rural areas of the park on interpretive self-guided auto routes (see Figure 2.2). Belle Grove Plantation, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract would be the primary destinations within the park. Small group tours would be offered at Harmony Hall. Auto routes in the park's rural areas would have wayfinding signage, a wayside pull-off, and supporting interpretive materials made available at the Key Partner sites as well as through the internet. Visitors would also explore Belle Grove Plantation and lands owned by the Cedar Creek Battlefield Foundation on non-motorized trails. All of the park's stories would be told at sites throughout the park.

Most visitors would perceive the park as a unit of the national park system. NPS rangers would offer interpretive programs and activities at the Key Partner sites and possibly other properties in the park. The NPS would provide technical assistance to the Key Partners, the Community Partners, and private landowners regarding preservation of historic and natural resources within the park. The NPS would rehabilitate and adaptively reuse the farmhouse and barn at the Whitham Farm. The NPS park offices would be located outside the park or perhaps at the rehabilitated Whitham Farm.

The NPS and the Key Partners would develop a coordinated interpretive program that would identify the primary interpretive themes and their related stories, as well as places in the park where those stories would be told. There would be an informal collaborative relationship regarding natural and cultural resource protection. Written agreements would be entered into for special projects and special management programs.

While the Key Partners would continue to purchase high-priority tracts of land, the current land status – about a third of the park owned and protected from development by the Key Partners – would not be expected to change significantly under Alternative B.

### 2.6.2 Partnerships (Alternative B)

**The NPS and the Key Partners would have a generally informal relationship with written agreements for special projects and management programs.**

The NPS and the Key Partners would continue to have a generally informal, collaborative relationship to share information, discuss issues of mutual concern, and coordinate responses to resource threats. In addition the NPS would serve as a facilitator among the Key Partners for land and resource protection and other

shared goals. The NPS and the Key Partners would manage their lands cooperatively per written, shared strategies for managing natural and cultural resources. Additionally, the NPS and the Key Partners would develop written agreements to undertake special projects and manage various aspects of the park.

### **2.6.3 Land Protection (Alternative B)**

**The Key Partners would have primary responsibility for land acquisition and resource protection. The NPS would acquire land and interests in land by donation or from willing sellers as funds are available.**

The land acquisition strategy under Alternative B would be the same as in Alternative A. Under Alternative B, the Key Partners would have the primary responsibility for land acquisition and resource protection. The NPS would not actively seek to be an owner of significant acreage within the park, but would accept donations of land or conservation easements and would continue to acquire land with appropriated funds. Assuming that existing funding levels for land acquisition continue, the NPS and the Key Partners would likely acquire an additional 200 acres of land within the park.

### **2.6.4 Resource Management (Alternative B)**

#### **■ Cultural Resource Management**

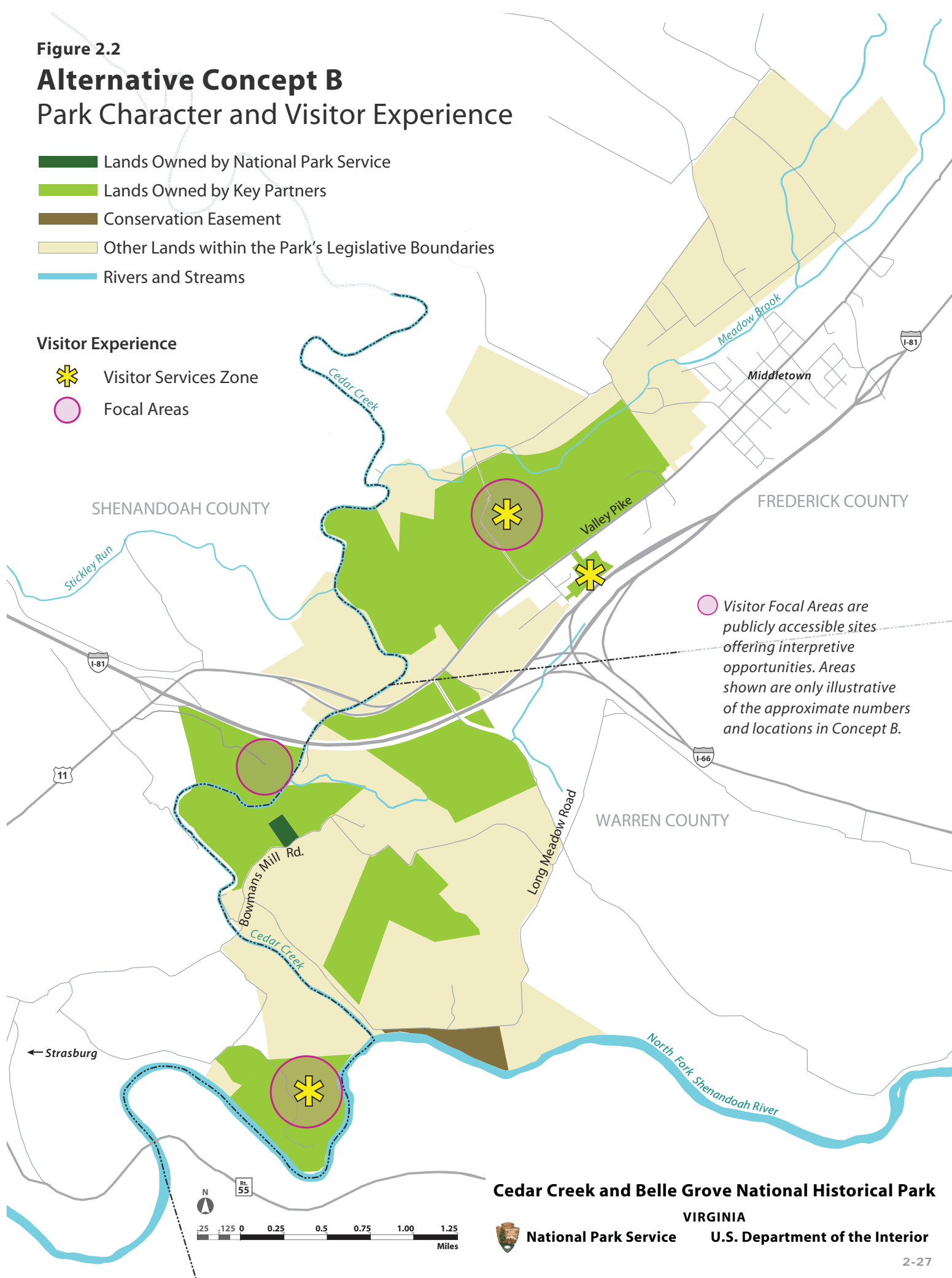
Cultural resource management actions in Alternative B would generally be the same as those described above for Alternative A.

Under Alternative B, the NPS would manage the historic property that it owns in the park – Whitham Farm (c. 1840) – as well as all other cultural resources that it acquires in accordance with the NPS *Management Policies* (NPS 2006d) and NPS *Cultural Resource Management Guidelines* (NPS 1998). Within the timeframe of the GMP, the NPS would also likely rehabilitate and adaptively reuse the Whitham House (c. 1840) and farm-related outbuildings to support park operations and visitor interpretation. All management actions at Whitham Farm would be completed in accordance with the mitigation measures summarized below in Section 2.12.

In Alternative B, the NPS would extend its technical assistance to private owners of cultural resources in the park, helping them to understand the historic significance of their property, treatment options, historic preservation tax incentives, and the overall economic benefits of historic preservation. Technical assistance would include assistance with National Register nominations to owners of significant properties. The NPS would also educate private landowners regarding the need to protect collections and encourage landowners to donate to the NPS collections recovered from private property within the park.

Figure 2.2

## Alternative Concept B Park Character and Visitor Experience



### ■ Natural Resource Management

Natural resource management actions in Alternative B would generally be the same as those for Alternative A. In Alternative B the NPS would acquire some property within the park using already appropriated funds and potentially through donations. Acquired properties would be managed in accordance with the NPS *Management Policies* (NPS 2006d) and other relevant NPS guidelines. Natural resources on NPS property would be managed to generally protect natural processes and population diversity. The types of management actions that would occur in Alternative B would be similar to those described for Alternative A.

In Alternative B, the NPS would extend its technical assistance to private owners of significant natural resources in the park, helping identify resources, conveying information about their significance, and assisting with resource management.

#### 2.6.5 Visitor Experience, Interpretation, and Education (Alternative B)

**Visitors would experience the park primarily at Key Partner-owned sites and via self-guided auto-touring routes.**

Visitors would experience the park primarily at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract, as well as at reenactments. Opportunities to explore the park would also be made available through the development of self-guided auto-touring routes. The NPS and the Key Partners would collaborate on interpretive planning. The NPS would provide information to visitors through a system of electronic media, which could include a web-based orientation, AM radio broadcasts, cell phone tours, CD rentals, MP3/iPod downloads, etc. The NPS interpretive staff would focus on providing programs and ranger-led tours of the park. Publicly accessible visitor focal areas would offer interpretive and educational opportunities. The desired visitor experience for each zone is outlined in Table 2.3.

#### 2.6.6 Park Facilities (Alternative B)

**Park facilities would be provided by the Key Partners.**

Visitor contact facilities would be provided by the Key Partners at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. Interpretive and orientation materials on the park and the National Historic District would be available at these sites. Electronic media (see Section 2.6.5 above) would be used to enable visitors to take self-guided tours of the park. In addition, the NPS and the Key Partners would collaborate to develop auto touring routes on existing roads and a trail system on land owned by the Key Partners and possibly on rights-of-way acquired from willing sellers. Approximately three miles of trail, with two trailheads, would be developed and maintained. Park signage would guide visitors to appropriate sites. An interpretive wayside would be developed. Ancillary facilities would be guided by the management zone

prescriptions under “Appropriate Types of Visitor Facilities and Services” (see Table 2.3 above).

#### **2.6.7 Transportation, Access, and Circulation (Alternative B)**

**Park access would be primarily vehicular, supplemented by trails on properties owned by the Key Partners. Wayfinding would assist visitors with accessing focal areas and the rural countryside within the park.**

Interstate 81 and Valley Pike (Route 11) would provide regional access to the park. Once in the local area visitors would travel through the park on Valley Pike (Route 11) to access the network of rural county roads that would take them to the visitor contact facilities at the Key Partner’s properties.

Visitors interested in exploring the park beyond the contact facilities of the Key Partners would do so via private vehicles following auto touring routes along Valley Pike (Route 11) and the park’s rural county roads. Wayfinding signage would be installed to help visitors find attractions along the tour routes.

The park and the Key Partners would cooperate to develop approximately three miles of trails on land owned by the Key Partners, and possibly on rights-of-way acquired from willing sellers.

#### **2.6.8 Park Operations and Staffing (Alternative B)**

**Park staff and operations would focus on developing and implementing interpretive programs as well as providing technical assistance.**

The NPS would employ approximately six full-time employees, including the park superintendent, a community planner, a landscape architect, interpretive rangers, a seasonal park guide, and an administrative specialist. Since this alternative calls for no NPS-managed visitor center and only minimal NPS land ownership, NPS staff would be focused on providing technical assistance to communities and the Key Partners, and interpretive programs and media on key partner- owned and privately owned lands within the park. The park would utilize NPS systemwide technical assistance from the NPS Regional and Washington Offices. Volunteers would play a role in providing administrative assistance to the NPS and assisting with park programs. The staffing of key partner organizations would not be expected to change substantially from its current levels.

The NPS administrative offices would be located in one of the park’s adjacent communities, and possibly in the Whitham house within the park once that structure is appropriately rehabilitated. The offices of the Key Partners would continue to be located in their current locations (listed under Park Operations, Alternative A).

### **2.6.9 Technical Assistance (Alternative B)**

**The park would provide technical assistance on issues affecting resources within the park boundary.**

NPS and the Key Partners would provide technical assistance to one another, to private landowners, and to local governments in support of protecting resources within the park boundary. An important aspect of this technical assistance would be private landowners, with whom the NPS and the Key Partners would work on protection of sensitive natural and cultural resources. The NPS would also provide technical assistance to the Key Partners with property management, including resource protection, land stewardship, and use of best management practices. See Section 2.3, Management Element 9, for the types of technical assistance that could be offered.

### **2.6.10 Related Resources (Alternative B)**

**The park would rely on interest groups, local governments, and others to protect thematically related resources outside the park boundary.**

Under Alternative B, the NPS and the Key Partners would collaborate with others to address threats to related resources outside the park as budgets and staffing allow. Related resources of interest would include scenic resources that provide the visual setting for the park, cultural resources that are thematically related to the park, and natural resources – such as hydrologic resources – that are functionally related to the park.

### **2.6.11 Costs (Alternative B)**

Estimates of annual operating costs and one-time costs associated with Alternative B have been prepared using NPS and industry cost estimating guidelines (see Table 2.6 in Section 2.11 below). These costs are presented for comparative purposes only and will be refined at a later date based upon final design of facilities and other considerations. Actual costs will vary depending on if and when specific actions are implemented and on contributions by partners and volunteers.

#### **■ NPS Annual Operating Costs**

NPS annual operating costs associated with Alternative B are estimated to be \$730,444 (2007\$). This includes the anticipated cost for staff salaries and benefits for 6 full-time equivalent staff, utilities, supplies, leasing (including leased park offices, as in Alternative A), and other materials needed for park maintenance and operations.

#### **■ NPS One-Time Costs**

NPS one-time costs associated with Alternative B are estimated to be \$2,719,280 (2007\$), including one-time facilities costs and non-facilities costs. Facilities costs are those required for rehabilitation of structures at Whitham Farm and for

development of trails, trailheads, picnic facilities, and wayside pull-offs. Non-facilities costs are those required for cultural landscape restoration at the Whitham Farm, historic resource studies, signage, and interpretive media.

#### ■ **Land Acquisition Costs**

Under Alternative B, the estimated cost to acquire land and interests in land is \$4,000,000 (2007\$). The Key Partners would have the primary responsibility for acquiring land and interests in land. Land acquisition cost estimates are preliminary and intended solely for general planning purposes. Actual land acquisition costs would be determined by detailed appraisals when lands are considered for acquisition.

#### ■ **NPS Deferred Maintenance Costs**

As in Alternative A, there are no deferred maintenance costs associated with Alternative B. Existing park assets include the Whitham Farm; costs to be incurred for rehabilitation and adaptive reuse of the Whitham Farm are in the NPS one-time facilities costs presented above.

## **2.7 Alternative C**

### **2.7.1 Concept (Alternative C)**

In Alternative C, the park's cultural heritage and natural history stories would be told at a central location with a unified message; this central hub would orient visitors to the park, the operations of the NPS and the Key Partners, and the National Historic District (see Figure 2.3). Focal areas elsewhere in the park would provide immersion experiences where stories would be told in more depth. Focal areas would include the existing Key Partner sites at Belle Grove Plantation, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. Several additional focal areas would be added as historically significant sites are acquired. Visitors would travel to focal areas via auto routes with wayfinding signage, several wayside pull-offs, and supporting interpretive materials made available at the Key Partner sites as well as through the internet. Visitors would also explore the park on trails that connect lands owned by the Key Partners and the NPS and that follow the course of the Battle of Cedar Creek and the historic mill road network. All of the park's stories would be told at sites throughout the park.

Visitors would perceive the park as a unit of the national park system. NPS rangers would offer interpretive programs and activities at a visitor center, at Key Partner sites, at NPS-owned focal areas, and possibly at other locations in the park. The NPS would provide technical assistance to the Key Partners, the Community Partners, and private landowners regarding preservation of historic and natural resources within and in proximity to the park, as well as its viewsheds. The NPS would rehabilitate and adaptively reuse the farmhouse and barn at the Whitham

Farm for park operations and visitor interpretation. NPS park offices would be located at a visitor center and perhaps at the rehabilitated Whitham Farm.

The NPS and the Key Partners would develop a coordinated interpretive program that would utilize the primary interpretive themes and their related stories, as well as identify places in the park where those stories would be told. There would be an informal collaborative relationship regarding natural and cultural resource protection. Written agreements would be entered into for special projects and special management programs.

The NPS and Key Partners would acquire land from willing sellers, providing resource protection at key historic sites that would become visitor focal areas.

### 2.7.2 Partnerships (Alternative C)

**The NPS and the Key Partners would have a generally informal relationship with written agreements for special projects and management programs.**

Under Alternative C, the NPS and the Key Partners would continue to have a generally informal, collaborative relationship to share information, discuss issues of mutual concern, and coordinate responses to resource threats. In addition, the NPS would serve as a facilitator among the Key Partners for land and resource protection and other shared goals. The NPS and the Key Partners would manage their lands cooperatively per written, shared strategies for managing natural and cultural resources. Additionally, the NPS and the Key Partners would develop written agreements to undertake special projects and manage various aspects of the park.

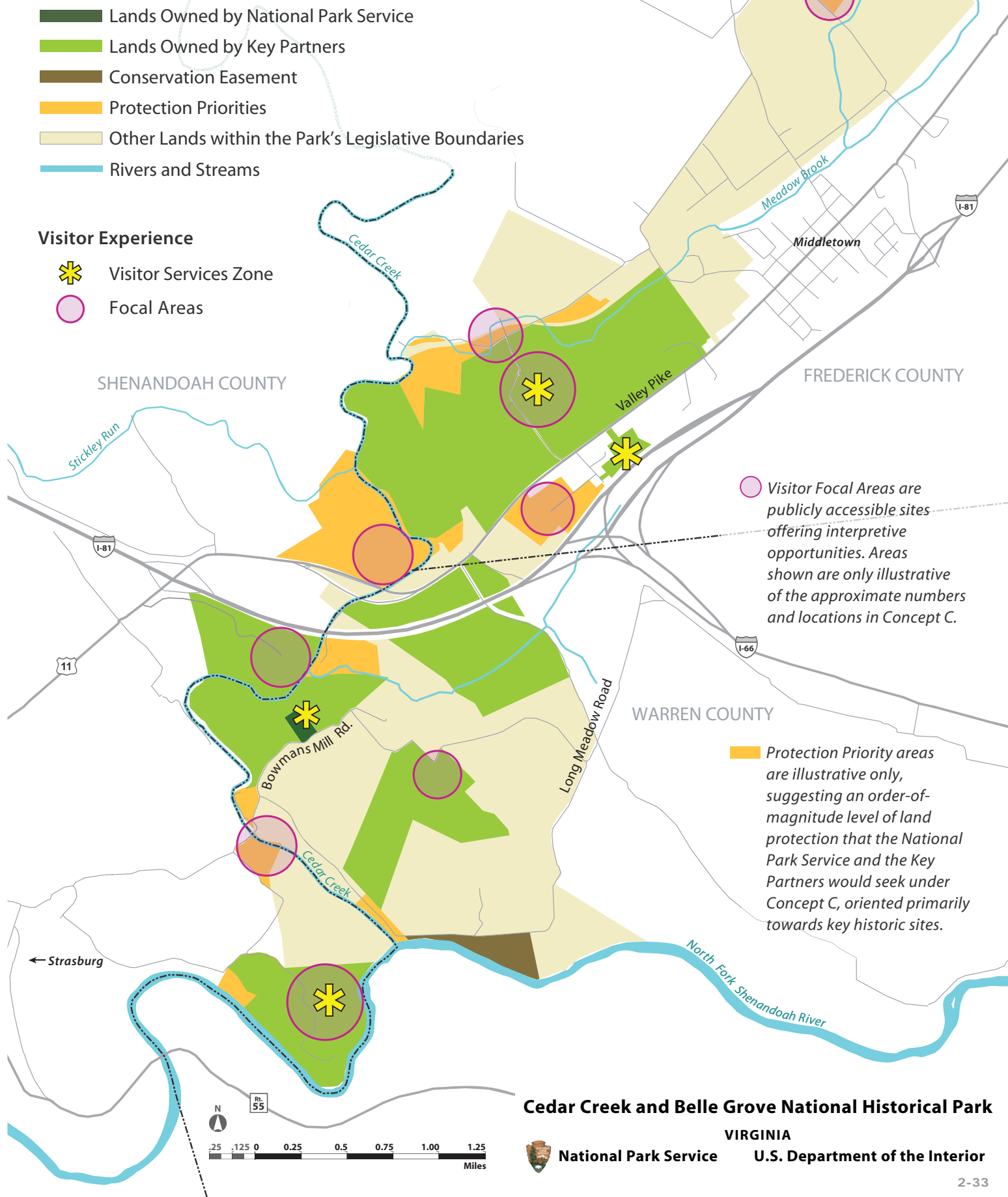
### 2.7.3 Land Protection (Alternative C)

**The NPS and the Key Partners would acquire land and interests in land in a phased approach based on land protection plan priorities. The highest priority or first phase would be to acquire key historic sites that would become visitor focal areas.**

In Alternative C, the NPS and Key Partners would actively seek to acquire land or interests in land by donation or from willing sellers using appropriated funds. A land protection plan would be developed in consultation with the Key Partners and other interested stakeholders in which the top priority would be key historic sites that would become visitor focal areas. These sites would be purchased in a phased approach with both the NPS and the Key Partners seeking to acquire land or interests in land. The lands within the Contemporary Settlement and Town and Countryside zones – about 300 acres -- would be the lowest priority for land acquisition and would likely not be acquired, unless warranted by special circumstances. Assuming availability of funding, the NPS and the Key Partners would acquire approximately 2,000 additional acres of land or interests in land within the park over the life of the GMP. The NPS and the Key Partners would work

Figure 2.3

## Alternative Concept C Park Character and Visitor Experience



together to acquire these lands and funding for their purchase would be a collaborative effort.

#### **2.7.4 Resource Management (Alternative C)**

##### **■ Cultural Resource Management**

Cultural resource management actions in Alternative C would generally be the same as those described above for Alternatives A and B.

Under Alternative C, the NPS would manage the historic property that it owns in the park - Whitham Farm (c. 1840) – as well as all other cultural resources that it acquires in accordance with the *NPS Management Policies* (NPS 2006d) and *NPS Cultural Resource Management Guidelines* (NPS 1998). Within the timeframe of the GMP, the NPS would rehabilitate and adaptively reuse the Whitham House (c. 1840) and farm-related outbuildings to support park operations and visitor interpretation. All management actions at Whitham Farm would be completed in accordance with the mitigation measures summarized below in Section 2.12.

As in Alternative B, in Alternative C the NPS would also extend its technical assistance to private owners of cultural resources in the park.

In Alternative C the NPS and Key Partners would acquire significant historic sites within the park. Implementation of cultural resource management actions (as outlined above in Alternative A) for these properties would require significantly increased operational support from the NPS when compared to Alternatives A and B. The NPS would provide technical assistance to the Key Partners in meeting the increased cultural resource management needs for these properties and in seeking financial support for their documentation, treatment, and long-term protection.

In Alternative C, the NPS would also identify adjacent lands that are significantly related to the cultural landscape and viewshed of the park and would identify the direct and indirect impacts of private development and land use within and adjacent to the park on its cultural landscapes. Strategies would be developed and implemented to work with adjoining landowners to mitigate impacts to the park.

##### **■ Natural Resource Management**

Natural resource management actions in Alternative C would generally be the same as those described for Alternatives A and B. In Alternative B, the NPS would acquire significant historic sites within the park. Acquired properties would be managed in accordance with *NPS Management Policies* (NPS 2006) and other relevant NPS guidelines. Natural resources on NPS property would be managed to generally protect natural processes and population diversity. The types of management actions that would occur in Alternative C would be similar to those described for Alternative A.

As in Alternative B, in Alternative C the NPS would extend its technical assistance to private owners of significant natural resources in the park, helping identify resources, conveying information about their significance, and assistance with resource management.

#### **2.7.5 Visitor Experience, Interpretation, and Education (Alternative C)**

**Visitors would be oriented to the park at a central location with a unified message. Then they could explore – by vehicle or on trails – protected sites where the park’s stories would be told.**

The NPS, Key Partners, and others would develop and implement a coordinated interpretive plan and programs throughout the park. Interpretation would occur at an NPS-managed visitor center, on NPS- and Key Partner-owned lands, and possibly on private lands owned by those willing to participate in the park’s interpretation program. NPS would provide information to visitors through a system of electronic media, which could include a web-based orientation, AM radio broadcasts, cell phone tours, CD rentals, MP3/iPod downloads, etc. Publicly accessible visitor focal areas would offer interpretive and educational opportunities. The desired visitor experience for each zone is outlined in Table 2.3.

#### **2.7.6 Park Facilities (Alternative C)**

**Park facilities would be provided by the NPS and the Key Partners.**

The NPS would develop and manage a visitor center that would orient visitors to the park and the National Historic District. The visitor center would be located within or near the park. The following considerations would be taken into account when choosing a location for the visitor center:

- The visitor center would need access to utilities and main travel corridors
- The site must have suitable building conditions
- The visitor center would not be located at or close to sensitive or significant natural or historic resources and would not be located within the sensitive resource zone
- The visitor center would not be an imposing structure on the landscape, be located in key viewsheds, or adversely impact scenic resources
- The visitor center would not disrupt travel patterns for local residents
- The visitor center would not be located in an area that would induce unsuitable private development within the park

Per Executive Order 13423 on sustainable practices, the visitor center would be designed to be energy efficient, reduce enclosed space, and when practical, export interior functions to exterior locations. The visitor center would attempt to meet Leadership in Energy and Environmental Design (LEED) standards for design,

construction, and operation of high-performance green buildings. Re-use of an existing structure to serve as a park visitor center has not been ruled out, but at this time a suitable facility has not been found. The Whitham Farm, owned by the NPS, fails to meet several of the criteria for a visitor center outlined above.

Additional visitor contact facilities would be provided by the Key Partners at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. The NPS and the Key Partners would collaborate to develop auto touring routes on existing roads and a trail system on land owned by the Key Partners, the NPS, and on rights-of-way acquired from willing sellers.

Approximately eight miles of trail, with about seven trailheads, would be developed and maintained. Park signage would guide visitors to appropriate sites. Two interpretive waysides would be developed. Ancillary facilities would be guided by the zone prescriptions under “Appropriate Types of Visitor Facilities and Services” (see Table 2.3 above).

#### **2.7.7 Transportation, Access, and Circulation (Alternative C)**

**Park access would be predominately vehicular, supplemented by a developed system of trails. Wayfinding would assist visitors with accessing the park’s focal areas and rural countryside.**

Interstate 81 and Valley Pike (Route 11) would provide regional access to the park. Once in the local area visitors would travel through the park on Valley Pike (Route 11) to access the park’s visitor center and the network of rural county roads that would take them to the visitor contact facilities at the Key Partner’s properties.

Visitors interested in exploring the park beyond the contact facilities of the Key Partners would do so via private vehicles following auto touring routes along Valley Pike (Route 11) and the park’s rural county roads. Wayfinding signage would be installed to help visitors find attractions along the tour routes.

The NPS and the Key Partners would cooperate to develop approximately eight miles of trails on land owned by the NPS, the Key Partners, and possibly on rights-of-way acquired from willing sellers. These trails would (1) follow the course of the Battle of Cedar Creek and the historic mill road network, and (2) connect properties owned by the NPS and the Key Partners.

#### **2.7.8 Park Operations and Staffing (Alternative C)**

**Park staff and operations would focus on managing a visitor center, protecting and maintaining park lands and facilities, developing and implementing interpretive programs and educational programs, and providing technical assistance.**

Under Alternative C, the NPS would manage a visitor center and have a substantial increase in acres to manage over alternatives A and B. With increased facilities to staff and lands to manage comes the need for increased personnel. The NPS would

employ approximately 18 full-time employees, including the park superintendent, a community planner, a landscape architect, a resource management division (4 staff), a visitor services and interpretation division (4 staff), a maintenance division (3 staff), and administrative staff (4 staff). The park staff would focus on protecting natural and cultural resources, managing the visitor center, maintaining park lands and facilities, providing interpretive media and programs, providing educational programs, and providing technical assistance to communities and the Key Partners. The park would utilize NPS systemwide technical assistance from the NPS Regional and Washington offices. Volunteers would play a substantial role in staffing the visitor center, providing administrative assistance to the NPS, and assisting with park programs. The staffing of the Key Partner organizations would not be expected to change substantially from its current levels.

The NPS administrative offices would be located in the NPS managed visitor center, and possibly in the Whitham house within the park once that structure is appropriately rehabilitated.

#### **2.7.9 Technical Assistance (Alternative C)**

**The NPS and the Key Partners would provide technical assistance with protection of the park's resources and viewsheds to one another, to private landowners, and to nearby communities.**

The NPS and the Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities to protect resources within the park boundary and important views from the park. The NPS would also provide technical assistance to the Key Partners with property management, including resource protection, land stewardship, and use of best management practices. See Section 2.3, Management Element 9, for the types of technical assistance that could be offered.

#### **2.7.10 Related Resources (Alternative C)**

**The NPS and the Key Partners would develop proactive strategies to protect resources outside the park boundary that are functionally or thematically-related to the park**

Resources of interest outside the boundary include scenic resources that provide the visual setting for the park, cultural resources that are thematically related to the park, and natural resources – such as hydrologic resources – that are functionally related to the park. Proactive strategies would include, but not be limited to protection of adjacent lands with conservation easements, consultation with local governments and businesses, working with conservation and preservation organizations, and consideration of a future park boundary adjustment.

### **2.7.11 Costs (Alternative C)**

Estimates of annual operating costs and one-time costs associated with Alternative C have been prepared using NPS and industry cost estimating guidelines (see Table 2.6 in Section 2.11 below). These costs are presented for comparative purposes only and will be refined at a later date based upon final design of facilities and other considerations. Actual costs will vary depending on if and when specific actions are implemented and on contributions by partners and volunteers.

#### **■ NPS Annual Operating Costs**

NPS annual operating costs associated with Alternative C are estimated to be \$2,039,172 (2007\$). This includes the anticipated cost for staff salaries and benefits for 18 full-time equivalent staff, utilities, supplies, leasing, and other materials needed for park maintenance and operations.

#### **■ NPS One-Time Costs**

NPS one-time costs associated with Alternative C are estimated to be \$12,981,943 (2007\$), including one-time facilities costs and non-facilities costs. Facilities costs are those required for rehabilitation of structures at Whitham Farm and for development of a park building with visitor contact facilities and administrative space for 18 full-time staff, an operations facility, trails, trailheads, picnic facilities, and wayside pull-offs. Non-facilities costs are those required for cultural landscape restoration at the Whitham Farm and elsewhere in the park, historic resource studies, historic structures reports, cultural landscape reports, signage, and interpretive media.

#### **■ Land Acquisition Costs**

Under Alternative C, the estimated cost for the NPS and the Key Partners to acquire land and interests in land is \$40,000,000 (2007\$). The NPS and the Key Partners would work together to acquire these lands and funding for their purchase would be a collaborative effort. Funding would also be sought from conservation trusts, friends groups, and other donors. Land acquisition cost estimates are preliminary and intended solely for general planning purposes. Actual land acquisition costs would be determined by detailed appraisals when lands are considered for acquisition.

#### **■ NPS Deferred Maintenance Costs**

As in Alternatives A and B, there are no deferred maintenance costs associated with Alternative C. Existing park assets include the Whitham Farm; costs to be incurred for rehabilitation and adaptive reuse of the Whitham Farm are in the NPS one-time facilities costs presented above.

## **2.8 Alternative D (Preferred)**

### **2.8.1 Concept (Alternative D)**

In Alternative D, the park's cultural heritage and natural history stories would be told at a central location with a unified message (see Figure 2.4). This central hub would orient visitors to the park, the operations of the NPS and the Key Partners, and the National Historic District; and would support educational programs, research, and other activities that help the park realize its special mandates for resource conservation. Focal areas within protected cultural landscapes elsewhere in the park would provide immersion experiences where stories would be told in more depth. Focal areas would include the existing Key Partner sites at Belle Grove Plantation, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. Several focal areas would be added as historically significant sites and adjoining cultural landscapes are acquired. Visitors would travel to focal areas via auto routes with wayfinding signage, numerous wayside pull-offs, and supporting interpretive materials made available at NPS and Key Partner sites as well as through the internet. Visitors would also explore the park on trails that connect lands owned by the Key Partners and the NPS, that follow the course of the Battle of Cedar Creek and the historic mill road network, and that connect to the towns of Middletown and Strasburg and the George Washington National Forest. All of the park's stories would be told at sites throughout the park.

Visitors would perceive the park as a unit of the national park system. NPS rangers would offer interpretive programs and activities at a visitor center, at Key Partner sites, at NPS and Key Partner-owned focal areas, and at other properties in and outside the park. The NPS would provide technical assistance to the Key Partners, the Community Partners, and private landowners regarding preservation of historic and natural resources within and in proximity to the park, as well as protection of the park's viewsheds and related resources outside the park boundary. The NPS would rehabilitate and adaptively reuse the farmhouse and barn at the Whitham Farm for park operations and visitor interpretation. NPS park offices would be located within a visitor center and perhaps at the rehabilitated Whitham Farm.

The NPS and the Key Partners would develop a coordinated interpretive program that would utilize the primary interpretive themes and their related stories, as well as identify places in the park where those stories would be told. There would be a formal relationship among the NPS and the Key Partners regarding resource management, interpretive programs, and park operations.

Protection of the park's resources would emphasize acquisition from willing sellers of cultural landscapes, sensitive natural resources, and connections between lands owned by the Key Partners and the NPS.

### 2.8.2 Partnerships (Alternative D)

**The NPS and the Key Partners would have a formalized relationship.**

The NPS and the Key Partners would enter into a formal relationship that defines a division of labor for various programs, events, and park operations.

### 2.8.3 Land Protection (Alternative D)

**The NPS and the Key Partners would acquire land and interests in land in a phased approach based on land protection plan priorities. The highest priority or first phase would be cultural landscape and natural resource protection and providing connectivity between land owned by the Key Partners and the NPS.**

In Alternative D, the NPS and Key Partners would seek to acquire substantial acreage within the park, actively acquiring land or interests in land by donation or from willing sellers using appropriated funds. In Alternative D, a land protection plan would be developed in consultation with the Key Partners and other interested stakeholders in which the top priority would be protecting the park's cultural landscapes and sensitive natural resources, and providing connectivity between parcels of land owned by the Key Partners and the NPS. These landscapes would be purchased in a rapidly phased approach with both the NPS and the Key Partners seeking to acquire land or interests in land. Land acquisition would be a high priority program for the NPS. Lands within the Contemporary Settlement and Town and Countryside zones would be the lowest priority for acquisition, and would likely not be acquired, unless warranted by special circumstances. Assuming availability of funding, the NPS and the Key Partners would acquire approximately 2,000 additional acres of land or interests in land within the park over the life of the GMP. The NPS and the Key Partners would work together to acquire these lands and funding for their purchase would be a collaborative effort.

### 2.8.4 Resource Management (Alternative D)

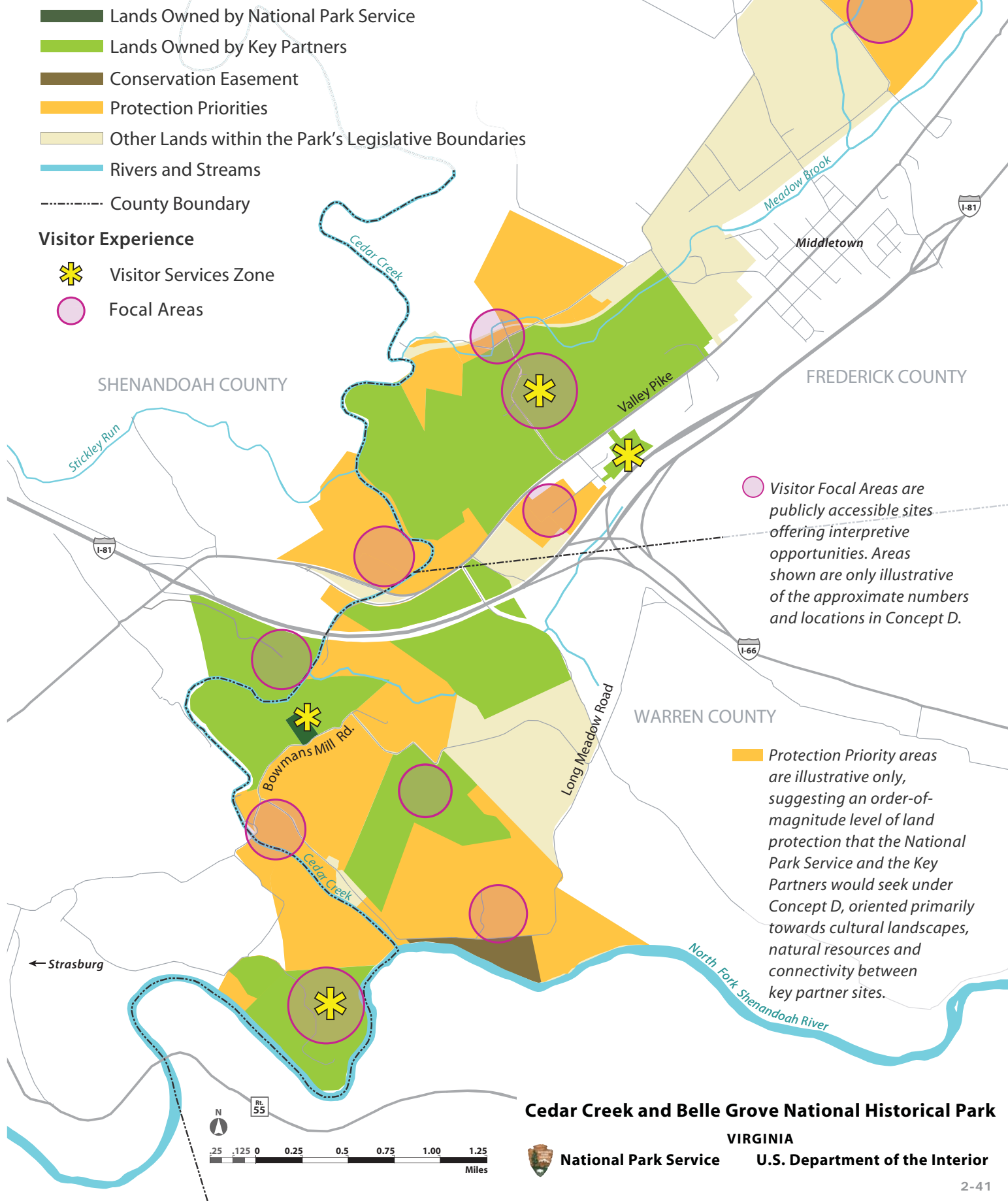
#### ■ Cultural Resource Management

Cultural resource management actions in Alternative D would generally be the same as those described above for Alternatives A, B, and C.

Under Alternative D, the NPS would manage the historic property that it owns in the park - Whitham Farm (c. 1840) – as well as all other cultural resources that it acquires in accordance with NPS *Management Policies* (NPS 2006d) and NPS *Cultural Resource Management Guidelines* (NPS 1998). Within the timeframe of the GMP, the NPS would rehabilitate and adaptively reuse the Whitham House (c. 1840) and farm-related outbuildings to support park operations and visitor interpretation. All management actions at Whitham Farm would be completed in accordance with the mitigation measures summarized below in Section 2.12.

Figure 2.4

## Alternative Concept D Park Character and Visitor Experience



As in Alternatives B and C, in Alternative D the NPS would also extend its technical assistance to private owners of cultural resources in the park.

In Alternative D, the NPS would acquire cultural landscapes as well as the significant historic sites in the park. Implementation of cultural resource management actions (as outlined above in Alternative A) for these properties would require significantly increased operational support from the NPS when compared to Alternatives A, B, and C. The Key Partners would also seek to acquire broader landscapes and historic sites. The NPS would provide technical assistance to the Key Partners in meeting the increased cultural resource management needs for these properties and in seeking financial support for their documentation, treatment, and long-term protection.

As in Alternative C, in Alternative D the NPS would also identify adjacent lands that are significantly related to the cultural landscape and viewshed of the park and would identify the direct and indirect impacts of private development and land use within and adjacent to the park on its cultural landscapes.

#### ■ **Natural Resource Management**

Natural resource management actions in Alternative D would generally be the same as those described for Alternatives A, B, and C. In Alternative D, the NPS would acquire land within the park, as funding allows. Acquired properties would be managed in accordance with NPS *Management Policies* (NPS 2006) and other relevant NPS guidelines. Natural resources on NPS property would be managed to generally protect natural processes and population diversity. The types of management actions that would occur in Alternative D would be similar to those described for Alternative A.

As in Alternatives B and C, in Alternative D the NPS would extend its technical assistance to private owners of significant natural resources in the park, helping identify resources, conveying information about their significance, and providing assistance with resource management.

#### **2.8.5 Visitor Experience, Interpretation, and Education (Alternative D)**

**Visitors would be oriented to the park at a central location with a unified message. Then they could explore – by vehicle or on trails – protected sites where the park’s stories and those of the Shenandoah Valley Battlefields National Historic District would be told. Educational programs would be offered for school groups and others.**

The NPS, the Key Partners, and others would develop and implement a coordinated interpretive plan and programs throughout the park; interpretation would occur at a visitor center, on NPS- and Key Partner-owned lands, and on private lands owned by those willing to participate in the park’s interpretation program. The NPS would provide interpretative media and sponsor occasional programs at selected sites in

the National Historic District to assist in conveying the meaning of the park's resources and values as they relate to sites in the district. The NPS would provide information to visitors through a system of electronic media, which could include a web-based orientation, AM radio broadcasts, cell phone tours, CD rentals, MP3/iPod downloads, etc. Publicly accessible visitor focal areas would offer interpretive and educational opportunities. The desired visitor experience for each zone is outlined in Table 2.3.

## **2.8.6 Park Facilities (Alternative D)**

### **Park facilities would be provided by the NPS and the Key Partners.**

The NPS would develop and manage a visitor center that would orient visitors to the park and the National Historic District, that would tie the park together with a unified message, and that would support educational programs, research, and other activities that help the park realize its special mandates for resource conservation (see section 1.6.5). The visitor center would be located within or near the park. The following considerations would be taken into account when choosing a location for the visitor center:

- The visitor center would need access to utilities and main travel corridors
- The site must have suitable building conditions
- The visitor center would not be located at or close to sensitive or significant natural or historic resources and would not be located within the sensitive resource zone
- The visitor center would not be an imposing structure on the landscape, be located in key viewsheds, or adversely impact scenic resources
- The visitor center would not disrupt travel patterns for local residents
- The visitor center would not be located in an area that would induce unsuitable private development within the park

Per Executive Order 13423 on sustainable practices, the visitor center would be designed to be energy efficient, reduce enclosed space, and when practical, export interior functions to exterior locations. The visitor center would attempt to meet Leadership in Energy and Environmental Design (LEED) standards for design, construction, and operation of high-performance green buildings. Re-use of an existing structure to serve as a park visitor center has not been ruled out, but at this time a suitable facility has not been found. The Whitham Farm, owned by NPS, fails to meet several of the criteria for a visitor center outlined above.

Visitor contact facilities would be provided by the Key Partners at Belle Grove, the Cedar Creek Battlefield Foundation visitor contact facility, Harmony Hall, and the Keister Tract. The NPS and the Key Partners would collaborate to develop auto touring routes on existing roads and a trail system on land owned by the Key

Partners, the NPS, and on rights-of-way acquired from willing sellers.

Approximately fifteen miles of trail, with about nine trailheads, would be developed and maintained. Park signage would guide visitors to appropriate sites. Four interpretive waysides would be developed. Ancillary facilities would be guided by the zone prescriptions under “Appropriate Types of Visitor Facilities and Services” (see Table 2.3 above).

#### **2.8.7 Transportation, Access, and Circulation (Alternative D)**

**Park access would be largely vehicular, supplemented by a well-developed system of trails that provides connections to adjacent communities and regional trails. Wayfinding would assist visitors with accessing the park’s focal areas and rural countryside.**

Park vehicular access would be along state and county roads, and Valley Pike (Route 11). The park would develop auto touring routes along these roads, guiding visitors throughout much of the park. The park would develop a trail network that provides access to interpretation and recreation opportunities, that follows the course of the battle and the historic mill road network, and that connects to regional trails outside the park.

Interstate 81 and Valley Pike (Route 11) would provide regional access to the park. Once in the local area visitors would travel through the park on Valley Pike (Route 11) to access the park’s visitor center and the network of rural county roads that would take them to the visitor contact facilities at the Key Partners’ properties.

As in Alternative B, visitors interested in exploring the park beyond the contact facilities of the Key Partners would do so via private vehicles following auto touring routes along Valley Pike (Route 11) and the park’s rural county roads. Wayfinding signage would be installed to help visitors find attractions along the tour routes.

The park and the Key Partners would cooperate to develop approximately 15 miles of trails on land owned by the NPS, the Key Partners, and possibly on rights-of-way acquired from willing sellers. These trails would (1) follow the course of the Battle of Cedar Creek and the historic mill road network (2) connect properties owned by the NPS and the Key Partners, and (3) connect to the towns of Middletown and Strasburg and the George Washington National Forest.

#### **2.8.8 Park Operations and Staffing (Alternative D)**

**Park staff and operations would focus on managing a visitor center, protecting and maintaining park lands and facilities, developing and implementing interpretive and educational programs, and providing technical assistance.**

Under Alternative D, the NPS would manage a visitor center and have the largest amount of acres to manage among the alternatives; therefore, Alternative D calls for the largest NPS staff. The NPS would employ approximately 25 full-time

employees, including the park superintendent, a community planner, a landscape architect, a volunteer coordinator, a resource management division (6 staff), a visitor services division (6 staff), a maintenance division (4 staff), and administrative staff (5 staff). NPS staff would focus on protecting natural and cultural resources, managing a visitor center, maintaining park lands and facilities, providing interpretive media and programs, providing educational programs, and providing technical assistance to communities and the Key Partners. The park would utilize NPS systemwide technical assistance from the NPS Regional and Washington Offices. Volunteers would play a substantial role in staffing the visitor center, providing administrative assistance to the NPS, and assisting with park programs. The staffing of the Key Partner organizations would not be expected to change substantially from its current levels.

The NPS administrative offices would be located in the NPS-managed visitor center, and possibly in the Whitham house within the park once that structure is appropriately rehabilitated.

#### **2.8.9 Technical Assistance (Alternative D)**

**The NPS and the Key Partners would provide technical assistance with protection of the park's resources, viewsheds, and thematically related resources outside the park boundary to one another, to private landowners, and to nearby communities.**

The NPS and the Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities to protect resources within the park boundary, important views from the park, and thematically related resources in proximity to the park and within the Shenandoah Valley Battlefields National Historic District. The NPS would also provide technical assistance to the Key Partners with property management, including resource protection, land stewardship, and use of best management practices. See Section 2.3, Management Element 9, for the types of technical assistance that could be offered.

#### **2.8.10 Related Resources (Alternative D)**

**The NPS and the Key Partners would develop proactive strategies to protect resources outside the park boundary that are functionally or thematically related to the park.**

Resources of interest outside the boundary include scenic resources that provide the visual setting for the park, cultural resources that are thematically related to the park, and natural resources – such as hydrologic resources – that are functionally related to the park. Proactive strategies would include, but not be limited to, protection of adjacent lands with conservation easements, consultation with local governments and businesses, working with conservation and preservation organizations, and consideration of a future park boundary adjustment.

### **2.8.11 Costs (Alternative D)**

Estimates of annual operating costs and one-time costs associated with Alternative D have been prepared using NPS and industry cost estimating guidelines (see Table 2.6 in Section 2.11 below). These costs are presented for comparative purposes only and will be refined at a later date based upon final design of facilities and other considerations. Actual costs will vary depending on if and when specific actions are implemented and on contributions by partners and volunteers.

#### **■ NPS Annual Operating Costs**

NPS annual operating costs associated with Alternative D are estimated to be \$2,765,996 (2007\$). This includes the anticipated cost for staff salaries and benefits for 25 full-time equivalent staff, utilities, supplies, leasing, and other materials needed for park maintenance and operations.

#### **■ NPS One-Time Costs**

NPS one-time costs associated with Alternative D are estimated to be \$17,971,527 (2007\$), including one-time facilities costs and non-facilities costs. Facilities costs are those required for rehabilitation of structures at Whitham Farm and for development of a park building with visitor contact facilities and administrative space for 25 full-time staff, an operations facility, trails, trailheads, picnic facilities, and wayside pull-offs. Non-facilities costs are those required for cultural landscape restoration at the Whitham Farm and elsewhere in the park, historic resource studies, historic structures reports, cultural landscape reports, signage, and interpretive media.

#### **■ Land Acquisition Costs**

Under Alternative D, the estimated cost for NPS and the Key Partners to acquire land and interests in land is \$40,000,000 (2007\$). The NPS and the Key Partners would work together to acquire these lands and funding for their purchase would be a collaborative effort. Funding would also be sought from conservation trusts, friends groups, and other donors. Land acquisition cost estimates are preliminary and intended solely for general planning purposes. Actual land acquisition costs would be determined by detailed appraisals when lands are considered for acquisition.

#### **■ NPS Deferred Maintenance Costs**

As in Alternatives A, B, and C, there are no deferred maintenance costs associated with Alternative D. Existing park assets include the Whitham Farm; costs to be incurred for rehabilitation and adaptive reuse of the Whitham Farm are in the NPS one-time facilities costs presented above.

## 2.9 User Capacity

General management plans are required to identify and contain strategies for addressing user capacity for all areas in the park. The NPS defines user capacity as the type and level of use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the park. It is not a set of numbers or limits, but rather a process of establishing desired conditions, monitoring impacts, evaluating the impacts against standards, and taking actions to ensure park values are protected. The premise behind this process is that with visitor use of park lands there would be a level of impact to natural or cultural resources, or visitor opportunities. It is the responsibility of the NPS to determine what level of impact is acceptable and what actions are needed to keep impacts within acceptable limits. Instead of solely tracking and controlling visitation, the park staff and key partners manage the levels, types, and patterns of visitor use and other public uses in a fashion that preserves the condition of the resources and the quality of the visitor experience. The monitoring component of the user capacity process keeps management in touch with the changing conditions in the park, and provides the basis for corrective actions.

The user capacity decision making process can be summarized by the following major planning and management steps:

1. Establish desired conditions for resources, visitor experiences, and types/levels of development.
2. Identify indicators and standards to measure success at achieving desired conditions
3. Monitor existing conditions in relation to indicators and standards
4. Take management action to maintain or restore desired conditions

This plan addresses user capacity in the following ways:

- Management zones based upon desired resource conditions, desired visitor experiences, desired levels of development, and desired land uses have been established for all areas within the national park boundary.
- The plan identifies the existing and potential resource and visitor experience concerns in the park. These concerns serve as the foundation for determining which indicators should be monitored, and what management actions should be taken.
- This plan identifies potential indicators that could be monitored to determine if there are unacceptable impacts to cultural and natural resources and the quality of visitor experiences.
- An indicator is a measurable variable that can be used to track changes caused by human activity in the conditions of natural and cultural

resources. Tracking these indicators enables measuring the difference between actual conditions and desired conditions.

- When the park selects an indicator to monitor, a corresponding standard would be identified. A standard is the minimum acceptable condition for an indicator.
- The plan also suggests a general range of actions that may be taken to avoid or minimize unacceptable impacts.

Currently, public use of the park is focused on a few sites and special events. The overall use levels are relatively low and the diversity of experiences is limited to visiting historic sites (e.g., Belle Grove Plantation, the Cedar Creek Battlefield), attending special events (e.g., annual “Of Ale and History” Beer Tasting Festival and the reenactment of the Cedar Creek Battle), and driving tours (e.g., Battle of Cedar Creek and the Apple Trail). As the park continues to develop, however, the amount of public use would likely increase. Also, the location of public use would likely be more dispersed throughout the park in relation to an increasing number of visitor focal areas, facilities and trails.

The NPS and Key Partners intend to work together to manage, coordinate and expand visitor opportunities, including interpretation of the important stories of the park. There is a hope and expectation that visitation would increase and the park would become a well known unit of the national park system. With the potential for increasing and changing public use, the following summary identifies some scenarios that may occur as conditions change, challenging the ability of the NPS and the Key Partners to protect the values for which the park was established.

As the park expands as a heritage tourism site, existing facilities that support public use could experience unintentional resource damage, visitor crowding, and disturbance of private property. In particular, the increasing presence of tour bus activity that is not regulated or pre-arranged may overcrowd sites and create visitor conflicts. Further, the increasing use of rural roads for visitor access may at some point conflict with on-going activities associated with the park’s working farm landscapes. If farm equipment or livestock need to be moved across or along these roads, high or frequent levels of public use may impede these activities, as well as present safety concerns.

In addition to overwhelming facilities, increasing public use may degrade visitor experiences by causing visitor crowding at sites throughout the park. If visitors can not gain access to an important vantage point or read an interpretive panel due to high volumes and density of use, visitor frustration may occur, along with a lost opportunity for understanding the park’s important stories. Further, visiting historic structures with long wait times may impact the visitor experience resulting in frustration and eventual displacement. Finally, use conflicts or crowding on trails

and at the Keister site could be a problem at some point if these facilities become a heavily used resource for the local community.

Historic landscapes, resources, and structures are types of resources that can be interpreted to the visiting public. These resources are particularly sensitive to public use and are non-renewable, so care must be taken in planning and managing use in these areas. In general, impacts from theft and vandalism may affect all classes of cultural resources in the park. More specifically, future implementation planning may consider public trails in conjunction with historic road traces as a way for visitors to understand and experience the park's important history. If this were deemed desirable through future planning, these road traces would need to be monitored and managed to maintain their integrity with on-going regular visitor use, including the evaluation of soil erosion, vegetation changes, and road width.

Informal trail activity, where visitors leave designated park trails, may also be a concern in the future. Informal trails cause vegetation damage, soil erosion and disturbance of wildlife. But more importantly for this park, informal trails may lead people to be in direct contact (intentionally or unintentionally) with sensitive cultural and natural resources. When access occurs in non-designated areas of the park in close or direct contact with sensitive resources, a variety of impacts such as trampling damage, erosion, site disturbance, exposure of sensitive materials, and illegal collection may occur. The park's battlefield earthworks, unearthed archeological resources, and certain types of plants and wildlife are particularly sensitive to these types of impacts.

Special events that cover large areas with intense levels of visitation may cause undesirable changes in the condition of park resources over time. Similar to the impacts associated with informal trail activity, this type of use may cause trampling damage, erosion, site disturbance, and exposure of sensitive archeological materials. In addition, campfire activities may leave burn scars on the landscape, and may unintentionally melt unearthed archeological resources. Horse use associated with these events may also cause impacts such as soil compaction, erosion, tree damage, and introduction of exotic weeds. Further, the large number of visitors at one time is hard to supervise which may lead to intentional or unintentional incidences of site damage, vandalism, and theft.

To minimize and contain these impacts, current special events taking place in the park are limited in number (only a few per year), size (numbers of attendees) and location, and are supervised. Other mitigation measures, such as using shuttle systems and regulatory actions (no digging of fire pits) may be taken to minimize impacts, on an as needed basis. There is an expectation that the demand for new and larger special events may occur, making it imperative that the partners collaborate on evaluating the appropriateness of future special events for the park

and identifying measures needed to sustain park resources and provide an authentic visitor experience.

The historic structures in the park are also vulnerable to visitor impacts, especially the historic objects contained within the structures. The current system of guided tours through Belle Grove Manor House should continue, allowing for direct supervision of public use, as well as providing a greater understanding of the site's important stories. At Belle Grove, the current ratio of guide to visitors is 1:15, with a total people at one time capacity in the house of 25 persons. This type of management system should be applied to the other historic sites that may eventually receive visitation, with a possible adjustment to the numbers.

Natural resources may also be affected by changing public use in the park. In particular, the park contains sensitive and rare plants and wildlife in certain areas that may be affected by trampling and site disturbance, so it is important that trails, interpretive points, and special events are sited away from these resources. Further, Cedar Creek and its associated watershed is a fundamental resource of the park that may be influenced by visitation. In particular, if access to the creek is planned for interpretive, recreational, or special event purposes, the access points need to be well-sited and managed to avoid loss of vegetation, bank erosion, and sedimentation of the waterway.

Based on some of the most pressing existing or potential use concerns in the park, Table 2.5 outlines possible resource and visitor experience indicators that may be monitored to assess those impacts. The applicability of each indicator to management zones is also identified. Also, a general range of potential management actions is identified for each indicator, but this list may not be inclusive of all management actions that may be considered in the future. Further, some management actions may not be appropriate in all zones. The final selection of any indicators and standards for monitoring purposes or the implementation of any management actions that affect use would comply with National Environmental Policy Act, National Register of Historic Places, and other laws, regulations and policy, as needed.

## **2.10 Mitigation Measures**

Future resource management and development of visitor facilities at Cedar Creek and Belle Grove NHP would be undertaken by the NPS in accordance with its congressional mandate to manage the lands under its stewardship "in such manner and by such means as would leave them unimpaired for the enjoyment of future generations" (NPS Organic Act, 16 USC 1).

To ensure that implementation of actions associated with the GMP alternatives protect unimpaired the park's natural and cultural resources and the quality of the visitor experience, a consistent set of mitigation measures would be applied to all

**Table 2.5 Park User Capacity Indicators**

|   | Management Zone(s)   | Indicator   | Management Actions that may be Considered  |
|---|--|---|--|
| 1 | Sensitive Resource   | <b>Impacts to river and stream banks, such as amount of erosion, loss of vegetation, informal trails</b>  | Management actions that may be considered to avoid or minimize these impacts include information on encouraging low impact practices, directing use to designated areas or facilities, site management and/or rehabilitation, reduction of use levels  |
| 2 | Sensitive Resource   | <b>Water quality</b>  | Management actions that may be considered to avoid or minimize these impacts include information on encouraging low impact practices, directing use to designated areas or facilities, cleaning of equipment before entering waterways, reduction/elimination of certain uses, activities or equipment, reduction of use levels  |
| 3 | Sensitive Resource, Cultural Landscape, Town and Countryside, Large Events | <b>Informal trails or areas of trampling disturbance, especially in close proximity to sensitive natural and cultural resources</b>                       | Management actions that may be considered to avoid or minimize these impacts include policy on restricting off-trail travel in the park, information on the regulation for off-trail activity and the importance of staying on trails to protect resources, site management to better define appropriate use areas, signage to better define appropriate use areas or areas that are off-limits to use, increased enforcement, area closures, redirection of use to alternate areas, site rehabilitation, reduction of use levels  |
| 4 | Sensitive Resource, Cultural Landscape, Large Events                       | <b>Incidences of site disturbance, trampling damage or exposure of material at cultural resource sites such as earthworks and archeological resources</b> | Management actions that may be considered to avoid or minimize these impacts include policy on restricting off-trail travel or climbing on above-ground cultural resources, information on the regulations and the importance of staying on trails and off resources to protect sites, site management to better define appropriate use areas, signage to better define appropriate use areas or areas that are off-limits to use, increased enforcement, institution of a volunteer watch program, area closures, redirection of use to alternate areas, site rehabilitation, reduction of use levels |
| 5 | All zones  | <b>Incidences of vandalism or theft of cultural resources</b>   | Management actions that may be considered to avoid or minimize these impacts include institute a no-collection policy for the public, increased information on the sensitivity and value of the park's cultural resources and on the no-collection policy, increased park staff and volunteer patrols in target areas, institution of a volunteer watch program, discourage the purchase of archeological resources, direction of use away from sensitive cultural resource areas, closure of areas with sensitive cultural resources  |

**Table 2.5**      **Park User Capacity Indicators** (continued)

|    | Management Zone(s)                                 | Indicator  | Management Actions that may be Considered  |
|----|--|--|--|
| 6  | All zones (except Contemporary Settlement)         | <b>Condition of historic road traces (e.g., width, incidences of erosion, change in vegetation, informal trails)</b>           | Management actions that may be considered to avoid or minimize these impacts include increased information on the sensitivity and value of the park's cultural resources, site management, closure of specific sections of trails/road traces and re-route use, changes in allowed uses, reduction in use levels   |
| 7  | Cultural Landscape, Large Events, Visitor Services | <b>Number or density of fire scars on cultural landscapes</b>  | Management actions that may be considered to avoid or minimize these impacts include education on minimizing the impacts and number of fires, reduction of frequency of events with fire activity to allow sites to recover, fire containment techniques such as fire pans, restrictions on fire activities, reduction in use levels, participant limits on large events                                   |
| 8  | Cultural Landscape, Town and Countryside           | <b>Incidences of obstruction to private landowner and farming activities on rural roadways due to the presence of visitors</b> | Management actions that may be considered to avoid or minimize these impacts include education on visitor etiquette to provide the right of way to farming activities, temporal and/or spatial redistribution of visitor use during peak farming activities, permanent rerouting of visitor access points to avoid conflicts with farming activities, reduction in use levels                              |
| 9  | Town and Countryside, Contemporary Settlement      | <b>Incidences of disruption to private property owners (e.g., parking on lawns, knocking on doors)</b>                         | Management actions that may be considered to avoid or minimize these impacts include education on minimizing disturbance to private property owners, signage of private property, site management to better define appropriate use areas, licensed/certified guide program, increased enforcement, area closures, redirection of use to alternate areas, reduction in use levels                           |
| 10 | Cultural Landscape, Large Events, Visitor Services | <b>People at one time (crowding) at important interpretive historic and interpretive sites and vantage points</b>              | Management actions that may be considered to avoid or minimize these impacts include advanced planning information on encouraging visitation to lesser used areas or off-peak times, real-time information about parking availability, closure of areas when full and active redistribution of use to other sites, permanent re-routing of access points to better distribute use, reduction of use levels |
| 11 | Cultural Landscape, Visitor Services               | <b>Wait times for accessing guided tours of historic structures</b>  | Management actions that may be considered to avoid or minimize these impacts include advanced planning information on encouraging visitation to lesser used areas or off-peak times, real-time information about wait times, new opportunities on-site to mitigate wait times, closure of areas when full and active redistribution of use to other sites, reservation system (may include timed entry)    |

management actions in the park. These would be implemented by the NPS on lands that it owns anywhere within the park. Collaboration and agreements between the NPS and the Key Partners would seek to ensure that such mitigation measures are also implemented on lands owned by the Key Partners. The NPS would provide technical assistance to the Key Partners with meeting their responsibilities to mitigate resource and visitor experience impacts on non-NPS property within the park. The NPS and the Key Partners would avoid, minimize, and mitigate adverse impacts of management actions when practicable. The mitigation measures and best management practices that would generally be applied to avoid or minimize potential impacts from implementation of future management actions in the park are summarized below. These mitigation measures apply to all of the action alternatives (B, C, and D).

#### **2.10.1 Cultural Resource Mitigation Measures**

- All projects with the potential to affect historic properties and cultural landscapes would be carried out to ensure that their effects are adequately addressed. All reasonable measures would be taken to avoid, minimize, or mitigate adverse effects in consultation with the Virginia State Historic Preservation Officer and, as necessary, the Advisory Council on Historic Preservation and other concerned parties.
- All areas selected for construction would be surveyed to ensure that cultural resources (i.e., archeological, historic, ethnographic, and cultural landscape resources) in the area of potential effects are adequately identified and protected. Compliance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) would apply in the unlikely event that human remains believed to be Native American would be discovered during pre-project surveys or inadvertently during construction. Archeological documentation would be done in accordance with the *Secretary of the Interior's Standards for Archeological Documentation*.
- New facilities would be constructed in previously disturbed areas whenever possible (note: some previously disturbed areas may contain historic resources and may not be appropriate locations for new facilities). Archeological surveys and/or monitoring, as appropriate, would precede any construction to ensure that potential impacts to archeological resources would be avoided or minimized to the greatest extent. Should construction unearth previously unknown archeological resources, work would stop in the area of discovery until the resources were properly recorded by the NPS and evaluated appropriately. Data recovery excavations and/or other mitigating measures would be carried out where site avoidance is not possible.
- New construction or alterations and rehabilitation of historic structures would be sensitively carried out in accordance with the *Secretary of the Interior's*

*Standards for Treatment of Historic Properties* and the *Secretary of the Interior's Standards for Archeology and Historic Preservation* to ensure that character-defining features are protected.

- Vegetation screening and sensitive topographic or other site selection criteria would be used to minimize the visual intrusion of new construction on historic viewsheds or in historic areas.
- Ethnographic resources would be protected, and access would be maintained for recognized groups to traditional, spiritual/ceremonial, or resource gathering and activity areas.
- Cultural landscape rehabilitation measures might include vegetation thinning, removing exotic species, removing noncontributing or nonhistoric structures and landscape features, and incorporating compatible designs for new construction.
- Further background research, resource inventories, and National Register of Historic Places evaluation of historic properties would be carried out where management information is lacking.
- All options for preserving historic properties would be considered and evaluated.
- A user-capacity framework would be implemented to minimize and mitigate impacts to cultural resources from visitor use.
- Visitors would be educated on the importance of protecting the park's historic properties and leaving these undisturbed for the enjoyment of future visitors.
- Museum collections would be accessioned, catalogued, protected, and preserved in accordance with appropriate standards.

#### **2.10.2 Natural Resource Mitigation Measures**

- Cedar Creek and Belle Grove National Historical Park's resources, including air, water, soils, vegetation, and wildlife, would be periodically inventoried and monitored to provide information needed to avoid or minimize impacts of future development.
- Whenever possible, new facilities would be built in previously disturbed areas or in carefully selected sites with as small a construction footprint as possible. During design and construction periods, NPS staff would identify areas to be avoided.
- Fencing or other means would be used to protect sensitive resources adjacent to construction areas.

- Construction activities would be monitored by resource specialists as needed. Construction materials would be kept in work areas, especially if the construction takes place near streams, springs, natural drainages, or other water bodies.
- A user-capacity framework would be implemented to minimize and mitigate impacts to natural resources from visitor use.
- Visitors would be informed through signage, brochures, ranger contacts, and other media, of the importance of protecting the park's natural resources and leaving these undisturbed for enjoyment of future generations.
- A dust abatement program would be implemented. Standard dust abatement measures could include watering or otherwise stabilizing soils, covering haul trucks, employing speed limits on unpaved roads, minimizing vegetation clearing, and revegetating after construction.
- To prevent water pollution during construction, erosion control measures would be used, discharges to water bodies would be minimized, and construction equipment would be inspected for leaks of petroleum and other chemicals.
- Best management practices, such as the use of silt fences, would be followed to ensure that construction-related effects were minimal and to prevent long-term impacts on water quality, wetlands, and aquatic species.
- For new facilities, and to the extent practicable for existing facilities, stormwater management measures would be implemented to reduce nonpoint source pollution discharge from parking lots and other impervious surfaces. The park would keep the creation of impervious surfaces to a minimum.
- A park spill prevention and pollution control program for hazardous materials would be developed, followed, and updated on a regular basis.
- Wetlands potentially affected by new facilities would be delineated by qualified NPS staff or certified wetland specialists and marked before construction work. All new facilities would be sited to avoid wetlands or, if that is not practicable, to otherwise comply with Executive Order 11990, "Protection of Wetlands"; regulations of the Clean Water Act; and NPS 77-1: *Wetlands Guidance*.
- New facilities would be built on soils suitable for development. Soil erosion would be minimized by limiting the time soil is left exposed and by applying other erosion-control measures such as erosion matting, silt fencing, and sedimentation basins in construction areas to reduce erosion, surface scouring, and discharge to water bodies. Once work was completed, construction areas would be revegetated with native plants in a timely period.

- Proposed sites for new facilities and trails would be surveyed for sensitive and special status plant and animal species before construction. If sensitive species were present, new developments would be relocated to avoid impacts, and appropriate consultations conducted.
- Best management practices would be devoted to preventing the spread of noxious weeds and other nonnative plants.
- Construction activities would be timed to avoid sensitive periods for wildlife, such as nesting or spawning seasons. Ongoing visitor use and NPS operational activities could be restricted if their potential level of damage or disturbance warranted doing so.
- Surveys would be conducted for special status species, including rare, threatened, and endangered species, before deciding to take action that might cause harm. In consultation with the U.S. Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, and the Virginia Department of Conservation and Recreation, appropriate measures would be taken to protect any sensitive species whether identified through surveys or presumed to occur.
- Facilities would be designed, sited, and constructed to avoid or minimize visual intrusion into the natural environment and/or landscape.
- Vegetative screening would be provided, where appropriate.

## **2.11 Cost Comparison**

### **2.11.1 Estimated Costs for Implementing the Plan**

Table 2.6 presents a summary of the annual operating and one-time costs for the four GMP alternatives. The cost figures are provided here and throughout the plan only to provide an estimate of the relative costs of the alternatives. The following statements apply to the cost estimates:

- The costs are presented as estimates and are not appropriate for budgeting purposes.
- The costs presented have been developed using NPS and industry standards to the extent available.
- Specific costs will be determined at a later date, considering the design of facilities, identification of detailed resource protection needs, and changing visitor expectations.
- Actual costs to the NPS will vary depending on if and when the actions are implemented, and on contributions by partners and volunteers.

**Table 2.6 Cost Comparison (2007\$)**

| <b>Subject</b>   | <b>Alternative A<br/>(Continuation of Existing<br/>Management)</b> | <b>Alternative B</b> | <b>Alternative C</b> | <b>Alternative D</b> |
|--|--|----------------------|----------------------|----------------------|
| <b>NPS Annual<br/>Operating Costs<br/>(ONPS)<sup>1</sup></b>             | <b>\$366,525</b>   | <b>\$730,444</b>     | <b>\$2,039,172</b>   | <b>\$2,765,996</b>   |
| <b>NPS Staffing –<br/>FTE<sup>2</sup></b>                                | <b>3</b>   | <b>6</b>             | <b>18</b>            | <b>25</b>            |
| <b>NPS Deferred<br/>Maintenance<sup>3</sup></b>                          | <b>none</b>  | <b>none</b>          | <b>none</b>          | <b>none</b>          |
| <b>Total One-Time<br/>NPS Costs<sup>4</sup></b>                          | <b>\$875,197</b>   | <b>\$2,719,280</b>   | <b>\$12,981,943</b>  | <b>\$17,971,527</b>  |
| NPS Facilities<br>Costs <sup>5</sup>                                     | \$775,197  | \$1,674,828          | \$8,669,169          | \$12,475,805         |
| NPS Non-<br>Facilities Costs <sup>6</sup>                                | \$100,000  | \$1,044,452          | \$4,312,774          | \$5,495,722          |
| <b>Land Acquisition<br/>Costs (NPS and<br/>Key Partners)<sup>7</sup></b> | <b>\$4,000,000</b>   | <b>\$4,000,000</b>   | <b>\$40,000,000</b>  | <b>\$40,000,000</b>  |

1. NPS annual operating costs are the total NPS costs per year for maintenance and operations associated with each alternative, including: utilities, supplies, staff salaries and benefits, leasing, and other materials. Cost and staffing estimates assume the alternative is fully implemented as described in Sections 2.2, 2.6, 2.7, and 2.8 above.
2. Total full-time equivalents (FTE) are the number of NPS person/years of staff required to maintain the assets of the park at a good level, provide acceptable visitor services, protect resources, and generally support the park's operations. The number of FTE indicates ONPS-funded NPS staff only, not volunteer positions. FTE salaries and benefits are included in the annual operating costs.
3. There are no deferred maintenance costs. Existing park assets include the Whitham Farm; costs to be incurred for rehabilitation and adaptive reuse of the Whitham Farm are included as NPS one-time facilities costs for each alternative.
4. Total one-time costs equal the sum of facility costs and non-facility costs.
5. NPS one-time facilities costs include those for design, construction, rehabilitation, or adaptive reuse of NPS facilities, including visitor centers, roads, parking areas, administrative facilities, comfort stations, educational facilities, entrance stations, fire stations, maintenance facilities, museum collection facilities, and other visitor facilities.
6. One-time NPS non-facility costs include actions for the preservation of cultural or natural resources not related to facilities, the development of visitor use tools not related to facilities, and other park management activities that would require substantial funding above the park annual operating costs.
7. Land acquisition costs include NPS and Key Partners acquiring land and interests in land. The NPS and the Key Partners would work together to acquire these lands and funding for their purchase would be a collaborative effort. Land acquisition costs are preliminary and are for general planning purposes only. Actual land acquisition costs would be determined by detailed appraisals when lands are considered for acquisition.

- Approval of the GMP does not guarantee that funding or staffing for proposed actions will be available.
- The implementation of the approved plan, no matter which alternative, will depend on future NPS funding levels and servicewide priorities, and on partnership funds, time, and effort.

### 2.11.2 Funding for Actions Identified in the GMP

The NPS develops 5-year deferred maintenance and capital improvement plans. These plans are developed by a systematic process of evaluating proposals from the field to determine which projects are of greatest need in priority order focusing on critical health and safety issues and critical resource protection requirements.

Actions that add specific projects to the 5-year plans inevitably result in other projects being displaced when budgets are limited.

Capital development, maintenance, and staffing proposals in this GMP would be evaluated in light of competing priorities for Cedar Creek and Belle Grove NHP and other units of the national park system. Because emphasis in the budget process is currently placed on addressing needs to maintain existing infrastructure, funding for new development is not likely within the next five years. However, the potential for implementing development and operational proposals in this plan may be improved if funding is available from partnerships that do not rely on the NPS's budget.

## **2.12 Alternatives Dismissed from Further Consideration**

### **2.12.1 Alternatives Based on Visitor Interpretive Experiences**

The GMP planning team explored the possibility of developing alternatives based upon different visitor interpretive experiences. Consideration was given to the following action alternatives:

- **Thematic Concept 1.** Park emphasis on preserving battlefield and antebellum landscapes, enabling visitors to experience authentic locations of the battle and retrace its course uninterrupted by contemporary development. The Battle of Cedar Creek would serve as a window for visitors to learn about the Shenandoah Valley Campaigns, the Civil War and the overall history of the Valley.
- **Thematic Concept 2.** Park emphasis on preserving resources and stories of life in the valley as a prism through which the Civil War would be interpreted to the visitor. The focus would be on the war's impact on domestic and social life. Visitors would experience discrete, non-contiguous historic sites, but each site would have a high degree of integrity.
- **Thematic Concept 3.** Park emphasis on the Key Partners and others inside and outside the park to tell the story of the Shenandoah Valley at their sites. The visitor experience would start at a central hub where visitors receive information about thematically related sites in the park and throughout the Valley. The NPS would not seek to be a major landowner but rely upon operations and resources of the Key Partners.

The GMP planning team presented these thematic concepts to the Park Advisory Commission in September, 2006. The Commission felt generally that all park stories should be told in all management alternatives and therefore alternatives based on thematic concepts would not be an appropriate basis for distinguishing the GMP action alternatives.

## 2.13 Alternatives Comparison Table

**Table 2.7 Comparison of Alternatives**

|  | Management Objectives   |   |   |   |
|--|---|---|---|---|
|  | Alternative A<br>(Continuation of Current Management)   | Alternative B   | Alternative C   | Alternative D<br>(Preferred)  |
| <b>Partnerships</b>  | <ul style="list-style-type: none"> <li>The NPS and Key Partners would have an informal collaborative relationship</li> <li>Lands would be managed independently</li> </ul>  | <ul style="list-style-type: none"> <li>The NPS and Key Partners would have a generally informal relationship with written agreements for special projects and management programs</li> <li>The NPS would serve as a facilitator for land and resource protection</li> <li>The NPS and the Key Partners would manage the lands cooperatively per written, shared strategies for managing natural and cultural resources</li> </ul>   | <ul style="list-style-type: none"> <li>Same as Alternative B</li> </ul>   | <ul style="list-style-type: none"> <li>The NPS and Key Partners would enter into a formal relationship that defines a division of labor for various programs, events, and park operations</li> </ul>  |
| <b>Land Protection</b><br><i>(as stated in Section 6 of the park's enabling legislation, land acquisition can occur only from willing sellers- see Appendix A)</i> | <ul style="list-style-type: none"> <li>Key Partners would have primary responsibility for land acquisition, as funding allows</li> <li>The NPS would accept donated lands and seek to purchase land from willing sellers using currently appropriated funds, but would not actively seek to be an owner of significant acreage within the park</li> </ul>   | <ul style="list-style-type: none"> <li>Same as Alternative A</li> </ul>   | <ul style="list-style-type: none"> <li>The NPS and Key Partners would share responsibility for acquisition of land and interests in land</li> <li>Focus of land acquisition would be on key historic sites that would become visitor focal areas</li> <li>The NPS and Key Partners would develop land protection plan</li> <li>Funding for land acquisition would be a collaborative effort between NPS and Key Partners</li> </ul>   | <ul style="list-style-type: none"> <li>The NPS and Key Partners would share responsibility for acquisition of land and interests in land</li> <li>Focus would be acquisition of cultural landscapes, sensitive natural resources, and connections between NPS and Key Partner properties</li> <li>The NPS and Key Partners would develop land protection plan</li> <li>Funding for land acquisition would be a collaborative effort between NPS and Key Partners</li> </ul>   |
| <b>Cultural Resource Management</b>  | <ul style="list-style-type: none"> <li>A few significant historic properties would be acquired in the park using already appropriated funds</li> <li>Whitham Farm buildings would be rehabilitated and adaptively reused to support park operations and visitor interpretation</li> <li>NPS-owned cultural resources would be managed pursuant to NPS <i>Management Policies</i>, NPS <i>Cultural Resource Management Guidelines</i>, and DO-28A: <i>Archeology</i></li> <li>Key Partners would be encouraged to follow NPS cultural resource management policies and guidelines</li> </ul> | <ul style="list-style-type: none"> <li>A few significant historic properties would be acquired in the park using already appropriated funds</li> <li>Whitham Farm buildings would be rehabilitated and adaptively reused to support park operations and visitor interpretation</li> <li>Cultural resource management would occur pursuant to NPS <i>Management Policies</i>, NPS <i>Cultural Resource Management Guidelines</i>, and DO-28A: <i>Archeology</i></li> <li>Key Partners would be encouraged to follow NPS cultural resource management policies and guidelines</li> <li>Private property owners would be assisted with management of significant cultural resources</li> </ul> | <ul style="list-style-type: none"> <li>The NPS and Key Partners would protect the park's significant historic sites, as funding permits</li> <li>Whitham Farm buildings would be rehabilitated and adaptively reused to support park operations and visitor interpretation; cultural landscape would be restored</li> <li>Cultural resource management would occur pursuant to NPS <i>Management Policies</i>, NPS <i>Cultural Resource Management Guidelines</i>, and DO-28A: <i>Archeology</i></li> <li>Key Partners would be encouraged to follow NPS cultural resource management policies and guidelines</li> <li>Private property owners would be assisted with management of significant cultural resources</li> <li>Lands adjoining the park significant to the park's cultural landscape would be identified along with strategies to work with adjoining property owners to protect park resources</li> </ul> | <ul style="list-style-type: none"> <li>The NPS and Key Partners would protect the park's cultural landscapes and significant historic properties</li> <li>Whitham Farm buildings would be rehabilitated and adaptively reused to support park operations and visitor interpretation; cultural landscape would be restored</li> <li>Cultural resource management would occur pursuant to NPS <i>Management Policies</i>, NPS <i>Cultural Resource Management Guidelines</i>, and DO-28A: <i>Archeology</i></li> <li>The NPS and Key Partners would have a formal agreement defining how cultural resources are managed</li> <li>Private property owners would be assisted with management of significant cultural resources</li> <li>Lands adjoining the park significant to the park's cultural landscape would be identified along with strategies to work with adjoining property owners to protect park resources</li> </ul> |

**Table 2.7 Comparison of Alternatives** (continued)

|  | Management Objectives  |  |   |  |
|--|--|--|---|--|
|  | Alternative A<br>(Continuation of Current Management)  | Alternative B  | Alternative C   | Alternative D<br>(Preferred)   |
| <b>Natural Resource Management</b>                       | <ul style="list-style-type: none"> <li>Natural resources acquired by NPS would be managed pursuant to NPS <i>Management Policies</i> and NPS <i>Cultural Resource Management Guidelines</i></li> <li>Significant natural resources on NPS property would be managed to protect natural processes and population diversity</li> <li>Key Partners would be encouraged to follow NPS natural resource management policies and guidelines</li> <li>The NPS would provide natural resource management technical assistance to Key Partners</li> </ul> | <ul style="list-style-type: none"> <li>Natural resources acquired by NPS would be managed pursuant to NPS <i>Management Policies</i> and NPS <i>Cultural Resource Management Guidelines</i></li> <li>Significant natural resources on NPS property would be managed to protect natural processes and population diversity</li> <li>Key Partners would be encouraged to follow NPS natural resource management policies and guidelines</li> <li>The NPS would provide natural resource management technical assistance to Key Partners</li> <li>The NPS would provide technical assistance to private landowners of significant natural resource</li> </ul> | <ul style="list-style-type: none"> <li>Same management actions as for Alternative B</li> </ul>  | <ul style="list-style-type: none"> <li>Same management actions as for Alternative B</li> </ul>   |
| <b>Visitor Experience, Interpretation, and Education</b> | <ul style="list-style-type: none"> <li>Visitors would experience the park at Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract</li> <li>Interpretive emphasis would vary by site, as determined by each Key Partner</li> <li>Very limited opportunities for picnicking and hiking would be available at the Key Partner's sites</li> </ul>   | <ul style="list-style-type: none"> <li>Visitors would experience the park at Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract</li> <li>The NPS and Key Partners would collaboratively develop interpretive media</li> <li>The NPS would develop electronic media for providing general information to visitors and for self-guided tours of the park</li> <li>Opportunities for hiking would be added through development of trails on key partner properties</li> </ul>  | <ul style="list-style-type: none"> <li>Visitors would be oriented to the park and the National Historic District at an NPS visitor center</li> <li>Visitors would experience protected sites throughout the park, including those owned by the NPS and the Key Partners (including but not limited to Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract)</li> <li>An integrated interpretive plan would guide where and how the park's stories are told</li> <li>The NPS would develop electronic media for providing general information to visitors and for self-guided tours of the park</li> <li>Opportunities for hiking would be added through development of trails</li> </ul> | <ul style="list-style-type: none"> <li>Visitors would be oriented to the park and the National Historic District at an NPS visitor center</li> <li>Visitors would experience protected cultural landscapes and sites throughout the park, including those owned by the NPS and the Key Partners (including but not limited to Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract)</li> <li>An integrated interpretive plan would guide where and how the park's stories are told</li> <li>The NPS would develop electronic media for providing general information to visitors and for self-guided tours of the park</li> <li>The park visitor center would support educational, research, and resource conservation programs</li> <li>Opportunities for hiking would be added through development of trails</li> <li>The NPS would provide interpretative media and sponsor occasional programs at selected sites in the National Historic District</li> </ul> |

**Table 2.7 Comparison of Alternatives (continued)**

|  | Management Objectives   |  |   |  |
|--|---|--|---|--|
|  | Alternative A<br>(Continuation of Current Management)   | Alternative B  | Alternative C   | Alternative D<br>(Preferred)   |
| <b>Park Facilities</b>                         | <ul style="list-style-type: none"> <li>Visitor contact and orientation to the park would be provided by Key Partners</li> <li>Trails, trailheads, and waysides would be developed by Key Partners on their property, as funding allows</li> </ul>   | <ul style="list-style-type: none"> <li>Visitor contact and orientation to the park would be provided by Key Partners</li> <li>The NPS and Key Partners would collaboratively develop auto touring routes on existing roads</li> <li>The NPS and Key Partners would collaboratively develop approximately 3 miles of trails on land owned by Key Partners and possibly on rights-of-way acquired from willing sellers</li> <li>The NPS and Key Partners would collaboratively develop park wayfinding and general signage</li> </ul>    | <ul style="list-style-type: none"> <li>Initial visitor contact would be directed to an NPS visitor center</li> <li>Additional visitor contact and orientation to the park would occur at Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract</li> <li>The NPS and Key Partners would collaboratively develop auto touring routes on existing roads</li> <li>The NPS and Key Partners would collaboratively develop approximately 8 miles of trails on land owned by Key Partners and possibly on rights-of-way acquired from willing sellers</li> <li>The NPS and Key Partners would collaboratively develop park wayfinding and general signage</li> </ul> | <ul style="list-style-type: none"> <li>Initial visitor contact would be directed to an NPS visitor center</li> <li>Additional visitor contact and orientation to the park would occur at Belle Grove, Harmony Hall, the Cedar Creek Battlefield Foundation visitor contact facility, and the Keister Tract</li> <li>The park visitor center would support educational, research, and resource conservation programs.</li> <li>The NPS and Key Partners would collaboratively develop auto touring routes on existing roads</li> <li>The NPS and Key Partners would collaboratively develop approximately 15 miles of trails on land owned by Key Partners and possibly on rights-of-way acquired from willing sellers</li> <li>The NPS and Key Partners would collaboratively develop park wayfinding and general signage</li> </ul> |
| <b>Transportation, Access, and Circulation</b> | <ul style="list-style-type: none"> <li>Park access would be primarily vehicular</li> <li>Visitors exploring the park would rely on existing wayfinding on rural county roads</li> </ul>   | <ul style="list-style-type: none"> <li>Park access would be primarily vehicular</li> <li>Wayfinding and directional signage would be added to assist visitors with exploring the park on rural country roads</li> <li>Trail access at key partner properties would be enhanced through addition of 3 miles of trails</li> </ul>  | <ul style="list-style-type: none"> <li>Park access would be predominantly vehicular, supplemented by a developed system of trails</li> <li>Wayfinding and directional signage would be added to assist visitors with exploring the park on rural county roads</li> <li>Approximately 8 miles of new trails would be developed</li> </ul>  | <ul style="list-style-type: none"> <li>Park access would be predominantly vehicular, supplemented by a well developed system of trails that provides connections to trails in the park's adjacent communities and in the region</li> <li>Wayfinding and directional signage would be added to assist visitors with exploring the park on rural country roads</li> <li>Approximately 15 miles of new trails would be developed</li> </ul>   |
| <b>Park Operations</b>                         | <ul style="list-style-type: none"> <li>3 full-time NPS employees would work at the park: <ul style="list-style-type: none"> <li>administering the park</li> <li>providing technical assistance</li> </ul> </li> <li>Key Partner staffing would not substantially change from current levels</li> <li>Volunteers would provide administrative assistance</li> <li>NPS staff would utilize technical assistance from the NPS Regional and Washington Offices</li> <li>NPS operations would be based in one of the park's adjacent communities (with some functions potentially</li> </ul> | <ul style="list-style-type: none"> <li>6 full-time NPS employees would work at the park: <ul style="list-style-type: none"> <li>administering the park</li> <li>providing interpretive media and programs</li> <li>providing technical assistance</li> </ul> </li> <li>Key Partner staffing would not substantially change from current levels</li> <li>Volunteers would be provide administrative assistance and assist with park programs</li> <li>NPS staff would utilize technical assistance from the NPS Regional and</li> </ul> | <ul style="list-style-type: none"> <li>18 full-time NPS employees would work at the park: <ul style="list-style-type: none"> <li>administering the park</li> <li>protecting park resources</li> <li>managing the visitor center</li> <li>maintaining NPS park land and facilities</li> <li>providing interpretive media and programs</li> <li>providing technical assistance</li> </ul> </li> <li>Key Partner staffing would not substantially change from current levels</li> <li>Volunteers would be</li> </ul>   | <ul style="list-style-type: none"> <li>25 full-time NPS employees would work at the park: <ul style="list-style-type: none"> <li>administering the park</li> <li>protecting park resources</li> <li>managing the visitor center</li> <li>maintaining NPS park land and facilities (more than Alt. C)</li> <li>providing interpretive media and programs</li> <li>providing technical assistance (more than Alt. C)</li> </ul> </li> <li>Key Partner staffing would not substantially change from current</li> </ul>  |

**Table 2.7 Comparison of Alternatives** (continued)

|                                       | Management Objectives  |   |   |   |
|---------------------------------------|--|---|---|---|
|                                       | Alternative A<br>(Continuation of Current Management)  | Alternative B   | Alternative C   | Alternative D<br>(Preferred)  |
| <b>Park Operations</b><br>(continued) | based at rehabilitated Whitham Farm)   | Washington Offices<br><ul style="list-style-type: none"> <li>NPS operations would be based in one of the park's adjacent communities (with some functions potentially based at rehabilitated Whitham Farm)</li> </ul>   | substantially involved in staffing the visitor center and generally assisting the NPS with operations<br><ul style="list-style-type: none"> <li>NPS staff would utilize technical assistance from the NPS Regional and Washington Offices</li> <li>NPS operations would be based at the visitor center (with some functions potentially based at rehabilitated Whitham Farm)</li> </ul>   | levels<br><ul style="list-style-type: none"> <li>Volunteers would be substantially involved in staffing the visitor center and generally assisting the NPS with operations</li> <li>NPS staff would utilize technical assistance from the NPS Regional and Washington Offices</li> <li>NPS operations would be based at the visitor center (with some functions potentially based at rehabilitated Whitham Farm)</li> </ul>   |
| <b>Technical Assistance</b>           | <ul style="list-style-type: none"> <li>NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities related to: <ul style="list-style-type: none"> <li>protection of significant resources inside the park</li> <li>design and implementation of mitigation measures</li> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities related to: <ul style="list-style-type: none"> <li>protection of significant resources inside the park (including assisting private landowners with land conservation and communities with rural area land use planning)</li> <li>design and implementation of mitigation measures</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities related to: <ul style="list-style-type: none"> <li>protection of significant resources inside the park (including assisting private landowners with land conservation and communities with rural area land use planning)</li> <li>protection of park viewsheds</li> <li>design and implementation of mitigation measures</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>NPS and Key Partners would provide technical assistance to one another, to private landowners, and to nearby communities related to: <ul style="list-style-type: none"> <li>protection of significant resources inside the park (including assisting private landowners with land conservation and communities with rural area land use planning)</li> <li>protection of park viewsheds</li> <li>protection of thematically-related resources outside the park boundary</li> <li>design and implementation of mitigation measures</li> </ul> </li> </ul> |
| <b>Related Resources</b>              | <ul style="list-style-type: none"> <li>The park would rely on interest groups, local governments, and others to protect related resources outside the park, including scenic resources that provide the visual setting for the park, cultural resources that are thematically-related to the park, and natural resources – such as hydrologic resources – that are functionally-related to the park</li> </ul> | <ul style="list-style-type: none"> <li>Same as Alternative A</li> </ul>   | <ul style="list-style-type: none"> <li>NPS would develop and implement proactive strategies to protect related resources outside the park, including scenic resources that provide the visual setting for the park, cultural resources that are thematically-related to the park, and natural resources – such as hydrologic resources – that are functionally-related to the park</li> </ul>   | <ul style="list-style-type: none"> <li>Same as Alternative C</li> </ul>   |

## 2.14 Impact Comparison Table

**Table 2.8 Comparison of Impacts of the Alternatives**

|                                | <b>Alternative A<br/>(Continuation of Current<br/>Management)</b>  | <b>Alternative B</b>   | <b>Alternative C</b>   | <b>Alternative D<br/>(Preferred)</b>   |
|--------------------------------|--|--|--|--|
| <b>Archeological Resources</b> | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and potentially adverse</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, potentially adverse</li> </ul>                          | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                               | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse than in Alternative A)</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse than in Alternative A)</li> </ul>  |
| <b>Ethnographic Resources</b>  | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact on NPS and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                                | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial (greater beneficial impact than in Alternative A)</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial (greater beneficial impact than in Alternative A)</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>   |
| <b>Historic Structures</b>     | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse impact than in Alternative A)</li> </ul>   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse impact than in Alternative A)</li> </ul>   |
| <b>Cultural Landscapes</b>     | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands in the park would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse impact than in Alternative A)</li> </ul>   | <ul style="list-style-type: none"> <li>overall impact on NPS- and partner-owned lands would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned lands would be long-term, minor to moderate, and potentially adverse (less adverse impact than in Alternative A)</li> </ul>   |
| <b>Museum Collections</b>      | <ul style="list-style-type: none"> <li>overall impact on museum collections owned by the NPS and its partners would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned collections would be long-term, minor to moderate, and potentially adverse</li> </ul> | <ul style="list-style-type: none"> <li>overall impact on museum collections owned by the NPS and its partners would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned collections would be long-term, minor to moderate, and potentially adverse</li> </ul> | <ul style="list-style-type: none"> <li>overall impact on museum collections owned by the NPS and its partners would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned collections would be long-term, minor to moderate, and potentially adverse</li> <li>potential for a larger museum collection than in Alternative A because the NPS and its partners would acquire more land within the legislated boundaries of the park</li> </ul> | <ul style="list-style-type: none"> <li>overall impact on museum collections owned by the NPS and its partners would be long-term, minor to moderate, and beneficial</li> <li>overall impact on privately owned collections would be long-term, minor to moderate, and potentially adverse</li> <li>potential for a larger museum collection than in Alternative A because the NPS and its partners would acquire more land within the legislated boundaries of the park</li> </ul> |

**Table 2.8 Comparison of Impacts of the Alternatives (continued)**

|  | <b>Alternative A</b><br>(Continuation of Current Management)  | <b>Alternative B</b>   | <b>Alternative C</b>  | <b>Alternative D</b><br>(Preferred)  |
|--|---|--|---|--|
| <b>Scenic/<br/>Visual Resources/<br/>Viewsheds</b> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, of unknown intensity, and beneficial or adverse</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse</li> <li>overall impact of land protection would be local, long-term, minor, and negligible</li> <li>overall impact of private land activities would be local, long-term, negligible to major, and adverse activities</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse (generally the same impact as Alternative A)</li> <li>overall impact of land use and management impacts would be local, long-term, minor, and beneficial or adverse (generally the same impact as Alternative A)</li> <li>overall impact of park facility development impacts would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternative A)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (generally the same impact as Alternative A)</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, minor, and beneficial or adverse</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternatives A and B)</li> <li>overall impact of land protection would be local, long-term, moderate, and beneficial (greater beneficial impact than in Alternatives A and B)</li> </ul>                      | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, moderate, and beneficial</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternatives A, B, and C)</li> <li>overall impact of land protection would be long-term, moderate to major, beneficial impacts that would be localized (greater beneficial impact than in Alternatives A, B, and C)</li> </ul> |
| <b>Soils</b>                                       | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of park facility development and maintenance would be local, long-term, negligible to moderate, and adverse</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial</li> <li>overall impact of private land activities would be local, long-term, negligible to major, and adverse activities</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse (generally the same as Alternative A)</li> <li>overall impact of land use and land management would be local, long-term, minor to moderate, and beneficial or adverse (generally the same as Alternative A)</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternative A)</li> <li>overall impact of land protection would be local, long-term, negligible to minor, and beneficial (generally the same as Alternative A)</li> </ul>       | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, minor to moderate, and beneficial or adverse</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternatives A and B)</li> <li>overall impact of land protection would be local, long-term, minor to moderate, and beneficial (greater beneficial impact than in Alternatives A and B)</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor to moderate, and adverse</li> <li>overall impact of land use and management would be local, long-term, minor to moderate, and beneficial or adverse</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternatives A, B, and C)</li> <li>overall impact of land protection would be local, long-term, moderate to major, and beneficial (greater beneficial impact than in Alternatives A, B, and C)</li> </ul>  |

Table 2.8 Comparison of Impacts of the Alternatives (continued)

|                              | Alternative A<br>(Continuation of Current Management)  | Alternative B   | Alternative C  | Alternative D<br>(Preferred)   |
|------------------------------|--|---|--|--|
| <b>Groundwater</b>           | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, negligible to minor, and adverse</li> <li>overall impact of land use and management would be local, long-term, negligible to minor, and adverse</li> <li>overall impact of facility development and maintenance would be parkwide, long-term, negligible to minor, and adverse</li> <li>overall impact of land protection would be local, minor, and beneficial</li> <li>overall impact of private land activities would be local, long-term, negligible to moderate, and adverse</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, short- and long-term, negligible to minor, and adverse (generally the same as in Alternative A)</li> <li>overall impact of land use and land management would be local, long-term, minor, and adverse (generally the same as in Alternative A)</li> <li>overall impact of park facility development and maintenance would be local, long-term, negligible to minor, and adverse (greater adverse impact than in Alternative A)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (generally the same as in Alternative A)</li> </ul> | <ul style="list-style-type: none"> <li>Adverse impacts on groundwater from facility development would be slightly greater than those in alternatives A and B, but the beneficial impacts of land protection would also be greater</li> <li>overall impact of visitor use would be local, short- and long-term, negligible to minor, and adverse</li> <li>overall impact of land use and management would be local, long-term, negligible to minor, and adverse or beneficial</li> <li>overall impact of park facility development and maintenance would be local, long-term, negligible to minor, and adverse (slightly greater adverse impact than in Alternatives A and B)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (greater beneficial impact than in Alternatives A and B)</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, short- and long-term, negligible to minor, and adverse</li> <li>overall impact of land use and management would be local, long-term, negligible to minor, and adverse or beneficial</li> <li>overall impact of park facility development and maintenance would be local, long-term, negligible to minor, and adverse (greater adverse impact than in Alternatives A, B, and C)</li> <li>overall impact of land protection would be local, long-term, moderate, and beneficial (greater beneficial impact than in Alternatives A, B, and C)</li> </ul> |
| <b>Surface Water Quality</b> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse</li> <li>overall impact of land use and management would be mostly local, long-term, minor to moderate, and adverse</li> <li>overall impact of park facility development would be local, short-term and long-term, minor and adverse</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial</li> <li>overall impact of private land activities would be local, long-term, negligible to major, and adverse</li> </ul>                | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse (generally the same as in Alternative A)</li> <li>overall impact of land use and land management would be mostly local, minor to moderate, and adverse or beneficial (generally the same as in Alternative A)</li> <li>overall impact of park facility development would be local, short-term, negligible to minor, and adverse (greater adverse impact than in Alternative A)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (generally the same as in Alternative A)</li> </ul>                   | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse</li> <li>overall impact of land use and land management would be mostly local, long-term, minor to moderate, and adverse or beneficial</li> <li>overall impact of park facility development would be local, short-term, negligible to minor, and adverse (greater adverse impact than in Alternatives A and B)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (greater beneficial impact than in Alternatives A and B)</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse</li> <li>overall impact of land use and management would be mostly local, long-term, minor to moderate, and adverse or beneficial</li> <li>overall impact of park facility development would be local, short-term, negligible to minor, and adverse (greater adverse impact than in Alternatives A, B, and C)</li> <li>overall impact of land protection would be local, long-term, moderate, and beneficial (greater beneficial impact than in Alternatives A, B, and C)</li> </ul>                                    |

**Table 2.8 Comparison of Impacts of the Alternatives (continued)**

|                                   | <b>Alternative A<br/>(Continuation of Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b>   | <b>Alternative D<br/>(Preferred)</b>  |
|-----------------------------------|---|--|--|---|
| <b>Vegetation</b>                 | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse</li> <li>overall impact of land use and management would be local, short- or long-term, minor to moderate, and adverse or beneficial</li> <li>overall impact of development would be local, short- and long-term, minor to moderate, and adverse</li> <li>overall impact of land protection would be local, long-term, negligible to minor, and beneficial</li> <li>overall impact of private land activities would be local, long-term, negligible to major, and adverse</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse (generally the same as in Alternative A)</li> <li>overall impact of land use and management would be local, long-term, minor, and adverse or beneficial (generally the same as in Alternative A)</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternative A)</li> <li>overall impact of land protection would be local, long-term, negligible to minor, and beneficial (generally the same as in Alternative A)</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, minor, and adverse or beneficial</li> <li>overall impact of land use and management would be long-term, minor, and adverse or beneficial</li> <li>overall impact of park facility development would be local, long-term, negligible to moderate, and adverse (greater adverse impact than in Alternatives A and B)</li> <li>overall impact of land protection would be local, long-term, minor, and beneficial (greater beneficial impact than in Alternatives A and B)</li> </ul> | <ul style="list-style-type: none"> <li>overall impact of visitor use would be local, long-term, and adverse or beneficial</li> <li>overall impact of Land use and management would be local, long-term, minor to moderate, and adverse or beneficial</li> <li>overall impact of Development impacts would be long-term, adverse, negligible to moderate, and localized (greater adverse impact than in Alternatives A, B, and C)</li> <li>overall impact of Land protection impacts would be local, long-term, moderate, and beneficial (greater beneficial impact than in Alternatives A, B, and C)</li> </ul> |
| <b>Visitor Use and Experience</b> | <ul style="list-style-type: none"> <li>overall impact would be long-term, moderate, and adverse</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact would be long-term, moderate, and beneficial</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact would be long-term, moderate, and beneficial</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact would be long-term, major, and beneficial</li> </ul>  |
| <b>Regional and Local Economy</b> | <ul style="list-style-type: none"> <li>overall impact would be short-term and long-term, negligible to minor, and beneficial</li> </ul>   | <ul style="list-style-type: none"> <li>overall impact on the local and regional economy would be short-term and long-term, minor, and beneficial</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact on the local and regional economy would be short-term and long-term, minor, and beneficial</li> </ul>  | <ul style="list-style-type: none"> <li>overall impact on the local and regional economy would be short-term and long-term, minor, and beneficial</li> </ul>   |

## 2.15 Consistency with the National Environmental Policy Act

The NPS requirements for implementing NEPA include an analysis of how each alternative meets or achieves the purposes of NEPA, as stated in sections 101(b) and 102(1). Each alternative analyzed in a NEPA document must be assessed as to how it meets the following purposes:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations
2. Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
5. Achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, while accurately describing the current management direction and efforts of the NPS and the Key Partners, fails to satisfy the requirements outlined above. Shortage of funding for staff, programs, facilities, and services limits the existing NPS staff to minimal operational effectiveness. This alternative would only minimally meet the first two criteria as a result of further commercial or residential development of key land parcels within and adjacent to the park. Alternative A is unlikely to meet criteria 3 and 4 due to limited funding and staff, and limited collaboration with the park's community partners. Alternative A does not meet criteria 5 and 6 due to the higher potential for development and economic pressures that would encroach on park resources and values.

Alternative B better meets criterion 4 than does Alternative A – with increased staff and funding, NPS would be better able to protect important park resources, provide visitor programs, and enhance visitor experiences. However, Alternative B is similar to A in that it would only minimally meet the other five criteria.

Alternatives C and D can more fully meet the six criteria above due to an enhanced visitor experience and a stronger preservation and technical assistance mission. Both Alternatives C and D describe greater land ownership by NPS and the Key Partners, as well as increased collaboration with the park's community partners, resulting in a greater ability to protect park resources and values while increasing

opportunities for visitor enjoyment, education, and recreation commensurate with the park's mission. Under alternatives C and D, historic and natural resources, landscapes, viewsheds, and the wide range of beneficial uses of the environment referred to in the NEPA criteria are addressed, and funding adequate to fulfill the mission is requested.

#### 2.15.1 Environmentally Preferred Alternative

In accordance with NPS Director's Order #12: *Conservation Planning, Environmental Impact Analysis, and Decision-making*, the NPS is required to identify the environmentally preferred alternative in its NEPA documents. The environmentally preferred alternative is the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b)) (516 DM 4.10). The Council on Environmental Quality's Forty Questions (Q6a) further clarifies the identification of the environmentally preferred alternative stating, "simply put, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural processes."

After careful review of potential impacts as a result of implementing the management alternatives, and assessing proposed mitigation for cultural and natural resource impacts, it is determined that the environmentally preferred alternative is **Alternative D**. This alternative clearly surpasses alternatives A and B in the level of resource protection that would be achieved through a stronger NPS mission and technical assistance program, emphasis on collaborative protection with the Key Partners, and development of additional community partnerships. Compared to Alternative C, under Alternative D, the NPS would be better equipped to develop and implement proactive land protection strategies for resource protection within and outside park boundaries. Overall, Alternative D provides the highest level of protection of natural and cultural resources.

#### 2.16 Selection of the Preferred Alternative

The NPS has identified **Alternative D** as the preferred alternative to guide long-term management of Cedar Creek and Belle Grove NHP. Selection of Alternative D as the preferred alternative is based on the analysis and findings completed by the GMP planning team, public comments received during the planning process, and input from the Key Partners and the Park Advisory Commission.

The GMP planning team also used the "Choosing by Advantages" (CBA) process to organize and evaluate the facts most relevant to the decision and to minimize the influence of individual biases and opinions in the decision-making process. Findings of the CBA determined that Alternative D would fulfill the NPS statutory mission and responsibilities at the park and offered a greater overall advantage when compared

to the other GMP alternatives considered (NPS 2007a). The advantages offered by Alternative D relative to Alternatives A, B, and C are summarized as follows:

- **Protection of the park's natural and cultural resources** – Alternative D would be highly advantageous when compared to Alternatives A and B and moderately more advantageous than Alternative C. Alternative D provides the highest degree of land and resource protection within the park and related lands protection outside the park.
- **Enhanced interpretation, education, and understanding** – Alternative D would be highly advantageous when compared to Alternatives A and B and slightly more advantageous when compared to Alternative C. Alternative D best enables interpretation of the park's themes and the orientation of visitors to the park and the National Historic District.
- **Enhanced public use and enjoyment of the park** – Alternative D would be highly advantageous when compared to Alternatives A and B and moderately more advantageous when compared to Alternative C. Alternative D provides the greatest opportunities for visitors to explore and move about the park while learning its stories. Visitor services are most likely to be improved under Alternative D.
- **Effective organizational management** – Alternative D would be highly advantageous when compared to Alternatives A and B and slightly more advantageous when compared to Alternative C. Alternative D provides the greatest collaborative opportunities between the NPS and the Key partners.
- **Effective technical assistance** – Alternative D would be highly advantageous when compared to Alternatives A and B and moderately more advantageous when compared to Alternative C. Alternative D has the most extensive technical assistance between the NPS and Key Partners and for private landowners and nearby communities.

The implementation of the approved plan, no matter which alternative, would depend not only on future NPS funding and servicewide priorities, but also on partnership funds, time, and effort. The approval of a GMP does not guarantee that funding and staffing needed to implement the plan would be forthcoming. Full implementation of the plan could be many years in the future.

