



## 2

### Alternatives

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#### Overleaf:

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The opportunity to interact with experts is a key feature of the action alternatives.

#### This Page:

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Exhibits and programming in historic buildings, such as Varnum's Quarters, enliven historic themes.



## Chapter 2: Alternatives

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### 2.1 Introduction

There is great potential to transform Valley Forge NHP and realize its potential as a place where citizens understand, care for, and preserve their history and natural heritage; a place where life-long education is compelling; and a place that is a vital and valued part of the community. Chapter 2 presents alternative proposals for achieving this future for the park. The alternatives were generated from study and analysis of the park's resources and significance, the ways visitors use the park, and the needs of the community. Alternatives were refined through a process of public consultation that included workshops and briefings to review issues, resources, and initial concepts. A summary of the public process is included in Chapter 5: Consultation and Coordination, and Appendix C: Scoping Summary and Analysis lists the public comments received during scoping. The alternatives are designed to take advantage of new opportunities to join with partners, volunteers, and stakeholders to make this a better park.

Each alternative presents options for natural and cultural resource management, visitor use and experience, operations, and working with partners. This range of choices is provided to allow the NPS and public to assess the positive and negative aspects of each alternative.

Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.

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### 2.2 How the Alternatives were Developed

Three elements provided the building blocks for developing each of the action alternatives. The park's purpose, mission, and the goals that would serve the mission form the **management framework**. Goals for the visitor's experience in the park are addressed by the **interpretive and thematic framework**. Finally, a package of possible solutions to address traffic issues was developed as part of the **transportation framework**. Each of these is described below.

#### 2.2.1 Management Framework

Each of the action alternatives described in this chapter is based on statements of the park's **purpose** and national **significance**, as well as the park's **mission** and **mission goals**. As presented in Chapter 1: Purpose and Need for Action, the statement of purpose, as defined by the U.S. Congress in establishing the park, and its significance - that which is most important about the park - help focus management strategies and channel funding where it will be most appropriate. The purpose and significance are summarized in the park's statement of mission.

Mission goals describe the ideals the NPS strives to achieve in the park and the conditions that must be met to realize the park mission. In total, the purpose, significance, mission, and mission goals describe a vision for the park's future.

**Management objectives** further define mission goals and serve as the core of each GMP. They support the mission by providing the foundation for all subsequent decision-making in the park. These detailed statements identify the specific resource conditions and visitor experiences that should be achieved and maintained for the park's various resources and areas over time. The kinds and levels of visitor use and development that are appropriate for maintaining those desired conditions are identified. Management objectives serve as park managers' primary reference source, to determine if a specific action to be taken is consistent with the direction established and agreed upon by the park and public in the GMP.

When developing management objectives for historic buildings, sites, or landscapes, **preservation treatments** must be considered. Preservation treatments are described in the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Each of the action alternatives presented by this GMP include elements of preservation, rehabilitation, and restoration.

**Preservation** is the process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work includes stabilizing the property and focuses on the ongoing maintenance and repair of historic materials and features. Preservation retains the existing character of the resource. Most of the activity that takes place in the park today is preservation: as funds are available, buildings, monuments, and landscapes are stabilized and repaired so that they maintain their existing character.

**Rehabilitation** makes possible compatible uses for properties through additional repair, alterations, or additions, while preserving those historic features that remain and that are significance and convey historical values. Rehabilitation starts with identifying, protecting, retaining, and preserving historic features. Changes to a property that have acquired significance in their own right are retained and preserved. Then, historic features that have deteriorated or changed may be repaired. For example, such repair work in the landscape could include reclaiming a field that has become overgrown, or replacing commemorative trees that are part of the park's National Register significant cultural landscape. Rehabilitation also allows replacement of missing historic features, such as hedgerows or fences. Finally, rehabilitation permits alterations and additions for new uses; an example might be providing a sub-base for a historic lane while retaining its original surface texture and width, thereby allowing it to carry horses, pedestrians, and emergency vehicles while maintaining its historic appearance. An example in a historic structure would be the updating of utilities to meet current life-safety codes, allowing the building to be used by visitors or for park operations.

**Restoration** is the process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. This can include removing features from other periods in its history and replacing missing features that can be substantiated by documentary and physical evidence. Care must be taken to ensure that features that are merely conjectural are not introduced, because that could create a false sense of history. An example of restoration in the park might be the fabrication of new bronze ornaments from the original plans for a monument, where the original ornaments have been stolen or vandalized.

Because there may be different approaches to park use, management, and development, the planning process investigates a range of feasible **alternatives** that may allow a park to achieve its mission and mission goals. To help the public and NPS understand what would happen if an alternative were adopted, the **impacts of each alternative** on the natural, cultural, and socioeconomic environments are described and compared. These descriptions are contained in the **environmental impact statement (or EIS)**, which is prepared in accordance with NEPA. After a range of alternatives has been fully assessed and considered, NPS, in consultation with the public, chooses the alternative to be implemented.

### 2.2.2 Interpretive and Thematic Framework

An interpretive and thematic framework was developed to guide the visitor experience defined by each alternative. It establishes interpretive and visitor experience objectives, as well as the philosophy behind interpretation. It identifies key considerations for developing the interpretive/visitor experience and the core themes that the experience should be based on (including both cultural and natural history). Finally, the interpretive framework defines the sites within the park that are most important to telling the stories at Valley Forge.

#### Interpretive and Visitor Experience Objectives

Through the messages we present in our programs, facilities, exhibits, and publications, we give visitors more than just information. “Interpretation” helps people to formulate the meaning behind the messages. It helps people make sense of the facts they learn and the resources they see. It helps people make connections to the intangible concepts and ideas the park represents. It helps people understand, appreciate, enjoy, and care for their natural and cultural history and resources.

We want to ensure that Valley Forge NHP meets its goal of providing visitors with a worthwhile and memorable experience. When we achieve that, we also achieve our goal for visitors to understand and value this place and to become motivated to participate in its preservation.

The interpretive and visitor experience objectives describe the learning, experiential, and behavioral experiences the park and its partners would like to be available to visitors. These objectives form the framework for planning.

#### *Interpretive Objectives*

Visitors should have the opportunity to

- understand the history and significance of the American Revolution and the encampment at Valley Forge
- understand the symbolic and actual legacy of the revolution and encampment
- understand the leadership of General George Washington and the roles played by other key figures in the revolution, many of whom continued to lead the country for a generation
- understand the history and significance of the park’s natural resources
- understand the historic and contemporary connections of the park’s cultural and natural resources

- become intrigued to learn more, though return visits or continued reading, viewing, and participation on their own
- make intellectual and emotional connections to their own lives and times through experiences and critical thinking
- appreciate that the understanding of cultural and natural history is dynamic, and that each generation reinterprets the meaning of history
- understand the value of both individual and collective action through the examples offered by both the encampment and subsequent stewardship of the cultural and natural resources of the park

### ***Visitor Experience Objectives***

Visitors should have the opportunity to

- feel comfortable and confident in planning their visits and orienting themselves to facilities, features, and participatory activities
- enjoy themselves, have memorable experiences, and return home with a feeling that their time was well spent
- develop a sense of appreciation and responsibility that will result in taking action to protect and support the resources of this place
- continue to learn something new and to deepen their understanding with each visit
- understand the fragility of cultural and natural resources and the need to treat them with care and respect
- experience and enjoy the scenery, places of solitude, wildlife, and natural places in the park, and come away refreshed and inspired

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### ***Interpretive Principles***

- *History first*
  - *The past is connected to the present*
  - *Rooted in reality*
  - *Diversity of opportunities*
  - *Multiple audiences*
  - *Complementary experiences*
  - *Engagement and empowerment*
  - *Dynamic context*
  - *The tradition of stewardship*
  - *Revolutionary War hub*
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### ***Interpretive Philosophy***

As part of developing this GMP, park staff reached out to visitors and to scholars, educators, and partners to imagine and plan for a better, more meaningful interpretive experience at the park. The following principles are guidelines that should apply to interpretation and education regardless of which alternative is finally chosen. Differences among the alternatives would be reflected in differences in implementation, particularly with how the principles are experienced by park visitors.

***History First*** - Valley Forge NHP is a *historical* park. As such, history is the park's most fundamental resource and the core foundation that underlies and supports everything else.

***The Past is Connected to the Present*** - Interpretation not only should address historical events but also should consider their impacts and consequences. Visitors should encounter and understand both the specific history of Valley Forge and its cultural and natural legacy. Interpretation should provide links between the past and present.

***Rooted in Reality*** - Authenticity is the park's greatest interpretive asset: real things (artifacts) and real places (sites) where real events happened. The artifacts and the places are the foundation for telling the stories.

***Diversity of Opportunities*** - Visitors should be able to access the park's core themes and stories at multiple locations and in many different ways, depending upon their own interests and preferences.

***Multiple Audiences*** - Interpretation should engage visitors of all ages and backgrounds who come to the park with very different motivations, from historians and naturalists to tourists and local recreational users.

***Complementary Experiences*** - Different forms of interpretation offered in the park should be mutually enhancing so that each individual experience is informed and enriched by others, creating a whole that is more than the sum of its parts.

***Engagement and Empowerment*** - Visitors should have the opportunity to become active participants in the interpretive process, making choices, asking questions, and directing their own inquiry into the past: visitors learn through experiences.

***Dynamic Context*** - Interpretation and education should explicitly acknowledge the fact that we live in a constantly changing world. Exhibits, programs, and publications should incorporate advances in historical and natural research and scholarship and also should acknowledge the continuing evolution of the park's landscapes and natural resources.

***The Tradition of Stewardship*** - Valley Forge's resources were first protected by citizens. Even after establishment as a state and national park, the tradition of cultural and natural stewardship by citizens is unusually strong here. That ongoing history should be both an interpretive story and also a clear opportunity for participation.

***Revolutionary War Hub*** - Valley Forge NHP should serve as a practical and philosophical hub for Revolutionary War interpretation in the United States, helping visitors gain access to additional information and plan their visits to other sites, as well as to understand the events and meanings of the encampment and the historical and geographical context in which it occurred.

## Interpretive Considerations

Implementation of these principles for visitor experiences and interpretation must be flexible in order to respond appropriately to a range of opportunities over time. This GMP provides a rationale for decision-making in the future and a cohesive and balanced framework for future visitor experiences. Key considerations include the following.

***Audience Characteristics*** - This GMP assumes as a core value that *all* of the park's different audiences would be served by interpretive and educational exhibits and programs: different types of visitors would encounter and engage the park's resources in very different ways. For example, destination visitors would almost certainly visit the Welcome Center and most would ride a park interpretive shuttle. By contrast, recreational users, who typically visit the park frequently, would rarely seek an interpretive overview and might encounter site-based interpretive experiences in a random fashion. They also would be unlikely to experience interpretation offered onboard a park interpretive shuttle. School groups and tour groups generally need a tailored experience and schedule, and they greatly benefit from advance educational information.

***Experience Selection and Sequence*** - Depending upon their personal preferences or circumstances, visitors may structure their visits to the park in many different ways.

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### Characteristics of Good Orientation

- *Clearly signed as the starting point for a visit*
  - *Assumes free (non-fee) access*
  - *Assumes presence of uniformed staff at all times during operating hours*
  - *Size requirements and configuration are consistent with moment-load visitation peaks identified in NPS planning documents.*
  - *Orientation is a distinct experience*
  - *Access to park is direct*
  - *Assumes mix of audiovisual and interactive media programming, and permanent and changeable exhibits and graphics*
  - *Provides information and preliminary interpretive introduction for all programs, resources, and activities, including natural history*
  - *Provides information on related sites and activities beyond the park*
  - *Incorporates basic visitor amenities (restrooms, water fountains, vending, telephones, etc.)*
  - *Incorporates ample casual seating*
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Their experience selection and park resource usage patterns have important ramifications for the character and quality of visitor experiences at the park and must be carefully considered as new interpretive features are developed.

***Visitor Transportation and Circulation Patterns*** - Management decisions about the route, character, and operational aspects of the proposed park-wide shuttle transportation system may not be driven by interpretive considerations, but they would have an impact on the experience of most future park visitors. Where the shuttle stops, how it is ticketed, when it operates, whether and how much interpretation is provided onboard, and in what form it is provided, etc. are all critical decisions with important ramifications, not only in terms of park operations and management but in terms of the quality and character of the visitor experience.

***Visitor Orientation and Visit Planning*** - The continued existence of an open access and non-fee visitor information and visit planning component is critical to maintaining and improving the overall quality of visitor experiences at the park. The Welcome Center would be a vital first stop for park visitors. Exhibits, graphics, media programming, and personal interpretation would provide first-time visitors with a complete and easily comprehensible overview of the park's many different interpretive resources and recreational opportunities. It would help them match their own needs and interests with available resources and activities and enable them to more effectively plan their visits. For repeat visitors, orientation would offer current information on programs, events, and temporary or traveling exhibits. To enhance its value as both a hub and a gateway for visitors to the park, orientation might be planned to incorporate changing displays that highlight features of the artifact collections or shed light on archeology, research, or restoration efforts underway within the park.

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## Interpretive Themes

Interpretive themes can be thought of as compelling stories. They are the fundamental ideas represented by the history and resources of a park. As part of the GMP planning process, the park and its partners engaged in a rethinking of the significance of Valley Forge to reflect new scholarship and the changes in context since the 1976 establishment of the national park. Table 2-1 presents the new themes.

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## Interpretive Focus Zones

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### ***Interpretive Focus Zones***

#### *Primary*

- *Washington's Headquarters*
- *Muhlenberg's Brigade*
- *Grand Parade*

#### *Secondary*

- *Walnut Hill*
  - *Varnum's Quarters/Star Fort*
  - *Artillery Park*
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Orientation at the Welcome Center would provide visitors with an overview of the themes of the encampment (and the American Revolution in some alternatives) and park natural resources. Collections-based museum exhibits would begin to detail the themes. It is in the landscape, however, that visitors can stand in the places that historic figures stood, see many of the sights they saw, and touch history.

Six specific places (interpretive focus areas) within the park were the sites of important activities during the encampment, and they can illustrate key interpretive themes. These sites lend themselves to special treatment as the focus for programming and activities. They would be developed to support programming and would be stops on any guided or self-guided tour around the park.

Each focus area would adopt a specific interpretive message. Repeated information among the sites would be minimized, and there would be complementary uses among the sites and between the sites and the Welcome Center.



Table 2-1 Valley Forge NHP Interpretive Themes

Overarching Theme — American Revolution	Valley Forge	Tangible	Intangible	Who
<p>The American Revolution created the United States. Today, we regard it as the embodiment of the values and ideals of the American people. Yet the historic record reveals a rich story of people who were divided by geography, culture, and class and torn by internal strife and uncertainty.</p>	<p><i>During the encampment period:</i></p> <p>The 1777-78 winter encampment at Valley Forge represents a microcosm of the American Revolution, with its range of people and personalities. Valley Forge reflects the conflicts, complexities, and contradictions inherent in the American Revolution and the War for Independence.</p>	<p>Definition:</p> <p>Tangibles are the places, events, objects, artifacts, etc. that can be (or have been) experienced; generally through the senses.</p>	<p>Definition:</p> <p>Intangibles include meanings, ideas, beliefs, values, and universal concepts (concepts that are universal to all people, although the values individuals associate with them vary).</p>	<p>The people whose stories may illustrate a particular thematic concept.</p>
	<p><i>After the encampment period:</i></p> <p>After the encampment of 1777-78, Valley Forge came to symbolize redemption through suffering by commemorating the sacrifice and hardship that characterized the early encampment period and evolved into a prime symbol of American ideals and identity. Its pastoral setting belies the complexities, contradictions, and uncertainties of the Revolutionary period.</p>			
<p><b>Component Themes</b></p> <p>Americans’ individual motivations and decisions about involvement in the American Revolution and the War for Independence ranged from the ideals of the Enlightenment, loyalty, and religious conviction to practical issues such as daily survival, the promise of freedom, and a secure economic future.</p>	<p>The stories of the military and civilian participants of the Philadelphia Campaign and the Valley Forge encampment reflect a spectrum of motivations and actions.</p>	<p>Military and political actions</p> <p>Effect of encampment on civilians, Washington’s directions about how civilians should be treated</p> <p>Von Steuben explaining “why” to the soldiers</p> <p>Burning the forge</p> <p>Philadelphia Campaign/strategy</p> <p>Taxes</p> <p>Committees of Safety</p> <p>Declaration of Independence Sovereignty, proxies</p> <p>Land bounties and expansion in the west</p> <p>Stephens family</p> <p>Varnum’s quarters</p> <p>French and Indian War and its effects</p> <p>Washington’s experiences in the French and Indian War</p> <p>“Join or die” cartoon of 1750s and Albany Conference</p>	<p>What was it like to be here then?</p> <p>Motivations for joining and staying</p> <p>The Enlightenment</p> <p>Natural law</p> <p>Freedom for the enslaved</p> <p>Concepts of duty and noblesse oblige (class influence and responsibility)</p> <p>Global economics including slave trade</p> <p>Behavior of people in wartime; paradox and evolution of concept of freedom and increasing enfranchisement; treatment of “patriots,” “traitors,” and neutral parties</p> <p>Differences of opinion about issues based on regional interests, class, gender, religion, age, etc.</p>	<p>Who was here?</p>

Table 2-1 Valley Forge NHP Interpretive Themes (Continued)

Component Themes (Continued)	Valley Forge	Tangible	Intangible	Who
How did the colonists defeat the most powerful empire in the world? As the War for Independence progressed, George Washington’s strategy focused on staying in the game: holding the army together and turning it into an effective fighting force.	By placing the 1777-78 winter encampment at Valley Forge, so close to the main British Army in Philadelphia, Commander-in-Chief General George Washington cleverly chose a strategic position enabling him to keep tabs on the British while keeping a safe distance. He used the encampment to refine and reform the organizations and systems necessary to support and professionalize the Continental Army.	Selection of Valley Forge: terrain and natural defensive positions	Defense	Quartermaster corps
		Defenses built, earthworks, engineering	Strategy	Greene
		Schuylkill River	Discipline	Von Steuben
		Washington’s Headquarters	Dissatisfaction	Duportail
		Washington’s order for a unified manual of arms (“the instructions”)	Relationship with Continental Congress and the states	Wayne
		What was it like to be here then?	Relationship between Continental Army and militia	Sullivan
		The north side and access to it.	Daily life during the encampment	Lafayette
		Mutiny, courts martial, and provost marshal	Pessimism	Knox
		Correspondence from Headquarters, Philadelphia	Hope	Military engineers
		Campaign/Brandywine	Pride	
		Burning forge	Endurance	
		Sullivan’s bridge	Duty	
		Harassing the British	Dedication	
		Militia	Loyalty to fellow soldiers, loyalty to home states/geographic regions	
		Rifle units	“Making of the army”	
		Quarters for other officers - Varnum, Lafayette, etc.	How did the encampment affect the war as a whole?	
		GW’s tent		
		Log huts		
		Artillery drills/units and artillery park		
		Archeology		
		Individual artifacts		
		Hospital system		
		Medicine		
		Commissary operation		
		The “military city”		
More than any other factor, it was George Washington’s character - his leadership skills, political savvy, and personal integrity - that was the basis for the cohesion of the army and ultimate victory of the American cause in the Revolution and the War for Independence.	At the Valley Forge encampment, General George Washington faced severe challenges to his leadership and organization yet assumed and retained the responsibility to hold the army together.	Washington’s Headquarters; careers of leaders during and after the war	Leadership	General Washington
		Washington’s orders, actions, and correspondence	Integrity	People under Washington’s command in Headquarters: Tilghman, Laurens, Hamilton, Knox, etc.
		Washington keeping Congress informed (how and why)	Duty	Others such as Von Steuben, Lafayette
		Conway Cabal	Responsibility	Martha Washington
		Pensions	Military subordinate to civilian authority	Catherine Greene; soldier/diarists such as JP Martin
			“Mentoring” by Washington	
			Washington’s relationships (successful and strained) with people such as Lafayette, Arnold, Gates, Wayne, Charles Lee	
			Support by Martha Washington	
			Balance of regional interests	
			Concept of Revolution as a civil war	

Table 2-1 Valley Forge NHP Interpretive Themes (Continued)

Component Themes (Continued)	Valley Forge	Tangible	Intangible	Who
The American Revolution often is considered an internal struggle of the British empire; however it was not only a civil war but also a war that triggered conflict on a global scale as power and influence shifted, new alliances were created, and opportunities seized to even old scores.	The story of the Valley Forge encampment provides a window to the global scale and foreign involvement in the War for Independence through such factors as the French Alliance and the foreign volunteers and participants on both sides.	French Alliance	Deep divisions caused in families, neighborhoods, etc., as a result of political differences	Foreign volunteers such as Von Steuben, Lafayette, Duportail, DeKalb, Kosciuszko, Rochambeau
		Role and effect of foreign soldiers (like Hessians) and officers	Diplomacy	Hessians
		French and Indian War	Foreign involvement and contributions	British generals and admirals such as Lord William Howe, Admiral Sir Richard Howe, Cornwallis, Henry Clinton
		Taxes	Ideals of the American Revolution applied later in Europe (France & Lafayette, Poland & Kosciuszko)	
		Understanding the power structure of 18th century western world	Global economics including the slave trade	
		Economics and the 18th century world economy	Power of British Army/Navy	
		Coordination with French after Valley Forge	Economic power	
		British focus on the Caribbean	Wealth	
			Success	
			Empire	
			Colonialism	
			Relationships with Congress	
The American Revolution forged an American identity that united both individuals and states around the ideals expressed in the Declaration of Independence, despite the paradox and tension inherent in subordinating individual liberties and state interests to common goals and the common good.	<i>The encampment period:</i> Despite the inherent drama of deprivation, disagreement, intrigue over leadership, personal animosities, factions of despondency and pessimism, as well as the uncertainty of the outcome, a stronger, more disciplined, organized, and professional national army emerged from the Valley Forge encampment with a renewed sense of confidence and identity.	Washington’s unified manual of arms (“the instructions”) and training	Relationships among the states	Washington
		Thomas Paine’s <i>The Crisis</i> and other writings	The Continental Army as a national institution and the influence it had (as an institution and through individual participants) after the war.	Von Steuben
		The press	Propaganda	Greene
		Propaganda	Propaganda	
		The Declaration of Independence	Spying	
		The Confederation of States	E pluribus unum	
		Continental Congress		
		Pensions		
	<i>Commemorating the encampment period:</i> Despite the complexities of the encampment, the Valley Forge story became symbolic shorthand for subsequent generations as they contributed to the evolving, pastoral landscape set aside to celebrate heroic suffering and sacrifice and to instill a sense of gratitude, inspiration, and patriotism.	What did it look like then, and why does it look different now?	Preservation and commemoration	People involved with establishing Valley Forge as a park
		Commemorative landscape	Myths and legends	The Centennial Association
		Log huts	Development and manipulation of meaning	The role of Civil War veterans in shaping the park and its stories
		Memorial Chapel	Value of green space and recreation opportunities in an urban area	Anna Morris Holstein
		Monuments	Decisions about what to preserve	W.S. Hancock, Reverend Burke
		Dogwood grove and allées	Remembering/honoring the story	Valley Forge Historical Society
		Boy Scouts and Jamboree	The “American resurrection” story with implications and connections to “civil religion” and patriotism	Authors writing about Valley Forge
		Events and protests held in the park	Encampment as representing all eight years of the Revolutionary War	
		Reflections of Washington and others on the place and its meaning		

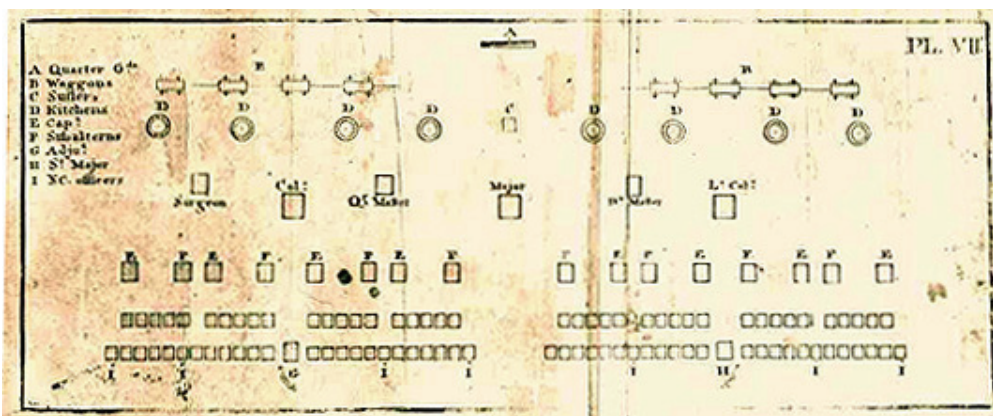


Table 2-1 Valley Forge National Historic Park Interpretive Themes (Continued)			
Overarching Theme — Natural Resources Stewardship at Valley Forge	Tangible	Intangible	Who
<p>The landscape of Valley Forge presents a pastoral appearance. Yet the landscape and its natural resources have been devastated numerous times from the overwhelming effects of war, industry, and agriculture. The recovery reflects the resilience of the resources and also the significance of this place to generations of Americans.</p> <p><i>Component Themes</i></p> <p>Citizens have sought to preserve Valley Forge since the mid-19th century. Each generation has assumed the responsibility to actively defend this ground; and each has redefined the meaning of commemoration. The landscape of the park reflects the imprint of each of these ideas, including reconstruction, beautification, active recreation, and naturalization. This important tradition continues today.</p>	Historic and natural landscapes	Patriotism	Civic leaders
	Designed features	Social movements	Past and present volunteers
	Changes through time	Commemoration	
		Opportunities for stewardship	
<p>The park protects a variety of habitat types, each of which supports an impressive diversity of native wildlife. The definition of “natural” conditions in this highly developed region is problematic, however. Protection requires constant choices.</p>	Wetland habitats	Conservation principles	
	Upland habitats	Biodiversity	
		Ecosystem management	
		Conflicts in values	
<p>The preservation of biotic and abiotic resources at Valley Forge is a globally shared conflict between the protection of the resources and their use. The conflict goes beyond the boundary of the national park.</p>		Ecology	
	Air	Climate	
	Water	Geologic time	
	Geologic formations	Sustainable use	
	Quarries		
	Impounding basins		
	Schuylkill River and Valley Creek		
	Dammed streams		
	Forests and meadows	Federal and state significance	
	Wetlands and riparian areas	Natural variability	
	Watchable wildlife	Ecosystem health	
		Ecological integrity	

**Primary interpretive focus zones** are the three sites that illustrate the most fundamental aspects of the encampment and that would be part of even a short tour of the park. **Secondary interpretive focus zones** are the three sites that illustrate additional interpretive themes and that would be part of an extended visit to the park. Each site's location and estimated size (which varies by alternative) are depicted on the alternative graphics presented later in this chapter (see Figures 2-11 and 2-12).

### **Primary Interpretive Focus Zones**

**Muhlenberg's Brigade** is the site that General Peter Muhlenberg and his Virginia Brigade occupied during the encampment. The location of this zone on a ridge overlooking both the Grand Parade and the route to Philadelphia makes it a good place to explain the way in which terrain was used strategically for defense. It also is a good location for activities depicting the domestic lives and the motivations of the common soldiers. Current interpretive resources include reconstructed huts and a reconstructed fort.



Soldier life and the organization of the encampment (depicted in Baron von Steuben's Revolutionary Drill Manual from 1794,) can be interpreted at the site of Muhlenberg's Brigade.

**The Grand Parade** is the site on which military operations, drilling, and training of the army took place, as well as celebrations and hangings. Because the Grand Parade lies in a broad valley, it is one of the few places in the park from which no modern intrusions are seen. Although it is completely enclosed by terrain, the long views up the valley are dramatic, and it is an evocative place. The Maurice Stephens farmhouse sits at the edge of the Grand Parade and is undergoing rehabilitation. It can be used for exhibits that support the Grand Parade theme.



The Maurice Stephens house can be used for exhibits that support the themes of the Grand Parade.

Both Muhlenberg's Brigade and the Grand Parade are within easy walking distance of the Welcome Center and can be linked through interpretive paths. These paths through the landscape offer the potential for visitors to "decompress" and make a mental and emotional transition to a different place and time.

The Muhlenberg's Brigade site would be most effectively developed as an enclosed experience with a single point of entry, regardless of which alternative is pursued. By contrast, the Grand Parade lends itself well to treatment as a diffuse experience with several different interpretive opportunities and entry points, again regardless of which management alternative is adopted.

**Washington's Headquarters** is best used to interpret the stories of Washington's leadership and command, and the political and military context and strategy of the encampment. The zone comprises the small house in which the general made his headquarters and in which he and his "military family" lived and worked for six



The train station adjacent to Washington's Headquarters can be used to tell the stories of General Washington's leadership and the history of the Village of Valley Forge.

months – effectively the Pentagon of the time. The area also includes a barn, stable, and additional house of the period, as well as a 1923 train station. All are available to be used for exhibits and visitor services, making it possible to tell additional stories, such as the history of the Village of Valley Forge itself.

### ***Secondary Interpretive Focus Zones***

***Walnut Hill*** was the site where all supplies arrived, the commissary stores were located, and the point of distribution to the brigade kitchens. Civilians brought goods to market here and it was a key point of interaction between the military and the populace. Located on the supply route from the fertile farmlands of Pennsylvania, as well as from New York, New Jersey, and New England, Walnut Hill connected the encampment to the outside world. Given its role as a hub, Walnut Hill provides an excellent venue at which to examine the encampment’s planning, design, infrastructure, and operations.

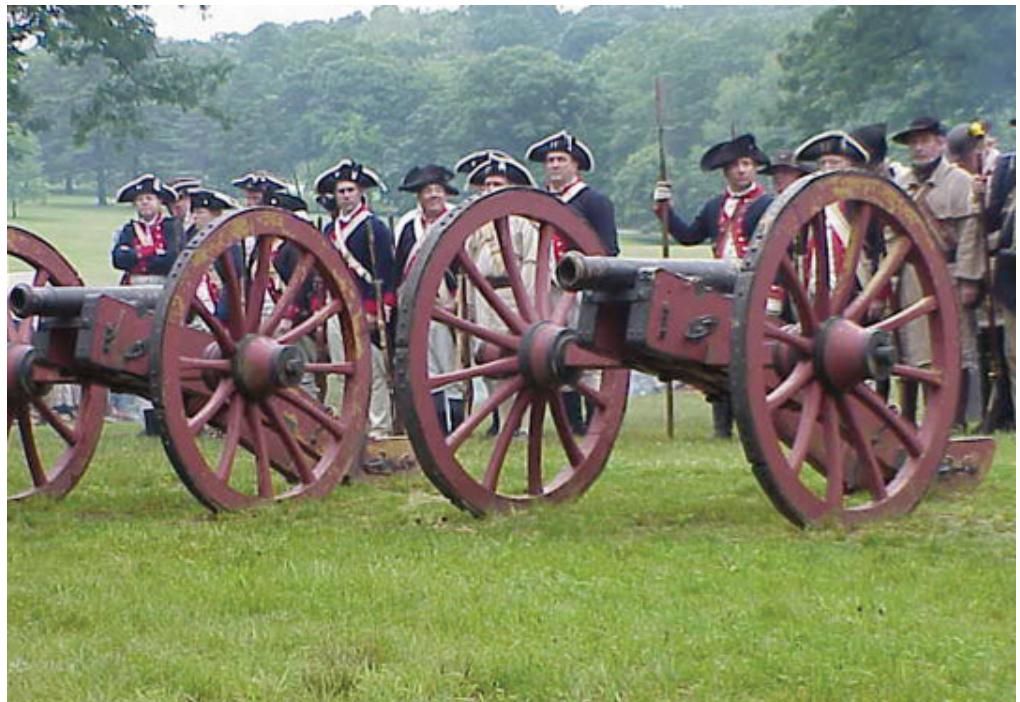


The reconstructed Star Fort can be climbed on; taken apart and put back together; and otherwise actively used in participatory programs on earthworks construction.

***Varnum’s Quarters and the Star Redoubt*** are features adjacent to each other, yet they represent quite different themes. The farmhouse that housed General James Varnum during the encampment can be used to illustrate the effects of the encampment and the Philadelphia Campaign in general on civilians. Varnum also played a key role in the racial integration of the Continental Army. Ironically, the landscape immediately surrounding the house holds the probable site of slave quarters.

The reconstructed redoubt also gives the zone an emphasis on fortifications and perimeter defense. The construction of fortifications was a primary activity throughout the encampment. Because it is a reconstruction rather than an original earthwork, it can be actively used by visitors and can even be taken apart and put together again in participatory programs on earthwork construction.

***Artillery Park*** was the area where the Continental Army’s cannons were stored and repaired. It is an ideal location to interpret military science and technology.



Artillery Park is an ideal location to interpret military science and technology.



## Natural History Interpretation

Four modes of natural history interpretation would be provided at Valley Forge NHP; each intended to serve specific audiences. First, an orientation and introduction to the park's natural history resources would be offered at the Welcome Center in conjunction with the general orientation to the park. Second, limited interpretation of contemporary natural resource assets and management issues also would be provided at the Welcome Center. More extensive interpretation would occur at selected sites throughout the park. Third, interpretation of the historic importance of the park's natural resources as they influenced the use of the site for the encampment would be provided as part of other historical interpretation in the park and at interpretive focus areas. Finally, programs focused on natural resources would be developed around specific issues or stories, both contemporary and historic, and offered on a scheduled basis at appropriate locations throughout the park.

The broad emphasis of natural history interpretation in the park would center on the themes of resilience and stewardship. The concept of resilience is captured in stories of recovery following devastation, such as from the encampment, industrial use, quarrying, the damming of the Schuylkill to create a canal, industrial use of Valley Creek, iron and steel mills in the Village of Port Kennedy, the coal reclamation project in the Schuylkill River, the park's ongoing devastation by and efforts to recover from the presence of deer and exotic invasive species, and the environmental impacts of development and traffic.

Stewardship values in the park are embedded in the long and inspiring history of citizen action to protect Valley Forge. While these actions were initially motivated by concern for the park's historic values, current initiatives address natural values as well.

### ***Natural Resources Overview***

A broad overview of natural resources and natural resource management issues at Valley Forge NHP would be included in the Welcome Center exhibits. This would be a discrete component of the orientation exhibition, titled and accessible on a stand-alone basis.

The overview would cover the role that natural resources played in the selection of the encampment site; the impact of the encampment on the environment of Valley Forge; land use and environmental changes over the centuries since the encampment; and contemporary natural resources of the park.

### ***Contemporary Natural Resources Interpretation***

Non-personal interpretation of contemporary natural resources and of management issues related to those resources would be provided in the form of a dedicated, distinctively designed system of small-scale waysides or similar exterior interpretive graphics, or electronically accessible media installed at appropriate locations throughout the park, wherever a critical issue or important feature could best be observed and explained. The scale and character of these components would be deliberately restrained to avoid intrusion into the cultural landscape and would employ a consistent and easily recognizable design style distinctly different from that of historic interpretation in the park. These exhibits would be targeted toward recreational users of the park including bicyclists, walkers, joggers, dog walkers, and possibly even daily commuters.



Natural resource programs would be developed around specific issues and stories, both contemporary and historic.

Programs focused on natural resources would be developed around specific issues or stories, both contemporary and historic, and offered on a scheduled basis at appropriate locations throughout the park.

### ***Historical Natural Resources Interpretation***

Interpretation of the historic role of natural resources at Valley Forge would be provided wherever it is germane to a visitor's understanding and appreciation of the encampment and the American Revolution. This could occur in the Welcome Center, as well as at interpretive focus zones.

### ***Contemporary Natural Resources Interpretive Programs***

Staff- and volunteer-led interpretive programming about natural resources will continue, enriched by partnership with other organizations. Program opportunities include ranger talks and guest lectures, nature walks, bird watching, etc. These programs would be advertised in park publications and through other means and would be open to all audiences.

## **2.2.3 Transportation Framework**

Also key to alternatives development was the transportation framework. In order to identify and develop a range of comprehensive solutions to the traffic and transportation problems of the park and surrounding area, the NPS, the FHWA, and PennDOT cooperated to develop the VFATPS. The study was steered by those agencies as well as the DVRPC, the Montgomery and Chester County Planning Commissions, and the Upper Merion Township Transportation Authority. The range of options identified in the study was intended to both improve quality of life for regional residents and also preserve and protect park resources and the visitor experience. (See Chapter 5 for a list of coordination activities that supported the study, and see Appendix A for agreements related to the transportation projects.)

A public process during development of the study solicited community concerns. In September 2002, a final options report was released. A subsequent Programmatic Agreement was signed by the NPS and FHWA with concurrence from PennDOT in December 2002. The agreement is intended to advance the study recommendations by providing methods for streamlining implementation of those projects and by outlining agency responsibilities for implementation.

The steering committee initiated the implementation phase for the Programmatic Agreement in July 2003 and since that time has continued to evaluate transportation elements that would reduce traffic congestion in and around the park. The effort includes two distinct but interrelated initiatives.

The first implementation initiative is a set of three projects that, for ease of understanding, collectively has been named the RCC, although they have independent utility. As noted in the Programmatic Agreement, PennDOT is the lead agency in compliance and implementation of this package, and FHWA serves as the lead federal agency, in consultation with the NPS. These projects are considered as part of the baseline condition for purposes of this GMP/EIS. The package of projects includes

- final design and construction of the replacement Betzwood Bridge, a project that has been underway for some years

- environmental clearance and preliminary engineering for upgrading the interchange of US 422 and PA Route 363, including widening of US 422 between PA Route 363 and US 202
- environmental clearance and preliminary engineering for upgrading the interchange of US 422 and PA Route 23, including relocation of North Gulph Road

The second implementation initiative was the preparation of 18 potential transportation improvement elements and evaluations that are included as part of the alternatives presented by this GMP/EIS. These elements were developed from the “park options” or “P-options” of the study, with the help of additional analysis and public comment. They were assessed to determine whether they meet the park’s resource preservation and visitor experience mission as well as serving transportation needs in the larger Valley Forge area (see Appendix E for the transportation purpose and need document). These options are described below, summarized in Figure 2-1, and depicted on Figures 2-2 through 2-4.

### **Transportation Elements Considered but Dismissed from Further Analysis**

With subsequent study and consideration, some of the P-options were found to pose unacceptable adverse impacts to natural, cultural, and or socioeconomic resources. Described in this subsection, these unacceptable options were dismissed from further analysis and consideration.

**Option P-2** - Four PA Route 23 bypass options were developed to relocate that road’s heavy through-traffic to other areas within the park. Option P-2 would reroute PA Route 23 to a new alignment extending from the east end of the park westward along the Norfolk & Southern Railroad right-of-way, then up the ridge west of the Washington Memorial Chapel to reconnect with existing PA Route 23 just east of Washington’s Headquarters.

**Option P-2A** - A variant of Option P-2 would extend the new alignment farther westward along the railroad to reconnect to existing PA Route 23 near its intersection with PA Route 252. The relocated route would pass through a “cut and cover” tunneled section east of Washington’s Headquarters. Both P-2 options would create serious adverse impacts to wetlands, archeological resources, cultural landscape resources, the trail system, and the Washington Memorial Chapel cemetery. They also would make vehicular access difficult to key venues along existing PA Route 23, including the chapel, which is not inside the park boundary. Consequently, Options P-2 and P-2A were not advanced in this GMP/EIS.

**Option P-3** - This new alignment would extend from the east end of the park over a new bridge across the Norfolk & Southern Railroad tracks, then parallel the tracks to a new bridge across the Schuylkill River. The alignment would then extend through the park’s Walnut Hill area to intersect with Pawlings Road. Using existing Pawlings Road, the alignment would connect back to existing PA Route 23 in Schuylkill Township, west of the park. Option P-3 would create severe impacts to wetlands and water resources, archeological resources, cultural landscapes, and the trail system. The high cost of two new bridges also was an issue. As with Option P-2, Option P-3 would make vehicular access difficult to key venues along existing PA Route 23. Consequently, Option P-3 was not advanced in this GMP/EIS.



**Option P-4** - This new alignment would extend from the east end of the park, utilize the replacement Betzwood Bridge to cross the Schuylkill River, and establish a new two-lane roadway paralleling US 422 on its south side to a new intersection with Pawlings Road. Using existing Pawlings Road, the alignment would connect back to existing PA Route 23 in Schuylkill Township, west of the park. Option P-4 would place an additional congestion burden on the proposed two-lane replacement Betzwood Bridge, would cause severe adverse impacts to homes and properties within Valley Forge Crossing mobile home park, and would create a new 1.8-mile roadway within the park on the north side. Additionally, Option P-4 would make vehicular access difficult to key venues along existing PA Route 23. Consequently, Option P-4 was not advanced in this GMP/EIS.

**Option P-7** - In this option, PA Route 23 would be closed within the park between Trooper Road (replacement Betzwood Bridge) and PA Route 252. No new alignment would be created. It was recognized, however, that the approximately 19,000 vehicles per day projected in Design Year 2030 for this road could not be accommodated by redistribution to other roadways, and that convenient alternate routing does not exist. Consequently, Option P-7 was not advanced in this GMP/EIS.

**Option P-10** - In response to suggestions during interagency coordination, this option would relocate PA Route 23 on the west side of the Schuylkill River to a new bridge crossing the Schuylkill River east of the existing US 422 bridge. Option P-10 would require an extension of Audubon Road eastward past Trooper Road, crossing the river, and connecting to PA Route 23 in Upper Merion Township at Beidler Road. It would also entail improvements of Audubon Road and Pawlings Road to accommodate projected future traffic increases. The added river crossing capacity provided by this option would supplement that provided by the proposed US 422 River Crossing Complex, which is an assumed element of the GMP/EIS as set forth in the December 2002 Interagency Programmatic Agreement. This option would result in major resource and community impacts, including to Saint Teresa of Avila Church and school complex; the adjacent West Norriton residential community; the new River View development now under construction; water resources of the Schuylkill River; the planned Southeastern Pennsylvania Transportation Authority (SEPTA) Transportation Center, including the SVM and PA Route 100 extension interface; and the Mancill Mill community in Upper Merion Township. Since this option would be extremely costly and involves substantial impacts, it was not advanced in this GMP/EIS.

### **Transportation Options Included in the GMP Alternatives**

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Thirteen options identified in VFAPTS were found to be appropriate for further consideration as part of the GMP alternatives. These include options to better handle traffic in the park (options P-1 and P-6); relocate traffic to other areas within the park (option P-8); manage visitor traffic (option P-9); provide travel options effectively outside the park (option P-5); and to supplement traffic management through additional bike trail capacity, public transit, and information management (options P-11 through P-18).

**Option P-1** was developed to consider how localized Transportation System Management (TSM) improvements and traffic calming measures employed within the park on the existing PA Route 23 corridor could reduce impacts and conflicts with visitor activities. The approach would reduce running speeds on PA Route 23 and minimize conflicts with pedestrians and bicyclists at key locations such as the

Development of the GMP/EIS has included a process with interagency and public review to identify and evaluate transportation improvements which help meet the park's mission.

The process of identification, evaluation, and inclusion of transportation options in the GMP/EIS alternatives is summarized here.

## Transportation Options Identified

Transportation Options Identified	Evaluation of Transportation Elements			Proposed Inclusion in GMP/EIS Alternatives		
	Meeting Identified Needs (Synthesis of park-related and transportation-related needs)	Resource & Impact Issues (Synthesis of park-related and transportation-related impact criteria)	Implementation Issues (Timing, costs, funding, degree of coordination, etc)	Alternative A*	Alternative B	Alternative C
0. No-Action						
1. Traffic calming: TSM and impact mitigation along PA 23						
2. Relocate PA 23 parallel to Norfolk Southern RR						
3. Relocate PA 23 parallel to RR and across Schuylkill River to Pawlings; RR bridge upgrade						
4. Relocate PA 23 alongside US 422 to intersection with Pawlings; RR bridge upgrade						
5. Alternate travel option with Pawlings/US 422 interchange; RR bridge upgrade						
6. Traffic calming: TSM and impact mitigation along PA 252						
7. Through-traffic ban on PA 23 in the park						
8. Through-traffic ban on Gulph Road in the park						
9. Traffic limitations on Outer Line Drive and Inner Line Drive						
10. New PA 23 Schuylkill River crossing east of US 422 bridge (Interagency Committee suggested)						
11. Park gateway treatment and entrance circulation						
12. New Schuylkill River pedestrian bridge for internal circulation within park						
13. New grade-separated pedestrian crossing of US 422 north of the Schuylkill River						
14. New Valley Creek crossing and trail connection at Yellow Springs Road						
15. Special transportation system (shuttle bus) throughout park						
16. Near-term transit: route and marketing opportunities						
17. Long-term transit: connections with SVM and/or Route 100 extension						
18. Optimization of transportation (e.g. ITS, coordinated signage)						

Option does not meet grounds for advancement

\* No-Action is carried forward for comparison purposes, despite its inability to meet project need.



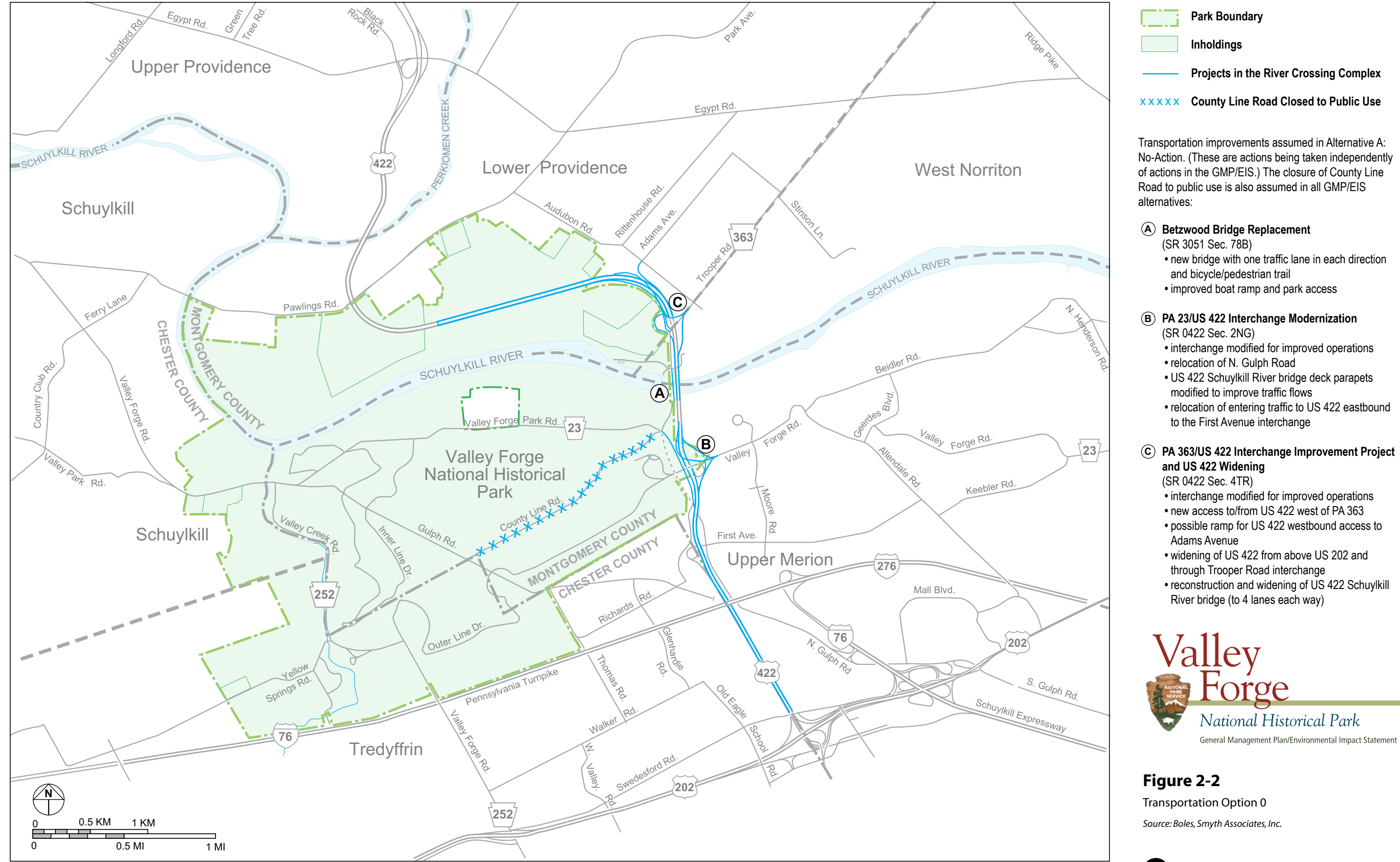
**Figure 2-1**

Incorporating Transportation into the GMP/EIS Alternatives

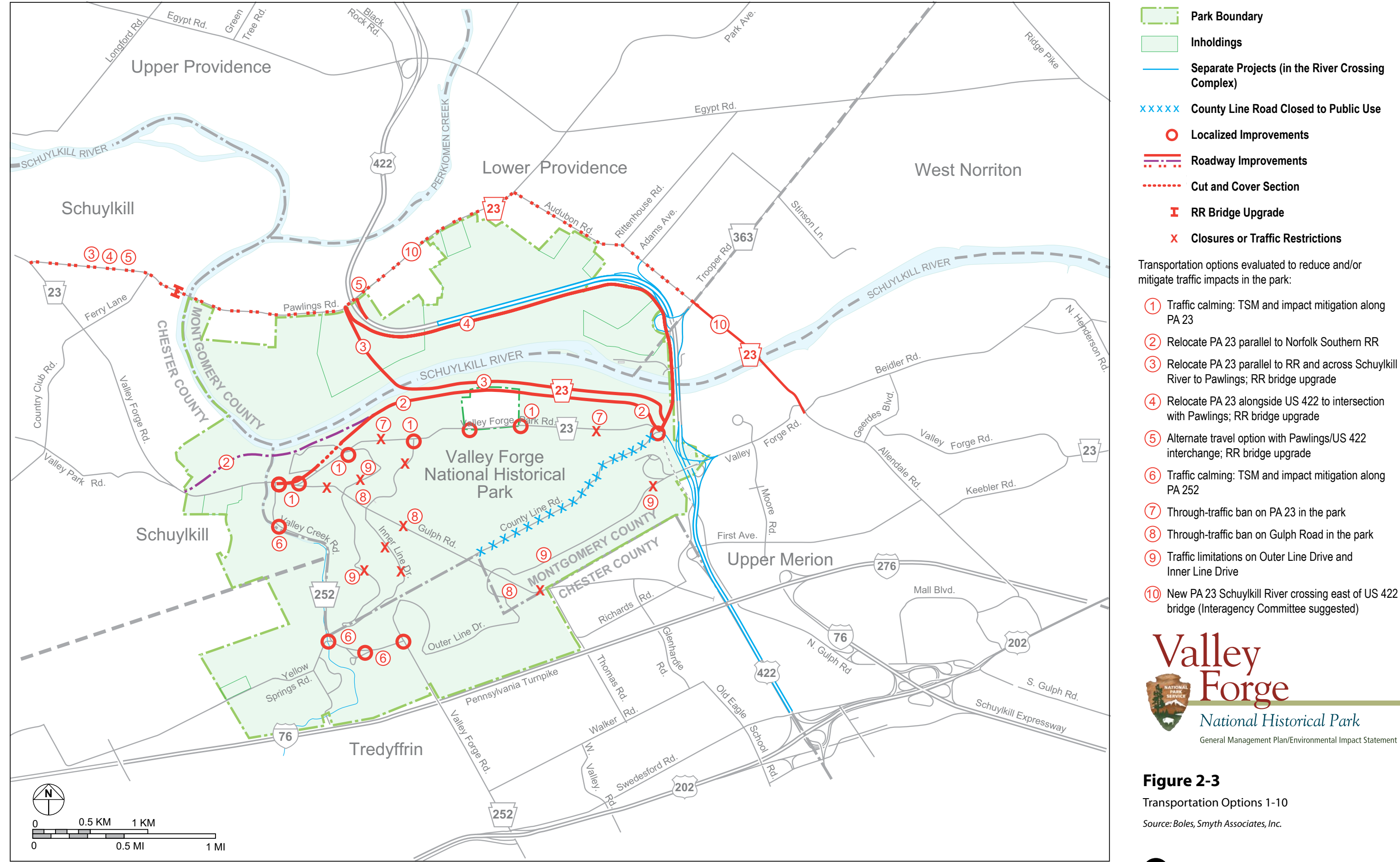
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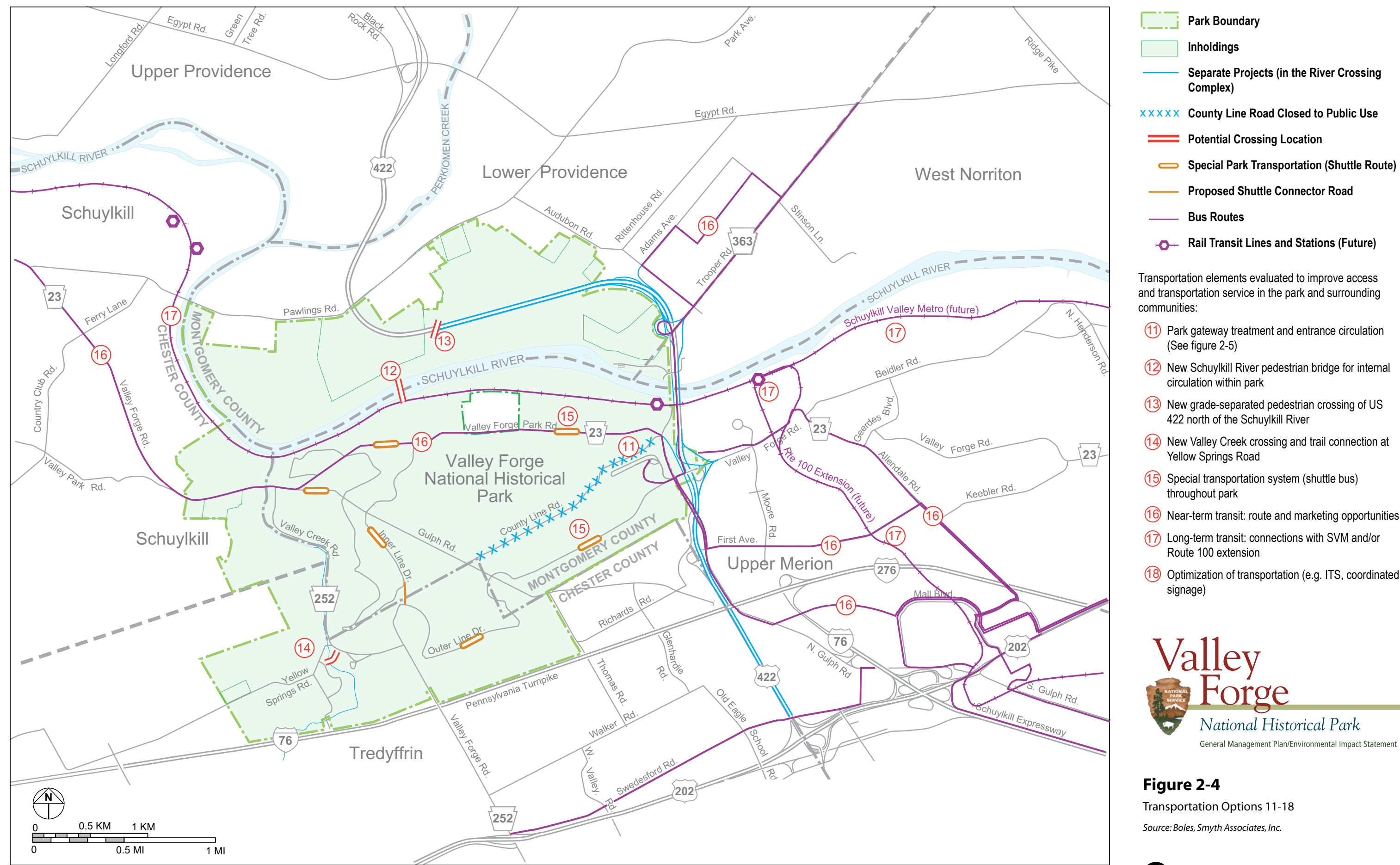














Washington Memorial Chapel and the Star Fort/Varnum's Picnic area. Special improvements would include pedestrian crosswalks, textured pavement, advanced warning signs, pavement marking, curbing, and driveway closures. Driveways would be relocated/reconfigured at Varnum's and the Chapel. These objectives are consistent with the park's mission and are included in GMP Alternatives B and C.

**Option P-5** would provide a travel option for through-traffic in the park through construction of a half-diamond interchange at Pawlings Road and US 422 east. Originally proposed by the *Phoenixville Area Intermodal Transportation Study* (DVRPC 2003), this option would include construction of an east-bound on-ramp and a west-bound off-ramp at US 422 and Pawlings Road, with a minor widening (2-10 feet) of Pawlings Road between US 422 and PA Route 23. This option would expand the opportunity for access to US 422 east, thereby relieving PA Route 23 east of Pawlings Road through Schuylkill Township, the Village of Valley Forge, and the park. This option would place additional traffic pressure on Pawlings Road between US 422 and existing PA Route 23 but creates virtually no traffic impacts to the roadways east of US 422. The degree of traffic diversion from PA Route 23 would be related to the level of roadway function and improvements to existing Pawlings Road and to existing PA Route 23.

In addition, localized improvements would be required at the intersection of Pawlings Road and Ferry Lane. The proposed cartway would be 34 feet wide, including one 11-foot-lane in each direction and 6-foot bike lanes. The maximum roadway width would be approximately 40 feet wide where left turns are necessary. These improvements would also include replacement of the Norfolk & Southern Railroad bridge over Pawlings Road to provide a minimum vertical clearance of 14.5 feet.

P-5 is a viable option addressing both the park mission and also improving area-wide access. Therefore, option P-5 is included in GMP Alternative C.

**Option P-6** was developed to consider how localized TSM improvements and traffic calming measures employed within the park on the existing PA Route 252 corridor could reduce impacts and conflicts with visitor activities. This approach would reduce running speeds on PA Route 252 and minimize conflicts with pedestrians and bicyclists at key locations such as the General Knox's Quarters area, the Covered Bridge, and the intersection with PA Route 23. These objectives are consistent with the park's mission and are included in GMP Alternatives B and C.

**Option P-8** would close Gulph Road in the park to through-traffic. It is included for consideration in Alternative C.

**Option P-9** would eliminate private vehicular traffic on Outer Line Drive and Inner Line Drive, providing visitor access through a transportation shuttle. Closure of these park tour roads might take place only during the high season or may be instituted year-around. It is included for consideration in Alternative C.

The remaining options (11 through 18) provide lesser benefits to the park in terms of transportation infrastructure but would supplement any of the above options to be carried through the GMP/EIS process.

**Option P-11** would create a new primary park gateway as a result of the relocated intersection of PA Route 23 and US 422 (Figure 2-5). This option has been incorporated into the RCC package of projects; therefore, the environmental impacts

of this action have been addressed through a separate NEPA compliance process led by PennDOT. The new park gateway is included in all the alternatives, including Alternative A (No-Action); however, the design treatment for the new gateway varies by alternative. For example, Alternative A would include landscape plantings only, while Alternatives B and C would include additional roadway reconfigurations.

**Option P-12** would provide a new pedestrian bridge over the Schuylkill River, at a location to be determined in the western portion of the park. This bridge would allow a connection from the existing regional Schuylkill River Trail to the existing Valley Creek Trail, to a future link with the regional Patriots' Trail/Chester Valley Trail (under construction). These connections would encourage recreational bicycling to remain in the western portion of the park, away from the historic core. They also would enable more visitors to arrive by bicycle or on foot, rather than in vehicles, reducing traffic-related impacts and congestion. This option is included for consideration in Alternatives B and C.

**Option P-13** would provide a new grade-separated pedestrian crossing of US 422 within the park. The highway bisects the park's north side, and there is no current trail crossing. Future study would be required to determine whether the crossing would be an overpass or an underpass, as well as its location. This option is included for consideration in Alternatives B and C.

**Option P-14** would extend the park's existing Joseph Plumb Martin Trail from its current terminus at the General Knox's Quarters parking lot. The trail would cross Valley Creek south of the Covered Bridge, and connect to the existing Valley Creek Trail to the north and to the future regional Patriots' Trail/Chester Valley Trail south of the park. There is no current safe and accessible means for a pedestrian or bicyclist to cross Valley Creek. This option is included for consideration in Alternatives B and C.

**Option P-15** would include shuttle transportation within the park to provide continued visitor access to all features of the park if and when park tour roads are closed. This option is included for consideration in Alternative C.

**Option P-16** would promote near-term transit opportunities for getting to and around the park. The study area already includes a variety of alternate transportation services, including regional and local bus routes, private tour buses, and a network of bicycle and pedestrian paths. Alternate transportation modes, which connect to and serve the park directly include

- SEPTA's PA Route 125, which runs between downtown Philadelphia and King of Prussia and terminates in the park, with hourly service on weekdays
- Upper Merion Township's Rambler and the Suburban Link that both traverse the park on PA Route 23 on weekdays. (Rambler also has Saturday service)
- Schuylkill River Trail, a continuous paved bike and pedestrian trail from center city Philadelphia north along the Schuylkill River, through the park, to Oaks

Park visitation is likely to increase slightly in the near-term for several reasons, including general population increases and trends towards domestic and shorter range travel. Continuing development around the park also will generate more traffic on the area's already challenged roadway systems. As a result, alternative transportation will become more attractive to park, commercial, and community interests alike.





- Asbestos Areas of Concern
- Existing Structures
- Renovated Structures
- Demolished Structures
- Existing Pavement
- Reconfigured/Renovated Roadways



**Figure 2-5**  
Park Gateway: Future Condition





Improving non-auto transportation for the park and for the surrounding area would depend on a combination of public and private initiatives which can draw on growth trends, seize entrepreneurial opportunities, and forge new partnerships to achieve commonly desired goals. Some of these improvements might include

- strengthening current bus service with close attention to promoting greater use, controlling cost increases, looking to additional funding support, and allowing sufficient test time for ridership to grow
- developing and marketing new routes (including private carriers) with the park, retail stops, and local hotels for overnight visitors
- considering perimeter parking and shuttle service for internal park circulation as a means to better structure the interpretive experience and to move more visitors with fewer impacts
- considering a regional park-n-ride lot program to promote ride sharing in the study area
- strengthening the bicycle and pedestrian network and connections with park facilities and intermodal points
- considering means to incorporate park themes and the interpretive experience into shuttles in order to extend outreach to those coming to the park
- coordinating with local and regional convention/tourism marketing to build stronger identity, visibility, and attractiveness for the park as a destination

To be effective, this option would require an innovative outlook, constructive partnering, and sustained commitment and oversight. As opposed to major construction projects, development of this option would require little or no process review and its attendant time costs. As such, this option could be an “early action,” in which publicity and noticeable results give credibility and momentum to the rest of the program.

This option is included for consideration in Alternatives B and C.

**Option P-17** would promote long-term transit improvements for getting to and around the park. It reflects the policy initiatives of sponsoring agencies (NPS, FHWA, PennDOT, and the host counties) to consider transit as an alternative in making major transportation improvements. It also responds to the practical challenge of getting increasing numbers of visitors to and through an impact-sensitive facility as highway use and congestion are likely to mount in the surrounding area in the future.

The region’s most ambitious transit project – the SVM – would pass through the park, providing the opportunity to improve access and visitation for the park while the visitors help build ridership for the SVM. The \$1.8 billion project has been planned as a high-speed rail line linking Reading, Philadelphia, and the Schuylkill Valley communities in between.

A major SVM station is planned just east of US 422, 1.2 miles from the park Welcome Center. SVM planning included a study of transit-oriented development and intermodal possibilities at that station. Additionally, a historic former passenger station is located in the park on Trooper Road about a quarter mile from the Welcome Center,

within easy walking distance. This station, owned by the park, could be opened for visitor use. To discourage commuter use, limited parking would be provided.

Similarly, the western end of the park may benefit from improved parking and transit access via the future Perkiomen Junction Station of the SVM.

This option is included for consideration in Alternatives B and C.

**Option P-18** would optimize transportation through the development of Intelligent Transportation Systems (ITS). Upon review of the available information on capital investment in ITS elements in the project area, it appears that there is substantial infrastructure currently being constructed to meet the ITS needs of the region. The opportunities to provide information to the park/public regarding management of traffic congestion exist now. Some options to distribute information to the public may include

- data sharing among agencies such as DVRPC, PennDOT, PA Turnpike Commission, SEPTA, Delaware River Port Authority, counties, municipalities, Transportation Management Associations (TMAs), and the private sector
- websites that provide real-time access to data (i.e., direct link to specific locations CCTV network)
- Archived Data User Services – the use of stored ITS-generated data beyond the execution of ITS control strategies

Numerous issues impede the optimization of a comprehensive regional ITS program. Some of these issues are (but are not limited to) data access and interface compatibility among agencies/systems, liability and confidentiality concerns, control of information and revenue, and operations/maintenance responsibilities (costs). This option focuses on taking full advantage of the extensive existing infrastructure and information through sharing data and management responsibilities. The key is getting the information where it is needed – in the hands of the traveling public so they can make informed decisions about commuting options.

DVRPC has an ITS task force with over 35 members (transportation agencies, counties, townships, TMAs, etc.) from Pennsylvania and New Jersey to coordinate the “Regional Architecture” of ITS in the Delaware Valley. The task force should include participation by Valley Forge NHP and the private sector at its meetings. Participation in these meetings could provide an “end user” perspective on the information needs of the traveling public.

One possibility might be to fund a pilot program to set up a local control center (through a TMA, NPS, county, township, or other appropriate agent) that has access to the various agency information resources and assists in dissemination of the information to the public. The information could be provided by the proprietors via subscription or license agreement.

In addition to the ITS component, improved park signing in the region would enhance the accessibility of the park to local residents and tourists. Increased visibility for the park via a focused signing program would remind the traveling public of their proximity to this valuable national landmark and make the park easier to find for unfamiliar travelers.

This option is included for consideration in Alternatives B and C.



## 2.3 Management Zones

While some management objectives apply to all resources in a park, many are applicable just to specific resources within certain areas of the park. Associating management objectives with specific geographic areas results in management zoning. A management zone can be considered to be a package of objectives and associated actions for resource management, visitor use, and facility development that may occur in different locations in the park. These vary by alternative, depending on the desired resource conditions, visitor experiences, and uses.

For Alternative A, the No-Action Alternative, the management zones and definitions established by the 1982 *Valley Forge GMP* are used (Figure 2-6). They are defined as follows

- **Historic Zone** – The management emphasis in this zone would be on restoration, preservation, protection, and interpretation of cultural resources and their settings. This includes the Preservation Subzone, the Preservation/Public Use Subzone, and the Preservation/Adaptive Use-Park Operations Subzone.
- **Park Development Zone** – This zone includes contemporary park development in areas where historically significant park resources have been substantially altered. It includes the Administration/Visitor Services Subzone and the Active Recreation Subzone.
- **Special Use Zone** – This zone applies to lands within the park boundary that are managed by others or that have only secondary NPS management influence. The zone includes the Institutional/Private Use Subzone and the Utility/Transportation Subzone.

For the action alternatives proposed by this GMP (Alternatives B and C), five management zones were identified, although the delineation of these zones varies for each alternative (Figures 2-7 and 2-8). They are defined as follows

- **Encampment Commemorative Zone** – This zone encompasses the area that was developed as a commemorative park by the commonwealth of Pennsylvania from 1893 to 1976. It includes meadows and lawns, tour drives, commemorative groves of trees, monuments, and similar features.
- **Interpretive Focus Zone** – Six specific places within the park were the sites of important activities during the encampment and they can illustrate key interpretive themes. These sites lend themselves to special treatment as the focus for programming and activities. They would be developed to support programming and would be stops on any guided or self-guided tour around the park.
- **Mixed Resource Zone** – These areas were part of the site of the encampment but were not developed as a commemorative park, generally because they were added to the park following the period of active commemorative development by the commonwealth. They not only illustrate multiple periods of history but also demonstrate regenerative natural processes.

- **North Side Zone** – This area of the park lies north of the Schuylkill River and was acquired after the period of commemorative park development ceased. It is characterized by forests, meadows, agricultural fields and farm lanes.
- **Park Support Zone** – This zone, generally commensurate with the Park Development Zone of the 1982 GMP, comprises an area previously developed with visitor support facilities.

For each of the zones (except for the Park Support Zone), carrying capacity standards and indicators have been identified (Table 2-2). They include both a resource condition and standard (for cultural and natural resources), as well as a social indicator and standard, which focuses on the visitor experience/satisfaction.

**Table 2-2 Carrying Capacity Standards and Indicators**

**Encampment Commemorative Zone**

Resource Condition Indicator	Degradation of natural resources and/ or cultural resources caused by excessive or unauthorized visitor use, such as off-trail hiking or biking.
Resource Condition Standard	No additional natural areas are trampled, eroded, or exposed. No additional areas of earthworks are trampled, eroded, or exposed. No new personal trails are opened.
Social Condition Indicator	The number of times per year that visitors experience excessive crowding on shuttles.
Social Condition Standard	Instances in which visitors will be unable to ride on a shuttle bus the first time it arrives at a stop (due to overcrowding) will occur no more than five times per year.

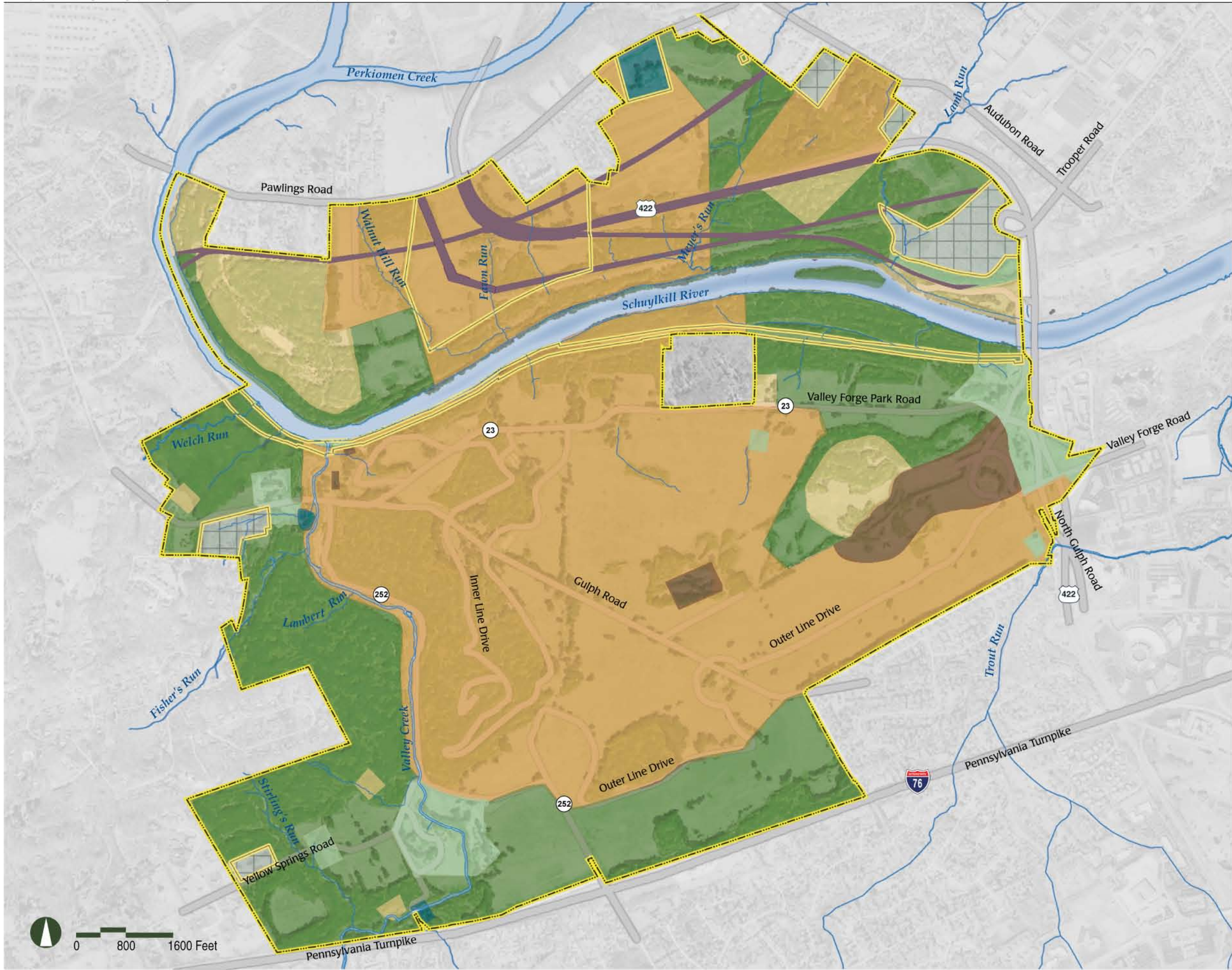
**Interpretive Focus Zone**

Resource Condition Indicator	Degradation of cultural resources caused by excessive or unauthorized visitor use.
Resource Condition Standard	No additional areas of earthworks are trampled, eroded, or exposed.
Social Condition Indicator	The number of times per year that visitors experience excessive crowding during programs or participatory activities.
Social Condition Standard	Visitors will experience crowding that prevents satisfying participation in interpretive activities or programs no more than 10 times per year.

**Mixed Resource Zone**

Resource Condition Indicator	Degradation of natural resources and/or cultural resources caused by excessive or unauthorized visitor use, such as off-trail hiking or biking.
Resource Condition Standard	No new natural areas are trampled, eroded, or exposed. No additional areas of earthworks are trampled, eroded, or exposed. No new personal trails are opened.
Social Condition Indicator	The number of times per year that visitors experience crowding on trails.
Social Condition Standard	Visitors will experience crowded conditions on hike or bike trails no more than 15 days per year.





- Park Boundary
- Inholdings
- Water Resources

## Zones

- Authorized Scenic Easement
- Historic Zone**
  - Preservation Subzone
  - Preservation/Public Use Subzone
  - Preservation/Adaptive Use-Park Operation Subzone
- Park Development Zone**
  - Administration/Visitor Services Subzone
  - Active Recreation Subzone
- Special Use Zone**
  - Institutional/Private Use Subzone
  - Utility/Transportation Subzone



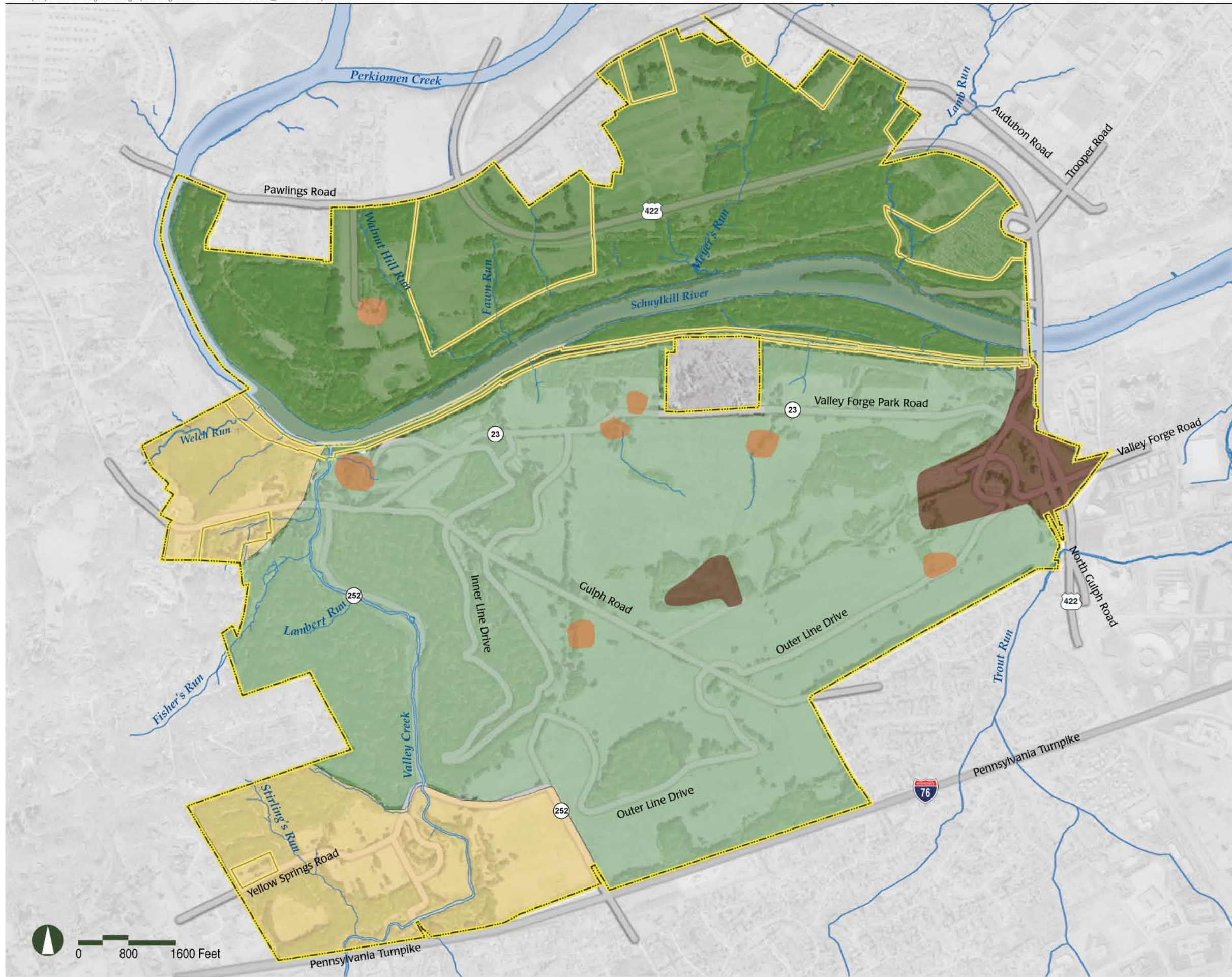
**Figure 2-6**

Alternative A  
Land and Resource Management









- Park Boundary
- Inholdings
- Water Resources

## Zones

- Encampment Commemorative Zone
- Interpretive Focus Zone
- Mixed Resource Zone
- North Side Zone
- Park Support Zone

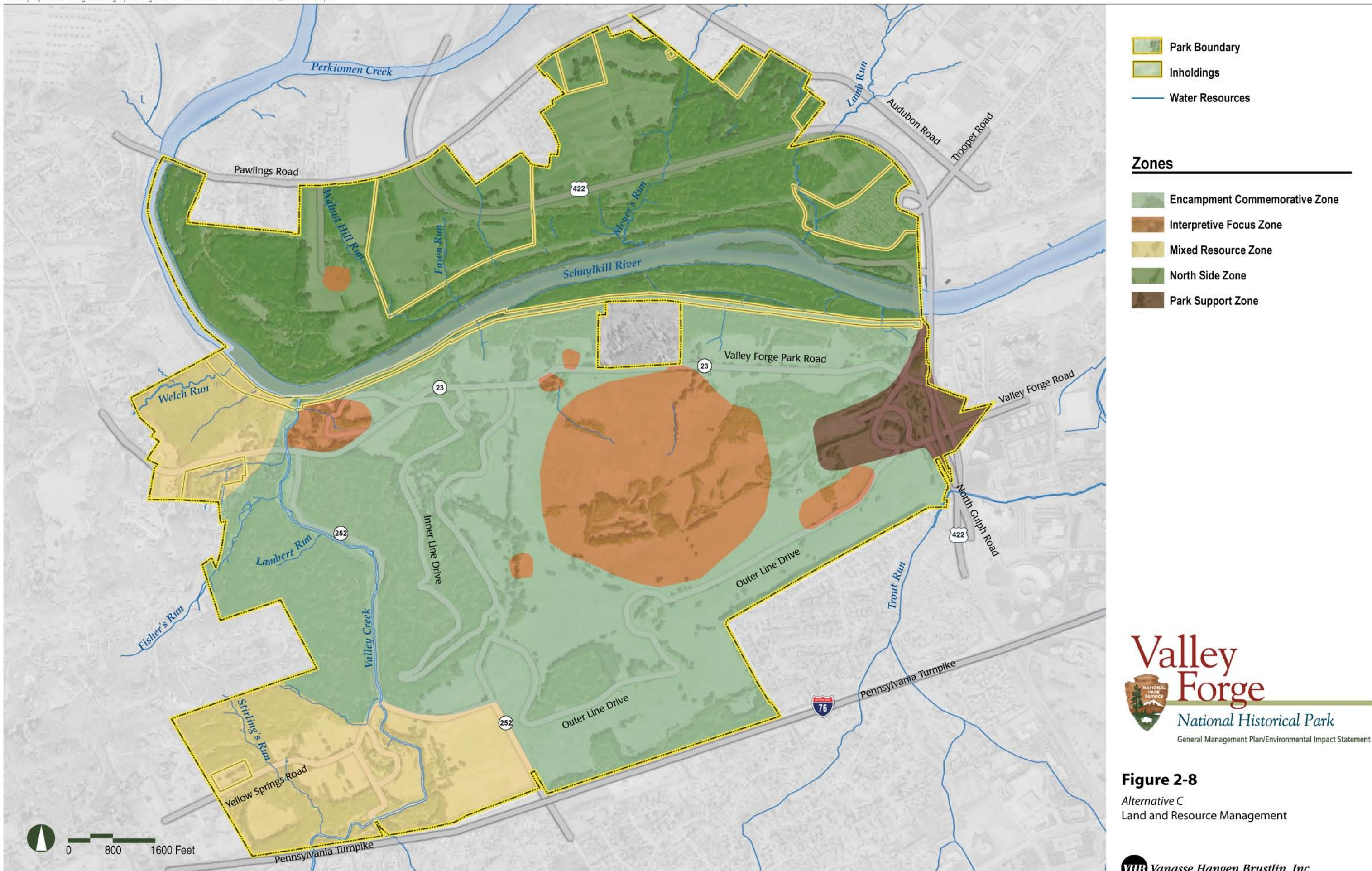


**Figure 2-7**

Alternative B  
Land and Resource Management











**Table 2-2      Carrying Capacity Standards and Indicators (Continued)**

<b>North Side Zone</b>	
Resource Condition Indicator	Degradation of natural resources and/or cultural resources caused by excessive or unauthorized visitor use, such as off-trail hiking or biking.
Resource Condition Standard	No additional natural areas are trampled, eroded, or exposed. No additional areas of earthworks are trampled, eroded, or exposed. No new personal trails are opened.
Social Condition Indicator	The number of times per year that Pawlings and Betzwood parking lots are full during mid-day.
Social Condition Standard	Visitors will be unable to find a parking space no more than 10 times per year.

## 2.4      Overview of Alternatives

Based on the alternatives development framework described above, this section outlines the three alternative approaches for managing the park over the 20-year time-span of this GMP. The reason for presenting a range of alternatives is to enable consideration by the NPS, other government agencies, stakeholders, and the public of the positive and negative effects of each approach. This leads to an informed choice by the NPS of the most appropriate way to preserve the park's resources and provide a high-quality experience for visitors. These alternatives incorporate the feasible and appropriate ideas and suggestions that surfaced during the public and agency scoping process, as filtered through the law and policy considerations that apply to units of the national park system.

A no-action alternative and two action alternatives are presented. The no-action alternative reflects current conditions and provides a baseline for comparison with the action alternatives. Presentation of a no-action alternative is required by NEPA. Implementation of this alternative would not meet the mission goals for the park, however.

Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.

### 2.4.1      How the Alternatives Differ

The concepts for the two action alternatives are based on differing interpretive philosophies and on differing emphases and means to interpret the park themes. The varying interpretive approaches also trigger varying approaches to management and preservation of the park's cultural landscape, ranging from preservation as is to rehabilitation of certain areas to 18th century conditions. Means to manage vehicular circulation variously include such measures as traffic calming, road closures, alternative transportation, and/or a new highway interchange.

The NPS uses facility planning models to predict realistic project sizes and costs even at the conceptual level appropriate to a GMP. The models allow development



of alternative scenarios based on both a desired program and also on industry standards. This GMP includes proposals for various new or renovated facilities, including the welcome center, ranger station, maintenance facility, and collections storage, depending on the alternative. The proposals were developed through the use of the NPS facility models and are congruent with the models.

### **2.4.2 How the Alternatives are Similar**

Many key objectives are found in both action alternatives. The most important of them are summarized here and described in detail under the full descriptions for each alternative. Table 2-3 summarizes and compares the alternatives, and Sections 2.5 through 2.7 describe each alternative in detail.

Each action alternative would meet the park's fundamental mission of preservation and interpretation of its outstanding resources for use and enjoyment now and in the future. The action alternatives are based on a new understanding of current and potential visitors and of visitation patterns. Although the interpretive approaches are different, each would dramatically improve the visitor experience over the current condition.

Each action alternative would open more historic buildings to visitor use and would utilize new authorities to lease park buildings to outside tenants in order to bring in new resources for preservation.

The action alternatives also are based on a much better understanding of the value of the park's natural resources. The alternatives are similar to each other in proposing that the park's biological resources be managed in order to preserve and restore the natural abundances, diversities, dynamics, and distributions of native plants and animals.

Each action alternative proposes an enhancement of the park's trail system, including connections to regional trails.

In the deployment of staff, the park would move away from the traditional model in which NPS employees themselves implement all objectives, to a model in which NPS employees take on the role of facilitator. In this model, the park could more effectively take advantage of abundant outside resources such as volunteers, partners, and grants. Rather than "doing it by ourselves," each staff member would be enabled to multiply his effort through outreach.

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## **2.5 Alternative A: No-Action**

This alternative assumes continuation of current policies and associated actions. It retains the management direction of the 1982 GMP and reflects current conditions. Some initiatives that already are underway as of this printing, such as construction of the RCC road improvements by PennDOT (see Section 2.2.3: Transportation Framework for a description) and the rehabilitation of the Valley Forge Train Station by the NPS, are reflected in this alternative. The following text describes the highlights of this alternative, while Table 2-6 (located at the end of this chapter) provides a complete list of the management objectives and associated actions.

Table 2-3 Alternatives Comparison - Management Objectives

Management Objective - Overall Concept for Each Alternative				
Management Zone	Alternative A: No-Action		Alternative B	Alternative C: NPS Preferred
	<p>This alternative assumes continuation of current policies and associated actions. It retains the management direction of the 1982 GMP and reflects current conditions. Some initiatives that are already underway, such as rehabilitation of the Valley Forge Train Station by NPS, and construction of the River Crossing Complex by PennDOT, are reflected in this alternative.</p> <p>The visitor experience is unchanged, and comprises self-guided travel through a landscape that is difficult to understand and that has few interpretive exhibits or programs.</p> <p>The landscape is unchanged and continues to largely reflect the state-park commemorative era on the south side and a modern agricultural and old-field landscape on the north side.</p> <p>Natural resources continue to be minimally managed.</p> <p>No new traffic congestion management initiatives are undertaken.</p> <p>Staff responsibilities for meeting the park mission of preservation and interpretation remain as is. No new partnership initiatives are undertaken.</p>		<p>Alternative B provides an exciting palette of new options for visitors to tailor visits and experiences to best meet their own needs and interests. Experiences focus on exploration and self-discovery of the full cultural and natural history of Valley Forge. Excellent orientations, as well as the use of new technologies, are the key to this approach.</p> <p>The historic landscape is preserved as is, and the park is respected as a memorial landscape that has been commemorated in many ways over generations. “Layers” from all eras are sustained and actively interpreted through the use of technology and multimedia.</p> <p>The health of the forests and meadows is enhanced through active environmental restoration.</p> <p>Through-traffic on public roads is calmed, in partnership with state and local government. Commuters continue to use public roads, and visitors continue to use automobiles on the tour route to access various sites throughout the park.</p> <p>To further achieve the park mission of preservation and interpretation, park staff are enabled to facilitate engagement of the community in the mission. Existing partnerships are strengthened and new partnerships are actively pursued.</p>	<p>Visitors have the opportunity to decide the kind of experience they want, depending on learning style, interest, and time. The park provides a core message and experience for all visitors that are primarily immersive and focus on the encampment and the American Revolution. A self-discovery approach illustrates additional areas of the park, and historic and natural resource themes and topics. Excellent orientations, as well as excellent programming, are the keys to this approach.</p> <p>The landscape of the core immersion zone evokes the 18th century. Some historic views are rehabilitated to facilitate interpretation. Most areas of the park are preserved as is.</p> <p>The health of the forests and meadows is enhanced through active environmental restoration.</p> <p>Through-traffic on public roads is calmed, in partnership with state and local government. To enhance the visitor experience, some roads in the park are closed to through- and visitor-traffic. Visitors may use a shuttle or walk or bike.</p> <p>To further achieve the park mission of preservation and interpretation, park staff are enabled to facilitate engagement of the community in the mission. Existing partnerships are strengthened and new partnerships are actively pursued.</p>
Mission Goal: Preserve Park Cultural and Natural Resources				
Park-wide	1	Managers make decisions about resource management and protection based on professional studies and adequate planning that are consistent with applicable policies and regulation.	Same as A.	Same as A.
Park-wide	2	Sustainable design and construction methods, techniques, and materials are used.	Same as A.	Same as A.
Park-wide	3	Boundary and land acquisition strategy is sufficient to protect the nationally significant qualities of the park.	Same as A.	Same as A.
Park-wide	4	Encampment-period earthworks and fortifications are stabilized.	Encampment-period earthworks and fortifications are stabilized and preserved.	Same as B.
Park-wide	5	Encampment-period buildings are preserved in their current conditions. They continue to be used for interpretation, visitor services, park offices, staff quarters, or remain vacant.	Encampment-period buildings are preserved as is. Some are restored or rehabilitated for interpretive purposes; while those for which there is no necessary and feasible interpretive or operational use are stabilized, preserved, and/or rehabilitated and available for visitor-service concessions and for leasing.	Same as B.
Park-wide	6	All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park and would be stabilized.	All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park and would be preserved.	Same as B.
Park-wide	7	Post-encampment-period historic buildings are maintained in their current conditions. They continue to be used for interpretation, visitor services, park offices, or staff quarters, or remain vacant.	Some post-encampment-period historic buildings are preserved or rehabilitated primarily for interpretive or visitor services purposes, while those for which there is no necessary and feasible interpretive or visitor services use are preserved or rehabilitated and available for concessions or for leasing, given that the determinations stipulated by 36 CFR 1/18.4 were made as part of the development of this GMP. Buildings for which there is no feasible use are considered for demolition.	Same as B.

Table 2-3 Alternatives Comparison - Management Objectives (Continued)				
Management Zone		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
Park-wide	8	Archeological sites and resources are managed as is.	Archeological sites and resources are stabilized and protected against destruction from vegetation, erosion, and inappropriate visitor use. Continuing research and fieldwork are emphasized.	Same as B.
Park-wide	9	The significant Revolution-era collections of Valley Forge NHP continue to be housed in multiple buildings, some with inadequate conditioning; and are rarely available for research. No connections are made with other Revolution-era collections.	The significant Revolution-era collections of Valley Forge NHP are properly housed and curated, and made accessible for research. A new collections storage facility is constructed; or part of the existing Welcome Center is rehabilitated for collections storage; or part of the collection is relocated to an off-site facility. Storage could be shared with other national parks under any of these options.	Same as B.
Park-wide	10	Historic monuments are preserved in good condition.	Same as A.	Same as A.
Park-wide	11	No new monuments are added to the park.	New monuments commemorating people who played a role in the encampment may be erected in the park provided the historic association between the person or group and the encampment is of exceptional importance. Commemoration requires the approval of the Director of the NPS and/or an act of Congress.	Same as B.
Mixed Resource Zone/Encampment Commemorative Zone/North Side Zone	12	Biological resources continue to be minimally managed.	Biological resources are managed to preserve and restore natural abundances, diversities, dynamics, and distributions of native plants and animal populations within forested and other naturally occurring communities (such as wooded wetlands). In naturally occurring communities where species populations occur in unnaturally high or low concentrations as a result of human influences or extirpation of predators, and such occurrences cause unacceptable impacts on natural resources and natural processes, biological and physical remedial actions would accelerate natural recovery.	Same as B.
Park-wide	13	The park participates in promoting measures to protect and enhance air quality in the Philadelphia airshed in order to mitigate the harmful effects of air pollution on natural and cultural resources, scenic vistas, and the health of visitors within the park.	Same as A.	Same as A.
Park-wide	14	The park participates in measures to protect the water quality in Valley Creek.	The park utilizes whole-watershed management strategies to protect the park’s water resources. Threats to water quality both inside and outside the park are minimized and existing water quality deficiencies are improved. The park actively participates in the initiatives to protect and restore the water quality in Valley Creek. The park actively participates in local and regional initiatives that protect and enhance the water quality of the Schuylkill River and its tributaries within the park.	Same as B.
Park-wide	15	Hydrologic flows in the park are little changed.	Natural hydrologic flows in the park are preserved and restored where possible.	Same as B.
Park-wide	16	The park’s caves and karst features are maintained as is.	The park’s caves and karst features are preserved, restored where possible, and protected where possible.	Same as B.
Park-wide	17	Lightscaapes in the park are little changed. In cases where artificial lighting is replaced or added, it is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.	Man-made intrusions on lightscaapes within the park (visibility of the night sky) are minimized through working with neighbors and through actions within the park. In cases where artificial lighting is replaced or added, it is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.	Same as B.
Park-wide	18	Man-made intrusions on soundscapes in the park are little changed.	Man-made intrusions on soundscapes within the park (audibility of natural sounds) are minimized.	Same as B.
Park-wide	19	Rights-of-way are maintained as is.	Rights-of-way are maintained using environmentally sensitive techniques.	Same as B.

Table 2-3 Alternatives Comparison - Management Objectives (Continued)

Management Zone		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
Encampment Commemorative Zone/Interpretive Focus Zone	20	Meadows continue to be minimally managed.	Meadows are intensively managed to enhance their high habitat values.	Meadows are managed to enhance their high habitat values.
Interpretive Focus Zone	21	The quarries at the center of the Grand Parade would be left as is.	The quarries at the center of the Grand Parade would be left as is and would be interpreted to explain their presence as well as how the Grand Parade appeared prior to quarrying.	The quarries on the Grand Parade are filled to their historic contour, restoring this essential cultural landscape at the heart of the park. Cave Quarry would not be filled, since it lies beyond the Grand Parade and because it exhibits rare geologic features.
Interpretive Focus Zone	22	No changes are made to the landscape at the six key interpretive sites (Muhlenberg’s Brigade, the Grand Parade, Washington’s Headquarters, Artillery Park, the Star Fort/Varnum’s Quarters area, and Walnut Hill). The major features of the cultural landscape-the terrain; the patterns of open vs. wooded land, and circulation, including public roads and major trails-are maintained as is.	Within the overall landscape, minimal changes are made to the six key interpretive sites. The major features of the cultural landscape—the terrain; the patterns of open vs. wooded land; and circulation, including public roads and major trails—are preserved. Technology is used to convey historic conditions.	Within the overall landscape, selected areas of great interpretive value are rehabilitated to their 18th century conditions as interpretive vignettes. The cultural landscapes of two key interpretive areas are managed primarily to achieve interpretive goals: Muhlenberg’s Brigade and the Grand Parade. At other key interpretive areas: Washington’s Headquarters, Artillery Park, Star Fort/Varnum’s Quarters area, and Walnut Hill, the landscape is preserved as is and technology is used to convey historic conditions.
Encampment Commemorative Zone	23	The major features that characterize the cultural landscape—the terrain, the patterns of open vs. wooded land, the encampment-period circulation system, the state park-era tour road and trail system, and commemorative plantings and structures—are maintained as is. Small scale features that contribute to the National Register significance of the park are maintained as is.	The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and major trails—are preserved as is. To support interpretive goals some features are rehabilitated. Small scale features that contribute to the National Register significance of the park are preserved.	Same as B.
Mixed Resources Zone	24	The major features of the cultural landscape—the terrain; the patterns of open vs. wooded land; circulation, including public roads and major farm and estate roads; and major trails—are maintained as is. Small scale features that contribute to the National Register significance of the park are maintained as is.	The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and farm and estate roads; and major trails—are preserved as is. To support interpretive and visitor experience goals, some features are rehabilitated and limited trails are established. Small scale features that contribute to the National Register significance of the park are preserved.	Same as B.
North Side Zone	25	The major features of the cultural landscape-the terrain; historic structures; and circulation, including towpath, farm roads, and major trails-are maintained as is.	The major features of the cultural landscape—the terrain; historic structures; and circulation, including towpath, farm roads and major trails are preserved. To support natural resources goals, some areas may be reforested.	Same as B.
Mission Goal: Public Use, Enjoyment, and Experience of the Park				
Park-wide	26	Visitors explore the site with little interpretive guidance.	Visitors learn by exploring, discovering, and doing. Because the landscape is not restored to its encampment-period conditions, personal imagination is essential. Visitors learn to “read” the landscape and to see how new layers of land use and commemoration were added in each period following the encampment. Through activities, visitors engage in a process of “peeling back” the layers to understand the connections among key elements of the site.	Visitors have the opportunity to decide the kind of experience they want, depending on learning style, interest, and time. The park provides a structured core message and experience for all visitors that is primarily immersive and focuses on the encampment and the American Revolution. This takes place at the Welcome Center and at the two key interpretive sites that are rehabilitated to period conditions so that visitors can experience a sense of stepping back in time. A self-discovery approach illustrates other areas of the park, and additional historic and natural resource themes and topics.
Park-wide	27	Interpretation in the park emphasizes the encampment. No other events or eras in the history of Valley Forge, or natural resource themes, are interpreted.	Interpretation emphasizes the encampment. Complementary themes include other events and periods in the history of Valley Forge, as well as natural resources.	Interpretation emphasizes the encampment and the American Revolution. Complementary themes include other events and periods in the history of Valley Forge, as well as natural resources.
Park Support Zone	28	No changes are made to the Welcome Center.	Exhibit space is added to the Welcome Center to enable orientation to all park themes. Retail space is added to accommodate current demand and provide ore revenue for programs. A theater is added if the current theater is rehabilitated for other purposes.	Exhibit space is added to the Welcome Center to expand the capacity for displaying the park’s collections and to accommodate changing exhibits. Retail space is added to accommodate current demand and provide ore revenue for programs. A theater is added if the current theater is rehabilitated for other purposes.

Table 2-3 Alternatives Comparison - Management Objectives (Continued)				
Management Zone		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
Park-wide	29	There is little connection between the thematic messages introduced in the Welcome Center and experiences in the park.	The thematic messages introduced in the Welcome Center are reinforced throughout the park’s cultural landscape.	Same as B.
Park-wide	30	Visitor movement through and experience of the landscape and resources contribute minimally to understanding the park’s interpretive themes.	Visitor movement through and experience of the landscape and resources is essential to understanding the park’s interpretive themes.	Same as B.
Interpretive Focus Zone	31	Current interpretation continues at the key interpretive sites (Muhlenberg’s Brigade, the Grand Parade, Artillery Park, Washington’s Headquarters, the Star Fort/Varnum’s Quarters area, and Walnut Hill),	At key interpretive sites, technology is used to convey historic conditions. Minimal changes are made to the landscape.	Within the overall landscape, two areas of great interpretive value (Muhlenberg’s Brigade and the Grand Parade) are rehabilitated to their 18th century conditions to provide a sense of stepping back in time for visitors. Other key interpretive areas are modified for interpretive purposes.
Park-wide	32	Park-wide, the landscape is maintained as is. No new interpretive tools are available to clarify the landscape or to convey historic conditions.	Park-wide, the landscape is preserved as is and technology is used to convey historic conditions.	With the exceptions of Muhlenberg’s Brigade, the Grand Parade, and the quarries, the park-wide landscape is preserved as is and technology is used to convey historic conditions.
Park-wide	33	Reconstructed earthworks and fortifications are stabilized.	Reconstructed earthworks and fortifications are preserved as interpretive exhibits.	Same as B.
Encampment Commemorative Zone/Interpretive Focus Zone	34	Views among redoubts are not re-established.	Same as A.	Views among historic redoubts are re-established through selective tree cutting, sot that visitors can better understand the strategic use of the terrain during the encampment.
Park-wide	35	All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park. The rest are interpretive exhibits and would be managed as ephemeral exhibits.	Same as A.	Same as A.
Park-wide	36	Educational opportunities continue to be limited in scope and availability.	Education is an important function of the park, which is a living classroom. Cultural and environmental education is provided in partnership with key organizations. Outdoor space for educational programs is added.	Education is a core function of the park, which is a living classroom. Cultural and environmental education is provided in partnership with key organizations. Indoor and outdoor space for education programs is added.
Park-wide	37	Only a small amount of the park’s collection is displayed.	The park’s collections help to illustrate Valley Forge encampment themes.	Same as B.
Park-wide	38	Existing modern visual and auditory intrusions continue.	To enhance the visitor experience and understanding of the park, existing and potential visual intrusions are minimized.	Same as B.
Park-wide	39	Park visitors cannot easily find out about other related historic sites and districts within the area.	Park visitors are actively encouraged to visit key sites and districts within the area and to understand their relationship to Valley Forge.	Same as B.
Park-wide	40	Natural resource education is available only through private programs.	Natural resource education on stewardship and contemporary resource preservation is essential.	Same as B.
Park-wide	41	Visitors enjoy a safe and secure experience at Valley Forge NHP.	Same as A.	Same as A.
Park-wide	42	Prospective visitors are able to obtain timely and relevant information to help in trip planning and travel to the park.	Same as A.	Same as A.
Park-wide	43	No new visitor services or facilities are added.	Visitor services and facilities are appropriately scaled and located, and they facilitate enjoyable and educational visits to the park.	Same as B.
Park-wide	44	The existing collection of trails is unchanged.	A trail system is established that combines existing trails and limited new trails to provide a variety of visitor experiences related to and appropriate to park resources. New trail segments are established where they meet the following goals and criteria: <ul style="list-style-type: none"><li>▫ provide safe access to key features</li><li>▫ make loop circulation possible</li><li>▫ provide good experience or interpretive value</li></ul>	Same as B.



Table 2-3 Alternatives Comparison - Management Objectives (Continued)

Management Zone		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
			<div><div>▫ easily maintainable</div><div>▫ trailhead available or feasible to make available</div><div>▫ no cultural or natural resources are affected</div></div>	
Park-wide	45	Bicycles continue to share the tour roads with private vehicles.	Same as A.	Inner Line and Outer Line Drives are closed to private vehicles, and are used as bike trails, reducing conflicts on the Joseph Plumb Martin Trail.
Interpretive Focus Zone	46	Active recreation continues to interfere with the key interpretive sites.	Active recreation is limited to pedestrian trails that skirt the zone.	Same as B.
Park-wide	47	Appropriate recreational use continues to be welcomed. All public activities are systematically evaluated for appropriateness before they are allowed.	Appropriate recreational use continues to be welcomed in places where it does not impact resources or interpretive activities. All public activities and events are systematically evaluated for appropriateness before they are allowed.	Same as B.
Park-wide	48	Pedestrian and bicycle access to the park is unchanged. There are no new connections to existing and future trails outside the park.	Connections to existing and future trails outside the park are pursued to encourage visitors to arrive through non-motorized means.	Same as B.
Park-wide	49	No traffic management initiatives are undertaken. No changes are made to the uses of public or park roads.	Traffic circulation is managed in a way that reduces impacts on park resources and provides for safe visitor use, while mitigating intrusion of auto traffic on the visitor experience. Through-traffic on public roads (PA Routes 23 and 252, and Gulph Road) would be calmed, in partnership with state and local government. The roads would remain open and commuters would continue to be able to use them. All park tour roads would remain open to visitor circulation, and visitors would continue to use their own vehicles on the tour route to access various sites throughout the park. Interpretive bus tours would continue to be provided as long as they are financially feasible. A transportation shuttle would not be provided.	Traffic circulation is managed in a way that reduces impacts on park resources and provides for safe visitor use, while mitigating intrusion of auto traffic on the visitor experience. Visitor and commuter traffic through the park is minimized.
Park Support Zone	50	Visitors continue to be confused by eleven different park entrances. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA 23 Route between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. The park entrance sign would be shifted, but no new landscaping or redesign of the entry road would take place.	The primary park gateway provides a sense of arrival and clearly understood circulation route to the visitor’s destination in the park. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. Redesign of this area would provide a clearly marked entrance and better sense of arrival as visitors exit the busy surrounding roads and enter the park. An entrance sign and landscaping would be added. The entrance drive would primarily comprise the existing roadway around the Welcome Center, with minor redesign to eliminate an existing sharp curve. Additional gateway treatments at other park entrances would help to establish a recognizable sense of place.	The primary park gateway provides a sense of arrival and clearly understood circulation route to the visitor’s destination in the park. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. Redesign of this area would provide a clearly marked entrance and better sense of arrival as visitors exit the busy surrounding roads and enter the park. An entrance sign and landscaping would be added. The entrance drive would be reconfigured as needed to accommodate the proposed relocated maintenance facility. Additional gateway treatments at other park entrances would help to establish a recognizable sense of place.
Park-wide	51	No new interchanges are proposed.	Same as A.	Regional traffic congestion on local roads would be reduced through construction of a half-diamond interchange at the intersection of Pawlings Road with US 422, as proposed in the <i>Phoenixville Intermodal Transportation Study</i> (DVRPC 2003). The interchange would be located on land within the legislated park boundary.
Park-wide	52	NPS would continue to support implementation of the proposed Schuylkill Valley Metro. The park’s Port Kennedy station would not be re-opened.	NPS would continue to support implementation of the proposed Schuylkill Valley Metro. The park’s Port Kennedy station would be re-opened for visitor (not commuter) use.	Same as B.
North Side Zone	53	The north side of the park is managed as is and no physical connections to the south side are established.	The north side is physically connected with the south side, making it more accessible to visitors while protecting its special qualities.	The north side is programmatically integrated with the south side, making it more accessible to visitors while protecting its special qualities.
North Side Zone	54	The River Trail, the Schuylkill River Trail, and the parking and support for the trailheads at Betzwood and Pawling’s Road are maintained as is.	The River Trail, the Schuylkill River Trail, and the parking and support for the trailheads at Betzwood and Pawling’s Road are managed to enhance their recreational values, while not impairing the cultural and natural values of lands adjacent to them.	Same as B.

Table 2-3 Alternatives Comparison - Management Objectives (Continued)				
Management Zone		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
Park-wide	55	The complement of full-time-equivalent employees continues to drop as federal budgets remain flat or drop.	Staffing from all sources is adequate in numbers and deployment to implement and support the management objectives.	Staffing from all sources is adequate in numbers and deployment to implement and support the management objectives.
Park-wide	56	Staff responsibilities remain essentially as is.	Employees continue to hold key responsibility in protecting the resources in the park as well as reducing the threats caused by improper use or development of such resources. Employees are responsible not only to achieve the park mission of preservation and interpretation, but also to encourage engagement of the community in the mission.	Same as B.
Park-wide	57	Existing park partnerships are maintained.	Existing park partnerships are maintained and strengthened as they expand the park’s capacity to protect park resources and provide high quality visitor interpretation and experiences. Additional partnerships are actively pursued.	Same as B.
Park-wide	58	The scope and contribution of volunteer programs in resource management, interpretation and visitor services, maintenance, and administration remain as is.	The scope and contribution of volunteer programs in resource management, interpretation and visitor services, maintenance, and administration are enhanced. Programs provide life-long opportunities for citizens to take personal responsibility to care for our heritage.	Same as B.
Park-wide	59	No sources of funds other than appropriated funds and current revenues and donations are used.	The park actively seeks non-appropriated funds to support its preservation and interpretation mission.	Same as B.
Park-wide	60	No new park fees are established.	Revenues from universal visitor use fees help the park to meet its preservation and interpretation missions.	Same as B.
Park-wide	61	The park’s utilities infrastructure is updated only to correct failures.	The park’s utilities infrastructure is updated to meet current safety and efficacy standards, and maintained in good working order.	Same as B.
Park-wide	62	Park staff, volunteers, interns, contractors, and partners work in a safe and secure environment.	Same as A.	Same as A.
Park-wide	63	Some non-contributing buildings for which there are suitable and feasible interpretive, visitor services, or park operational uses are maintained for continuing park use.	Some non-contributing buildings in the park for which there are suitable and feasible interpretive, visitor services, or park operational uses are maintained in good condition and/or renovated for continuing park use.	Same as B.
			Non-contributing buildings that are not needed or suitable and feasible for interpretive, visitor services, or park operational uses are available for concessions or for leasing, under the determinations stipulated by 36 CFR 1/18.4 that were made as part of the development of this GMP. Buildings for which there is no feasible use are demolished.	Same as B.
Park-wide	64	The park housing program meets service-wide objectives: Buildings in the park are used for staff housing only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitory or seasonal staff, volunteers, essential cooperators); or sustains a historic structure for which there is no feasible use.	Same as A.	Same as A.
Park Support Zone	65	The park maintenance facility remains on its site in the middle of the Grand Parade.	Same as A.	The park maintenance facility is relocated near the administration building on a site that does not impair a core, historic landscape and provides adequate and safe space to accomplish work efficiently.
Park Support Zone	66	The ranger station remains in the Mordecai Moore House.	The ranger station is relocated near the administration building in an adequate and safe space to accomplish work efficiently.	The ranger station is relocated near the administration building in an adequate and safe space to accomplish work efficiently. It is co-located with the new maintenance facility or established within the current theater.

### **2.5.1 Mission Goal: Preserve Cultural and Natural Resources**

In Alternative A, the landscape would be preserved just as it is, and would continue to largely reflect the state-park commemorative era on the south side. No missing features, such as memorial groves of trees, would be restored, and nothing would be purposefully removed, such as the pine plantations. On the north side of the park, the modern agricultural and old-field landscape would be preserved as is. No interpretive, natural resources, or recreational initiatives or development would take place there.

Historic structures such as buildings, bridges, and earthworks would be stabilized as funds and resources were available. Most historic buildings would continue to be closed to visitors. Museum and library collections would continue to be stored in seven different locations around the park and would continue to be largely inaccessible to visitors and scholars. Needed improvements to the environmental and security deficits would be made as funds and resources are available.

Natural resources would continue to be minimally managed. NPS would not initiate any efforts to manage or enhance bio-diversity in the park. Infestations of exotic invasive plants would continue to be treated as funding and resources are available. NPS would not manage the herd of white-tailed deer, nor would it manage any other faunal species. The park would continue to participate in regional stormwater management initiatives, at the current level.

### **2.5.2 Mission Goal: Promote Public Use, Enjoyment, and Experience of the Park**

Interpretation would continue to focus on the life of the Continental soldier. Interpretive and educational programs would continue to be limited in availability. There would continue to be few interpretive opportunities available to recreational visitors. There would continue to be minimal orientation to features and opportunities in the park, or to related sites outside the park. The current Welcome Center would remain as the point of orientation. There would continue to be no available space in the center for interpretive programs or collections-based programs.

No new connecting trail segments would be added, and no trailheads constructed. No connections would be made to regional trails such as the Upper Merion Township system or the Chester Valley Trail.

Recreation would continue to be minimally managed. Appropriate uses would continue to be welcomed in the park. Activities that contribute to public understanding of park history and resources are appropriate. Activities that damage park resources would continue to be prohibited. No interpretive programs for recreational visitors would be developed.

No measures would be taken in the park to manage traffic congestion. All tour roads and public roads would remain open to vehicular traffic. (County Line Road will be closed as part of the Betzwood Bridge replacement project). As part of the RCC traffic projects (see Section 2.2.3:Transportation Framework for a detailed description), a half-mile portion of PA Route 23 will be shifted some 350 feet eastward, and with it, the park's main point of entry. The existing park entrance sign would be moved, but no new landscaping or redesign of the entrance drive would take place.

### **2.5.3 Mission Goal: Ensure Organizational Effectiveness**

No new park staff would be added. Staff would continue to be deployed according to the traditional model, in which most objectives are accomplished – when they can be accomplished - primarily through the efforts of park staff. If budget trends of the last decade continue, staff positions would continue to be lost. No new volunteer initiatives would be undertaken, and the volunteer program would continue at existing levels, or at diminished levels concurrent with the decline of paid staff that manage volunteers.

No new visitor fees would be initiated.

The park would continue to work with current partners at existing levels. No new interpretive, traffic congestion management, cultural resources preservation, or natural resources preservation partnerships would be pursued or undertaken.

See the tables in Appendix H for a comparison of staffing by alternative.

Table 2-6 (located at the end of this chapter) provides details for Alternative A, and Figure 2-9 depicts key features.

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## **2.6 Alternative B**

Alternative B provides an exciting palette of options for visitors to tailor visits and experiences to best meet their own needs and interests. Experiences focus on exploration and self discovery of the full cultural and natural history of Valley Forge. This alternative proposes a non-traditional approach to interpretation that reflects current research and ideas about how people learn, visitation patterns both for national and regional visitors, and new technology. The following text describes the highlights of this alternative. For a list of specific management objectives and potential actions, please see Table 2-7, located at the end of this chapter.

### **2.6.1 Mission Goal: Preserve Cultural and Natural Resources**

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#### **Cultural Landscape**

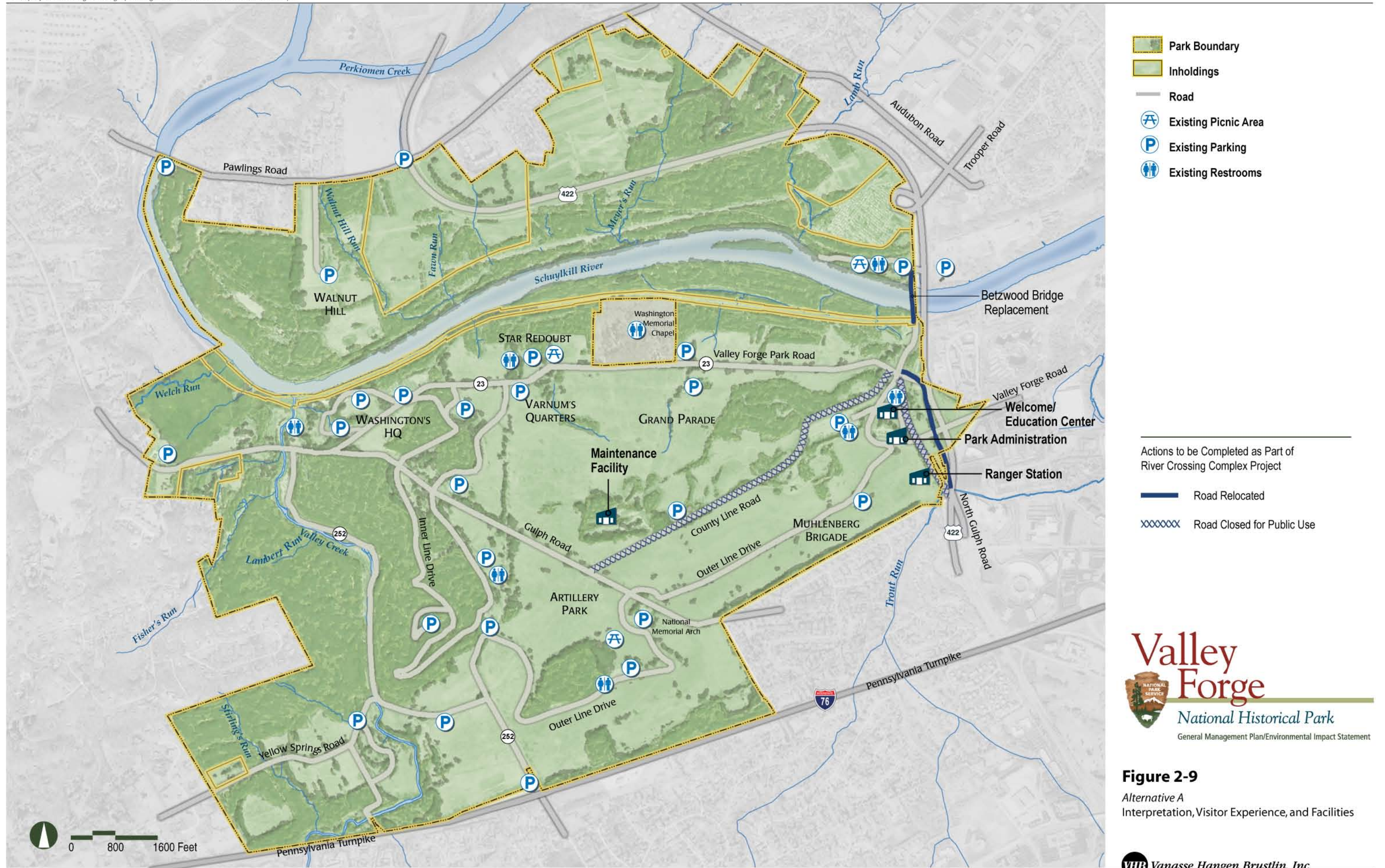
In this alternative, the park’s historic landscape would be preserved as it is, and the park would be respected as a memorial landscape that has been commemorated in many ways over generations. The park would reflect the “layers” from all periods, including the encampment period, the 19th century agricultural and industrial period, and the 20th century state park commemorative period.

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#### **Historic Structures**

In both action alternatives, key historic buildings would be preserved. Some would be rehabilitated for interpretive or other visitor uses. Other historic structures, for which there is no necessary and feasible interpretive or operational use, would be available for visitor-service concessions or for general leasing in order to bring in outside funding for the preservation and support of the buildings. Some post-encampment historic buildings, for which there is no feasible use, would be considered for demolition. See Appendix D for treatments and uses of all park buildings.









Encampment-period earthworks and fortifications would be stabilized and preserved. Twentieth-century reconstructed fortifications would be maintained for interpretive use and would be available for visitors to enter. All huts are reconstructions – two have National Register significance and would be preserved – the remainder would be managed as interpretive exhibits.

## Collections

In both action alternatives, the NPS would consolidate its museum and library collections in a single place with modern environmental and security controls. To accomplish this, the NPS would construct a curatorial storage facility in the park within the Park Support Zone, construct an addition to the Welcome Center, or utilize storage in an off-site facility. The potential to share storage with other national parks is common to each of these options. As staffing allowed, the collections would be available for viewing and study by visitors and scholars. To increase public access to information about the collections, the park would expand its use of the Web Catalog.

## Archeological Resources

In both action alternatives, archeological sites would be protected against damage from encroaching vegetation and inappropriate visitor use, such as off-trail biking. Continued research would be emphasized on topics and areas of the park about which relatively little is known, including accurate locations of some of the fortifications and picket posts, the metamorphosis through the centuries of the Village of Valley Forge, slavery-related resources associated with agriculture and the iron industry, and the encampment commissary function on the north side. Field work to confirm the research and to develop additional information, particularly in the brigade areas, would be emphasized and would be a key interpretive and educational activity in this alternative.

## Biological Resources

In this alternative, within forested and other naturally occurring biological communities, the NPS would actively manage the park's biological resources in order to preserve and restore natural abundances, diversities, dynamics, and distributions of native plants and animals. In cases in which species populations occur in unnaturally high or low concentrations as a result of human influences or extirpation of predators, and these occurrences cause unacceptable impacts on natural resources and processes, the NPS would take action to accelerate natural recovery through biological and physical remedial actions. A future deer management plan would determine the best means to manage infestations of exotic invasive plants, as well as how to achieve subsequent revegetation of forests and meadows. A future deer management plan/environmental impact statement would determine the best means to manage the size of the white-tailed deer herd.

Although tall grass meadows are a naturally occurring biological community in the region, the park's meadows were created from former lawns. Their high habitat values are widely recognized, however, and in this alternative, these values would be enhanced through intensive control of exotic invasive plants and other measures, to be identified through the future deer management plan.



The “learning by doing” interpretive approach of Alternative B would include participation in archeology.



More active management of the habitat values of forests, meadows, and water resources is a feature of both action alternatives.

## **Water Resources**

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In both the action alternatives, the NPS would use whole-watershed management strategies to protect the park's water resources. Threats to water quality both inside and outside the park would be minimized and existing water quality deficiencies improved. Natural hydrologic flows in the park would be preserved and restored where possible. In both action alternatives, the NPS would actively participate in regional stormwater management initiatives to protect and restore the natural hydrological flow and water quality in Valley Creek. The park also would actively participate in regional initiatives to protect the Schuylkill River and its tributaries that flow through the park to the river.

## **Air**

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Through management of traffic within the park, cooperation with regional transportation agencies, and other measures, the park would participate in promoting the reduction of harmful effects of air pollution.

## **Geologic Resources**

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The park is one of the few places in Pennsylvania's Great Valley where the karst topography of limestone solution channels, sinkholes, and caves is undeveloped. In this alternative, the NPS would more actively manage these resources within the park, and would develop a detailed plan to preserve them, restore them where possible, and interpret them to the public.

## **Sound and Light**

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Recognizing the park's value as a source of quiet, inspiration, and connection with nature for visitors, the NPS would work to minimize excessive levels of sound and light in the park by eliminating unnecessary sources generated within the park. The NPS also would work with neighbors and neighboring agencies to buffer existing sources and to mitigate excessive new sources beyond the boundaries.

### **2.6.2 Mission Goal: Promote Public Use, Enjoyment, and Experience of the Park**

#### **Interpretation**

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The interpretive objective of both action alternatives is to transform the visitor experience throughout the 3,452-acre park from one that is primarily active recreation to one that integrates and enhances interpretive and recreational opportunities. The interpretive approach of Alternative B is based on the idea that people learn by exploring, discovering, and doing. In this alternative, the landscape would not be restored to an historic appearance. Therefore, an excellent orientation to the park and its stories and resources is essential. The Welcome Center would be expanded to accommodate space for orientation. As part of orientation, visitors would be provided with basic information and tools with which they could learn to "read" the many layers of the historic landscape and to see how new layers of land use and commemoration were added in each period following the encampment. Through imagination, interpretive media, and activities, visitors would engage in "peeling back" the layers to understand the connections among key elements of the site.



In both action alternatives, the expanded Welcome Center would act as the “trailhead” that provides easily accessible and free orientation for all park visitors to themes, programs, events, facilities, and opportunities to be found in the center and park-wide. Excellent orientation would prepare visitors to experience the park as a multi-layered historic and natural resource. Information would be targeted to both cultural visitors and also recreational visitors.

Collections-based exhibits also are an important part of the experience. Additional collections-based exhibits in the park’s Welcome Center, and existing exhibits at Washington’s Headquarters and Varnum’s Quarters, would illustrate key themes and would be used to prepare visitors for experiencing the larger landscape. The expansion of the Welcome Center would provide additional exhibition space.

Space for educational programs would be added to the exterior of the Welcome Center. A theater sized to accommodate two bus loads of children or adults would be added, if the existing theater is rehabilitated for other purposes (see Buildings section, below). More retail space would be added to accommodate the current demand and generate additional revenues for programs.

Each of the action alternatives recognizes six key interpretive sites within the park (see description of the sites starting on page 2-6). In Alternative B, the landscape at these sites would be preserved as it is rather than restored. Visitors would use a variety of visually unobtrusive methods to understand the history and historic activities at each site, such as technology that allows one to project a historic scene on the current scene or to receive an interpretive message on a cell phone or MP3 player. Facilitated and/or self-guided activities at each site would engage visitors in the place and the stories.

At the edge of the Grand Parade, the rehabilitated Maurice Stephens House would be the site for interpretive exhibits that convey Grand Parade themes. In the Village of Valley Forge, the historic train station adjacent to Washington’s Headquarters would be the site for interpretive exhibits about Washington’s leadership and related themes.

In this alternative, interpretation would emphasize the encampment as well as complementary themes, including other events and eras in the history of Valley Forge and natural resources. General American Revolution themes would be interpreted only for context. The NPS would continue to work with current partners to develop and present programming and activities. Additional partners would be sought in order to develop a more robust program of education and interpretation.

## Trails

In both action alternatives, the park’s disparate collection of trails would be organized, completed, and managed as a system. The system would comprise existing trails and limited new trails to provide a variety of visitor experiences related to the park’s history and natural resources. Effective signage would be installed at key locations. Trailheads with adequate yet unobtrusive parking, restrooms, and information would be added. Some authorized trails that are unmaintainable and any personal trails that damage resources would be eliminated.

In both action alternatives, connections to planned regional trails would be made at the Port Kennedy (connection with future Upper Merion system) and at Wilson Road (connection to Patriots Trail/Chester Valley Trail). In order to manage the capacity of and build on previous investment in existing bike trails, a pedestrian/bicycle bridge would be built over the Schuylkill River, connecting long-distance bicycle trails in the



Alternative B proposes broader use of electronic media, such as cell phones or MP3 players, for receiving interpretive messages in the park.

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### ***New trail segments could be established where they meet the following goals and criteria:***

- *provide safe access to key features*
  - *make loop circulation possible*
  - *provide good experience or interpretive value*
  - *easily maintainable*
  - *trailhead available or feasible to make available*
  - *no cultural or natural resources are affected*
-

west end of the park and removing them from the park’s historic core. A trail crossing of US 422 is proposed, which would link the two halves of the park’s north side, currently bisected by the highway. This also would enable a trail link to Mill Grove, the National Audubon Society/Montgomery County art and natural resources educational facility. (See Figure 2-10 for a map of the proposed system.)

### Recreational Uses

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In all alternatives, appropriate recreational uses would continue to be welcomed in the park. Activities that contribute to the public’s understanding of park history and resources are appropriate. Activities that damage park resources would continue to be prohibited. Public activities would be systematically evaluated for appropriateness before they are allowed. Recreational visitors generally come from within the region and tend to visit frequently. During the GMP planning process, numerous frequent visitors have noted that they are hungry for more knowledge about the park, but that no interpretive programming is available to meet their needs. The NPS would develop and provide better information and special interpretation about park history, resources, and activities specifically targeted to these visitors.

### Traffic and Transportation

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In both action alternatives, vehicular traffic in the park would be managed to reduce the impacts of congestion and excessive speed on park resources and visitors. The following elements would be incorporated in Alternative B:

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#### ***Parking Lots to Be Removed***

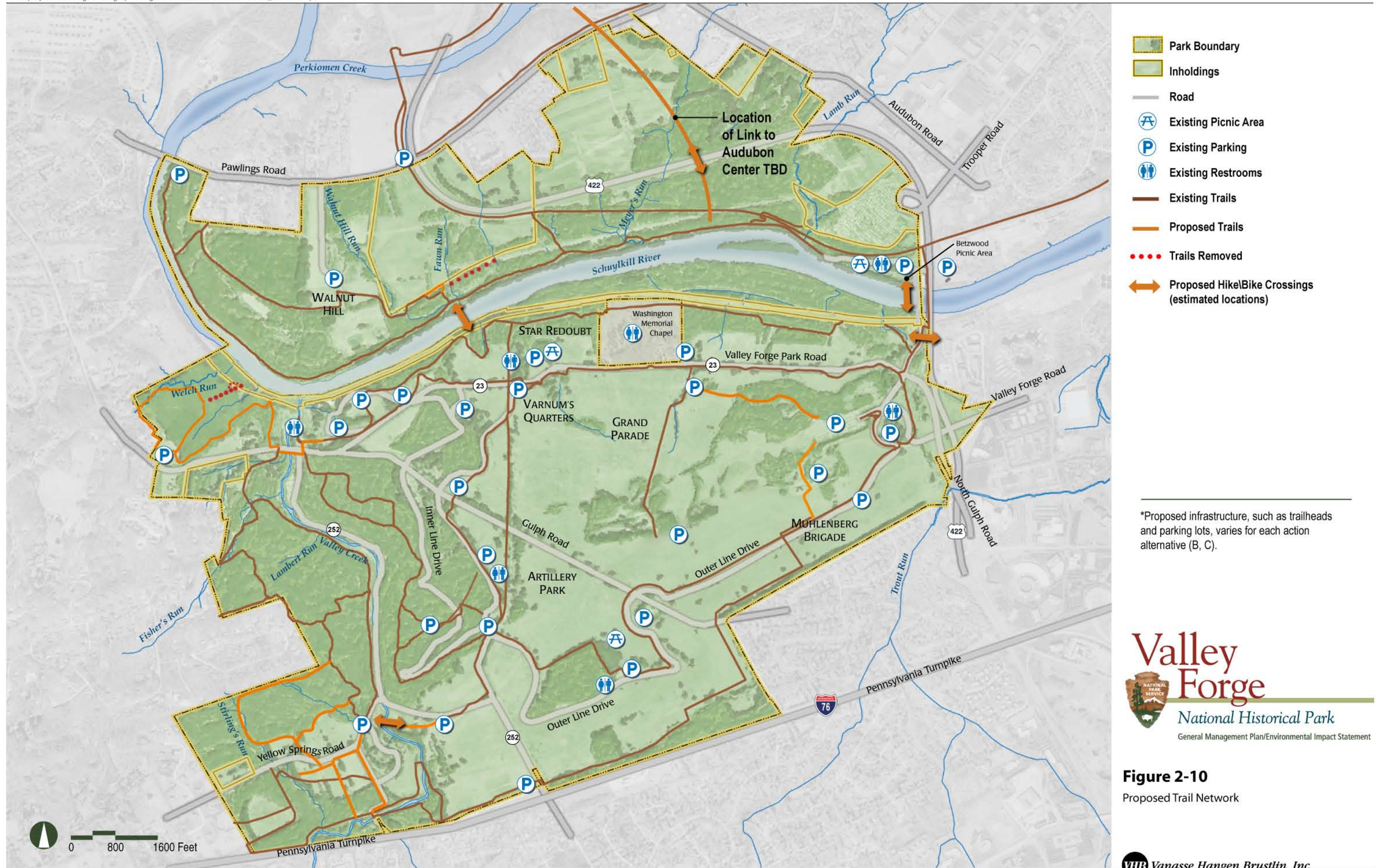
- *Tower*
- *Covered Bridge*
- *Lower Washington’s Headquarters*
- *Upper Washington’s Headquarters*
- *Conway’s Brigade*
- *Huntingdon’s Overlook*

#### ***Parking Lots to be Added***

- *Yellow Springs Road at Walker Barn*
  - *Walnut Hill*
- 

- Through-traffic on public roads (PA Route 23, PA Route 252, and Gulph Road) would be calmed, in partnership with state and local government. The roads would remain open and commuters would continue to be able to use them. (County Line Road will be closed as part of the Betzwood Bridge replacement project.)
- All park tour roads would remain open to visitor circulation, and visitors would continue to use their own vehicles on the tour route to access various sites throughout the park. Interpretive bus tours would continue to be provided as long as they are financially feasible. A transportation shuttle would not be provided.
- Six little-used existing parking areas would be closed. Two new areas would be added, and several additional parking lots would be reconfigured.
- The park would work with other government agencies and partners to promote near- and long-term transit opportunities - including the future implementation of the SVM, and on the provision of intelligent transportation systems.
- As part of the RCC traffic projects (see Section 2.2.3: Transportation Framework for a detailed description) a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive will be shifted 350 feet to the eastern boundary of the park (see Figure 2-5). The primary park entrance also will be shifted 350 feet eastward. Redesign of this area would provide a clearly marked entrance and better sense of arrival as visitors exit the busy surrounding roads and enter the park. In both action alternatives, an entrance sign and landscaping would be added. In Alternative B, the entrance drive would primarily comprise the existing roadway around the Welcome Center, with minor redesign to eliminate an existing sharp curve. Additional gateway treatments at other park entrances would help to establish a recognizable sense of place.











In both action alternatives, the NPS would continue to support the future implementation of the SVM – a light rail system to be established between Philadelphia and Reading. Part of the right-of-way on which the line would run is in the park. The historic Valley Forge Park train station in the Port Kennedy – within walking distance of the Welcome Center – would be re-opened for visitor use only. Limited parking would be available, and the station would not be available for commuter use.

### **2.6.3 Mission Goal: Ensure Organizational Effectiveness**

#### **Partnership and Staffing**

Valley Forge NHP wishes to work with volunteers and partners to preserve the park, enhance the experiences of park visitors, and build a community dedicated to conserving the park for the future. Partnerships would be undertaken to support education, sponsor historical and scientific research about park resources, restore native habitats, rehabilitate historic structures, and create exhibits and publications.

In both action alternatives, the role of park staff and the way they accomplish their objectives would change from current practices. The park would move away from the traditional model in which NPS employees themselves implement all objectives, to a model in which NPS employees take on the role of facilitator. In this model, the park could more effectively take advantage of abundant outside resources such as volunteers, partners, and grants. Rather than “doing it by ourselves,” each staff member would be enabled to multiply his effort through outreach. During this GMP process, the park has repeatedly heard from partners, volunteers, and the community that they want opportunities to participate more actively in conserving the park. Organizing the staff to enable this will create a cadre of stewards at every level - people and organizations that, through participation, would move from interest to understanding to caring to advocacy. This could be the single most important action in integrating the park in the community.

Such reorganization would promote strengthening of existing partnerships and cultivation of additional partnerships in all operational areas. In both action alternatives, a stronger volunteer program would be important, and a staff person would be added to support the recruitment and management of volunteers. This person also would develop and manage additional sources of support, such as interagency agreements and grants.

In Alternative B, additional interpretive and educational staff would be required to provide additional programming. The expanded interpretive mission of the park would be met by using partners and volunteers more strategically, and by giving existing staff a greater role in facilitating this. In both action alternatives, as attrition occurs, the existing complement would be adjusted to include fewer permanent full-time interpretive rangers and more term and seasonal park guides.

Visitation would not be expected to increase substantially under the action alternatives and no law enforcement rangers would be added to the staff. As attrition occurs, the existing complement would be adjusted to include fewer permanent full-time law enforcement rangers and more seasonal and term law enforcement rangers. One law enforcement specialist (investigation) would be added and shared with Independence NHP.

In both action alternatives, the likely leasing of many buildings in the park and the phasing out of the use of buildings as quarters for park staff would greatly reduce the demand for maintenance of the buildings by park staff. As leasing proceeds, maintenance positions would be reduced through attrition. Additionally, as attrition occurs, the existing complement would be adjusted to include fewer permanent full-time staff and more seasonal and subject-to-furlough staff. In the near term, however, the stabilization of buildings to be leased would require additional maintenance positions.

In 2006, the park implemented a Core Operations Analysis intended to move toward an objective of reducing labor costs as a percentage of the appropriated budget. Such analyses enable parks to focus resources on priorities, achieve the most effective and efficient operations, stimulate creative management, and link expenditures to annual and long-term goals. With a goal of reallocating up to 11% of base funds to top priorities, the park will seek to achieve personnel services and fixed costs equal to or below 80% of base funds, in order to ensure a sustainable operation. As attrition occurs, each open position would be evaluated against this standard.

See the tables in Appendix H for a comparison of staffing by alternative.

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### **Fees**

In both action alternatives, to help meet the preservation and interpretation mission, the park would move from the collection of a fee for visiting Washington's Headquarters to a park-wide fee charged to all visitors. Options would be evaluated for a fee structure that would provide reasonable fees, and that would fairly accommodate not only once-in-a-lifetime visitors, but also frequent visitors.

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### **Buildings**

The NPS owns and must care for a number of buildings that do not contribute to the National Register significance of the park. In both action alternatives, those that are not needed or suitable and feasible for interpretive or park operations, or for visitor services or leasing, would be demolished.

In both action alternatives, in accordance with service-wide housing policy, the park's structures would be used for employee quarters only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitional and seasonal staff, volunteers, or essential cooperators); or sustains a historic structure for which there is no other feasible use. See Appendix D for treatment and uses of all park buildings.

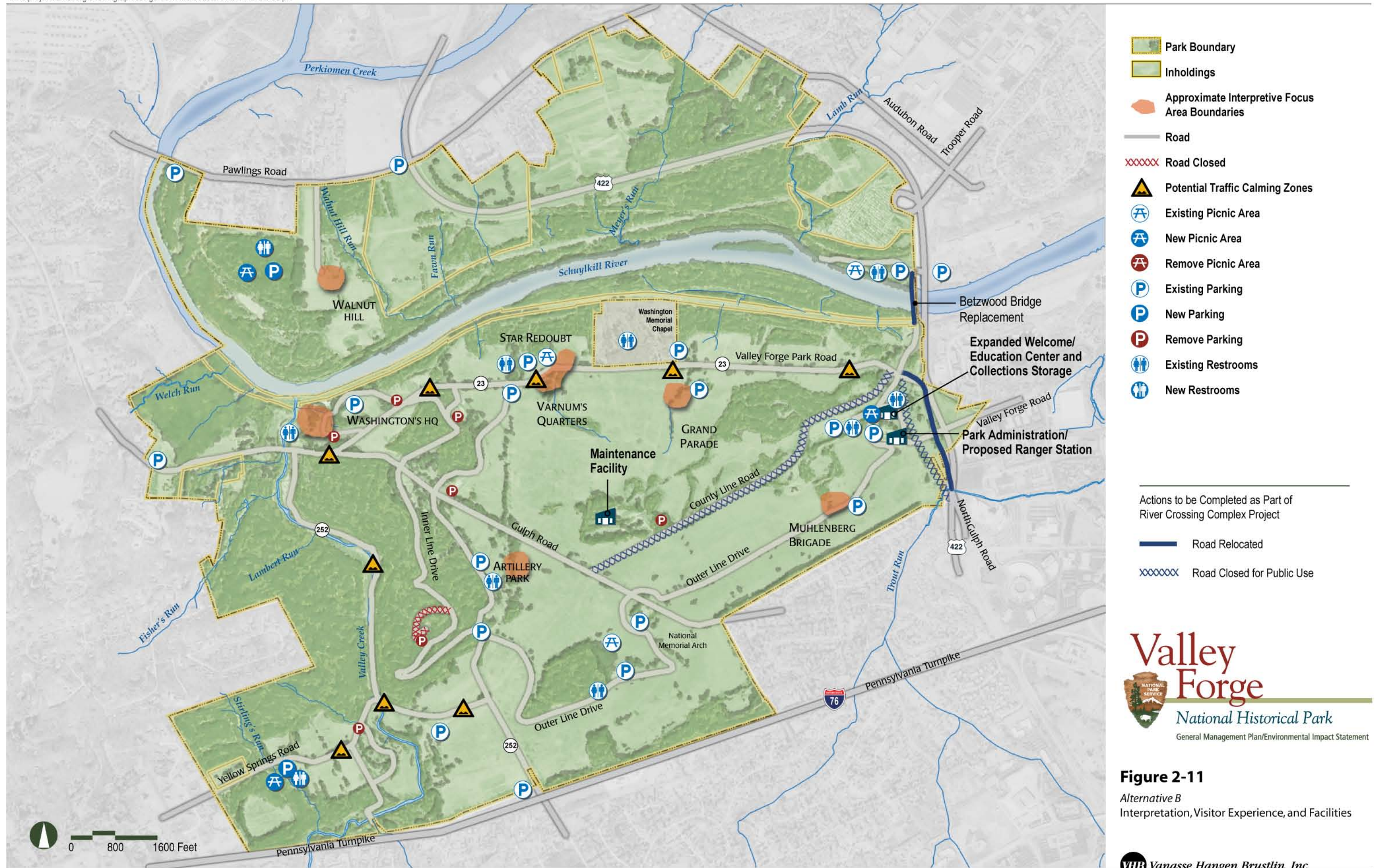
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### **Operational Facilities**

In this alternative, the Ranger Station would be moved out of the encampment-period Mordecai Moore House. A new Ranger Station would be constructed within the Park Support Zone adjacent to the Administration Building, or the current theater building could be rehabilitated for this use.

Table 2-7 (located at the end of this chapter) provides details for Alternative B, and Figure 2-11 depicts important features.











## 2.7 Alternative C: NPS Preferred

Similar to Alternative B, Alternative C would provide visitors with the opportunity to decide the kind of experience they want, depending on learning style, interest, and time. Alternative C proposes a combination of the non-traditional approach to interpretation and cultural landscape management of Alternative B with some aspects of a more formal interpretive and cultural landscape approach in which visitors can follow a sequenced narrative around the park. Some interpretive sites would be rehabilitated to their encampment-period conditions. A visit to the park would include park-wide exploration of the full cultural and natural history of Valley Forge. The history of the American Revolution also would be a key theme, both within the Welcome Center and throughout the park. The following text describes the highlights of this alternative. For a list of specific management objectives and potential actions, please see Table 2-8 located at the end of this chapter.

Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.

### 2.7.1 Mission Goal: Preserve Cultural and Natural Resources

#### Cultural Landscapes

In this alternative, two areas of great interpretive value - the interpretive focus zones of Muhlenberg's Brigade and the Grand Parade - would be rehabilitated to their 18th century conditions as interpretive vignettes. Rehabilitation of the Grand Parade would include filling of the quarries that mar this essential cultural landscape at the heart of the park to their historic contour. Cave Quarry would not be filled, because it lies beyond the eastern edge of the Grand Parade and because it exhibits rare geologic features that are of educational interest. As in Alternative B, the rest of the park's historic landscape would be preserved as it is, and the park would be respected as a memorial landscape that has been commemorated in many ways over generations. The park would reflect and interpret the "layers" from all periods, including the encampment period, the 19th century agricultural and industrial period, and the 20th century state park commemorative period.

#### Historic Structures

In both action alternatives, key historic buildings would be preserved. Some would be rehabilitated for interpretive or other visitor uses. Other historic structures, for which there is no necessary and feasible interpretive or operational use, would be available for visitor-service concessions or for general leasing in order to bring in outside funding for the preservation and support of the buildings. Some post-encampment historic buildings, for which there is no feasible use, would be considered for demolition. See Appendix D for treatment and uses of all park buildings.

Encampment-period earthworks and fortifications would be stabilized and preserved. Twentieth-century reconstructed fortifications would be maintained for interpretive use and would be available for visitors to enter. All huts are

reconstructions – two have National Register significance and would be preserved – the remainder would be managed as interpretive exhibits.

### **Collections**

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In both action alternatives, the NPS would consolidate its museum and library collections in a single place with modern environmental and security controls. To accomplish this, the NPS would construct a curatorial storage facility in the park within the Park Support Zone, construct an addition to the Welcome Center, or utilize storage in an off-site facility. The potential to share storage with other national parks is common to each of these options. As staffing allowed, the collections would be available for viewing and study by visitors and scholars. To increase public access to information about the collections, the park would expand its use of the Web Catalog.

### **Archeological Resources**

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In both action alternatives, archeological sites would be protected against damage from encroaching vegetation and inappropriate visitor use, such as off-trail biking. Continued research would be emphasized on topics and areas of the park about which relatively little is known, including accurate locations of some of the fortifications and picket posts, the metamorphosis through the centuries of the Village of Valley Forge, slavery-related resources associated with agriculture and the iron industry, and the encampment commissary function on the north side. Field work to confirm the research and to develop additional information - particularly in the brigade areas - would be emphasized and would be a key interpretive and educational activity in this alternative.

### **Biological Resources**

---

In this alternative, within forested and other naturally occurring biological communities, the NPS would actively manage the park's biological resources in order to preserve and restore natural abundances, diversities, dynamics, and distributions of native plants and animals. In cases in which species populations occur in unnaturally high or low concentrations as a result of human influences or extirpation of predators, and these occurrences cause unacceptable impacts on natural resources and processes, the NPS would take action to accelerate natural recovery through biological and physical remedial actions. A future deer management plan would determine the best means to manage infestations of exotic invasive plants, as well as how to achieve subsequent revegetation of forests and meadows. A future deer management plan/EIS would determine the best means to manage the size of the white-tailed deer herd.

Although tall grass meadows are a naturally occurring biological community in this region, the park's meadows were created from former lawns. Their high habitat values are widely recognized, however. These values would be enhanced through control of exotic invasive plants and other measures, to be identified through the future deer management plan.

### **Water Resources**

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In both action alternatives, NPS would use whole-watershed management strategies to protect the park's water resources. Threats to water quality both inside and outside the park would be minimized and existing water quality deficiencies improved. Natural hydrologic flows in the park would be preserved and restored

where possible. As in Alternative B, the NPS would actively participate in regional stormwater management initiatives to protect and restore the natural hydrological flow and water quality in Valley Creek. The park also would actively participate in regional initiatives to protect the Schuylkill River and its tributaries that flow through the park to the river.

## Air

Through management of traffic within the park, cooperation with regional transportation agencies, and other measures, the park would participate in promoting the reduction of harmful effects of air pollution.

## Geologic Resources

The park is one of the few places in Pennsylvania's Great Valley where the karst topography of limestone solution channels, sinkholes, and caves is undeveloped. As in Alternative B, the NPS would more actively manage these resources within the park and would develop a detailed plan to preserve them, restore them where possible, and interpret them to the public.

## Sound and Light

Recognizing the park's value as a source of quiet, inspiration, and connection with nature for visitors, in both action alternatives the NPS would work to minimize excessive levels of sound and light in the park by eliminating unnecessary sources generated within the park. The NPS also would work with neighbors and neighboring agencies to mitigate excessive new sources beyond the boundaries and to buffer existing sources.

### 2.7.2 Mission Goal: Promote Public Use, Enjoyment, and Experience of the Park

#### Interpretation

The interpretive objective of both action alternatives is to transform the visitor experience throughout the 3,452-acre park from one that is primarily active recreation to one that integrates and enhances interpretive and recreational opportunities. The interpretive approach of Alternative C is based on the premise that people have a variety of learning styles. Some learn best by exploring, discovering, and doing; others through formal programs and directed experiences. Alternative C would provide both.

A core message and experience would be provided for all visitors. This experience would initially immerse in a sequenced and structured experience of the park that evokes the encampment period. Two key areas of the park would be rehabilitated to their encampment-period conditions and would give visitors a sense of stepping back in time. There would be opportunities for visitors to interact with guides and first-person interpreters. A self-discovery approach (as in Alternative B) would illustrate other areas of the park, and additional historic and natural resources themes and topics.

Both action alternatives recognize six key interpretive sites within the park (see description of the sites beginning on page 2-6). In this alternative, the Muhlenberg's Brigade and Grand Parade landscapes would be rehabilitated to their 18th century appearance. They are within easy walking distance of the Welcome Center, and



More frequent living history programs would be a feature of Alternative C.

interpretive trails would be established between it and the sites, allowing visitors to relax, decompress, and reach the sites in a new frame of mind.

The landscapes of the other four interpretive focus zones would be preserved as they are. At these sites, as with Alternative B, visitors would use a variety of visually unobtrusive methods to understand the history and historic activities at each site, such as technology that allows one to project a historic scene on the current scene, or to receive an interpretive message on a cell phone or MP3 player, for example. Facilitated and/or self-guided activities at each site would engage visitors in the place and the stories.

The landscape of the rest of the park would not be restored to a historic appearance; therefore, an excellent orientation to the park and its stories and resources is essential. At orientation, visitors would be provided with basic information and tools with which they could learn to “read” the many layers of the historic landscape and to see how new layers of land use and commemoration were added in each period following the encampment. Through imagination, interpretive media, and activities, visitors would engage in “peeling back” the layers to understand the connections among key elements of the site.

In both action alternatives, the rehabilitated Welcome Center would act as the “trailhead” that provides easily accessible and free orientation for all park visitors to themes, programs, events, facilities, and opportunities to be found in the center and park-wide. Excellent orientation would prepare visitors to experience the park as a multi-layered historic and natural resource. Information would be targeted to both cultural visitors and also recreational visitors.

Additional space for educational programs would be added to the interior and exterior of the Welcome Center. A theater sized to accommodate two bus loads of children or adults would be added, if the existing theater is rehabilitated for other purposes (see Section 2.3.2: Buildings, below). More retail space would be added to accommodate the current demand and generate additional revenues for programs.

As with Alternative B, the collections-based exhibits in the expanded Welcome Center would be an important part of the visitor experience. Exhibits would illustrate key themes of the encampment and the American Revolution and would be used to prepare visitors for experiencing the themes in the larger landscape. Existing collections-based exhibits at Washington’s Headquarters and Varnum’s Quarters would continue to display artifacts that provide more detail on specific themes relevant to those sites. Adjacent to Washington’s Headquarters, the historic Valley Forge Train Station would provide interpretive exhibits about Washington’s leadership and related themes.



Washington’s Headquarters and the collections displayed there would provide additional detail - building on the introduction to historic themes provided at the Welcome Center.

Historic views among Redoubts 1, 2, 3, 4, the Star Fort, and Stony Battery would be re-established so that visitors could better understand the strategic use of the terrain during the encampment.

In this alternative, interpretation would emphasize both the encampment and also the American Revolution, as well as complementary themes including other events and eras in the history of Valley Forge. Interpretation of natural resources also would be emphasized. The NPS would continue to work with partners to develop and present programming and activities, and would seek additional partners in order to develop a more robust program of education and interpretation. The NPS would particularly seek to develop and promote educational initiatives in cooperation with regional and national American Revolution sites and institutions.



## Trails

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In both action alternatives, the park's disparate collection of trails would be organized, completed, and managed as a system. The system would comprise existing trails and limited new trails to provide a variety of visitor experiences related to the park's history and natural resources. Effective signage would be installed at key locations. Trailheads with adequate yet unobtrusive parking, restrooms, and information would be added. Some authorized trails that are unmaintainable and any personal trails that damage resources would be eliminated. Additionally, because Inner Line and Outer Line Drives would be seasonally closed to private vehicles in this alternative, these roads would be used as bike trails, reducing conflicts on the Joseph Plumb Martin Trail and making it safer for pedestrians.

In both action alternatives, connections to planned regional trails would be made at the Port Kennedy (connection with future Upper Merion system) and at Wilson Road (connection to Patriots' Trail/Chester Valley Trail). In order to manage the capacity of and build on previous investment in existing bike trails, a pedestrian/bicycle bridge would be built over the Schuylkill River, connecting long-distance bicycle trails in the west end of the park, removing cyclists from the park's historic core. In both action alternatives, a trail crossing of US 422 is proposed, which would link the two halves of the park's north side, currently bisected by the highway. This also would enable a trail link to Mill Grove, the National Audubon Society/Montgomery County art and natural resources educational facility. (See Figure 2-10 for a map of the proposed trail system.)

## Recreational Uses

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In all alternatives, appropriate recreational uses would continue to be welcomed in the park. Activities that contribute to public understanding of park history and resources are appropriate. Activities that damage park resources would continue to be prohibited. Public activities would be systematically evaluated for appropriateness before they are allowed. Recreational visitors generally come from within the region and tend to visit frequently. During the GMP planning process, numerous frequent visitors have noted that they are hungry for more knowledge about the park, but that no interpretive programming is available to meet their needs. The NPS would develop and provide better information and special interpretation about park history, resources, and activities specifically targeted to these visitors.

## Traffic and Transportation

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In both action alternatives, vehicular traffic in the park would be managed to reduce the impacts of congestion and excessive speed on park resources and visitors. The following elements would be incorporated in Alternative C

- Through-traffic on public roads (PA Route 23 and PA Route 252) would be calmed, in partnership with state and local government. Commuters would continue to be able to use PA Route 23 and PA Route 252. In Alternative C, Gulph Road would be closed to private vehicles. (County Line Road will be closed as part of the Betzwood Bridge replacement project.)
- Park tour roads would be closed to private vehicular use. To access various sites throughout the park, visitors would use a transportation shuttle or would continue to walk or ride bicycles. Interpretive bus tours also would continue to be provided as long as they are financially feasible.

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**Parking Lots to Be Removed**

- *Tower*
- *Covered Bridge*
- *Lower Washington's Headquarters*
- *Upper Washington's Headquarters*
- *Conway's Brigade*
- *Huntingdon's Overlook*

**Parking Lots to be Added**

- *Yellow Springs Road at Walker Barn*
  - *Walnut Hill*
- 

- Six existing parking lots in the park would be closed and removed, and their landscapes restored. Two new parking lots would be added, and several additional lots would be reconfigured.
- Regional traffic congestion on local roads, including PA Route 23 through and beyond the park, would be reduced through construction of a half-diamond interchange at the intersection of Pawlings Road with US 422, offering ramps to and from the east, as proposed by the *Phoenixville Area Intermodal Transportation Study* (DVRPC 2003). The interchange would be located on land within the legislated park boundary. Existing Pawlings Road intersections would be improved, and the roadway would be widened between PA Route 23 and US 422 to allow for standard lane widths and bicycle lanes (shoulders). The Norfolk & Southern Railroad bridge over Pawlings Road would be raised to obtain the standard 14.5-foot clearance.

In both action alternatives, the NPS would continue to support the future implementation of the SVM - a light rail system to be established between Philadelphia and Reading. Part of the right-of-way on which the line would run is in the park. The historic Valley Forge Park train station in the Port Kennedy - within walking distance of the Welcome Center - would be re-opened for visitor use only. Limited parking would be available, and the station would not be available for commuter use.

### 2.7.3 Mission Goal: Ensure Organizational Effectiveness

#### Partnerships and Staffing

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Valley Forge NHP wishes to work with volunteers and partners to preserve the park, enhance the experiences of park visitors, and build a community dedicated to conserving the park for the future. Partnerships would be undertaken to support education, sponsor historical and scientific research about park resources, restore native habitats, rehabilitate historic structures, and create exhibits and publications.

In both action alternatives, the role of park staff and the way they accomplish their objectives would change from current practices. The park would move away from the traditional model in which NPS employees themselves implement all objectives, to a model in which NPS employees take on the role of facilitator. In this model, the park could more effectively take advantage of abundant outside resources such as volunteers, partners, and grants. Rather than “doing it by ourselves,” each staff member would be enabled to multiply his effort through outreach. During this GMP process, the park repeatedly heard from partners, volunteers, and the community that they want opportunities to participate more actively in conserving the park. Organizing the staff to enable this would create a cadre of stewards at every level - people and organizations that, through participation, would move from interest to understanding to caring to advocacy. This could be the single most important action in integrating the park in the community. Such reorganization would promote strengthening of existing partnerships and cultivation of additional partnerships in all operational areas.



In each of the action alternatives, park staff would be reorganized to better facilitate outreach, partnerships, and contributions by volunteers, such as this AmeriCorps crew.

In both action alternatives, a stronger volunteer program would be important, and staff person would be added to support the recruitment and management of volunteers. This person also would develop and manage additional sources of support, such as interagency agreements and grants.

In Alternative C, no additional interpretive and educational staff would be required. The expanded interpretive mission of the park would be met by using partners and volunteers more strategically, and by giving existing staff a greater role in facilitating this. In both action alternatives, as attrition occurs, the existing complement would be adjusted to include fewer permanent full-time interpretive rangers and more term and seasonal park guides.

Visitation would not be expected to increase substantially under the action alternatives, so no law enforcement rangers would be added to the staff. As attrition occurs, the existing complement would be adjusted to include fewer permanent full-time law enforcement rangers and more seasonal and term law enforcement rangers. One law enforcement specialist (investigation) would be added and shared with Independence NHP.

In both action alternatives, the likely leasing of many buildings in the park and the phasing out of the use of buildings as quarters for park staff would greatly reduce the demand for maintenance of the buildings by park staff. As leasing proceeds, maintenance positions would be reduced through attrition. Additionally, as attrition occurs, the existing complement would be adjusted to include fewer permanent full-time staff and more seasonal and subject-to-furlough staff. In the near-term, however, the stabilization of buildings to be leased would require additional maintenance positions.



In 2006, the park implemented a Core Operations Analysis intended to move toward an objective of reducing labor costs as a percentage of the appropriated budget. Such analyses enable parks to focus resources on priorities, achieve the most effective and efficient operations, stimulate creative management, and link expenditures to annual and long-term goals. With a goal of reallocating up to 11% of base funds to top priorities, the park will seek to achieve personnel services and fixed costs equal to or below 80% of base funds, in order to ensure a sustainable operation. As attrition occurs, each open position would be evaluated against this standard.

See Appendix H for a comparison of staffing by alternative.

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### **Fees**

In both action alternatives, to help meet the preservation and interpretation mission, the park would move from the collection of a fee for visiting Washington's Headquarters to a park-wide fee charged to all visitors. Options would be evaluated for a fee structure that would provide reasonable fees, and that would fairly accommodate not only once-in-a-lifetime visitors, but also frequent visitors.

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### **Buildings**

The NPS owns and must care for a number of buildings that do not contribute to the National Register significance of the park. In both action alternatives, those that are not needed or suitable and feasible for interpretive or park operations, or for visitor-services or leasing, would be demolished.

In both action alternatives, in accordance with service-wide housing policy, the park's structures would be used for employee quarters only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitional or seasonal staff, volunteers, or essential cooperators); or sustains a historic structure for which there is no other feasible use. See Appendix D for treatment and uses of all park buildings.

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### **Operational Facilities**

In Alternative C, the Maintenance Facility would be removed from the center of the Grand Parade, which is the park's core historic area. A new facility would be constructed within the Park Support Zone, well screened from public view. The Ranger Station would be moved out of the encampment-period Mordecai Moore House and co-located with the Maintenance Facility or established within the current theater.

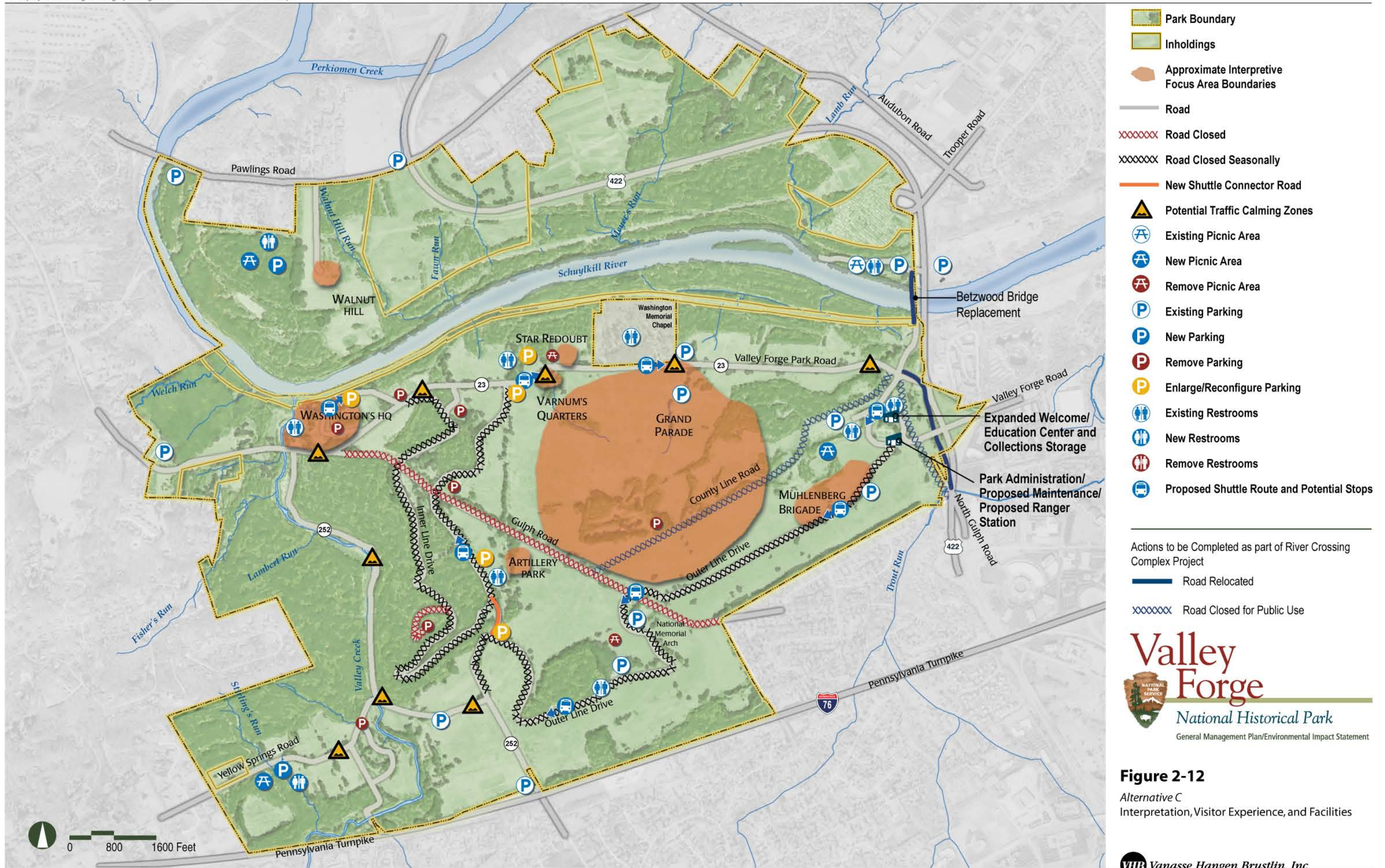
For details of Alternative C, please see Table 2-8 located at the end of this chapter. Figure 2-12 depicts important features.

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## **2.8 Cost Comparison**

Table 2-4 presents a summary of the annual recurring and capital investments for each alternative. Annual recurring costs include personnel and non-labor costs, such as utilities, vehicles, travel, and supplies. One-time, capital investments, on the other hand, include construction, exhibits, research, and planning. The capital investments listed for Alternative A, \$54,527,000, include the FY 2006 funded projects (\$722,000) and all deferred maintenance projects (\$53,805,000). Costs for deferred maintenance were determined using information from the NPS asset management system. These











capital investments are also included in the capital investments shown for Alternatives B and C. Therefore, the additional capital investments proposed under Alternative B would range from \$31,218,000 to \$43,295,000, while Alternative C would range from \$61,321,000 to \$85,044,000. Additional capital investments include new facility construction and/or facility rehabilitation, natural and cultural resource management investments (such as filling the quarries to their historic contours and forest/meadow rehabilitation), new interpretive features and waysides, removal of underused roads and parking lots, and circulation enhancements. Appendix H provides a detailed breakdown of the additional capital costs and how total costs were generated.

As noted on Table 2-4, these additional investments have the potential to be funded through partnerships or through shared funding with other governmental agencies; therefore, the full costs would not be borne by the NPS. Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.

**Table 2-4 Cost Summary**

	<b>Alternative A: No-Action</b>	<b>Alternative B</b>	<b>Alternative C: NPS Preferred Alternative</b>
<b>Range of Annual Recurring Costs</b>	\$5,734,000	\$5,882,000 to \$6,208,000	\$5,808,000 to \$6,130,000
	<ul style="list-style-type: none"> <li>▪ FY06 Operations Costs (\$5,660,000).</li> <li>▪ Includes personnel services for 71 FTE and non-labor costs such as utilities, vehicles, travel, and supplies.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes personnel services for 73 FTE and non-labor costs such as utilities, vehicles, travel, and supplies.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes personnel services for 72 FTE and non-labor costs such as utilities, vehicles, travel, and supplies.</li> </ul>
<b>Range of Initial One-time Costs</b>	\$54,527,000	\$85,745,000 to \$97,822,000	\$115,849,000 to \$139,571,000
	<ul style="list-style-type: none"> <li>▪ Includes construction, exhibits, research, and planning.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some projects have the potential to be funded through partnerships or through shared funding with other governmental agencies. Full costs are indicated on this chart; however, full costs would not be borne by the NPS.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some projects have the potential to be funded through partnerships or through shared funding with other governmental agencies. Full costs are indicated on this chart; however, full costs would not be borne by the NPS.</li> </ul>
<b>Total Life-cycle Costs over the Life of the Plan (per year)</b>	\$10,413,000	\$13,240,000 to \$14,602,000	\$15,749,000 to \$18,106,000
	<ul style="list-style-type: none"> <li>▪ Includes total maintenance operations, personnel, and capital costs over 25 years, expressed in present worth.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes total maintenance operations, personnel, and capital costs over 25 years, expressed in present worth.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes total maintenance operations, personnel, and capital costs over 25 years, expressed in present worth.</li> </ul>

**Notes:**

- 1 These costs were developed in May 2006 and represent contemporary dollars rounded to the nearest thousand.
- 2 Annual recurring costs were developed using annualized labor, non-labor, and other cyclic expenses adjusted for the instant locality.
- 3 One-time initial costs are based on the DSC "Class C" estimating guide, and include factors of 18% to 40% for overhead and profit, 15% to 30% for design contingency, 4% to 20% for general conditions, a regional location factor of 1.0, and a park location factor of 1.0.
- 4 One-time costs include information from the NPS asset management system about the deferred maintenance for facilities and assets in the park. These costs are included in all proposed alternatives, including Alternative A.
- 5 Life-cycle costs were developed using the NPS Construction Management LLC template, which assumes a discount rate of 7% and a project life cycle of 25 years.
- 6 These cost estimates are very general and are intended to be utilized for a comparison of alternatives. They are not intended to be utilized for budget formulation.
- 7 Approval of the GMP does not authorize funding for the proposals. Funding must be sought through NPS budget processes and potential outside sources such as grants and partnerships.
- 8 Actions directed by GMPs or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities prevent the immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future, or may not be realized.

## 2.9 Ideas Considered but Dismissed from Further Analysis

In addition to the transportation options described in Section 2.2.3: Transportation Framework that were considered but dismissed, a number of ideas were raised by the public or planning team during the scoping process that were considered but ultimately not pursued. They were dismissed because they would have posed unacceptable adverse impacts to park resources, or because they would not have met the requirements of law and policy that pertain to units of the national park system. These ideas, and the reasons why they were not incorporated into the alternatives presented in this GMP, are described below.

***Restoration of the park's landscape to its 1777-78 conditions*** was proposed as an aid to interpretation. There are a number of reasons why this idea was not pursued. By policy, reconstruction of a historic feature in a national park can only take place when there is detailed documentation of the historic appearance and condition of the feature. There is one contemporaneous map of the encampment, and a number of diaries describe conditions in part. There are no drawings, however, and of course, no photographs. Although it is possible to surmise what the encampment came to look like, the level of documentation that would meet the test for reconstruction does not exist.

Nor would it be possible to achieve a successful restoration. We know that by the spring of 1778, all trees had been cut down within a radius of many miles, and the timber used for huts, cooking, and warmth. Views from the encampment extended for miles across the landscape beyond. The loss of the park's trees today would reveal not miles and miles of farmland, but instead the modern development that now extends to the park's boundary.

Reconstruction also would result in unacceptable environmental impacts. The park's forests provide valuable habitat that is increasingly rare in this highly urbanized region.

Finally, there are non-impacting alternatives to full restoration that can aid interpretation. These options are incorporated into this GMP's alternatives.

***Commemorative development of the park's north side*** was proposed. Some scoping participants felt that developing the north side to resemble the south side would help to unify the two sides, and would help the public understand that the north side is part of Valley Forge NHP. This idea was not pursued for two reasons.

First, development as a commemorative landscape would involve unacceptable environmental impacts, including large-scale clearance of forests, and the addition of impervious surface through tour roads and parking lots.

Second, there are non-impacting alternatives to achieve the objectives of unification and identification. These options are incorporated into this GMP's alternatives.

***Development of some park lands for active, local recreation*** was proposed, such as ball fields. This proposal was not pursued because it contradicts the congressional purpose for which the park was established: to preserve and interpret the resources associated with the 1777-78 encampment.



## 2.10 Environmentally Preferred Alternative

The Environmentally Preferred Alternative is defined by the CEQ as “the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act [Section 101(b)].” Section 101(b) defines six criteria for an Environmentally Preferred Alternative (listed below). Generally, the Environmentally Preferred Alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources. Each criterion is presented below, followed by a discussion of how well the proposed alternatives meet each one.

1. ***Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.*** The goal of the NPS at all units is to serve as trustees of the environment for future generations. Under the No-Action Alternative, historic structures within the park would be preserved as is, and long-term, adverse impacts would result from continued inappropriate use and deferred maintenance as staff and funding diminished. The NPS would preserve as is the natural resources within the park. Exotic invasive species and white-tailed deer would continue to threaten biodiversity within the forests and meadows, which could lead to the ultimate loss of the forests, as they are unable to regenerate. This would also lead to a deterioration of existing cultural landscape patterns.

Alternatives B and C would enhance the park’s ability to meet this criterion by stabilizing, preserving, and rehabilitating historic structures, as well as portions of the cultural landscape. The health of the forests and meadows would be enhanced through active management and environmental restoration. While both action alternatives would also rehabilitate interpretive focus areas within the cultural landscape, Alternative C would fill the quarries within the Grand Parade (except Cave Quarry) to their historic contours, thus removing this intrusion from the cultural landscape and enhancing understanding.

2. ***Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.*** Under the No-Action Alternative, the park would strive to provide safe, healthful, productive, and aesthetically pleasing surroundings for its visitors. However, the landscape itself would not be rehabilitated to enhance visitor understanding and experience of the site and the health of the forests and meadows would be at stake. Visitors who come to the site for understanding and appreciation of the surroundings would eventually notice a visual deterioration of these resources. Alternative A would not implement new traffic congestion management initiatives, so conflicts between vehicles, bicycles, and pedestrians would remain.

Alternatives B and C would take steps to improve the safety and aesthetics at Valley Forge NHP. As natural and cultural resource management improved so would visitor enjoyment and understanding of the site. Alternative C would also include the rehabilitation of historic views, further enhancing the aesthetics at the site. Through-traffic on public roads would be calmed, thus improving safety at hazardous intersections and crosswalks. Alternative C would take traffic improvements one step further by closing

some roads to visitor and through-traffic, eliminating safety conflicts between vehicles and pedestrians/bicycles. Both action alternatives would also enhance existing trail systems throughout the park, closing personal trails and separating pedestrians from bicycles, in some locations.

3. ***Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.*** Currently at Valley Forge NHP, the resources within the park are used by both interpretive and recreational visitors, with recreational visitors making up approximately 80% of visitation. Under Alternative A, heavy recreational use of the park would continue in sensitive natural and cultural resource areas, threatening resources such as historic structures, cultural landscapes, archeological resources, surface waters, wetlands, vegetation, and wildlife. Under the action alternatives, improved management of cultural and natural resources would provide protection and minimize the degradation caused by visitor use. The existing trail system within the park would be enhanced by closing personal trails through sensitive areas and providing improved options for users. Completing trail loops and connections with regional trail networks would remove some recreational users from within the historic core, protecting these resources and improving the experience for interpretive visitors.
4. ***Preserve important historical, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.*** The mission of the NPS, as identified in the Organic Act, is to, “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (16 USC I). Under Alternative A, the NPS would continue current management of the cultural and natural resources at Valley Forge NHP, basically preserving as is the resources as funding and staffing allow. This limited management of resources could lead to the loss of significant historic structures, as well as the deterioration of forest and meadow health. Heavy, unmonitored recreational use of the park would be supported by this management; however, as resources deteriorated, visitors coming to the park to enjoy the historic resources would diminish. The action alternatives would improve the management of cultural and natural resources by working closely with partners and other agencies and focusing time and money on those areas that are in need of immediate assistance.
5. ***Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life’s amenities.*** The NPS strives to achieve a balance between population and resource use at Valley Forge NHP. With regards to visitor population and carrying capacities of the site, Valley Forge NHP would continue to meet this criterion under all the alternatives. However, for natural resources, the balance between population and resource use would deteriorate under the No-Action Alternative as the deer population continued to rise, along with the numbers of exotic invasive plants. Both action alternatives would meet this criterion by enhancing the health of the forests and meadows through active environmental restoration and determining a healthy balance between the deer and the habitats they use.

6. ***Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.*** Under Alternative A, the No-Action Alternative, no changes would be made to current management of cultural and natural resources, which could result in loss of some historic structures, as well as the current patterns of forest and meadow. Thus, this alternative would not meet this criterion. Both action alternatives would improve the management of these resources, further protecting them from loss. The health of the forests and meadows would greatly improve.

Although each of the alternatives meets the above criteria to some degree, Alternative C surpasses the other alternatives in fulfilling the criteria outlined in NEPA Section 101(b). Overall, both action alternatives would result in adverse and beneficial impacts to resources within the park. However, Alternative C would rehabilitate portions of the cultural landscape to 18th century conditions, and it would fill the quarries within the Grand Parade, removing a physical intrusion to the understanding of the encampment landscape. Alternative C would implement traffic management initiatives beyond traffic calming by closing some public roads to visitor and through-traffic. Taking all of this into consideration, and balancing the impacts to natural and cultural resources and the population, Alternative C best meets the criteria for the environmentally preferred alternative. Alternative C is also identified as the NPS Preferred Alternative.

Table 2-5 provides a summary of the environmental consequences related to each alternative, and Chapter 4: Environmental Consequences details the impacts summarized in Table 2-5.



Table 2-5      Summary of Environmental Consequences

\*For a detailed description of environmental impacts, please see Chapter 4: Environmental Consequences.

Affected Environment		Alternative A: No-Action	Alternative B	Alternative C: NPS Preferred
Cultural Resources	<i>Cultural Landscapes</i>	Overall impact would be long-term, minor, beneficial; and long-term, major, adverse.	Overall impact would be long-term, minor to major, beneficial; and long-term, major, adverse.	Overall impact would be long-term, minor to major, beneficial.
	<i>Historic Buildings and Structures</i>	Overall impact would be long-term, minor to major, adverse.	Overall impact would be long-term, minor to major, beneficial; and long-term, major, adverse.	Same as B.
	<i>Archeological Resources</i>	Overall impact would be long-term, negligible to moderate, adverse.	Overall impact would be long-term, minor to moderate, adverse; and long-term, moderate to major, beneficial.	Same as B.
	<i>Archives and Collections</i>	Overall impact would be long-term, minor to moderate, adverse.	Overall impact would be long-term, moderate to major, beneficial.	Same as B.
Physical and Natural Resources	<i>Topography and Geologic Resources</i>	Overall impact would be long-term, minor, adverse.	Overall impact would be long-term, minor, beneficial.	Overall impact would be long-term, moderate, adverse; and long-term, moderate, beneficial.
	<i>Soils</i>	Overall impact would be short-term, minor, adverse; long-term, moderate, beneficial; and long-term, moderate, adverse.	Same as A.	Overall impact would be short-term, minor, adverse; long-term, minor, adverse; and long-term, moderate, beneficial.
	<i>Surface Waters and Groundwater</i>	Overall impact would be long-term, minor, adverse.	Overall impact would be long-term, moderate, beneficial.	Same as B.
	<i>Floodplains</i>	Overall impact would be long-term, moderate, beneficial; and long-term, moderate, adverse.	Overall impact would be long-term, moderate, beneficial.	Same as B.
	<i>Wetlands</i>	Overall impact would be long term, minor, adverse.	Overall impact would be long-term, moderate, beneficial; and long-term, minor, adverse.	Same as B.
	<i>Vegetation</i>	Overall impact would be long-term, major, adverse.	Overall impact would be short-term, minor, adverse; and long-term, major, beneficial.	Overall impact would be short-term, moderate, adverse; and long-term, major, beneficial.
	<i>Wildlife</i>	Overall impact would be long-term, major, adverse.	Overall impact would be long-term, major, beneficial.	Same as B.
	<i>Air Quality</i>	Overall impact would be long-term, minor, adverse.	Overall impact would be long-term, minor, beneficial; and long-term, minor, adverse.	Overall impact would be short-term, minor, beneficial; short-term, minor, adverse; long-term, moderate, beneficial; and long-term, minor, adverse.
	<i>Soundscapes</i>	Overall impact would be negligible.	Overall impact would be long-term, minor, beneficial; and long-term, minor, adverse.	Same as B.
	<i>Lightscapes</i>	Overall impact would be long-term, moderate, adverse.	Overall impact would be long-term, moderate, beneficial.	Same as B.
Visitor Use and Experience		Overall impact would be long-term, moderate, adverse.	Overall impact would be long-term, moderate, beneficial.	Overall impact would be long-term, major, beneficial.
Socioeconomic Environment		Overall impact would be long-term, negligible, beneficial.	Overall impact would be long-term, negligible to minor, beneficial.	Same as B.
Transportation and Site Access		Overall impact would be long-term, major, adverse.	Overall impact would be long-term, minor, beneficial (inside park); and long-term, major, adverse (outside park).	Overall impact would be long-term, major, beneficial (inside park); and long-term, major, adverse (outside park).
Park Operations and Facilities		Overall impact would be long-term, moderate, adverse.	Overall impact would be short-term, moderate, adverse; and long-term, major, beneficial.	Same as B.

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## **2.11 Detailed Management Objectives and Appropriate Actions**

The following tables detail the proposed management objectives and potential actions for each alternative described above (Alternatives A, B, and C).



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**Table 2-6 Alternative A: No-Action Alternative**

<b>Overall Concept</b>	<p>This alternative assumes continuation of current policies and associated actions. It retains the management direction of the 1982 GMP and reflects current conditions. Some initiatives that are already underway as of this printing, such as rehabilitation of the Valley Forge Train Station by NPS and construction of the River Crossing Complex by PennDOT, are reflected in this alternative.</p> <p>The visitor experience is unchanged, and comprises self-guided travel through a landscape that is difficult to understand and that has few interpretive exhibits or programs.</p> <p>The landscape is unchanged and continues to largely reflect the state-park commemorative era on the south side and a modern agricultural and old-field landscape on the north side.</p> <p>Natural Resources continue to be minimally managed.</p> <p>No new traffic congestion management initiatives are undertaken.</p> <p>Staff responsibilities for meeting the park mission of preservation and interpretation remain as is. No new partnership initiatives are undertaken.</p>
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**Examples of Appropriate Actions That May Result from Management Objectives**

**Management Objectives**

**Mission Goal: Preserve Park Cultural and Natural Resources**

Park-wide	1	Managers make decisions about resource management and protection based on professional studies and adequate planning that are consistent with applicable policies and regulation.	<ul style="list-style-type: none"> <li>■ Prepare historic resource studies and archeological studies and other work as needed as foundations for preservation and stabilization.</li> </ul>
Park-wide	2	Sustainable design and construction methods, techniques, and materials are used.	<ul style="list-style-type: none"> <li>■ Consider the viability of seeking LEED certification (at some level) when rehabilitating existing structures and facilities.</li> </ul>
Park-wide	3	Boundary and land acquisition strategy is sufficient to protect the nationally significant qualities of the park.	<ul style="list-style-type: none"> <li>■ Acquire key remaining lands within the authorized boundary, including the Saint Gabriel's field and Valley Forge Crossing.</li> <li>■ Survey and review the existing utility and road easements to ensure that significant resources are protected.</li> </ul>
Park-wide	4	Encampment-period earthworks and fortifications are stabilized.	<ul style="list-style-type: none"> <li>■ Record the positions of earthworks through global positioning.</li> <li>■ Maintain tall grass cover to prevent erosion and discourage trampling.</li> </ul>
Park-wide	5	Encampment-period buildings are preserved in their current conditions. They continue to be used for interpretation, visitor services, park offices, or staff quarters or remain vacant.	<ul style="list-style-type: none"> <li>■ Continue to manage Washington's Headquarters, the David Potts House, the Washington Stable, the Potts Barn, and Varnum's Quarters as fully restored structures used as house museums, or for interpretive exhibits.</li> <li>■ Pawling mansion and the Springhouse continue as ruins.</li> </ul>
Park-wide	6	All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park and would be stabilized.	

**Table 2-6 Alternative A: No-Action Alternative (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>		
Park-wide	7 Post-encampment-period historic buildings are maintained in their current conditions. They continue to be used for interpretation, visitor services, park offices, or staff quarters, or remain vacant.	<ul style="list-style-type: none"> <li>Develop historic preservation agreements with owners of historic buildings within the park boundary to protect the significant qualities of the buildings.</li> <li>See Appendix D for complete list of buildings.</li> </ul>
Park-wide	8 Archeological sites and resources are managed as is.	<ul style="list-style-type: none"> <li>Minimal surveillance is used to prevent “pot hunting.”</li> </ul>
Park-wide	9 The significant Revolution-era collections of Valley Forge NHP continue to be housed in multiple buildings, some with inadequate conditioning; and are rarely available for research. No connections are made with other Revolution-era collections.	<ul style="list-style-type: none"> <li>Develop a Collections Storage Plan that considers the best options for protection of and accessibility to the collection.</li> <li>Continue to compete with all other units of the national park system for limited funding to upgrade existing facilities or relocate to an off-site facility.</li> </ul>
Park-wide	10 Historic monuments are preserved in good condition.	<ul style="list-style-type: none"> <li>Continue to work with existing sponsors of historic monuments.</li> </ul>
Park-wide	11 No new monuments are added to the park.	<ul style="list-style-type: none"> <li>No actions under Alternative A.</li> </ul>
Mixed Resource Zone/ Encampment Commemorative Zone/ North Side Zone	12 Biological resources continue to be minimally managed.	<ul style="list-style-type: none"> <li>Complete identification of park Vital Signs for naturally occurring communities.</li> <li>Continue to eradicate exotic invasive plants in selected locations as funding is available.</li> <li>Continue to monitor sensitive habitats associate with state-listed rare, threatened, or endangered species to protect the viability of the species population.</li> </ul>
Park-wide	13 The park participates in promoting measures to protect and enhance air quality in the Philadelphia airshed in order to mitigate the harmful effects of air pollution on natural and cultural resources, scenic vistas, and the health of visitors within the park.	<ul style="list-style-type: none"> <li>Identify and mitigate causes of air pollution impacts within the park.</li> <li>Continue to link to regional trails and information systems in order to encourage visitors to come to the park on foot or by bicycle.</li> <li>Continue to work with SEPTA and the GVFTMC to promote public transportation to the park.</li> <li>Limit use of gasoline-powered equipment on high pollution days.</li> </ul>



**Table 2-6 Alternative A: No-Action Alternative (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>		
Park-wide	14 The park participates in measures to protect the water quality in Valley Creek.	<ul style="list-style-type: none"> <li>■ Continue to work with the Valley Creek Restoration Partnership to implement the restoration plan for the creek.</li> <li>■ Continue to work with PennDOT to implement long-term stream bank stabilization solutions for Valley Creek.</li> </ul>
Park-wide	15 Hydrologic flows in the park are little changed.	<ul style="list-style-type: none"> <li>■ Remove current dams only if they become breached and irreparable.</li> <li>■ As new construction occurs, manage stormwater to promote the natural infiltration of precipitation into groundwater.</li> <li>■ Continue to work with organizations and jurisdictions that influence management of waters upstream of the park to protect against damaging storm surges.</li> </ul>
Park-wide	16 The park's caves and karst features are maintained as is.	<ul style="list-style-type: none"> <li>■ Caves continue to be closed to general use.</li> <li>■ Cease filling sinkholes unless an important structure is threatened or in cases in which human safety cannot be protected by any other means.</li> </ul>
Park-wide	17 Landscapes in the park are little changed. In cases where artificial lighting is replaced or added, it is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.	<ul style="list-style-type: none"> <li>■ Use minimal impact lighting techniques where artificial lighting is required.</li> </ul>
Park-wide	18 Man-made intrusions on soundscapes in the park are little changed.	<ul style="list-style-type: none"> <li>■ Improve vegetative or other buffers adjacent to the PA Turnpike and US 422 as the roads are widened.</li> </ul>
Park-wide	19 Rights-of-way are maintained as is.	
Encampment Commemorative Zone/Interpretive Focus Zone	20 Meadows continue to be minimally managed.	<ul style="list-style-type: none"> <li>■ Continue to manage through annual mowing.</li> <li>■ Continue to use mowing to indicate historic field boundaries.</li> </ul>
Encampment Commemorative Zone/Interpretive Focus Zone	21 The quarries at the center of the Grand Parade would be left as is.	

**Table 2-6 Alternative A: No-Action Alternative (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)	22 No changes are made to the landscape at the six key interpretive sites (Muhlenberg's Brigade, the Grand Parade, Washington's Headquarters, Artillery Park, the Star Fort/Varnum's Quarters areas, and Walnut Hill). The major features of the cultural landscape-the terrain, the patterns of open vs. wooded land; and circulation, including public roads and major trails-are maintained as is.	
	23 The major features that characterize the cultural landscape—the terrain, the patterns of open vs. wooded land, the encampment-period circulation system, the state park-era tour road and trail system, and commemorative plantings and structures—are maintained as is. Small scale features that contribute to the National Register significance of the park are maintained as is.	<ul style="list-style-type: none"> <li>■ Retain existing wooded areas; do not re-establish views through the wooded areas.</li> <li>■ Do not replace pine plantations as they die, as they are not considered to be National Register contributing features.</li> <li>■ Continue to delineate historic farm boundaries through mowing and preservation.</li> <li>■ Maintain circulation on current roads and trails.</li> <li>■ Maintain as is such features as berms and hedgerows that indicate historic property lines and commemorative features added during the state-park era, including reproduction huts and fences, outbuildings, and ornamental features associated with post-encampment farmsteads.</li> </ul>
Mixed Resources Zone	24 The major features of the cultural landscape—the terrain; the patterns of open vs. wooded land; circulation, including public roads and major farm and estate roads; and major trails—are maintained as is. Small scale features that contribute to the National Register significance of the park are maintained as is.	<ul style="list-style-type: none"> <li>■ Retain existing wooded areas; do not re-establish views through these areas.</li> </ul>
North Side Zone	25 The major features of the cultural landscape-the terrain; historic structures; and circulation, including towpath, farm roads, and major trails-are maintained as is.	<ul style="list-style-type: none"> <li>■ The siltation ponds continue to be unmanaged.</li> <li>■ Continue to manage Fatlands field through agricultural leasing.</li> <li>■ Allow Fuller field and former Waggonseiler field (south of US 422) to continue to progress from old field conditions to forest.</li> <li>■ Complete a cultural landscape history and treatment plan for the newly acquired Waggonseiler property north of US 422.</li> </ul>

Table 2-6 Alternative A: No-Action Alternative (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park</b>		
Park-wide	26 Visitors explore the site with little interpretive guidance.	<ul style="list-style-type: none"> <li>■ No new programs, tools, or events are offered.</li> </ul>
Park-wide	27 Interpretation in the park emphasizes the encampment. No other events or periods in the history of Valley Forge, or natural resource themes, are interpreted.	<ul style="list-style-type: none"> <li>■ Continue existing interpretation of encampment through limited ranger programs and Welcome Center exhibits.</li> <li>■ Retain current self-guided tour.</li> </ul>
Park Support Zone	28 No changes are made to the Welcome Center.	
Park-wide	29 There is little connection between the thematic messages introduced in the Welcome Center and experiences in the park.	<ul style="list-style-type: none"> <li>■ The self-guided auto-tour continues to be the primary interpretive experience.</li> <li>■ No new programs or interpretive media are available in the park.</li> </ul>
Park-wide	30 Visitor movement through and experience of the landscape and resources contribute minimally to understanding the park's interpretive themes.	<ul style="list-style-type: none"> <li>■ The self-guided auto tour continues to be the primary interpretive experience.</li> <li>■ The topography, strategic layout of the encampment, and relationship to historic and current natural resources are not explained as a basis for visitor understanding.</li> <li>■ No new programs or interpretive media are available in the park.</li> </ul>
Interpretive Focus Zone	31 Current interpretation continues at the key interpretive sites (Muhlenberg's Brigade, the Grand Parade, Artillery Park, Washington's Headquarters, the Star Fort/Varnum's Quarters areas, and Walnut Hill).	<ul style="list-style-type: none"> <li>■ Continue to interpret most key sites through limited wayside exhibits.</li> <li>■ Continue to provide seasonal programming at Muhlenberg's Brigade.</li> </ul>
Park-wide	32 Park-wide, the landscape is maintained as is. No new interpretive tools are available to clarify the landscape or to convey historic conditions.	<ul style="list-style-type: none"> <li>■ Continue to provide no explanation of the sequential layers of historic landscape that are visible to visitors.</li> </ul>
Park-wide	33 Reconstructed earthworks and fortifications are stabilized.	
Encampment Commemorative Zone/Interpretive Focus Zone	34 Views among redoubts are not re-established.	
Park-wide	35 All huts in the park are reconstruction. Two of them contribute to the National Register significance of the park. The rest are interpretive exhibits and would be managed as ephemeral exhibits.	



**Table 2-6 Alternative A: No-Action Alternative (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park</b>		
Park-wide	36 Educational opportunities continue to be limited in scope and availability.	<ul style="list-style-type: none"> <li>■ Few educational programs and times are available.</li> <li>■ Little work with partners is accomplished.</li> </ul>
Park-wide	37 Only a small amount of the park's collection is displayed.	<ul style="list-style-type: none"> <li>■ Continue to use Welcome Center for display of collections.</li> <li>■ Continue to provide no educational programs using the collections.</li> </ul>
Park-wide	38 Existing modern visual and auditory intrusions continue.	<ul style="list-style-type: none"> <li>■ Work with neighboring townships to ensure new construction is adequately screened.</li> </ul>
Park-wide	39 Park visitors cannot easily find out about other related historic sites and districts within the area.	<ul style="list-style-type: none"> <li>■ No new partnership initiatives are undertaken.</li> </ul>
Park-wide	40 Natural resource education is available only through private programs.	<ul style="list-style-type: none"> <li>■ Continue to allow organizations such as the Great Valley Nature Center and the YMCA to present fee-based programs in the park.</li> </ul>
Park-wide	41 Visitors enjoy a safe and secure experience at Valley Forge NHP.	<ul style="list-style-type: none"> <li>■ Ensure all park facilities and structures are maintained according to applicable regulations for use as visitor facilities.</li> <li>■ Mitigate health and safety risks of all facilities and structures according to a comprehensive integrated pest management plan and program.</li> <li>■ Complete an implementation plan/engineering study that sets priorities and methods for asbestos remediation.</li> <li>■ Complete the CERCLA process for the asbestos release site so public and environmental health is protected, and there is full public use of the park.</li> </ul>
Park-wide	42 Prospective visitors are able to obtain timely and relevant information to help in trip planning and travel to the park.	<ul style="list-style-type: none"> <li>■ Continue to update the park website only on a sporadic basis.</li> <li>■ Continue to work with Valley Forge Visitors and Convention Bureau sporadically to develop and distribute information on facilities and activities at the park and related sites.</li> <li>■ Request that PennDOT and the PA Turnpike Commission provide adequate and accurate directional signage on highways.</li> <li>■ Depend on other agencies to improve the content and availability of bike and hiking information available to visitors on the web, in printed materials, and at trailheads.</li> </ul>
Park-wide	43 No new visitor services or facilities are added.	<ul style="list-style-type: none"> <li>■ Maintain existing visitor services and facilities.</li> </ul>

Table 2-6 Alternative A: No-Action Alternative (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)		
Park-wide	44 The existing collection of trails is unchanged.	<ul style="list-style-type: none"> <li>■ No new trails are established or authorized.</li> <li>■ Evaluate existing authorized trails for accessibility and ensure appropriate level of accessibility to the extent possible.</li> <li>■ No improvements are made at trailheads.</li> <li>■ Eliminate the currently authorized and unauthorized trails that are unsustainable and/or that damage cultural or natural resources.</li> <li>■ Improve the content and availability of trail information available to visitors on the web, printed materials, and at trailheads.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> </ul>
Park-wide	45 Bicycles continue to share the tour roads with private vehicles.	
Interpretive Focus Zone	46 Active recreation continues to interfere with the key interpretive sites.	<ul style="list-style-type: none"> <li>■ Facilities that encourage recreational use, such as the multi-purpose trail, remain as is.</li> </ul>
Park-wide	47 Appropriate recreational use continues to be welcomed. All public activities are systematically evaluated for appropriateness before they are allowed.	<ul style="list-style-type: none"> <li>■ Use <i>NPS Management Policies</i> criteria to evaluate if and when uses are compatible with resource protection.</li> <li>■ Cooperate with local organizations and governments to find alternative locations for incompatible events.</li> <li>■ Continue to prohibit uses that damage park resources and/or do not contribute to public understanding of park history and resources.</li> </ul>
Park-wide	48 Pedestrian and bicycle access to the park is unchanged. There are no new connections to existing and future trails outside the park.	<ul style="list-style-type: none"> <li>■ Continue to work with Montgomery County on management of parking, signage, and user information for the Schuylkill River Trail.</li> <li>■ Strengthen relationship with Horseshoe Trail Coalition to address issues of signage, authorized use, and user information.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> </ul>
Park-wide	49 No traffic management initiatives are undertaken. No changes are made to the uses of public or park roads.	<ul style="list-style-type: none"> <li>■ VFATPS park options are not implemented.</li> <li>■ Continue to support implementation of the Schuylkill Valley Metro.</li> </ul>

**Table 2-6 Alternative A: No-Action Alternative (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b> Park Support Zone	50	<p>Visitors continue to be confused by eleven different park entrances. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. The park entrance sign would be shifted, but no new landscaping or redesign of the entry road would take place.</p> <ul style="list-style-type: none"> <li>■ The poorly marked and confusing primary park entrance is unchanged.</li> </ul>
	51	No new interchanges are proposed.
	52	NPS would continue to support implementation of the proposed Schuylkill Valley Metro. The park's Port Kennedy station would not be re-opened.
	53	The north side of the park is managed as is and no physical connections to the south side are established.
	54	The River Trail, the Schuylkill River Trail, and the parking and support for the trailheads at Betzwood and Pawling's Road are maintained as is.
<b>Mission Goal: Ensure Organizational Effectiveness</b> Park-wide	55	<p>The complement of full-time-equivalent employees continues to drop as federal budgets remain flat or drop.</p> <ul style="list-style-type: none"> <li>■ In order to stay within declining federal budget, do not replace staff who leave or retire.</li> </ul>
	56	Staff responsibilities remain essentially as is.
	57	Existing park partnerships are maintained.
		<ul style="list-style-type: none"> <li>■ Continue to work with partners such as commonwealth agencies, the Schuylkill River National &amp; State Heritage Area, the two counties, and numerous private organizations on joint initiatives for cultural and natural resources education; long-distance trails management; and natural resources management, particularly in regard to themes and resources that extend beyond park boundaries.</li> <li>■ Continue to work with partners on initiatives to protect and restore the quality of the Valley Creek watershed.</li> <li>■ Continue to work with PennDOT, FHWA, DVRPC, Chester and Montgomery Counties, and the five townships to manage traffic congestion in and around the park.</li> </ul>

Table 2-6 Alternative A: No-Action Alternative (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness (Cont'd.)</b>		
Park-wide	58 The scope and contribution of volunteer programs in resource management, interpretation and visitor services, maintenance, and administration remains as is.	<ul style="list-style-type: none"> <li>Continue to work with SEPTA and GVFTMA to implement alternative transportation options that reduce traffic volume and congestion.</li> <li>Continue to work with current volunteers.</li> </ul>
Park-wide	59 No sources of funds other than appropriated funds and current revenues and donations are used.	
Park-wide	60 No new park fees are established.	<ul style="list-style-type: none"> <li>Visitors continue to pay a fee to enter Washington's Headquarters.</li> </ul>
Park-wide	61 The park's utilities infrastructure is updated only to correct failures.	
Park-wide	62 Park staff, volunteers, interns, contractors, and partners work in a safe and secure environment.	
Park-wide	63 Some non-contributing buildings for which there are suitable and feasible interpretive, visitor services, or park operational uses are maintained for continuing park use.	<ul style="list-style-type: none"> <li>Continue to use the YACC garage and the Fatlands garage for remote maintenance storage.</li> </ul>
Park-wide	64 The park housing program meets service-wide objectives: Buildings in the park are used for staff housing only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitory or seasonal staff, volunteers, essential cooperators); or sustains a historic structure for which there is no feasible use.	<ul style="list-style-type: none"> <li>Ensure that bi-annual housing plan includes strategies for continual reduction of the number of current housing units until this objective is met.</li> </ul>
Park Support Zone	65 The park maintenance facility remains on its site in the middle of the Grand Parade.	
Park Support Zone	66 The ranger station remains in the Mordecai Moore House.	



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**Table 2-7**      **Alternative B**

Overall Concept	Alternative B	
	<p>Alternative B provides an exciting palette of new options for visitors to tailor visits and experiences to best meet their own needs and interests. Experiences focus on exploration and self discovery of the full cultural and natural history of Valley Forge. Excellent orientation, as well as the use of new technologies are the key to this approach.</p> <p>The historic landscape is preserved as is, and the park is respected as a memorial landscape that has been commemorated in many ways over generations. “Layers” from all periods are sustained and actively interpreted through the use of technology and multimedia.</p> <p>The health of the forests and meadows is enhanced through active environmental restoration.</p> <p>Through-traffic on public roads is calmed, in partnership with state and local government. Commuters continue to use public roads, and visitors continue to use automobiles on the tour route and to access various sites throughout the park.</p> <p>To further achieve the park mission of preservation and interpretation, park staff are enabled to facilitate engagement of the community in the mission. Existing partnerships are strengthened and new partnerships are actively pursued.</p>	
Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources</b>  Park-wide	1      Managers make decisions about resource management and protection based on professional studies and adequate planning that are consistent with applicable policies and regulation (same as A).	<ul style="list-style-type: none"> <li>■ Prepare historic resource studies, archeological studies, implementation plans, and other work as foundations for preservation and rehabilitation of park resources.</li> <li>■ Revise the park’s strategic plan in accordance with the Final GMP.</li> <li>■ Prepare a Resource Stewardship Plan.</li> <li>■ Complete a Phase III cultural landscape treatment plan that implements the Final GMP.</li> <li>■ Monitor carrying capacity of natural and cultural resources.</li> <li>■ Plan, design, and implement an integrated long-term Vital Signs monitoring program.</li> </ul>
Park-wide	2      Sustainable design and construction methods, techniques, and materials are used (same as A).	<ul style="list-style-type: none"> <li>■ Assess current practices, facilities, and available resources for sustainable design and maintenance.</li> <li>■ Seek LEED certification (at some level) when rehabilitating existing structures and facilities.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>		
Park-wide	3 Boundary and land acquisition strategy is sufficient to protect the nationally significant qualities of the park (same as A.)	<ul style="list-style-type: none"> <li>■ Acquire key remaining lands within the authorized boundary, including the Saint Gabriel's field and Valley Forge Crossing.</li> <li>■ Survey and review the existing utility and road easements to ensure that significant resources are protected.</li> </ul>
Park-wide	4 Encampment-period earthworks and fortifications are stabilized and preserved.	<ul style="list-style-type: none"> <li>■ Record the positions of earthworks through global positioning.</li> <li>■ Keep earthworks clear of trees.</li> <li>■ Educate visitors about the significance and fragility of earthworks.</li> <li>■ Route trails and roads in ways that do not encourage climbing earthworks.</li> <li>■ Maintain tall grass cover to prevent erosion and discourage trampling.</li> </ul>
Park-wide	5 Encampment-period buildings are preserved as is. Some are restored or rehabilitated for interpretive purposes; while those for which there is no necessary and feasible interpretive or operational use are stabilized, preserved, and/or rehabilitated and available for visitor-service concessions and for leasing.	<ul style="list-style-type: none"> <li>■ As an example, continue to manage Washington's Headquarters and Varnum's Quarters as restored structures used as house museums.</li> <li>■ Remove the ranger station from the Mordecai Moore House.</li> <li>■ Complete a market analysis on suitable uses for buildings.</li> <li>■ Implement a park-wide concessions and leasing program.</li> <li>■ See Appendix D for full listing of buildings and treatments.</li> </ul>
Park-wide	6 All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park and would be preserved.	
Park-wide	7 Some post-encampment-period historic buildings are preserved or rehabilitated primarily for interpretive or visitor services purposes, while those for which there is no necessary and feasible interpretive or visitor services use are preserved or rehabilitated and available for concessions or for leasing, given that the determinations stipulated by 36 CFR 1/18.4 were made as part of the development of this GMP. Structures for which there is no feasible use are considered for demolition.	<ul style="list-style-type: none"> <li>■ As an example, rehabilitate the Maurice Stephens House (the site of Huntingdon's Quarters) to interpret activities on the Grand Parade.</li> <li>■ Complete a market analysis on suitable uses for these buildings.</li> <li>■ Stabilize suitable buildings in preparation for adaptive reuse.</li> <li>■ Implement a park-wide concessions and leasing program. Develop historic preservation agreements with owners of historic buildings within the park boundary to protect the significant qualities of the buildings.</li> <li>■ See Appendix D for full listing of buildings and treatment.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)		
Park-wide	8 Archeological sites and resources are stabilized and protected against destruction from vegetation, erosion, and inappropriate visitor use. Continuing research and fieldwork are emphasized.	<ul style="list-style-type: none"> <li>■ Use techniques such as increased surveillance and proper routing of trails to prevent degradation through “pot hunting” and compaction.</li> <li>■ Manage vegetation at archeological sites to prevent degradation through soil erosion and tree fall.</li> <li>■ Educate visitors about the significance and fragility of archeological sites and resources.</li> <li>■ Continue research on topics and areas of the park about which relatively little is known, including accurate locations of fortifications and picket posts, the Village of Valley Forge, slavery-related resources, charcoal-making resources on Mount Misery, and the commissary function on the north side of the park.</li> </ul>
Park-wide	9 The significant Revolution-era collections of Valley Forge NHP are properly housed and curated, and made accessible for research. A new collections storage facility is constructed; or part of the existing Welcome Center is rehabilitated for collections storage; or part of the collection is relocated to an off-site facility. Storage could be shared with other national parks under any of these options. To increase public access to information about the collections, the park would expand its use of the Web Catalog.	<ul style="list-style-type: none"> <li>■ Through new construction, provide a curatorial storage and support facility with appropriate environmental, fire safety and suppression, and security conditions using technologies that conform to contemporary archival and conservation practices.</li> <li>■ Complete the documentation (accession, cataloging, and marking) of the park’s museum collection and the library collection prior to their physical move to a curatorial facility.</li> <li>■ Complete the development of finding aids or other retrieval systems so researchers and scholars can effectively use the collection.</li> </ul>
Park-wide	10 Historic monuments are preserved in good condition (same as A).	<ul style="list-style-type: none"> <li>■ Establish an “adopt-a-monument” program to endow the care of existing historic monuments/statues.</li> <li>■ Continue to work with existing sponsors of historic monuments.</li> </ul>
Park-wide	11 New monuments commemorating people who played a role in the encampment may be erected in the park provided the historic association between the person or group and the encampment is of exceptional importance. Commemoration requires the approval of the Director of the NPS and/or an act of Congress.	<ul style="list-style-type: none"> <li>■ Consider new monuments only when they meet the criteria established by <i>Management Policies 2006</i>.</li> <li>■ New monuments must be endowed by their sponsor or others in order to ensure the monuments can be properly maintained over time.</li> </ul>



**Table 2-7 Alternative B (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<p>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</p> <p>Mixed Resource Zone/ Encampment Commemorative Zone/ North Side</p>	<p>12 Biological resources are managed to preserve and restore natural abundances, diversities, dynamics, and distributions of native plants and animal populations within forested and other naturally occurring communities (such as wooded wetlands). In naturally occurring communities where species populations occur in unnaturally high or low concentrations as a result of human influences or extirpation of predators, and such occurrences cause unacceptable impacts on natural resources and natural processes, biological and physical remedial actions would accelerate natural recovery.</p>	<ul style="list-style-type: none"> <li>■ Identify and set a standard for ecosystem health.</li> <li>■ Develop and implement an intensive and comprehensive forest management plan.</li> <li>■ Determine appropriate wildlife densities to obtain a healthy natural ecosystem.</li> <li>■ Complete the survey of Valley Forge Vital Signs for naturally occurring communities.</li> <li>■ Develop and implement an intensive and comprehensive invasive species management plan.</li> <li>■ Develop and implement an intensive and comprehensive deer management plan.</li> <li>■ Fully protect sensitive habitats associated with state-listed rare, threatened, or endangered species to protect the viability of the species population.</li> <li>■ Work with Chester County and townships to preserve Valley Creek's and Fisher's Run's values as open space corridors.</li> <li>■ Limit visitor access in sensitive areas.</li> <li>■ Remove hazardous materials that pose a risk to humans, wildlife, and plants.</li> <li>■ Remove remaining coal silt from within the siltation basins and plant native trees and shrubs in disturbed areas or create additional wetlands.</li> <li>■ Close most unauthorized trails and plant with native vegetation; a few are converted to authorized trails to give visitors access to the area.</li> <li>■ Reforest Fuller field and Waggonsetter field.</li> <li>■ Manage select agricultural fields to encourage preservation of grassland species.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Park-wide	13 The park participates in promoting measures to protect and enhance air quality in the Philadelphia airshed in order to mitigate the harmful effects of air pollution on natural and cultural resources, scenic vistas, and the health of visitors within the park (same as A).	<ul style="list-style-type: none"> <li>■ Identify and mitigate causes of air pollution impacts within the park.</li> <li>■ Continue to link to regional trails and information systems in order to encourage visitors to come to the park on foot or by bicycle.</li> <li>■ Continue to work with SEPTA and the GVFTMC to promote public transportation to the park.</li> <li>■ Limit use of gasoline-powered equipment on high pollution days.</li> <li>■ Work with local, state, and federal agencies to complete the traffic improvement measures identified in VFATPS that ensure smooth traffic flow on roads near the park. (See other objectives and actions under Mission Goal #4.)</li> <li>■ Monitor physical, chemical, and biological effects and impacts to natural and cultural resources through research partnerships with subject matter experts in academia, governmental, industrial, and other organizations.</li> <li>■ Submit park vehicles to emissions testing.</li> </ul>
	14 The park utilizes whole-watershed management strategies to protect the park's water resources. Threats to water quality both inside and outside the park are minimized and existing water quality deficiencies are improved. The park actively participates in the initiatives to protect and restore the water quality in Valley Creek. The park actively participates in local and regional initiatives that protect and enhance the water quality of the Schuylkill River and its tributaries within the park.	<ul style="list-style-type: none"> <li>■ Work with state and local governments and private organizations on regional initiatives that protect and enhance water quality.</li> <li>■ Perform stream assessments.</li> <li>■ Work with the Valley Creek Restoration Partnership to implement the restoration plan for the creek.</li> <li>■ Implement long-term stream bank stabilization solutions for Valley Creek.</li> <li>■ Implement Best Management Practices, including low impact development.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Park-wide	15 Natural hydrologic flows in the park are preserved and restored where possible.	<ul style="list-style-type: none"> <li>■ Study potential effects of removing the Valley Creek dam.</li> <li>■ Remove the Meyer's Run, Fatlands, and Colonial Springs dams.</li> <li>■ Manage stormwater to promote the natural infiltration of precipitation into groundwater.</li> <li>■ Continue to work with organizations and jurisdictions that influence management of waters upstream of the park to protect against damaging storm surges.</li> <li>■ Work with partners and community to restore Walnut Hill, Lamb, Fawn, and Meyer's Run.</li> </ul>
	16 The park's caves and karst features are preserved, restored where possible, and protected where possible.	<ul style="list-style-type: none"> <li>■ Caves are closed to general use pending further evaluation for other designated uses.</li> <li>■ Install pervious gates to prevent unauthorized entry to caves while allowing continuing use by wildlife.</li> <li>■ Develop interpretive media to help visitors appreciate and understand the fragility of cave resources.</li> <li>■ Cease filling sinkholes unless an important structure is threatened or in cases in which human safety cannot be protected by any other means.</li> <li>■ Develop and implement a cave and karst management plan.</li> </ul>
Park-wide	17 Man-made intrusions on lightscapes within the park (visibility of the night sky) are minimized through working with neighbors and through actions within the park. In cases where artificial lighting is replaced or added, it is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.	<ul style="list-style-type: none"> <li>■ Artificial lighting is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.</li> <li>■ Identify areas where artificial lighting is being used but is not necessary; remove artificial lighting from these areas and restore the natural lightscapes.</li> <li>■ Work with park neighbors, PennDOT, the PA Turnpike Commission, and other local/state government agencies to restore natural lightscapes conditions.</li> <li>■ Use minimal impact lighting techniques where artificial lighting is required.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)		
Park-wide	18 Man-made intrusions on soundscapes within the park (audibility of natural sounds) are minimized.	<ul style="list-style-type: none"> <li>■ Identify what levels of human-caused sound are appropriate for various areas of the park.</li> <li>■ Improve vegetative or other buffers adjacent to the PA Turnpike and US 422 as they are widened.</li> <li>■ Use traffic calming measures to slow traffic on PA Route 23.</li> <li>■ Reduce the acreage that needs close mowing or “weed whipping.”</li> <li>■ Use electric maintenance equipment where feasible.</li> </ul>
Park-wide	19 Rights-of-way are maintained using environmentally-sensitive techniques.	<ul style="list-style-type: none"> <li>■ Work with PennDOT and utility companies to determine feasible and appropriate methods consistent with park recommendations.</li> </ul>
Encampment Commemorative Zone/Interpretive Focus Zone	20 Meadows are intensively managed to enhance their habitat values.	<ul style="list-style-type: none"> <li>■ Complete an implementation plan to eliminate non-native vegetation and encourage native grass species to enhance both habitat and interpretive values.</li> <li>■ Continue to use mowing to indicate historic field boundaries.</li> <li>■ Replace boundary witness trees as they die.</li> </ul>
Encampment Commemorative Zone/Interpretive Focus Zone	21 The quarries at the center of the Grand Parade would be left as is, and would be interpreted to explain their presence as well as how the Grand Parade appeared prior to quarrying.	
Interpretive Focus Zone	22 Within the overall landscape, minimal changes are made to the six key interpretive sites. The major features of the cultural landscape—the terrain, the patterns of open vs. wooded land; and circulation, including public roads and major trails—are preserved. Technology is used to convey historic conditions.	<ul style="list-style-type: none"> <li>■ Employ a variety of visually unobtrusive methods to portray the history and activity at each interpretive site, including technology that allows one to superimpose a historic scene on the actual scene, printed materials, and tours and programs.</li> </ul>



Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<p><b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b></p> <p>Encampment Commemorative Zone</p>	<p>23 The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and major trails—are preserved as is. To support interpretive goals some features are rehabilitated. Small scale features that contribute to the National Register significance of the park are preserved.</p>	<ul style="list-style-type: none"> <li>■ Retain existing wooded areas; do not re-establish views through these areas.</li> <li>■ Continue to delineate historic farm boundaries through mowing and preservation and replacement of boundary witness trees.</li> <li>■ Do not replace the pine plantations as they die, as they are not considered to be National Register contributing features; however, continue to maintain a planted visual buffer according to a future vegetation management plan.</li> <li>■ Maintain circulation on current roads and trails. See management objective #49 below for details.</li> <li>■ Remove little-used parking lots and restore the historic contour.</li> <li>■ As trees that are part of current alleés and commemorative plantings die, replace them in kind or with native species having similar characteristics.</li> <li>■ Preserve such features as berms and hedgerows that indicate historic property lines and commemorative features added during the state-park era, including reproduction huts and fences, outbuildings, and ornamental features associated with post-encampment farmsteads.</li> </ul>
Mixed Resources Zone	<p>24 The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and farm and estate roads; and major trails—are preserved as is. To support interpretive and visitor experience goals, some features are rehabilitated and limited trails are established. Small scale features that contribute to the National Register significance of the park are preserved.</p>	<ul style="list-style-type: none"> <li>■ Delineate historic farm boundaries through mowing and preservation and replacement of boundary witness trees.</li> <li>■ Preserve such features as berms and hedgerows that indicate historic property lines and commemorative features added during the state-park era, including reproduction huts and fences, outbuildings, and ornamental features associated with post-encampment farmsteads.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>  North Side Zone	25 The major features of the cultural landscape—the terrain, historic structures; and circulation, including towpath, farm roads and major trails are preserved. To support natural resources goals, some areas may be reforested.	<ul style="list-style-type: none"> <li>■ Complete a management action plan that conserves major features of the cultural landscape and sets specific ecological objectives and strategies to meet them.</li> <li>■ Remove remaining coal silt from within the siltation basins and plant native trees and shrubs in disturbed areas or create additional wetlands.</li> <li>■ Close most personal trails and plant with native vegetation; a few are converted to authorized trails to give visitors access to the area.</li> <li>■ Manage select agricultural fields to encourage preservation of grassland species.</li> <li>■ Allow Fuller field and former Waggon seller field (south of US 422) to continue to progress from old field conditions to forest.</li> <li>■ Complete a cultural landscape history and treatment plan for the newly acquired Waggon seller property north of US 422.</li> </ul>
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park</b>  Park-wide	26 Visitors learn by exploring, discovering, and doing. Because the landscape is not restored to its encampment-period conditions, personal imagination is essential. Visitors learn to “read” the landscape and to see how new layers of land use and commemoration were added in each period following the encampment. Through activities, visitors engage in a process of “peeling back” the layers to understand the connections among key elements of the site.	<ul style="list-style-type: none"> <li>■ Complete and implement the comprehensive interpretive plan to match themes to specific sites.</li> <li>■ Provide visitors the “tools” to structure personal experiences that focus on discovery.</li> <li>■ Tools include excellent orientation at the Welcome Center as preparation to experience the park as a multi-layered historic and natural resource; technology applications ranging from personal audio devices to virtual viewing stations; an active interpretive archeology program; limited guided tours; and a palette of participatory activities at the key interpretive sites.</li> <li>■ The Welcome Center continues to provide free orientation for park visitors to themes, programs, events, and facilities in the park.</li> </ul>

**Table 2-7 Alternative B (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b> Park-wide	27 Interpretation emphasizes the encampment. Complementary themes include other events and eras in the history of Valley Forge, as well as natural resources.	<ul style="list-style-type: none"> <li>■ Develop and implement Comprehensive Interpretive Plan.</li> </ul>
	28 Exhibit space is added to the Welcome Center to enable orientation to all park themes. Retail space is added to accommodate current demand and provide one revenue for programs. A theater is added if the current theater is rehabilitated for other purposes.	
Park-wide	29 The thematic messages introduced in the Welcome Center are reinforced throughout the park's cultural landscape.	<ul style="list-style-type: none"> <li>■ Expand the existing Welcome Center to provide space for orientation.</li> <li>■ Six key interpretive sites are the focus of historic programming and activities in the park landscape.</li> <li>■ Present exhibits and programs that convey the history and significance of the people, events, and legacy of the encampment, and the role of Valley Forge as an icon of American history.</li> <li>■ Natural resources programming takes place park-wide.</li> <li>■ Present exhibits and programs in the Welcome Center to convey the breadth and significance of natural resources.</li> </ul>
Park-wide	30 Visitor movement through and experience of the landscape and resources is essential to understanding the park's interpretive themes.	<ul style="list-style-type: none"> <li>■ Employ a variety of visually unobtrusive methods to portray the history and activity at each interpretive site, including technology that allows one to superimpose a historic scene on the actual scene, printed materials, and tours and programs.</li> <li>■ Continue to allow the use of private vehicles on park tour roads.</li> <li>■ Encourage visitors to walk, bicycle, or ride horseback among the key interpretive sites by providing information and appropriate comfort facilities.</li> </ul>
Interpretive Focus Zone	31 At key interpretive sites, technology is used to convey historic conditions. Minimal changes are made to the landscape.	<ul style="list-style-type: none"> <li>■ Employ a variety of visually unobtrusive methods to portray the history and activity at each interpretive site, including technology that allows one to superimpose a historic scene on the actual scene, printed materials, and tours and programs.</li> <li>■ No vistas are re-established.</li> </ul>
Park-wide	32 Park-wide, the landscape is preserved as is and technology is used to convey historic conditions.	

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	33 Reconstructed earthworks and fortifications are preserved as interpretive elements.	
Encampment Commemorative Zone/Interpretive Focus Zone	34 Views among redoubts are not re-established.	
Park-wide	35 All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park. The rest are interpretive exhibits and would be managed as ephemeral exhibits (same as A).	
Park-wide	36 Education is an important function of the park, which is a living classroom. Cultural and environmental education is provided in partnership with key organizations. Outdoor space for educational programs is added.	<ul style="list-style-type: none"> <li>■ Work with partners to develop and present a range of educational programs, including guided tours, curriculum-based programs for schools, web- or cable-based distance learning, internships for older students, interactive CDs, teacher training and institutes, adult education, lecture series, symposia, etc.</li> <li>■ Provide resource- and collections-based cultural programming in the park based on current exhibits.</li> <li>■ Work with Mill Grove Audubon Center and other institutions and schools to provide resource-based environmental education in the park.</li> </ul>
Park-wide	37 The park's collections help to illustrate Valley Forge encampment themes.	<ul style="list-style-type: none"> <li>■ Approximately 1% of the park's collection continues to be displayed in the Welcome Center.</li> <li>■ Continue to use Washington's Headquarters and Varnum's Quarters to display those items that convey a more detailed story than those in the Welcome Center.</li> </ul>
Park-wide	38 To enhance the visitor experience and understanding of the park, existing and potential visual intrusions are minimized.	<ul style="list-style-type: none"> <li>■ Use existing and augmented vegetative buffers to screen existing and new visual intrusions along the perimeter of the park.</li> <li>■ Buffers are defined, delineated, and actively managed to protect resources from possible damage or deterioration and to maintain the tranquility of the remainder of the site's landscape.</li> <li>■ Work with PECO to bury remaining overhead electrical lines.</li> <li>■ Work with neighboring townships to ensure new construction is adequately screened.</li> <li>■ Work with PennDOT and the PA Turnpike Commission to screen US 422 and the Turnpike as they are widened.</li> </ul>



Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	39 Park visitors are actively encouraged to visit key sites and districts within the area and to understand their relationship to Valley Forge.	<ul style="list-style-type: none"> <li>■ Work with managers of Revolutionary War sites and other historic and natural sites that convey themes related to those of Valley Forge on joint programming and promotion.</li> </ul>
Park-wide	40 Natural resource education on stewardship and contemporary resource preservation is essential.	<ul style="list-style-type: none"> <li>■ Park staff develop and present natural resource programs.</li> <li>■ Establish partnerships with schools, institutions, and other partners who can use the park's natural landscape to provide programming.</li> <li>■ Continue to work with Mill Grove Audubon Center on potential for rehabilitating north side structures as educational facilities.</li> <li>■ Present exhibits and programs that convey the history and significance of Valley Forge as a national park with a diversity of significant resources, its role in maintenance and recovery of native biodiversity, and its role throughout time in its broader ecological contexts.</li> </ul>
Park-wide	41 Visitors enjoy a safe and secure experience at Valley Forge NHP (same as A).	<ul style="list-style-type: none"> <li>■ Establish a "park watch" volunteer program.</li> <li>■ Remove little-used parking lots that attract illicit use.</li> <li>■ Complete the CERCLA process for the asbestos release site that sets priorities and methods for asbestos remediation.</li> <li>■ Fully mitigate the asbestos so public and environmental health are protected, and there is full public use of the park.</li> <li>■ Remove other hazardous materials that pose a risk to humans, wildlife, and plants.</li> <li>■ Ensure all park facilities and structures are maintained according to applicable regulations for use as visitor facilities.</li> <li>■ Mitigate health and safety risks of all facilities and structures according to a comprehensive integrated pest management plan and program.</li> <li>■ Staff law enforcement commensurate with levels and patterns of visitation.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	42 Prospective visitors are able to obtain timely and relevant information to help in trip planning and travel to the park (same as A).	<ul style="list-style-type: none"> <li>■ Keep the park website current and user-friendly, and ensure that it is linked to other sites that allow the public to find it.</li> <li>■ Continue to work with Valley Forge Visitors and Convention Bureau to develop and distribute information on facilities and activities at the park and related sites.</li> <li>■ Continue to work with PennDOT and the PA Turnpike Commission to ensure adequate and accurate directional signage on highways.</li> <li>■ Improve the content and availability of bike and hiking information available to visitors on the web, in printed materials, and at trailheads.</li> </ul>
Park-wide	43 Visitor services and facilities are appropriately scaled and located, and they facilitate enjoyable and educational visits to the park.	<ul style="list-style-type: none"> <li>■ Park continues to provide limited events and programs.</li> <li>■ A cooperator provides retail sales and limited food service.</li> <li>■ Ensure that accessible restrooms are available at key interpretive areas and major trail heads.</li> <li>■ Retain parking areas located near key interpretive sites.</li> <li>■ Complete a market analysis to assess the potential for using existing park structures for visitor services such as lodging or food service.</li> <li>■ Establish a picnic area for school groups adjacent to the Welcome Center.</li> <li>■ Monitor visitor satisfaction in terms of facilities used for recreation, including trails and parking lots.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>  Park-wide	44 A trail system is established that combines existing trails and limited new trails to provide a variety of visitor experiences related to and appropriate to park resources. New trail segments are established where they meet the following goals and criteria: <ul style="list-style-type: none"> <li>– provide safe access to key features</li> <li>– make loop circulation possible</li> <li>– provide good experience or interpretive value</li> <li>– easily maintainable</li> <li>– trailhead available or feasible to make available</li> <li>– no cultural or natural resources are affected</li> </ul>	<ul style="list-style-type: none"> <li>■ Establish and/or formalize connections that create loop trails.</li> <li>■ Complete a historic resource study and treatment plan for those trails that are known to be historic.</li> <li>■ Evaluate trail system for accessibility and ensure appropriate level of accessibility to the extent possible.</li> <li>■ Ensure that trailheads are adequately served by parking, rest facilities, and information in order to serve visitor needs and prevent resource damage.</li> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Eliminate the currently authorized and unauthorized trails that are unmaintainable and/or that damage cultural or natural resources.</li> <li>■ Publicize the formal trail system (as defined by this GMP) through public information.</li> <li>■ Improve the content and availability of trail information available to visitors on the web, printed materials, and at trailheads.</li> <li>■ Facilitate a program of vigorous volunteerism to enhance and maintain trails, trails information, and patrolling.</li> <li>■ Develop more interpretive activities for trail users.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> <li>■ See Figure 2-10 for a map of the proposed trail system.</li> </ul>
Park-wide	45 Bicycles continue to share the tour roads with private vehicles (same as A).	
Interpretive Focus Zone	46 Active recreation is limited to pedestrian trails that skirt the zone.	<ul style="list-style-type: none"> <li>■ Eliminate active recreation from interpretive focus zones by siting recreational paths outside the zones.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	47 Appropriate recreational use continues to be welcomed in places where it does not impact resources or interpretive activities. All public activities and events are systematically evaluated for appropriateness before they are allowed.	<ul style="list-style-type: none"> <li>■ Provide information and interpretation about park history and cultural and natural resources specifically targeted to recreational visitors.</li> <li>■ Use official NPS criteria to evaluate if and when uses are compatible with resource protection.</li> <li>■ Cooperate with local organizations and governments to find alternative locations for incompatible events.</li> <li>■ Continue to prohibit uses that damage park resources and/or do not contribute to public understanding of park history and resources.</li> </ul>
Park-wide	48 Connections to existing and future trails outside the park are pursued to encourage visitors to arrive through non-motorized means.	<ul style="list-style-type: none"> <li>■ Establish a Wilson Road connection to the future Chester Valley Trail.</li> <li>■ Continue to work with Montgomery County on management of parking, signage, and user information for the Schuylkill River Trail.</li> <li>■ Continue to work with Upper Merion Township on a trail connection at the eastern end of the park.</li> <li>■ Strengthen relationship with Horseshoe Trail Coalition to address issues of signage, authorized use, and user information.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> </ul>
Park-wide	49 Traffic circulation is managed in a way that reduces impacts on park resources and provides for safe visitor use, while mitigating intrusion of auto traffic on the visitor experience. Through-traffic on public roads (PA Routes 23 and 252, and Gulph Road) would be calmed, in partnership with state and local government. The roads would remain open and commuters would continue to be able to use them. All park tour roads would remain open to visitor circulation, and visitors would continue to use their own vehicles on the tour route to access various sites throughout the park. Interpretive bus tours would continue to be provided as long as they are financially feasible. A transportation shuttle would not be provided.	<ul style="list-style-type: none"> <li>■ Work with PennDOT, the counties, FHWA, and DVRPC to implement findings of VFATPS.</li> <li>■ PA Routes 252 and 23, and Gulph Road remain public roads and receive traffic calming measures according to VFATPS park options 1 and 6.</li> <li>■ Implement VFATPS park option 5 by installing a half-diamond interchange at Pawling's Road and US 422.</li> <li>■ Continue to support implementation of the Schuylkill Valley Metro.</li> <li>■ Re-open the Port Kennedy train station within the park for non-commuter use.</li> <li>■ Remove little-used parking lots that do not serve interpretive purposes.</li> </ul>



Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>  <b>Park Support Zone</b>	50 The primary park gateway provides a sense of arrival and clearly understood circulation route to the visitor's destination in the park. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. Redesign of this area would provide a clearly marked entrance and better sense of arrival as visitors exit the busy surrounding roads and enter the park. An entrance sign and landscaping would be added. The entrance drive would primarily comprise the existing roadway around the Welcome Center, with minor redesign to eliminate an existing sharp curve. Additional gateway treatments at other park entrances would help to establish a recognizable sense of place.	<ul style="list-style-type: none"> <li>■ Establish a new primary gateway in response both to the reconfiguration of the US 422/PA Route 23 interchange and also the replacement of the Betzwood Bridge.</li> <li>■ Establish appropriately scaled and recognizable entrances from Pawlings Road, Audubon Road, Yellow Springs Road, Thomas/Gulph Road, North Gulph Road, and PA Route 23.</li> <li>■ Coordinate signage, landscaping, and imagery at all park entrances - both vehicular and trail - to establish a recognizable sense of place.</li> </ul>
	51 No new interchanges are proposed (same as A).	
Park-wide	52 NPS would continue to support implementation of the proposed Schuylkill Valley Metro. The park's Port Kennedy station would be re-opened for visitor (not commuter) use.	
North Side Zone	53 The north side is physically connected with the south side, making it more accessible to visitors while protecting its special qualities.	<ul style="list-style-type: none"> <li>■ Use signage and appropriate gateway design to clarify park entrances.</li> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Connect the north side of the park to the south side of the park programmatically, through interpretation.</li> </ul>
North Side Zone	54 The River Trail, the Schuylkill River Trail, the parking and support for the trailheads at Betzwood and Pawling's Road are managed to enhance their recreational values, while not impairing the cultural and natural values of lands adjacent to them.	<ul style="list-style-type: none"> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Work with PennDOT to establish a pedestrian/bicycle crossing over or under US 422 from the Schuylkill River Trail to the Fatlands/Waggonseiler's area.</li> <li>■ Monitor the volume of visitor use of these trails to ensure that carrying capacity is not exceeded.</li> <li>■ Focus volunteer effort on maintenance and patrol of these trails to discourage damaging off-trail use.</li> <li>■ Establish water trail landings.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness</b>		
Park-wide	55 Staffing from all sources is adequate in numbers and deployment to implement and support the management objectives.	<ul style="list-style-type: none"> <li>■ Hire additional staff or re-allocate staff as needed. See Appendix H for details.</li> <li>■ Work with volunteers.</li> </ul>
Park-wide	56 Employees continue to hold key responsibility in protecting the resources in the park as well as reducing the threats caused by improper use or development of such resources. Employees are responsible not only to achieve the park mission of preservation and interpretation, but also to encourage engagement of the community in the mission.	<ul style="list-style-type: none"> <li>■ Every employee develops a personal stewardship goal for engaging the community.</li> <li>■ Monitor programs to track stewardship.</li> <li>■ Augment volunteer program to assist with stewardship efforts.</li> </ul>
Park-wide	57 Existing park partnerships are maintained and strengthened to expand the park's capacity to protect park resources and provide high quality visitor interpretation and experiences. Additional partnerships are actively pursued.	<ul style="list-style-type: none"> <li>■ Numerous actions result. Among the major initiatives that would be accomplished through partnerships are the following:               <ul style="list-style-type: none"> <li>■ Organize and allocate park staff to facilitate development and management of partnerships.</li> <li>■ Continue to work with the PennDOT, FHWA, DVRPC, Chester and Montgomery Counties, and the five townships to manage traffic congestion in and around the park and to implement preferred transportation options as identified in this GMP.</li> <li>■ Continue to work with SEPTA and GVFTMA to implement alternative transportation options that reduce traffic volume and congestion.</li> <li>■ Continue to work with partners such as commonwealth agencies, the Schuylkill River National &amp; State Heritage Area, the two counties, and numerous private organizations on joint initiatives for cultural and natural resources education; long-distance trails management; and natural resources management, particularly in regard to themes and resources that extend beyond park boundaries.</li> <li>■ Take a lead in the initiatives to protect and restore the quality of the Valley Creek watershed.</li> <li>■ Actively participate in local and regional initiatives that protect and enhance the quality of the Schuylkill River watershed.</li> <li>■ Work with other NPS Revolutionary War sites and with historic sites in the region on promoting joint interpretation and visitation.</li> </ul> </li> </ul>

**Table 2-7 Alternative B (Continued)**

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness (Continued)</b>		
Park-wide	58 The scope and contribution of volunteer programs in resource management, interpretation and visitor services, maintenance, and administration are enhanced. Programs provide life-long opportunities for citizens to take personal responsibility to care for our heritage.	<ul style="list-style-type: none"> <li>■ Organize and allocate park staff to build and manage volunteer programs.</li> <li>■ Continue to work with current volunteer groups to expand and enhance the effect of their services to the park by providing training, support, recruitment, and other services.</li> <li>■ Increase the use of interns from organizations such as the Student Conservation Association, local colleges, and high schools.</li> </ul>
Park-wide	59 The park actively seeks non-appropriated funds to support its preservation and interpretation mission.	<ul style="list-style-type: none"> <li>■ Organize and allocate staff resources to facilitate obtaining alternate support, such as through cooperative and interagency agreements, grants, donations, cost recovery, concessions, fees, earned income, and similar opportunities.</li> </ul>
Park-wide	60 Revenues from universal visitor use fees help the park to meet its preservation and interpretation missions.	<ul style="list-style-type: none"> <li>■ Evaluate options for a fee structure that provides reasonable fees, paid by all park visitors, and easily collected.</li> </ul>
Park-wide	61 The park's utilities infrastructure is updated to meet current safety and efficacy standards, and maintained in good working order.	<ul style="list-style-type: none"> <li>■ Complete a master utilities survey of the existing utility infrastructure to determine easement locations, capacities, and existing demands.</li> </ul>
Park-wide	62 Park staff, volunteers, interns, contractors, and partners work in a safe and secure environment (same as A).	<ul style="list-style-type: none"> <li>■ Ensure all park facilities and structures are maintained according to applicable regulations for use as office, laboratory/curation work space, etc.</li> <li>■ Mitigate health and safety risks of all facilities and structures according to a comprehensive integrated pest management plan and program.</li> </ul>

Table 2-7 Alternative B (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness (Continued)</b>		
Park-wide	<p>63 Some non-contributing buildings in the park for which there are suitable and feasible interpretive, visitor services, or park operational uses are maintained in good condition and/or renovated for continuing park use.</p> <p>Non-contributing buildings that are not needed or suitable and feasible for interpretive, visitor services, or park operational uses are available for concessions or for leasing, under the determinations stipulated by 36 CFR 1/18.4 that were made as part of the development of this GMP. Buildings for which there is no feasible use are demolished.</p>	<ul style="list-style-type: none"> <li>Renovate the current Welcome Center as a collections storage and curatorial support facility.</li> <li>Renovate the existing Theater building for administrative offices.</li> <li>Continue to use the YACC garage and the Fatlands garage for remote maintenance storage.</li> <li>As conditions and the needs of park operations change through the years, evaluate additional modern structures for inclusion in the leasing program.</li> <li>Demolish buildings which have no feasible use and which do not contribute to the National Register significance of the park, for example, the amphitheater.</li> </ul>
Park-wide	<p>64 The park housing program meets service-wide objectives: Buildings in the park are used for staff housing only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitory or seasonal staff, volunteers, essential cooperators); or sustains a historic structure for which there is no feasible use (same as A).</p>	<ul style="list-style-type: none"> <li>Ensure that bi-annual housing plan includes strategies for continual reduction of the number of current housing units until this objective is met.</li> </ul>
Park Support Zone	65 The park maintenance facility remains on its site in the middle of the Grand Parade.	
Park Support Zone	66 The ranger station is relocated near the administration building in an adequate and safe space to accomplish work efficiently.	<ul style="list-style-type: none"> <li>Relocate the ranger station to a location within the park support zone that provides good access to the park, and adequate and secure space for operations.</li> </ul>



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Table 2-8 Alternative C: NPS Preferred

Overall Concept	Visitors have the opportunity to decide the kind of experience they want, depending on learning style, interest, and time. The park provides a core message and experience for all visitors that is primarily immersive and focuses on the encampment and the American Revolution. A self-discovery approach illustrates additional areas of the park, and historic and natural resource themes and topics. Excellent orientation, as well as excellent programming, are the keys to this approach.		
	The landscapes of the Grand Parade and Muhlenberg's Brigade evoke the 18th century. Some historic views are rehabilitated to facilitate interpretation. Most areas of the park are preserved as is.		
	The health of the forests and meadows is enhanced through active environmental restoration.		
	Through-traffic on public roads is clamed, in partnership with state and local government. To enhance the visitor experience, some roads in the park are closed to through- and visitor-traffic. Visitors may use a shuttle or walk or bike.		
	To further achieve the park mission of preservation and interpretation, park staff are enabled to facilitate engagement of the community in the mission. Existing partnerships are strengthened and new partnerships are actively pursued.		
Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives	
Mission Goal: Preserve Park Cultural and Natural Resources Park-wide	1	Managers make decisions about resource management and protection based on professional studies and adequate planning that are consistent with applicable policies and regulation (same as A).	<ul style="list-style-type: none"> <li>■ Prepare historic resource studies, archeological studies, implementation plans, and other work as foundations for preservation and rehabilitation of park resources.</li> <li>■ Revise the park's strategic plan in accordance with the Final GMP.</li> <li>■ Prepare a Resource Stewardship Plan.</li> <li>■ Complete a Phase III cultural landscape treatment plan that implements the Final GMP.</li> <li>■ Monitor carrying capacity of natural and cultural resources.</li> <li>■ Plan, design, and implement an integrated long-term Vital Signs monitoring program.</li> </ul>
Park-wide	2	Sustainable design and construction methods, techniques, and materials are used (same as A).	<ul style="list-style-type: none"> <li>■ Assess current practices, facilities, and available resources for sustainable design and maintenance.</li> <li>■ Seek LEED certification (at some level) when rehabilitating structures and facilities.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>		
Park-wide	3 Boundary and land acquisition strategy is sufficient to protect the nationally significant qualities of the park (same as A).	<ul style="list-style-type: none"> <li>■ Acquire key remaining lands within the authorized boundary, including the Saint Gabriel's field and Valley Forge Crossing.</li> <li>■ Survey and review the existing utility and road easements to ensure that significant resources are protected.</li> </ul>
Park-wide	4 Encampment-period earthworks and fortifications are stabilized and preserved (same as B).	<ul style="list-style-type: none"> <li>■ Record the positions of earthworks through global positioning.</li> <li>■ Keep earthworks clear of trees.</li> <li>■ Educate visitors about the significance and fragility of earthworks.</li> <li>■ Route trails and roads in ways that do not encourage climbing earthworks.</li> <li>■ Maintain tall grass cover to prevent erosion and discourage trampling.</li> </ul>
Park-wide	5 Encampment-period buildings are preserved as is or restored or rehabilitated for interpretive purposes, while those for which there is no necessary and feasible interpretive or operational use are stabilized, preserved, and/or rehabilitated and available for visitor-service concessions and for leasing (same as B).	<ul style="list-style-type: none"> <li>■ As an example, continue to manage Washington's Headquarters and Varnum's Quarters as restored structures used as house museums.</li> <li>■ Remove the ranger station from the Mordecai Moore House.</li> <li>■ Complete a market analysis on suitable uses for buildings.</li> <li>■ Implement a park-wide concessions and leasing program.</li> <li>■ See Appendix D for full list of buildings and treatments.</li> </ul>
Park-wide	6 All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park and would be preserved (same as B).	

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Park-wide	7 Some post-encampment-period historic buildings are preserved or rehabilitated primarily for interpretive or visitor services purposes, while those for which there is no necessary and feasible interpretive or visitor services use are preserved or rehabilitated and available for concessions or for leasing, given that the determinations stipulated by 36 CFR 1/18.4 were made as part of the development of this GMP. Buildings for which there is no feasible use are considered for demolition (same as B).	<ul style="list-style-type: none"> <li>■ As an example, rehabilitate the Maurice Stephens House (the site of Huntingdon's Quarters) to interpret activities on the Grand Parade.</li> <li>■ Complete a market analysis on suitable uses for these buildings.</li> <li>■ Stabilize suitable buildings in preparation for adaptive reuse.</li> <li>■ Implement a park-wide concessions and leasing program. Develop historic preservation agreements with owners of historic buildings within the park boundary to protect the significant qualities of the buildings.</li> <li>■ See Appendix D for full list of buildings and treatments.</li> </ul>
	8 Archeological sites and resources are stabilized and protected against destruction from vegetation, erosion, and inappropriate visitor use. Continuing research and fieldwork are emphasized (same as B).	<ul style="list-style-type: none"> <li>■ Use techniques such as increased surveillance and proper routing of trails to prevent degradation through "pot hunting" and compaction.</li> <li>■ Manage vegetation at archeological sites to prevent degradation through soil erosion and tree fall.</li> <li>■ Educate visitors about the significance and fragility of archeological sites and resources.</li> <li>■ Continue research on topics and areas of the park about which relatively little is known, including accurate locations of fortifications and picket posts, the Village of Valley Forge, slavery related resources, charcoal-making resources on Mount Misery, and the commissary function on the north side of the park.</li> </ul>
	9 The significant Revolution-era collections of Valley Forge NHP are properly housed and curated, and made accessible for research. A new collections storage facility is constructed; or part of the existing Welcome Center is rehabilitated for collections storage; or part of the collection is relocated to an off-site facility. Storage could be shared with other national parks under any of these options. To increase public access to information about the collections, the park would expand its use of the Web Catalog (same as B).	<ul style="list-style-type: none"> <li>■ Through new construction, provide a curatorial storage and support facility with appropriate environmental, fire safety and suppression, and security conditions using technologies that conform to contemporary archival and conservation practices.</li> <li>■ Complete the documentation (accession, cataloguing, and marking) of the park's museum collection and the library collection prior to their physical move to a curatorial facility.</li> <li>■ Complete the development of finding aids or other retrieval systems so researchers and scholars can effectively use the collections.</li> </ul>



Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Preserve Park Cultural and Natural Resources (Continued)</b>		
Park-wide	10 Historic monuments are preserved in good condition (same as A).	<ul style="list-style-type: none"> <li>■ Establish an “adopt-a-monument” program to endow the care of existing historic monuments/statues.</li> <li>■ Continue to work with existing sponsors of historic monuments.</li> </ul>
Park-wide	11 New monuments commemorating people who played a role in the encampment may be erected in the park provided the historic association between the person or group and the encampment is of exceptional importance. Commemoration requires the approval of the Director of the NPS and/or an act of Congress (same as B).	<ul style="list-style-type: none"> <li>■ Consider new monuments only when they meet the criteria established by <i>Management Policies 2006</i>.</li> <li>■ New monuments must be endowed by their sponsor or others in order to ensure the monuments can be properly maintained over time.</li> </ul>
Mixed Resource Zone/ Encampment Commemorative Zone/ North Side Zone	12 Biological resources are managed to preserve and restore the natural abundances, diversities, dynamics, and distributions of native plants and animal populations within forested and other naturally occurring communities (such as wooded wetlands). In naturally occurring communities where species populations occur in unnaturally high or low concentrations as a result of human influences or extirpation of predators, and such occurrences cause unacceptable impacts on natural resources and natural processes, biological and physical remedial actions would accelerate natural recovery (same as B).	<ul style="list-style-type: none"> <li>■ Identify and set a standard for ecosystem health.</li> <li>■ Develop and implement a forest management plan.</li> <li>■ Determine appropriate wildlife densities to obtain a healthy natural ecosystem.</li> <li>■ Complete the survey of Valley Forge Vital Signs for naturally occurring communities.</li> <li>■ Develop and implement a formal invasive species management plan.</li> <li>■ Develop and implement a deer management plan.</li> <li>■ Fully protect sensitive habitats associated with state-listed rare, threatened, or endangered species to protect the viability of the species population.</li> <li>■ Identify key focus areas for accelerated natural recovery and develop and implement recovery plans for these areas.</li> <li>■ Work with Chester County and townships to preserve Valley Creek's and Fisher's Run's values as open space corridors.</li> <li>■ Limit visitor access in sensitive areas.</li> <li>■ Remove hazardous materials that pose a risk to humans, wildlife, and plants.</li> <li>■ Remove remaining coal silt from within the siltation basins and plant native trees and shrubs in disturbed areas or create additional wetlands.</li> <li>■ Close most unauthorized trails and plant with native vegetation; a few are converted to authorized trails to give visitors access to the area.</li> <li>■ Reforest Fuller field and Waggoners field (south of US 422.)</li> <li>■ Manage select agricultural fields to encourage preservation of grassland species.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Park-wide	13 The park participates in promoting measures to protect and enhance air quality in the Philadelphia airshed in order to mitigate the harmful effects of air pollution on natural and cultural resources, scenic vistas, and the health of visitors within the park (same as A).	<ul style="list-style-type: none"> <li>■ Identify and mitigate causes of air pollution impacts within the park.</li> <li>■ Continue to link to regional trails and information systems in order to encourage visitors to come to the park on foot or by bicycle.</li> <li>■ Continue to work with SEPTA and the GVFTMC to promote public transportation to the park.</li> <li>■ Limit use of gasoline-powered equipment on high pollution days.</li> <li>■ Work with local, state, and federal agencies to complete the traffic improvement measures identified in VFATPS that ensure smooth traffic flow on roads near the park.</li> <li>■ Monitor physical, chemical, and biological effects and impacts to natural and cultural resources through research partnerships with subject matter experts in academia, governmental, industrial, and other organizations.</li> <li>■ Submit park vehicles to emissions testing.</li> <li>■ Limit vehicular traffic within the park and use energy-efficient shuttles to enable visitor access throughout the park.</li> </ul>
	14 The park utilizes whole-watershed management strategies to protect the park's water resources. Threats to water quality both inside and outside the park are minimized and existing water quality deficiencies are improved. The park actively participates in the initiatives to protect and restore the water quality in Valley Creek. The park actively participates in local and regional initiatives that protect and enhance the water quality of the Schuylkill River and its tributaries within the park (same as B).	<ul style="list-style-type: none"> <li>■ Work with state and local governments and private organizations on regional initiatives that protect and enhance water quality.</li> <li>■ Perform stream assessments.</li> <li>■ Work with the Valley Creek Restoration Partnership to implement the restoration plan for the creek.</li> <li>■ Implement long-term stream bank stabilization solutions for Valley Creek.</li> <li>■ Implement Best Management Practices, including low impact development.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Park-wide	15 Natural hydrologic flows in the park are preserved and restored where possible (same as B).	<ul style="list-style-type: none"> <li>■ Study potential effects of removing the Valley Creek dam.</li> <li>■ Remove the Meyer's Run, Fatlands, and Colonial Springs dams.</li> <li>■ Manage stormwater to promote the natural infiltration of precipitation into groundwater.</li> <li>■ Continue to work with organizations and jurisdictions that influence management of waters upstream of the park to protect against damaging storm surges.</li> <li>■ Work with partners and community to restore Walnut Hill, Lamb, Fawn, and Meyer's Runs.</li> </ul>
	16 The park's caves and karst features are preserved, restored where possible, and protected where possible (same as B).	<ul style="list-style-type: none"> <li>■ Caves are closed to general use pending further evaluation for other designated uses.</li> <li>■ Install pervious gates to prevent unauthorized entry to caves while allowing continuing use by wildlife.</li> <li>■ Develop interpretive media to help visitors appreciate and understand the fragility of cave resources.</li> <li>■ Cease filling sinkholes unless an important structure is threatened or in cases in which human safety cannot be protected by any other means.</li> <li>■ Develop and implement a cave and karst management plan.</li> </ul>
Park-wide	17 Man-made intrusions on lightscapes within the park (visibility of the night sky) are minimized through working with neighbors and through actions within the park. In cases where artificial lighting is replaced or added, it is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met (same as B).	<ul style="list-style-type: none"> <li>■ Artificial lighting is limited to those areas where security, basic human safety, and specific cultural resource requirements must be met.</li> <li>■ Identify areas where artificial lighting is being used but is not necessary; remove artificial lighting from these areas and restore the natural lightscapes.</li> <li>■ Work with park neighbors, PennDOT, the PA Turnpike Commission, and other local/state government agencies to restore natural lightscape conditions.</li> <li>■ Use minimal impact lighting techniques where artificial lighting is required.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)		
Park-wide	18 Man-made intrusions on soundscapes within the park (audibility of natural sounds) are minimized (same as B).	<ul style="list-style-type: none"> <li>■ Identify what levels of human-caused sound are appropriate for various areas of the park.</li> <li>■ Improve vegetative or other buffers adjacent to the PA Turnpike and US 422 as they are widened.</li> <li>■ Use traffic calming measures to slow traffic on PA Route 23.</li> <li>■ Reduce the acreage that needs close mowing or “weed whipping.” Use electric maintenance equipment where feasible.</li> <li>■ Remove both commuter and visitor vehicular traffic from the tour roads.</li> </ul>
Park-wide	19 Rights-of-way are maintained using environmentally-sensitive techniques (same as B).	<ul style="list-style-type: none"> <li>■ Work with PennDOT and utility companies to determine feasible and appropriate methods consistent with park recommendations.</li> </ul>
Encampment Commemorative Zone/Interpretive Focus Zone	20 Meadows are intensively managed to enhance their habitat values.	<ul style="list-style-type: none"> <li>■ Complete an implementation plan to eliminate non-native vegetation and encourage native grass species to enhance both habitat and interpretive values.</li> <li>■ Continue to use mowing to indicate historic field boundaries.</li> <li>■ Replace boundary witness trees as they die.</li> </ul>
Encampment Commemorative Zone/Interpretive Focus Zone	21 The quarries on the Grand Parade are filled to their historic contour, restoring this essential cultural landscape at the heart of the park. Cave Quarry would not be filled, since it lies beyond the Grand Parade and because it exhibits rare geologic features.	<ul style="list-style-type: none"> <li>■ Fill the quarries to their historic contour, except Cave Quarry.</li> </ul>



Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Interpretive Focus Zone	22 Within the overall landscape, selected areas of great interpretive value are rehabilitated to their 18th century conditions as interpretive vignettes. The cultural landscapes of two key interpretive areas are managed primarily to achieve interpretive goals: Muhlenberg's Brigade and the Grand Parade. At other key interpretive areas: Washington's Headquarters, Artillery Park, Star Fort/Varnum's Quarters area, and Walnut Hill, the landscape is preserved as is and technology is used to convey historic conditions.	<ul style="list-style-type: none"> <li>■ Rehabilitate the Muhlenberg's Brigade area and part of the Grand Parade to their 18th century appearance. Reconstruct huts or other temporary encampment structures.</li> <li>■ Program Washington's Headquarters, Artillery Park, the Star Fort/Varnum's area, and Walnut Hill as interpretive focus areas but preserve the commemorative landscape as is.</li> <li>■ Re-establish the historic contour by filling quarries at the Grand Parade (except Cave Quarry).</li> <li>■ As the quarries are filled, remove the trees that have grown on their edges in order to restore the historic size and extent of the Grand Parade.</li> <li>■ Remove state park-era Maintenance Complex from the Grand Parade and restore historic contour.</li> <li>■ Remove County Line Road and restore to its original contour.</li> <li>■ Establish vegetation where necessary to screen modern intrusions.</li> </ul>
	23 The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and major trails—are preserved as is. To support interpretive goals some features are rehabilitated. Small-scale features that contribute to the National Register significance of the park are preserved (same as B).	<ul style="list-style-type: none"> <li>■ Retain most existing wooded areas; re-establish views through the wooded areas that are essential to understanding the lay-out of the encampment and strategic value of the terrain, including views among Redoubts 1, 2, 3, and 4.</li> <li>■ Re-establish views from the Star Fort to the Stony Battery.</li> <li>■ Continue to delineate historic farm boundaries through mowing and preservation and replacement of boundary witness trees. Do not replace the pine plantations as they die, as they are not considered to be National Register contributing features; however, continue to maintain a planted visual buffer according to a future vegetation management plan.</li> <li>■ Close Gulph Road to public traffic and restore it as a historic trace.</li> <li>■ Remove little-used parking lots as well as parking lots in key interpretive viewsheds and restore the historic contour.</li> <li>■ As trees that are part of allées and commemorative plantings die, replace them, except where they are located in interpretive focus areas; replace them in kind or with native species having similar characteristics.</li> <li>■ Preserve such features as berms and hedgerows that indicate historic property lines and commemorative features added during the state-park era, including reproduction huts and fences, outbuildings, and ornamental features associated with post-encampment farmsteads.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Preserve Park Cultural and Natural Resources (Continued)  Mixed Resources Zone	24 The major features of the cultural landscape—the terrain; historic structures; the patterns of open vs. wooded land; circulation, including public roads and farm and estate roads; and major trails—are preserved as is. To support interpretive and visitor experience goals, some features are rehabilitated and limited trails are established. Small-scale features that contribute to the National Register significance of the park are preserved (same as B).	<ul style="list-style-type: none"> <li>■ Delineate historic farm boundaries through mowing and preservation and replacement of boundary witness trees.</li> <li>■ Preserve such features as berms and hedgerows that indicate historic property lines and commemorative features added during the state-park era, including reproduction huts and fences, outbuildings, and ornamental features associated with post-encampment farmsteads.</li> <li>■ See Figure 2-10 for new trails.</li> </ul>
	25 The major features of the cultural landscape—the terrain; historic structures; and circulation, including towpath, farm roads and major trails are preserved. To support natural resources goals, some areas may be reforested (same as B).	<ul style="list-style-type: none"> <li>■ Complete a management action plan that conserves major features of the cultural landscape and sets specific ecological objectives and strategies to meet them.</li> <li>■ Remove remaining coal silt from within the siltation basins and plant native trees and shrubs in disturbed areas or create additional wetlands.</li> <li>■ Close most unauthorized trails and plant with native vegetation; a few are converted to authorized trails to give visitors access to the area.</li> <li>■ Manage select agricultural fields to encourage preservation of grassland species.</li> <li>■ Allow Fuller field and former Waggonseiler field (south of US 422) to continue to progress from old field conditions to forest.</li> <li>■ Complete a cultural landscape history and treatment plan for the newly acquired Waggonseiler farm property north of US 422.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park</b>		
Park-wide	26 Visitors have the opportunity to decide the kind of experience they want, depending on learning style, interest, and time. The park provides a structured core message and experience for all visitors that is primarily immersive and focuses on the encampment and the American Revolution. This takes place at the Welcome Center and at the two key interpretive sites that are rehabilitated to period conditions so that visitors can experience a sense of stepping back in time. A self-discovery approach illustrates other areas of the park, and additional historic and natural resource themes and topics.	<ul style="list-style-type: none"> <li>■ Complete and implement the comprehensive interpretive plan to match themes to specific sites.</li> <li>■ Provide visitors the “tools” to structure personal experiences that focus on discovery.</li> <li>■ Tools include excellent orientation at Welcome Center as preparation to experience the park as a multi-layered historic and natural resource; technology applications ranging from personal audio devices to virtual viewing stations; an active interpretive archeology program; limited guided tours; and a palette of participatory activities at the key interpretive sites.</li> <li>■ Welcome Center provides an integrated orientation and introduction to the story of the American Revolution as a whole, to the Valley Forge story, and to options for the visitor’s experiences in the park landscape.</li> <li>■ Use Welcome Center as the “trailhead” to provide easily accessible and free orientation for park visitors to themes, programs, events, and facilities, and opportunities in the park.</li> <li>■ Provide extensive opportunities for visitors to interact with guides and first-person interpreters. The two vignettes are the venues for first-person interpretation and dramatic presentations.</li> <li>■ Develop and implement Comprehensive Interpretive Plan.</li> </ul>
Park-wide	27 Interpretation emphasizes the encampment and the American Revolution. Complementary themes include other events and eras in the history of Valley Forge, as well as natural resources.	
Park Support Zone	28 Exhibit space is added to the Welcome Center to expand the capacity for displaying the park’s collections and to accommodate changing exhibits. Retail space is added to accommodate current demand and provide ore revenue for programs. A theater is added if the current theater is rehabilitated for other purposes.	

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)  Park-wide	29 The thematic messages introduced in the Welcome Center are reinforced throughout the park's cultural landscape (same as B).	<ul style="list-style-type: none"> <li>■ Six key interpretive sites are the focus of historic programming and activities in the park landscape.</li> <li>■ Expand the existing Welcome Center to provide space for orientation.</li> <li>■ Present exhibits and programs that convey the history and significance of the people, events, and legacy of the revolution and encampment, and the role of Valley Forge as an icon of American history.</li> <li>■ Natural resources programming takes place park-wide.</li> <li>■ Present exhibits and programs in the Welcome Center to convey the breadth and significance of natural resources.</li> </ul>
	30 Visitor movement through and experience of the landscape and resources is essential to understanding the park's interpretive themes (same as B).	<ul style="list-style-type: none"> <li>■ Rehabilitate two vignettes to encampment-period conditions.</li> <li>■ Employ a variety of visually unobtrusive methods to portray the history and activity at four key interpretive sites, including technology that allows one to superimpose a historic scene on the actual scene, printed materials, and tours and programs.</li> <li>■ Eliminate the use of private vehicles on park tour roads and provide shuttle service to key interpretive sites.</li> <li>■ Encourage visitors to walk, bicycle, or ride horseback among the key interpretive sites by providing information and appropriate comfort facilities, and by allowing bicycle use of park tour roads.</li> </ul>



Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Interpretive Focus Zone	31 Within the overall landscape, two areas of great interpretive value (Muhlenberg's Brigade and the Grand Parade) are rehabilitated to their 18th century conditions to provide a sense of stepping back in time for visitors. Other key interpretive areas are modified for interpretive purposes.	<ul style="list-style-type: none"> <li>■ Rehabilitate the Muhlenberg's Brigade area and part of the Grand Parade to their 18th century appearance. Reconstruct huts or other temporary encampment structures.</li> <li>■ Program Washington's Headquarters, Artillery Park, the Star Fort/Varnum's Quarters area, and Walnut Hill as interpretive focus areas but preserve the commemorative landscape.</li> <li>■ Re-establish historic views at Redoubts 1, 2, 3, and 4, and from the Star Fort to Stony Battery.</li> <li>■ Re-establish the historic contour by filling quarries at the Grand Parade (except Cave Quarry).</li> <li>■ Provide small-scale re-enactment activities at Grand Parade and Muhlenberg's Brigade.</li> <li>■ Establish vegetation where necessary to screen modern intrusions.</li> </ul>
Park-wide	32 With the exceptions of Muhlenberg's Brigade, the Grand Parade, and the quarries, the park-wide landscape is preserved as is and technology is used to convey historic conditions.	
Park-wide	33 Reconstructed earthworks and fortifications are preserved as interpretive exhibits (same as B).	
Encampment Commemorative Zone/Interpretive Focus Zone	34 Views among historic redoubts are re-established through selective tree cutting, so that visitors can better understand the strategic use of the terrain during the encampment.	

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	35 All huts in the park are reconstructions. Two of them contribute to the National Register significance of the park. The rest are interpretive exhibits and would be managed as ephemeral exhibits (same as A).	
Park-wide	36 Education is a core function of the park, which is a living classroom. Cultural and environmental education is provided in partnership with key organizations. Indoor and outdoor space for education programs is added.	<ul style="list-style-type: none"> <li>■ Work with partners to develop and present a range of educational programs, including guided tours, curriculum-based programs for schools, web- or cable-based distance learning, internships for older students, interactive CDs, teacher training and institutes, adult education, lecture series, symposia, etc.</li> <li>■ Provide resource- and collections-based cultural programming in the park based on current exhibits.</li> <li>■ Work with Mill Grove Audubon Center and other institutions and schools to provide resource-based environmental education in the park.</li> </ul>
Park-wide	37 The park's collections help to illustrate Valley Forge encampment themes (same as B).	<ul style="list-style-type: none"> <li>■ Organize and display the collections to illustrate and enhance the interpretive themes.</li> <li>■ Continue to use Washington's Headquarters and Varnum's Quarters to display those items that convey a more detailed story than those in the Welcome Center.</li> </ul>
Park-wide	38 To enhance the visitor experience and understanding of the park, existing and potential visual intrusions are minimized (same as B).	<ul style="list-style-type: none"> <li>■ Use existing and augmented vegetative buffers to screen existing and new visual intrusions along the perimeter of the park.</li> <li>■ Buffers are defined, delineated, and actively managed to protect resources from possible damage or deterioration and to maintain the tranquility of the remainder of the site's landscape.</li> <li>■ Work with PECO to bury remaining overhead electrical lines.</li> <li>■ Work with neighboring townships to ensure new construction is adequately screened.</li> <li>■ Work with PennDOT and the PA Turnpike Commission to screen US 422 and the Turnpike as they are widened.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	39 Park visitors are actively encouraged to visit key sites and districts within the area and to understand their relationship to Valley Forge (same as B).	<ul style="list-style-type: none"> <li>■ Work with managers of Revolutionary War sites and other historic and natural sites that convey themes related to those of Valley Forge on joint programming and promotion.</li> </ul>
Park-wide	40 Natural resource education on stewardship and contemporary resource preservation is essential (same as B).	<ul style="list-style-type: none"> <li>■ Park staff ensure the availability of natural resource interpretation and educational programs by developing objectives, targeting the best partners, and facilitating partner operations in the park.</li> <li>■ Establish partnerships with schools, institutions, and other partners who can use the park's natural landscape to provide programming.</li> <li>■ Continue to work with Mill Grove Audubon Center on potential for rehabilitating north side structures as educational facilities.</li> <li>■ Present exhibits and programs that convey the history and significance of Valley Forge as a national park with a diversity of significant resources, its role in maintenance and recovery of native biodiversity, and its role throughout time in its broader ecological contexts.</li> </ul>
Park-wide	41 Visitors enjoy a safe and secure experience at Valley Forge NHP (same as A).	<ul style="list-style-type: none"> <li>■ Establish a "park watch" volunteer program.</li> <li>■ Remove little-used parking lots that attract illicit use.</li> <li>■ Relocate bicycle traffic to the tour roads.</li> <li>■ Complete the CERCLA process for the asbestos release site that sets priorities and methods for asbestos remediation.</li> <li>■ Fully mitigate the asbestos so public and environmental health is protected, and there is full public use of the park.</li> <li>■ Remove other hazardous materials that pose a risk to humans, wildlife, and plants.</li> <li>■ Ensure all park facilities and structures are maintained according to applicable regulations for use as visitor facilities.</li> <li>■ Mitigate health and safety risks of all facilities and structures according to a comprehensive integrated pest management plan and program.</li> <li>■ Staff law enforcement commensurate with levels and patterns of visitation.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)	Park-wide  42 Prospective visitors are able to obtain timely and relevant information to help in trip planning and travel to the park (same as A).	<ul style="list-style-type: none"> <li>■ Keep the park website current and user-friendly, and ensure that it is linked to other sites that allow the public to find it.</li> <li>■ Continue to work with Valley Forge Visitors and Convention Bureau to develop and distribute information on facilities and activities at the park and related sites.</li> <li>■ Continue to work with PennDOT and the PA Turnpike Commission to ensure adequate and accurate directional signage on highways.</li> <li>■ Improve the content and availability of bike and hiking information available to visitors on the web, in printed materials, and at trailheads.</li> </ul>
	Park-wide  43 Visitor services and facilities are appropriately scaled and located, and they facilitate enjoyable and educational visits to the park (same as B).	<ul style="list-style-type: none"> <li>■ Park continues to provide limited events and programs.</li> <li>■ A cooperator provides retail sales and limited food service.</li> <li>■ Ensure that accessible restrooms are available at key interpretive areas and major trail heads.</li> <li>■ Retain parking areas located near key interpretive sites.</li> <li>■ Complete a market analysis to assess the potential for using existing park structures for visitor services such as lodging or food service.</li> <li>■ Establish a picnic area for school groups adjacent to the Welcome Center.</li> <li>■ Monitor visitor satisfaction in terms of facilities used for recreation, including trails and parking lots.</li> </ul>



Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park-wide	<p>44 A trail system is established that combines existing trails and limited new trails to provide a variety of visitor experiences related to and appropriate to park resources. New trail segments are established where they meet the following goals and criteria:</p> <ul style="list-style-type: none"> <li>— provide safe access to key features</li> <li>— make loop circulation possible</li> <li>— provide good experience or interpretive value</li> <li>— easily maintainable</li> <li>— trailhead available or feasible to make available</li> <li>— no cultural or natural resources are affected</li> </ul>	<ul style="list-style-type: none"> <li>■ Establish and/or formalize connections that create loop trails.</li> <li>■ Complete a historic resource study and treatment plan for those trails that are known to be historic.</li> <li>■ Evaluate trail system for accessibility and ensure appropriate level of accessibility to the extent possible.</li> <li>■ Ensure that trailheads are adequately served by parking, rest facilities, and information in order to serve visitor needs and prevent resource damage.</li> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Eliminate the currently authorized and unauthorized trails that are unmaintainable and/or that damage cultural or natural resources.</li> <li>■ Publicize the formal trail system (as defined by this GMP) through public information.</li> <li>■ Improve the content and availability of trail information available to visitors on the web, printed materials, and at trailheads.</li> <li>■ Facilitate a program of vigorous volunteerism to enhance and maintain trails, trails information, and patrolling.</li> <li>■ Develop more interpretive activities for trail users.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> <li>■ See Figure 2-10 for a map of the proposed trail system.</li> </ul>
Park-wide	45 Inner Line and Outer Line Drives are closed to private vehicles, and are used as bike trails, reducing conflicts on the Joseph Plumb Martin Trail.	
Interpretive Focus Zone	46 Active recreation is limited to pedestrian trails that skirt the zone (same as B).	<ul style="list-style-type: none"> <li>■ Eliminate active recreation from interpretive focus zones by siting recreational paths outside the zones and using vegetative screens.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<p>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</p> <p>Park-wide</p>	47 Appropriate recreational use continues to be welcomed in places where it does not impact resources or interpretive activities. All public activities and events are systematically evaluated for appropriateness before they are allowed (same as B).	<ul style="list-style-type: none"> <li>■ Provide information and interpretation about park history and cultural and natural resources specifically targeted to recreational visitors.</li> <li>■ Use official NPS criteria to evaluate if and when uses are compatible with resource protection.</li> <li>■ Cooperate with local organizations and governments to find alternative locations for incompatible events.</li> <li>■ Continue to prohibit uses that damage park resources and/or do not contribute to public understanding of park history and resources.</li> </ul>
	48 Connections to existing and future trails outside the park are pursued to encourage visitors to arrive through non-motorized means (same as B).	<ul style="list-style-type: none"> <li>■ Establish a Wilson Road connection to the future Chester Valley Trail.</li> <li>■ Continue to work with Montgomery County on management of parking, signage, and user information for the Schuylkill River Trail.</li> <li>■ Continue to work with Upper Merion Township on a trail connection at the eastern end of the park.</li> <li>■ Strengthen relationship with Horseshoe Trail Coalition to address issues of signage, authorized use, and user information.</li> <li>■ Monitor the volume of visitor use on trails to ensure that carrying capacity is not exceeded.</li> </ul>
	49 Traffic circulation is managed in a way that reduces impacts on park resources and provides for safe visitor use, while mitigating intrusion of auto traffic on the visitor experience. Visitor and commuter traffic through the park is minimized.	<ul style="list-style-type: none"> <li>■ Work with PennDOT, the counties, FHWA, and DVRPC to implement findings of VFATPS.</li> <li>■ PA Routes 252 and 23 remain public roads and receive traffic calming measures according to VFATPS ark options 1 and 6.</li> <li>■ Implement VFATPS park option 5 by installing a single-point westbound fly over at Pawling's Road and US 422.</li> <li>■ Continue to support implementation of the Schuylkill Valley Metro.</li> <li>■ Re-open the Port Kennedy station within the park for non-commuter use.</li> <li>■ Close Inner Line Drive and Outer Line Drive to public vehicular traffic.</li> <li>■ Close Gulph Road permanently to public vehicular traffic.</li> <li>■ Establish a shuttle to carry visitors to those parts of the park that are not accessible by private vehicles.</li> <li>■ Ensure continued access for emergency vehicles on closed roads.</li> <li>■ Re-open link between Outer and Inner Line Drives for shuttle use only.</li> <li>■ Remove parking lots from the cultural landscape.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
Park Support Zone	<p>50 The primary park gateway provides a sense of arrival and clearly understood circulation route to the visitor's destination in the park. As part of the River Crossing Complex of US 422 projects, a half-mile portion of PA Route 23 between Trooper Road and Outer Line Drive would be shifted to the eastern boundary of the park. The primary park entrance also would be shifted eastward. Redesign of this area would provide a clearly marked entrance and better sense of arrival as visitors exit the busy surrounding roads and enter the park. An entrance sign and landscaping would be added. The entrance drive would be reconfigured as needed to accommodate the proposed relocated maintenance facility. Additional gateway treatments at other park entrances would help to establish a recognizable sense of place.</p>	<ul style="list-style-type: none"> <li>■ Establish a new primary gateway in response both to the reconfiguration of the US 422/PA Route 23 interchange and also the replacement of the Betzwood Bridge.</li> <li>■ Establish appropriately scaled and recognizable entrances from Pawlings Road, Audubon Road, Yellow Springs Road, Thomas/Gulph Road, North Gulph Road, and PA Route 23.</li> <li>■ Coordinate signage, landscaping, and imagery at all park entrances—both vehicular and trail—to establish a recognizable sense of place.</li> </ul>
Park-wide	<p>51 Regional traffic congestion on local roads would be reduced through construction of a half-diamond interchange at the intersection of Pawlings Road with US 422, as proposed in the <i>Phoenixville Area Intermodal Transportation Study</i> (DVRPC 2003). The interchange would be located in land within the legislated park boundary.</p> <p>52 NPS would continue to support implementation of the proposed Schuylkill Valley Metro. The park's Port Kennedy station would be re-opened for visitor (not commuter use).</p>	<ul style="list-style-type: none"> <li>■ Construct half-diamond interchange at the intersection of Pawlings Road and US 422.</li> </ul>
North Side Zone	<p>53 The north side is programmatically integrated with the south side, making it more accessible to visitors while protecting its special qualities.</p>	<ul style="list-style-type: none"> <li>■ Use signage and appropriate gateway design to clarify park entrances.</li> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Connect the north side of the park to the south side of the park programmatically, through interpretation.</li> <li>■ Designate the north side as a distinct ranger district in order to better manage visitor use and impacts.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Public Use, Enjoyment, and Experience of the Park (Continued)</b>		
North Side Zone	54 The River Trail, the Schuylkill River Trail, the parking and support for the trailheads at Betzwood and Pawling's Road are managed to enhance their recreational values, while not impairing the cultural and natural values of lands adjacent to them (same as B).	<ul style="list-style-type: none"> <li>■ Establish a new pedestrian/bicycle bridge over the Schuylkill River to connect the trail systems of the north and south sides of the park.</li> <li>■ Work with PennDOT to establish a pedestrian/bicycle crossing over or under US 422 from the Schuylkill River Trail to the Fatlands/Waggonseiler's area.</li> <li>■ Monitor the volume of visitor use of these trails to ensure that carrying capacity is not exceeded.</li> <li>■ Focus volunteer effort on maintenance and patrol of these trails to discourage damaging off-trail use.</li> <li>■ Establish water trail landings.</li> </ul>
<b>Mission Goal: Ensure Organizational Effectiveness</b>		
Park-wide	55 Staffing from all sources is adequate in numbers and deployment to implement and support the management objectives.	<ul style="list-style-type: none"> <li>■ Hire additional staff and re-allocate staff as needed. See Appendix H for details.</li> <li>■ Work with volunteers.</li> </ul>
Park-wide	56 Employees continue to hold key responsibility in protecting the resources in the park as well as reducing the threats caused by improper use or development of such resources. Employees are responsible not only to achieve the park mission of preservation and interpretation, but also to encourage engagement of the community in the mission (same as B).	<ul style="list-style-type: none"> <li>■ Every employee develops a personal stewardship goal for engaging the community.</li> <li>■ Monitor programs to track stewardship.</li> <li>■ Augment volunteer program to assist with stewardship efforts.</li> </ul>



Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<p><b>Mission Goal: Ensure Organizational Effectiveness (Continued)</b></p> <p><b>Park-wide</b></p>	<p>57 Existing park partnerships are maintained and strengthened to expand the park's capacity to protect park resources and provide high quality visitor interpretation and experiences. Additional partnerships are actively pursued (same as B).</p>	<ul style="list-style-type: none"> <li>■ Numerous actions result. Among the major initiatives that would be accomplished through partnerships are the following:</li> <li>■ Organize and allocate park staff to facilitate development and management of partnerships.</li> <li>■ Coordinate visitor services, interpretive, and educational operations with other partners to ensure the broadest audience is reached with highest quality services at the best cost.</li> <li>■ Continue to work with the PennDOT, FHWA, DVRPC, Chester and Montgomery Counties, and the five townships to manage traffic congestion in and around the park and to implement preferred transportation options as identified in this GMP.</li> <li>■ Continue to work with SEPTA and GVTMA to implement alternative transportation options that reduce traffic volume and congestion.</li> <li>■ Continue to work with partners such as commonwealth agencies, the Schuylkill River National &amp; State Heritage Area, the two counties, and numerous private organizations on joint initiatives for cultural and natural resources education; long-distance trails management; and natural resources management, particularly in regard to themes and resources that extend beyond park boundaries.</li> <li>■ Take a lead in the initiatives to protect and restore the quality of the Valley Creek watershed.</li> <li>■ Actively participate in local and regional initiatives that protect and enhance the quality of the Schuylkill River watershed.</li> <li>■ Work with other NPS Revolutionary War sites and with historic sites in the region on promoting joint interpretation and visitation.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness (Continued)</b>		
Park-wide	58 The scope and contribution of volunteer programs in resource management, interpretation and visitor services, maintenance, and administration are enhanced. Programs provide life-long opportunities for citizens to take personal responsibility to care for our heritage (same as B).	<ul style="list-style-type: none"> <li>Organize and allocate park staff to build and manage volunteer programs.</li> <li>Continue to work with current volunteer groups to expand and enhance the effect of their services to the park by providing training, support, recruitment, and other services.</li> <li>Increase the use of interns from organizations such as the Student Conservation Association, local colleges, and high schools.</li> </ul>
Park-wide	59 The park actively seeks non-appropriated funds to support its preservation and interpretation mission (same as B).	<ul style="list-style-type: none"> <li>Organize and allocate staff resources to facilitate obtaining alternate support, such as through cooperative and interagency agreements, grants, donations, cost recovery, concessions, fees, earned income, and similar opportunities.</li> </ul>
Park-wide	60 Revenues from universal visitor use fees help the park to meet its preservation and interpretation missions (same as B).	<ul style="list-style-type: none"> <li>Evaluate options for a fee structure that provides reasonable fees, paid by all park visitors, and easily collected.</li> <li>Fees may be charged for selected special services, such as guided park bus tours.</li> </ul>
Park-wide	61 The park's utilities infrastructure is updated to meet current safety and efficacy standards, and maintained in good working order (same as B).	<ul style="list-style-type: none"> <li>Complete a master utilities survey of the existing utility infrastructure to determine easement locations, capacities, and existing demands.</li> </ul>
Park-wide	62 Park staff, volunteers, interns, contractors, and partners work in a safe and secure environment (same as A).	<ul style="list-style-type: none"> <li>Ensure all park facilities and structures are maintained according to applicable regulations for use as office, laboratory/curation work space, etc.</li> <li>Mitigate health and safety risks of all facilities and structures according to a comprehensive integrated pest management plan and program.</li> </ul>

Table 2-8 Alternative C: NPS Preferred (Continued)

Management Zone	Management Objectives	Examples of Appropriate Actions That May Result from Management Objectives
<b>Mission Goal: Ensure Organizational Effectiveness (Continued)</b>		
Park-wide	<p>63 Some non-contributing buildings in the park for which there are suitable and feasible interpretive, visitor services, or park operational uses are maintained in good condition and/or renovated for continuing park use (same as B).</p> <p>Non-contributing buildings that are not needed or suitable and feasible for interpretive, visitor services, or park operational uses are available for concessions or for leasing, under the determinations stipulated by 36 CFR 1/18.4 that were made as part of the development of this GMP. Buildings for which there is no feasible use are demolished.</p>	<ul style="list-style-type: none"> <li>■ Renovate the current Welcome Center as a collections storage and curatorial support facility.</li> <li>■ Renovate the existing Theater building for administrative offices.</li> <li>■ Continue to use the YACC garage and the Fatlands garage for remote maintenance storage.</li> <li>■ As conditions and the needs of park operations change through the years, evaluate additional modern structures for inclusion in the leasing program.</li> <li>■ Demolish buildings which have no feasible use and which do not contribute to the National Register significance of the park, for example, the amphitheater and the maintenance facility within the Grand Parade.</li> </ul>
Park-wide	64 The park housing program meets service-wide objectives: buildings in the park are used for staff housing only when occupancy provides security (in terms of timely response to park protection needs, ensuring reasonable deterrence to prevent threats to park resources, or protecting the health and safety of park visitors); is essential to staffing (transitory or seasonal staff, volunteers, essential cooperators); or sustains a historic structure for which there is no feasible use (same as A).	<ul style="list-style-type: none"> <li>■ Ensure that bi-annual housing plan includes strategies for continual reduction of the number of current housing units until this objective is met.</li> </ul>
Park Support Zone	65 The park maintenance facility is relocated near the administration building on a site that does not impair a core historic landscape and provides adequate and safe space to accomplish work efficiently.	<ul style="list-style-type: none"> <li>■ Remove the maintenance complex from the asbestos quarry on the Grand Parade.</li> <li>■ Construct a new maintenance facility on adjacent to Steuben Memorial Information Center or at Cinder Lane or adjacent to the County Line/PA Route 23 intersection.</li> </ul>
Park Support Zone	66 The ranger station is relocated near the administration building in an adequate and safe space to accomplish work efficiently. It is co-located with the new maintenance facility or established within the current theater.	<ul style="list-style-type: none"> <li>■ Relocate the ranger station to a location within the park support zone that provides good access to the park, and adequate and secure space for operations.</li> </ul>