Petersburg National Battlefield Draft General Management PlanEnvironmental Impact Statement March, 2004

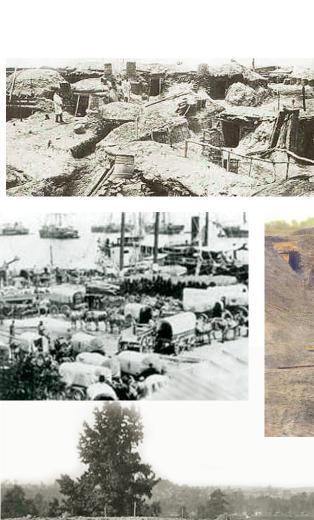
Environmental Impact Statement

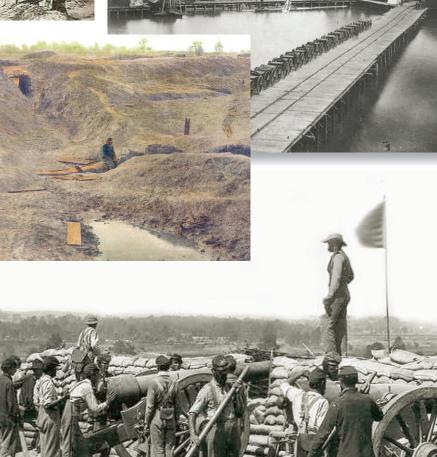


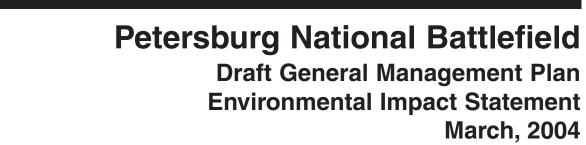


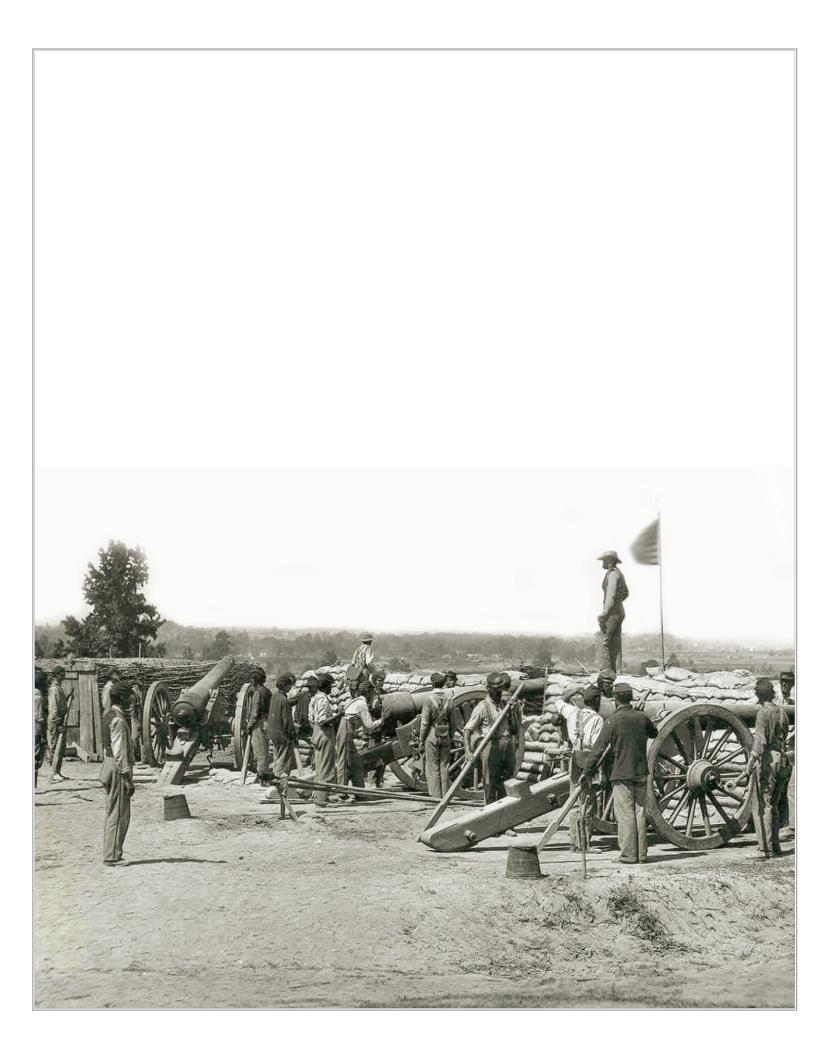
















As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife and biological diversity; preserving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

DRAFT GENERAL MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

Petersburg National Battlefield
Petersburg, Virginia
2004
Abstract

his Draft General Management Plan/Environmental Impact Statement (GMP/EIS) presents an exciting vision for the future of Petersburg National Battlefield. This document also describes the environment that will be affected, and the environmental consequences of implementing each of the alternatives. Alternative A continues the current management direction of the park and constitutes the no-action alternative. Alternative B directs the park's priorities towards the preservation of nationally significant battlefield resources both inside and outside the park. Under this alternative, the boundary would expand by 7,238 acres and maximize partnerships with the communities and other Civil War organizations to protect remaining nationally significant battlefields that have a high degree of integrity. Visitors would continue to use the existing visitor center for orientation and interpretive activities. The visitor contact station at Five Forks Battlefield is removed and relocated. Themes would be expanded to tell the broader stories of the Petersburg Campaign. Alternative C creates dynamic interpretation with resources geared towards interactive and animated programs using modern technology where appropriate, the latest interpretive tools and an upgraded interpretive center. There is a limited boundary expansion of 2,030 acres for protecting existing resources. Visitors can begin their experience at any of the five units with new themes, and expanded programs and facilities developed at Grant's Headquarters at City Point, the Home Front in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield. Partnerships that protect nationally significant battlefields outside the park's boundary are emphasized. Under Alternative D, the cultural landscape is the mechanism by which the Civil War stories are told. A boundary expansion of 7,238 acres would preserve nationally significant battlefields, protect existing park resources and create opportunities for visitors to access these significant Civil War landscapes and resources. Selected earthworks, viewsheds and landscapes would be rehabilitated to reflect their 1864/1865 appearance. Similar to Alternative C, visitors can begin their experience at any of the five units with new themes, and expanded programs and facilities developed at Grant's Headquarters at City Point, the Home Front in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield.

The public review period will last for 60 days after the publication of a Notice of Availability in the Federal Register. Comments on this draft document should be directed in writing to the Superintendent, Petersburg National Battlefield, 1539 Hickory Hill Road, Petersburg, Virginia, 23803. Comments may be submitted electronically at pete_gmp@nps.gov. Please note that names and addresses of people who comment become part of the public record. If you wish for us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations, businesses, and individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

For further information regarding this document, please contact the Superintendent, at Petersburg National Battlefield at the above address or call (804) 732-3571 extension 105 or visit the park through the web site at www.nps.gov/pete.

İ

DRAFT GENERAL MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

SUMMARY

Letersburg National Battlefield does not currently have a General Management Plan. The park's existing Master Plan (1965) was primarily a facilities development plan. The current Master Plan provides no long-range guidance on such issues as related lands outside the park, the management of new park areas, or revisions to operations and programming activities. All of its major recommendations have been completed. In the intervening 38 years, Petersburg NB transferred park land to the city of Petersburg, added two new units, undertook minor boundary adjustments, and identified battlefield lands critical to the park's mission that lie outside its boundaries. At the same time, the park has experienced threats to physical resources and to the visitor experience from incompatible residential, commercial and industrial development along park borders. Finally, over the past quarter century, modern scholarship and changing public values have revealed limitations in the current visitor experience and the need for new interpretive themes.

The Draft General Management Plan (GMP) presents and analyzes four alternatives for preserving resources, enhancing interpretation, providing visitor services and working with partners. It responds to the park's mission and the challenges facing the park and adjacent communities today. The Draft Environmental Impact Statement (EIS) has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, which requires the evaluation of potential impacts resulting from federal actions. It includes a description of the environment affected by the proposed activities and the environmental consequences of implementing any of the alternatives.

Alternative A, the no action alternative, identifies the current management direction and provides a baseline with which to compare the other alternatives, as required by the National Environmental Policy Act. It retains the management guidance and direction of the 1965 Master Plan, including its identification of significant resources, its boundaries as modified by legislation, and its policies for battlefields and historic properties. The visitor experience begins with an overview of the events at the Eastern Front and continues with a tour of the NPS sites: major fortifications, portions of four battlefields and the Appomattox Manor. This alternative focuses on the existing park resources and relies entirely on NPS to conserve resources, interpret the story and develop and manage the facilities. Partnerships continue to be developed with individuals, organizations or agencies to conserve Civil War resources outside the park.

Under Alternative B, the park places the highest value for staffing and financial resources on battlefield preservation both inside and outside current park boundaries. A boundary expansion of 7,238 acres is proposed. The majority of the park's activities are directed towards protecting battlefield lands through easements, partnership efforts, landowner outreach and education efforts and direct purchase. The historical and contextual importance of Petersburg,

the surrounding battlefield lands, and the need to protect the "blood-soaked ground" for future generations is emphasized in expanded interpretive themes. Visitor interpretation and services currently underway remain as is, with an added layer regarding the importance of the park's preservation efforts and strategies. Educational outreach targets both students and adults for innovative learning. Visitors continue to use the Eastern Front visitor center as the main point of entry and orientation. Since the highest concentration of important battlefields is located here, visitor contact and resources can be maximized. Appomattox Manor provides limited visitor services. The visitor contact station at Five Forks Battlefield is removed and relocated. Partnerships that promote battlefield preservation receive the most consideration in terms of outreach and staff efforts. Technical assistance to surrounding localities and local landowners are an integral part of the park's advocacy role in achieving resource protection.

Alternative C focuses the park's priorities on creating dynamic interpretation with resources geared towards interactive and animated programs using modern technology where appropriate, the latest interpretive tools, and staff. There is a limited boundary expansion of 2,030 acres for protecting existing resources and providing better access for interpretation. A more complete Civil War understanding is emphasized—causes of, experience during, and reconciliation after the war including relevance of the war to people today. The existing visitor center is upgraded to provide for more interpretive media and exhibits. Visitors begin and are oriented to the Petersburg Campaign at any of the five park units. At each unit, a full and comprehensive interpretive program is available, with each unit's story explained within the Campaign. New programs and expanded facilities are developed at Grant's Headquarters at City Point, the Home Front in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield. Partnerships with Civil War organizations and sites are the mechanism by which nationally significant battlefields outside the park's boundary are preserved. Park staff provides technical assistance and increases its advocacy role in the community. Partnerships with scholars, historians and educational institutions are also pursued.

In Alternative D, the cultural landscape is the mechanism by which the Civil War stories are told. A boundary expansion of 7,238 acres preserves nationally significant battlefields, protects existing park resources and creates opportunities for visitors to access these significant Civil War landscapes and resources. The interpretive program is dynamic and interactive, conveying a more comprehensive Civil War story by making full use of battlefield resources. The visitor experience is much more compelling, as they are immersed in the landscape upon which battles were fought. Efforts by which NPS and others are protecting battlefields and other Civil War-related resources are emphasized. Visitors can begin and be fully oriented at any of the five park units. At each unit, a full and comprehensive interpretive program is available, with each unit's story explained within the campaign. New programs and expanded facilities are developed at Grant's Headquarters at City Point, the Home Front in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield. Partnerships with localities and organizations that promote battlefield preservation and further Civil War education and interpretation are pursued.

DRAFT GENERAL MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

TABLE of CONTENTS

Abstract	i
Summary	ii
Table of Contents	iv
CHAPTER ONE: PURPOSE AND NEED FOR ACTION	1
Virginia's Vanishing Battlefields	3
Background and History of the Park	5
Description of the Park	12
Purpose, Significance and Mission of Petersburg NB	14
Decision Points	16
Analysis of Boundary Adjustment Criteria	21
Park Interpretive Themes	37
Relationship to Other Plans and Projects	41
CHAPTER TWO: MANAGEMENT ALTERNATIVES	43
Other Alternatives Considered	44
Preservation Treatments and Their Relation to the Alternatives	46
Management Zones	47
Alternative A: Continuation of Current Management Practices: No Action	50
Common to All Action Alternatives	56
Alternative B: Saving the Battlefields	67
Alternative C: Telling the Stories	74
Alternative D: The Landscapes Tell the Stories	81
CHAPTER THREE: THE AFFECTED ENVIRONMENT	87
Impact Topics Eliminated from Further Analysis	88
Cultural Resources	89
Historic and Designed Landscapes	90
Historic Structures	91
Archeological Resources	95
Ethnographic Resources	97

Monuments & Commemorative Resources	98
Library, Collections & Archives	99
Natural Resources	100
Climate	100
Air Quality	100
Noise and Soundscapes	101
Energy and Green Operations	102
Geology, Soils and Topography	103
Prime and Unique Agricultural Lands	104
Water Resources and Quality	104
Wetlands	106
Wild and Scenic Rivers	109
Ecological Resources	109
Vegetation	109
Vegetation Mapping Project	111
Wildlife and Aquatic Life	112
Rare, Threatened and Endangered Species	114
Social and Economic Environment	115
Region of Influence	115
Demographic and Economic Profile	116
Land Use	118
Planning Agencies & Comprehensive Plans	121
Regional Open Space & Recreation Resources	122
Infrastructure	124
Transportation	125
Future Planning	128
Travel & Tourism	128
Role of the Park	128
Visitor Experience, Use & Facilities	129

CHAPTER FOUR: ENVIRONMENTAL CONSEQUENCES	135
Statutory Requirements	136
Methodology	137
Impacts to Cultural Resources	140
Impacts to Natural Resources	151
Impacts to Social and Economic Environment	162
Unavoidable Adverse Impacts	175
Relationship Between Local Short-Term Uses of the	
Environment and the Maintenance and Enhancement	
of Long-Term Productivity of the Action Alternatives	175
Irreversible and Irretrievable Commitments of Resources of Action Alternatives	176
Environmentally Preferred Alternative	176
Carrying Capacity	178
CHAPTER 5: CONSULTATION AND COORDINATION	179
History of Community Participation	180
Compliance With Specific Laws & Regulations	182
Agency Consultation	186
List of Preparers	188
List of Recipients	189
APPENDICES	191
Appendix A - Enabling Legislation	192
Appendix A - Chapter Three Tables	196
Appendix C - Cost Estimates for Action Alternatives	201
Appendix D - References	202
Appendix D. References	202

THIS PLAN IS DIVIDED INTO FIVE CHAPTERS:

Chapter 1: The Purpose & Need for Action

Sets forth the park's purpose, significance and mission goals; describes the history of the park area; summarizes the current situation; and outlines the goals and decision points that will be addressed during the management planning stage.

Chapter 2: The Management Alternatives

Describes the no-action alternative and three action alternatives under consideration, including action examples. It also briefly describes several alternatives that were considered but rejected.

Chapter 3: The Affected Environment

Identifies the natural, cultural and socioeconomic environment and the infrastructure elements that may be affected by the implementation of any of the alternatives.

Chapter 4: Environmental Consequences

Describes the impacts that could result from the implementation of any of the alternatives.

Chapter 5: Consultation and Coordination

Describes public participation and agency coordination as part of the planning process.

Appendix

Includes additional information on legislation, cost estimates and selected references.



Purpose & Need for Action

Purpose and Need for Action

Each day at Petersburg National Battlefield, park managers and staff make many decisions that affect its visitors and how resources are protected, used and interpreted. The management direction for these decisions is found in a park's general management plan (GMP). A GMP defines the park's basic approaches to natural and cultural resource management, interpretation, the visitor experience, and partnerships for the next 20 years. In short, a GMP tells park managers what they should be doing, and why.

The National Park Service (NPS) manages all park units in accordance with the mandate in its 1916 Organic Act and other legislation to conserve resources unimpaired for the enjoyment of future generations. To help implement this mandate, the National Parks and Recreation Act of 1978 (Public Law 95-625) and NPS Management Policies (NPS 2001) require each national park to have a broad-scale general management plan.

This draft Petersburg National Battlefield (Petersburg NB) GMP describes the park's vision for preserving nationally significant battlefields, expanding stories associated with the Petersburg Campaign and providing services and facilities that enhance the visitor experience. The plan does not provide specific and detailed answers to every issue or question facing the park. However, the plan does provide a framework for proactive decision making on such issues as battlefield preservation, cultural resource management, and visitor use which allow park managers to effectively address future problems and opportunities.

Many changes have occurred at Petersburg NB, in the surrounding area and in park management since the park's last master plan was approved in 1965. This master plan was primarily a facilities development plan and all of its major recommendations have been completed. In the intervening 38 years, Petersburg NB has transferred surplus park

land to the city of Petersburg, added two new units (Grant's Headquarters at City Point and Five Forks), undertaken minor boundary adjustments, and identified battlefield lands critical to the park's mission that lie outside its boundaries. At the same time, the park has experienced threats to physical resources and to the visitor experience from incompatible residential, commercial and industrial development along park borders. Finally, over the past quarter century, modern scholarship and changing public values have revealed limitations in the current visitor experience and the need for new interpretive themes. The current Master Plan provides no long-range guidance on such issues as related lands outside the park, the management of new park areas, or revisions to operations and programming activities. A new plan is essential for providing guidance in the 21st century, and to ensure the preservation of nationally significant battlefields and park resources and opportunities for visitors to have quality park experiences.

In the process of developing a GMP, many different approaches to park use, management and development are examined. This range of proposals is narrowed to a small number of action alternative plans, each of which would allow a park to achieve its mission and mission goals. To help the public and the NPS understand what would happen if an alternative were adopted, the

impacts of each alternative on the natural and cultural environment are described and compared. These descriptions are contained in the Environmental Impact Statement (EIS), which is prepared to satisfy the requirements of the National Environmental Policy Act of 1969 as amended and the National Historic Preservation Act of 1969. After a full range of alternatives has been described, the NPS, in consultation with the public, selects the alternative or combination of alternatives to be implemented.

A Notice of Intent to prepare an EIS was published in the Federal Register on April 1, 1997. From 1997-2000, the park and the Northeast Regional Office were engaged in the first GMP planning process. An internal draft document was produced that focused on minor boundary adjustments to protect existing park resources, expanding the interpretive themes, and developing new facilities. This document was never officially released to the public. As part of the NPS internal review process, it was determined that the park should pursue a boundary expansion in order to protect nationally significant battlefields associated with the Petersburg Campaign. The GMP planning process was redirected and new efforts resulted in scoping and conceptual alternative meetings with the public, consultations with state and federal agencies, and elected officials and development of this draft GMP/EIS.

Virginia's Vanishing Battlefields— A Context Statement for the Petersburg NP GMP

Since the conclusion of the Civil War in 1865, battlefield preservationists have struggled to find a balance between saving these hallowed fighting grounds and the growth of an expanding nation. Immediately following the war, farmers dismantled earthworks and forts, plowed and planted the battlefields and rebuilt homes and farm buildings on the very

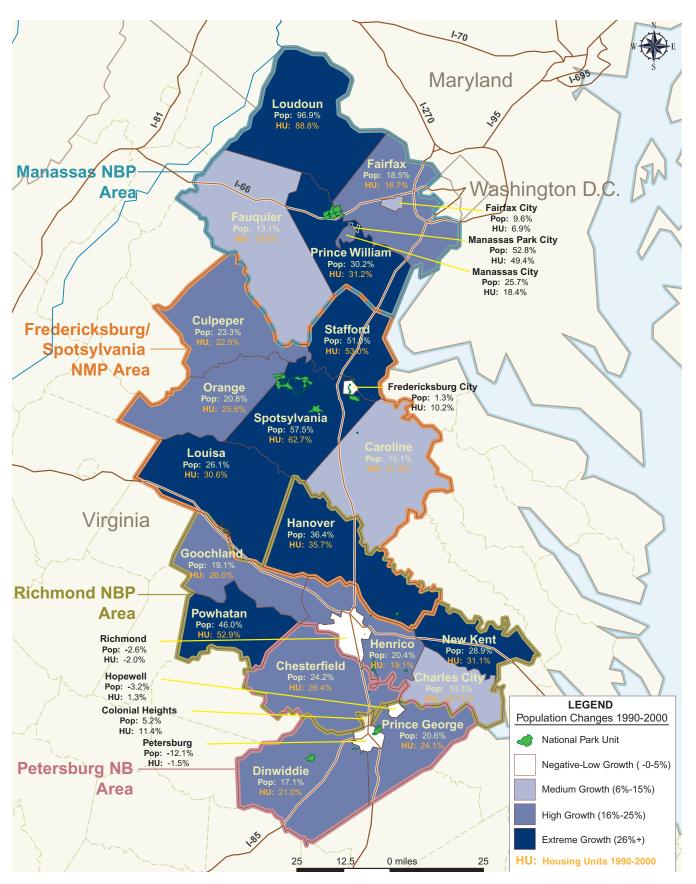
sites of intense combat and human loss. By 1900, less than 10% of these lands were protected by Congress as national military parks and most of the battlefields reverted to agricultural uses and the threat of landscape change was considered low.

But in the last twenty years, the spread of commercial, residential and industrial development radiating from the Washington DC area and along the Interstate 95 corridor through Virginia has had a dramatic impact on the Civil War battlefields preserved and managed by the National Park Service. In 1988, the proposed construction of a regional shopping mall on 550 acres at the Battle of Second Manassas sparked a national outcry





for preservation of the site. Using a "legislative taking", Congress acquired the land at a cost of \$134 million dollars. Over the next 15 years, similar high profile preservation efforts to prevent development occurred around battlefield parks in Manassas, Fredericksburg and Richmond. In many cases, an imminent threat from new roads, shopping malls or residential housing construction resulted in last minute efforts to protect the threatened battlefields. Following a grassroots campaign at the Chancellorsville Battlefield in 2003, a dramatic vote by the local county government prevented rezoning of an



adjacent farm—but may not be able to change the development of 225 homes and 55 commercial acres at the site. Many of these battlefields were saved from the "bulldozers at the gate" by the intervention of new coalitions, friends groups, national organizations, and NPS-at high costs. Over these last twenty years, real estate values have consistently risen 5-6% a year placing a heavy strain on non-profit organizations and local, state and federal agencies to raise funds in times of crisis. Recent acquisitions include 455 acres for the Wilderness Battlefield, Fredericksburg and Spotsylvania National Military Park for \$6.1 million, 808 acres at Brandy Station for \$5.7 million and 519 acres at Malvern Hill for approximately \$2 million, both at Richmond National Battlefield Park.

The rates of explosive population growth surrounding Manassas National Battlefield Park, Fredericksburg and Spotsylvania NMP and Richmond NBP will soon reach Petersburg National Battlefield. The 2000 U.S. Census figures on page 4 illustrate the high and extreme growth rates in the counties surrounding these parks. From an astounding 96.9% population increase in Loudoun County northwest of Washington DC to a 46% population increase in Powhatan County west of Richmond, these expanding populations create pressure for new housing, shopping, industry, schools and recreation—often at the expense of battlefield preservation. Petersburg National Battlefield has already experienced the impact of high growth in Prince George and Dinwiddie counties. Significant portions of battlefields have already been lost with the development of an industrial park at Globe Tavern, a steel recycling plant at Peebles Farm and residential housing at Boydton Plank Road. A more detailed description of the battlefields and evaluation begins on page 21.

Through the efforts of Petersburg NB, preservation partners, and with support

of local governments, organizations and private citizens, these nationally significant battlefields can be saved. Today, there is an opportunity through this General Management Plan to protect the battlefields associated with the Petersburg Campaign prior to escalating development pressure and real estate costs.

BACKGROUND AND HISTORY OF THE PARK

A Brief History of Petersburg

Petersburg was one of the south's leading industrial and commercial cities before the Civil War. Transportation links made Petersburg a strategic military target in wars fought on American soil in the east, for to occupy Petersburg was to control the movement of goods and people between the production areas of the south and the markets to the north. Consequently, there were battles for Petersburg during the Revolutionary War and the Civil War.

The City of Petersburg has been a transportation hub since its settlement by Europeans in 1645. The historic core of Petersburg, now known as Old Town, was the commercial heart of the Lower Appomattox region. Twenty-three miles south of Richmond, at the "point of Appomattox," this was the destination of 17th and early 18th-century trading parties of Appomattox tribesmen and English "woodsmen" bringing quantities of deerskins for the English market. With a navigable port farthest upstream on the Appomattox River and only eight miles from its confluence with the James River, the city became the regional market for agricultural goods and the point of departure for westward expeditions in the 17th and 18th centuries. As the 18th century progressed, and the English settled southern Virginia and northern North Carolina,

Petersburg became the center of the North American tobacco trade. During the American Revolution, Petersburg was the principal staging point for operations on the southern front. After the Revolutionary War, transportation projects (canals, roads, and some of America's earliest railroads) and manufacturing industries based on tobacco, cotton, flour and iron led to prosperity.

With the advent of railroads in the 19th century, Petersburg became the rail hub among the major cities of the North, and via the port of Wilmington, North Carolina, to



The City of Petersburg, May 1865

the great agricultural regions of the deep South and the interior of Tennessee and Kentucky. In the 20th century, the interstate highway system was developed and connected the southern production and distribution centers with the markets to the north. Petersburg became the junction at which the major north-south road along the eastern seaboard (I-95) and a connector between the northern markets and Atlanta and the southern agricultural areas (I-85) intersected.

At the time of the Civil War, all railroad traffic through Petersburg crossed a single bridge to the north of Old Town. This was

the only bridge along the Appomattox for many miles, and the only one to connect all five railroads from the south and west to Richmond and the north. It was railroads that drew General Grant's attention to Petersburg.

Petersburg's Role in the Civil War

After three years of war, the Union army found itself under the command of the newly appointed commander-in-chief of all Federal armies, Lieutenant General Ulysses S. Grant. Up to this point, the main target of the Union Army had been the capital of the Confederacy, Richmond. Now their new leader looked beyond that objective: the simple fact of the matter would be that this conflict would not come to an end until Lee's fighting power was destroyed. Therefore, Grant ordered General George Gordon Meade's Army of the Potomac to follow Lee's army wherever Lee's army went.

When Grant tried to punch through Lee's well-laid defensive works at Cold Harbor, he found to his regret that trench warfare was now changing the tactics both armies were used to and relied on. One man behind a breastwork could hold back three times his attackers. Since Grant could not afford the casualties that resulted from frontal assaults on the battlefield, he would now go after their major supply lines to weaken them. Studying his maps, he soon realized that "the key to Richmond is Petersburg."

Lee, too, knew what the current situation meant to his army's survival. He wrote to another general earlier in the campaign, "We must destroy this Army of Grant's before he gets to the James River. If he gets there it will become a siege and then it will be a mere question of time." Unbeknown to the Confederate commander, Grant was already slipping away from his front virtually undetected and heading for the James. Soon

he would find ferryboats and a 2,220-foot pontoon bridge awaiting the use of his troops. The race for Petersburg had begun.

By 1864, Petersburg continued to play a major role in the Confederate cause. With a population of over 18,000 in 1860, it was the second largest city in Virginia, and the seventh largest in the South. It served as a major railroad transportation center with five lines radiating out to various points: Richmond, City Point, Norfolk, Weldon (North Carolina and Deep South) Lynchburg, and beyond. This mobile system made it a logical point for a major hospital center, which it had been before the siege began. Important industries were here: flour and cotton mills, iron works, a lead smelting plant, nitre works, railroad shops, tobacco warehouses, and other businesses.

Realizing the strategic importance of Petersburg, Confederate authorities had constructed a ten-mile semi-circular defensive line of earthworks around the city. With both flanks resting on the south bank of the Appomattox River, it contained fifty-five artillery batteries spaced at intervals, the works themselves being known as the "Dimmock Line" after the engineer who laid them out, Captain Charles H. Dimmock. Manning these defenses as Grant's forces quickly approached from Cold Harbor was a hodge-podge Southern army commanded by General P. G. T. Beaureguard. As the Louisiana general sent messages to Lee at Richmond that Petersburg was being attacked on June 15, the Confederate commander was still unsure of Grant's intentions. Soon he would realize that Petersburg was indeed the intended target of Union forces.

For four days, from the 15th through the 18th, Grant's army pounded the eastern gates of Petersburg from the Appomattox River to the Jerusalem Plank Road. While the Union forces did gain ground and eventually pushed back the Confederates out of two lines of works, the arrival of Lee on the 18th stabilized the situation as his men fell back to a third and final trench system. The fighting would cost Grant another 10,000 casualties.

Grant decided to lay siege to Petersburg, a military operation that would be the longest entrenched siege of any city in North America. While under the strict definition, it would never become a true siege (i.e. a total investment or surrounding of the Confederate stronghold). Nevertheless, Grant finally did surround the city on three sides and, most importantly, cut the supply lines feeding Lee's Army.



City Point Waterfront, 1864

As soon as a trench network was in place, the Union army was sent out on what would become a series of eight offensive movements to the south and eventually the west of Petersburg. The Weldon Railroad was the first objective of Grant's movements. While the capture of this supply line was initially unsuccessful in June, Union troops did eliminate the Confederate's use of the Jerusalem Plank Road (June 21-23) and extended their lines to the west of it.

The most famous action in July 1864, was the well-known Battle of the Crater, although strategically the Union Army gained nothing. That evening, the 30th of the month, the lines returned to their former static positions and the northern army had nothing to show for its efforts except another 4,000 casualties.

As the summer waned, Union infantry again went after the Weldon Railroad. This time they gained a foothold on it near Globe Tavern (August 18-21). A few days later while attempting to destroy the track farther south at Reams Station (August 25), the Federal forces were routed from the field. With Federal control of the Weldon Railroad, Lee was forced to bring his supplies from North Carolina as far as Stony Creek Station (16 miles due south of Petersburg). There he was forced to unload them onto wagons for transport toward Dinwiddie Court House,



U.S. Army supply trains leaving Petersburg on Washington Street.

then via the Boydton Plank Road into Confederate lines—a 27-mile route. The Plank Road would serve as an intermediary supply route for Lee's troops.

The autumn was spent with Grant's army again pushing toward the supply arteries. The Battles of Peebles's Farm (September 29-October 2) and Burgess' Mill (October 27) were both attempts to cut the Boydton Plank Road and the nearby South Side Railroad. Again, while not completing their objective, Federal forces did gain more ground and they extended their works. Lee likewise had to lengthen his trenches to guard his right flank and the lifelines, which fed his army. Usually, the arrival of inclement weather brought a halt to the military movements of armies. Such was not the case around Petersburg. In the first week of December (7-12), Union troops staged a raid on the

Weldon Railroad and destroyed portions below Stony Creek in the direction of Hicksford (now Emporia). While snow and sleet hampered this effort, Lee would be further inconvenienced in transporting subsistence into the region.

In February 1865, to keep a constant pressure on Southern forces, Grant once again ordered his troops out of the lines and toward the Plank Road. Reaching Hatcher's Run near Armstrong's Mill, the armies battled for three days (February 5-7) in winter weather. Consequently, the Union line extended all the way to this watercourse. As the spring foliage began to blossom in March, Grant moved his army into position for the final blow. Muddy roads would soon be hardening thus allowing massive troop movements. Grant began gathering a force of some 50,000 infantry, cavalry and artillery to break away from the siege lines and seize Lee's remaining supply routes west of the city. Realizing Lee's forces were stretched out in the defensive lines, Grant prepared to act.

Lee had one last surprise for the Federal army. Hoping to draw Grant's built-up force from its westward thrust, the Southern commander decided to execute what would be his only major offensive of the campaign. On March 25, 1865, a large contingent of Lee's men broke through the Union lines at Fort Stedman, east of the city. Although they were initially successful in their dawn assault, newly arriving Federal reinforcements stemmed the attack and recaptured their line. The offensive cost Lee nearly 4,000 casualties, few of whom he could hope to replace. Grant seized the initiative that very afternoon by attacking and securing sections of Confederate picket lines defending Boydton Plank Road.

The battles of Lewis Farm (where the Boydton Plank Road was finally taken), White Oak Road, and Dinwiddie Court House, were all preludes to the climactic Battle of Five Forks, the "Waterloo of the Confederacy." After the capture of this road junction on April 1, the Union commander ordered an all-out assault at various points along the Confederate lines for the following day. By dark of April 2nd the last rail line, the South Side, was in Federal hands and Lee began his withdrawal from Petersburg. Richmond would fall, and the Confederates holding it had to retreat across the James. Within a week of the fall of Petersburg, Lee surrendered his Army of Northern Virginia to Grant at Appomattox Court House, in effect, closing this dramatic chapter in American history.

Establishment of a National Military Park

Petersburg NB protects and interprets resources associated with the campaign, siege and defense of Petersburg that occurred between June 1864 and April 1865. This includes the encampments, routes of advance and retreat and the earthworks from which Union soldiers attacked (the siege); the encampments, routes of advance and retreat and the earthworks from which Confederate soldiers repelled their attackers (the defense); and the command centers, logistical supply systems, hospitals and other support facilities used by both sides (the campaign). In this document, the events associated with the campaign, siege and defense of Petersburg are referred to as the Petersburg Campaign.

Congress coined the term Petersburg
Campaign when it was debating the
designation of Civil War national parks at
Richmond and Petersburg. For the purposes
of managing Civil War resources, Congress
assigned battlefield lands associated with
Grant's Overland Campaign, the RichmondPetersburg Campaign, and the Appomattox
Campaign, to the new national military parks.
Petersburg National Military Park was
established in 1926 for the purpose of

managing lands related to the "campaign, siege and defense of Petersburg". The lands that were assigned to the park reflected those military actions in the two administrative subdivisions-the Appomattox Campaign and the Richmond-Petersburg Campaign-that occurred south of the James River and before the Battle at Sailor's Creek.

The first national battlefield parks designated by Congress were Antietam (1890), Chickamauga and Chattanooga (1890), Shiloh (1894) and Gettysburg (1895). In an effort to boost interest in establishing a park, the Petersburg National Battlefield Association was organized in 1898 with Stith Bolling, a



Confederate veteran, as its president. The goal of this group was to establish a park that would commemorate the Petersburg Campaign. Although early congressional bills failed (1898, 1900, 1901, 1906, 1908, 1909 and two in 1914), in 1925 Congress appointed a War Department Petersburg National Battlefield Commission to study the feasibility of preserving and marking the battlefields at Petersburg for historical and professional military study.

In 1926, Congress recognized the importance of preserving elements of the Petersburg Campaign, and established the Petersburg

National Military Park and the Petersburg National Military Park Commission. A report by the U. S. House of Representatives noted that:

"Manassas was, in the largest sense, the beginning of the war; Gettysburg was the high tide of hostilities on both sides, but Petersburg was the final field where the fratricidal struggle was fought to a finish. There, if anywhere, should be a permanent memorial to a restored peace between the states. Such a memorial, in the form of a park, would commemorate the highest ideals and exploits of American valor and strategy, without the taint of bitterness or shame to either side . . . The committee believes that the marking and preservation of the battlefields of the siege of Petersburg, according to the plan recommended by the commission and as embodied in this bill, will serve very practical, educational, historical, military and patriotic purposes, and recommends the passage of the bill."

The Work of the Military Park Commission

The Military Park Commission's first objectives at Petersburg were to open or repair roads deemed necessary for the park; and to designate with historical markers all earthworks, lines of battle, troop positions, buildings and other historical points of interest within the park or in its vicinity. Late in 1926, the Commission recommended the construction of a hard-surfaced road along the lines of both armies, and the acquisition of land that included Union forts Stedman, Haskell, Rice, Sedgwick, Davis, Wadsworth and Fisher, as well as Confederate forts Walker and Gregg, Battery Pegram and the Crater. The road was to be 21 miles long and the park was to encompass 185 acres. In 1928, the Commission recommended the acquisition of all forts, trenches and

earthworks contiguous to park roads, the Crater, portions of Camp Lee and additional lands of Battery Five and the site of the opening battle for Petersburg (the Initial Assault).

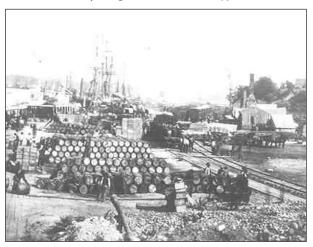
The Secretary of War urged that additional land be acquired, as he believed that the recommended acquisition would not be sufficient to protect battlefield resources. He also urged that the land comprise one continuous strip. A revised proposal for a 480-acre linear park that almost completely encircled the city of Petersburg, was approved by Congress in June of 1929. In July 1929, Congress authorized the transfer of portions of the Camp Lee Military Reservation to the military park.

Changes to Park Boundaries in the NPS Period

In 1933, when all national military parks were transferred from the Department of War to the National Park Service, Department of the Interior, Petersburg National Military Park's boundary encompassed 346 acres. The U.S. Army transferred Poplar Grove National Cemetery to the National Park Service in 1933, and responsibility for its upkeep was assigned to Petersburg NB in 1935. Since then, the park has grown as a result of a number of congressional and presidential actions. In 1949, park boundaries were expanded by 206 acres in a transfer from the Department of the Army authorized by Congress. This was part of a series of land exchanges with the Department of Defense, the Federal Bureau of Prisons and the Veterans Administration that took place around that time. By 1950, the park encompassed approximately 1,530 acres.

In 1962, Congress enacted legislation to change the name of the park from 'national military park' to 'national battlefield' and authorized the acquisition of land at the site of the Battle of Five forks. The 1,116 acres

were acquired in 1990, leading to the establishment of the Five Forks Unit. The most recent legislative action (1978) was for the acquisition of the Eppes Manor and adjacent lands in Hopewell (Grant's Headquarters at City Point), which added 19.8 acres to the park's holdings. Some 257 acres have been transferred from NPS to the city of Petersburg. Centre Hill Mansion and property along Flank and Defense roads were transferred in the 1970s. Today the park consists of 2,659 acres.



African American laborers at City Point Waterfront, April 1865.

Facility Development

Much of the initial road construction and land clearing was done by the Civilian Conservation Corps (CCC). Accommodations for the crew, which included 50 tent sites and associated facilities, were constructed near Fort Stedman. The CCC marked historic sites, cleared battlefields, planted tree screens and reconstructed and stabilized the Crater tunnel and earthworks.

The road system developed by the CCC in what is now the Eastern Front originally consisted of a series of cul de sacs that provided access to sites from public roads. Some segments of this system have been retained in today's park tour road. Flank

and Defense roads were constructed beginning in 1934 and 1935 to reach the Union and Confederate forts. A new entrance and bridge access from U.S. Route 36 was constructed in 1939. The building program spurred by the NPS Mission 66 initiative included the construction of the current maintenance facility and visitor center in 1967. Since the Mission 66 program, a number of other visitor service facilities have been built and several park buildings renovated to accommodate administrative and interpretive uses.

Changes to the Landscapes of the Park

In the 138 years since the end of the Civil War, the battlefields and other landscapes within the park have experienced change.

All have new land uses and all have become more forested. Generally, the units have been affected in the following ways:

- Grant's Headquarters at City Point was transformed from a plantation to a busy port and supply center during the Civil War. It then reverted to residential uses, and is now part of a residential neighborhood and commercial district.
- The Eastern Front has experienced considerable recreational facility development, extensive natural reforestation and substantial dismantling of earthworks and fortifications.
- The sites of the Western Front have been cut off from their larger battlefields and have experienced extensive natural reforestation, but there has been minimal physical dismantling of the fortifications.
- The Five Forks Battlefield has experienced limited development inside the park and considerable natural reforestation.

DESCRIPTION OF THE PARK

Name Changes to Management Units

Park management units are a mechanism by which park managers designate and differentiate discrete geographic units within a park. They do this for a variety of reasons to:

- establish operational units with discrete management organizations and staffing;
- readily identify designated geographic areas to enable quick reference and identification;
- group together like-units in order to better manage them by sharing discipline-specific resources (human and inanimate) that are unique to the resource (urban vs. rural, mountain vs. valley, seashore vs. inland, cultural vs. natural, etc.);
- better segregate and track the allocation of fiscal and material resources.

As part of the GMP process, a recommendation by park interpretive staff to change the current names of individual sites and units to reflect strategic positions or other Civil War usage was adopted. The term "front" is used by many contemporary sources of the Civil War. Used as a general term, the word signifies the direction in which soldiers face when occupying the same relative positions. Knowing of problems encountered by visitors to the park and their misunderstandings of each site's importance, these proposed changes not only are intended to alleviate confusion, but to help with the overall visitor experience. The changes include:

Current Name New Name

City Point Unit Grant's Headquarters at City Point

Main Unit Eastern Front

Outlying Unit Western Front

Five Forks Unit Five Forks Battlefield

In addition, under Alternatives C & D, a new management unit entitled the "Home Front" will be designated in Old Town Petersburg in partnership with the city. The Home Front will focus on the civilian siege experience and how the 9 months of conflict around them affected those within the city.

Location

Petersburg NB is located in south central Virginia, 20 miles south of Richmond and



50 miles north of the Virginia/North Carolina border. The park is comprised of 2,659 acres that lay in separate units in a semi-circle east, south and west of the city of Petersburg. It has land in four jurisdictions: Hopewell, Petersburg, Dinwiddie County, and Prince George County. The location, acreage, and a brief description of the four park units follow.

Grant's Headquarters at City Point, in Hopewell, is set on a peninsula overlooking the confluence of the James and Appomattox rivers. The extraordinarily picturesque unit, some 40 feet above mean low water, has been a site of human occupation for more than 10,000 years. It was the home of the Eppes family for 344 years; their plantation

residence, Appomattox Manor, dominates the setting.

The Eastern Front is the largest section of the park and its administrative center. It lies to the east of Petersburg, between two tributaries of the Appomattox River (Harrison Creek and Poor Creek) within the city limits and Prince George County. The unit shares boundaries with Petersburg and Fort Lee U.S. Army base. It presents a park-like appearance to the typical visitor who enters the main gate and drives the four-mile park road.

The Western Front includes the Gowen and Pennsylvania Monuments (two individual sites which total .13 acres) located within Petersburg, and five sites west of Petersburg that follow the battle siege lines along relatively high and level ground. The sites, all in Dinwiddie County, are Union Fort Wadsworth (10.5 acres), Long Flank (22.0 acres), Short Flank (3.4 acres), Fishhook (14.4 acres), Fort Wheaton (1.3 acres) and Confederate Fort Gregg. Poplar Grove National Cemetery (12.8 acres) is also within Dinwiddie County.

The Five Forks Battlefield lies approximately 17 miles southwest of Petersburg in Dinwiddie County. It is a rural area of fields and forests located at the junction of roads that, in the Civil War period, connected the South Side Railroad with the county seat at Dinwiddie Court House.

Access and Circulation

The park visitor center is accessible from both I-95 and I-295, using the Wythe St. and Oaklawn Blvd. exits, respectively. The four park units are accessible via the county and state road system. A visitor planning to see all the units would currently begin at the visitor center in the Eastern Front and branch off to the east to reach City Point or to the west for the Western Front and Five Forks

Battlefield. The distance between City Point and Five Forks is 37 miles, or about an hour's drive. The main circulation routes include the following:

- The park tour road in the Eastern
 Front, four miles in length, is located
 between Battery Five and the Crater. It is
 one way, and the park's visitor center is at
 the entry point. One lane of the park road
 is reserved for bicyclists, hikers, and
 parking. Vehicles are restricted to slow
 speeds. The road is featured as the
 Battlefield Tour in the park brochure.
 There are eight interpretive stops on the
 Battlefield Tour.
- West of the Eastern Front, a loop road and spur link the sites in the Western Front, and connect the unit with Five Forks and the Eastern Front. This comprises the Siege Line Tour in the tour brochure. There are seven interpretive stops on the Siege Line Tour. The driving distance is sixteen miles.
- Local roads and city streets create the connection to City Point from the Eastern Front. The distance between the two units is 6.7 miles.

The park's circulation system also includes the trail system, both informal and formal, that provides recreational opportunities and access to individual sites. Grant's Head-quarters at City Point has a number of informal paths that are remnants from the early twentieth century garden and an informal path along the river's edge. The Eastern Front has an extensive system used by joggers, horse riders, walkers and mountain bikers that originate from parking lots at the eastern edge near Fort Lee and the visitor center. A more limited system of walking trails is found in the Western Front and Five Forks Battlefield.

PURPOSE, SIGNIFICANCE AND MISSION OF PETERSBURG NB

Park Purpose Statement

A park's purpose is the reason for which it was set aside and preserved by Congress. It provides the fundamental criteria against which the appropriateness of all plan recommendations, operational decisions and actions are evaluated. The park's purpose is based on interpretation of its authorizing legislation. The purpose of Petersburg NB is:

- to commemorate the campaign, siege and defense of Petersburg, Virginia in 1864 and 1865;
- to preserve the breastworks, earthworks, walls or other defenses or shelters used by the armies;
- to educate the American people about the campaign, siege and defense of Petersburg and its causes, impacts and legacy in the full context of the Civil War and American history; and
- to preserve Poplar Grove National Cemetery and the memorials within Petersburg NB.

Park Significance

A statement of significance defines what makes the park unique - why it is important enough to our cultural heritage to warrant national park designation and how it differs from other parts of the country. Statements of significance are a tool for setting resource protection priorities and for identifying interpretive themes and appropriate visitor experiences. They help focus efforts and funding on the resources and experiences that matter most.

Petersburg NB is nationally significant as the site of:

• The campaign, siege and defense of Petersburg which effectively neutralized

the Army of Northern Virginia, eliminated its logistical capabilities and resulted in the evacuation of the Confederate government from Richmond, the capital of the Confederate States of America. It is the longest (both in time and distance) sustained combative military front on American soil. The resources that contribute to and represent this significance are the natural landscape and the man-made features including the extensive and exemplary network of earthen fortifications, trenches, batteries



Flags adorn headstones on Memorial Day at Poplar Grove National Cemetery.

and battlefields as well as roads and buildings that influenced and affected the conduct of the campaign.

headquarters for the Union Army and the headquarters for General Ulysses S. Grant during the entire course of the Petersburg Campaign. This was one of the largest field logistical support operations of the war. During the campaign, it was one of the busiest seaports in the world. The resources that contribute to this significance are the natural features including the Appomattox and James Rivers and the high bluff at their confluence; the river banks that served as the site of the Union port and depot during the siege; and

cultural features including the railroad right-of-ways that served as the vital communication and supply link to the front lines in Petersburg; the Appomattox Manor grounds that served as the site of the tent and cabin quarters for Grant and his staff; the Civil War-era structures associated with Appomattox Manor; and archeological resources.

 City Point also served as the site where discussions between President Abraham Lincoln and General Ulysses Grant took



Cannon located at Confederate Battery Five.

place and played a critical role in developing the terms of surrender offered to the Confederate Army, including peace with honor. The resources that contribute to this significance are the Appomattox Manor grounds and Grant's cabin, the only surviving military structure from the Union's occupation of City Point.

 Poplar Grove National Cemetery, for its association with the Petersburg Campaign, commemorates the valor and sacrifice of more than 6,000 Union soldiers who died during the battles. The features that contribute to the national significance of the cemetery include its design, the superintendent's lodge, stable, cemetery walls, carriage lane, monuments and grave markers.

The Park Mission

The park mission statement sums up NPS' understanding of why Petersburg NB was created and why it matters to Americans:

The mission of Petersburg National Battlefield is to preserve the nationally significant resources associated with the campaign, siege and defense of Petersburg and Poplar Grove National Cemetery, and to provide an understanding of the events and their causes, impacts and legacy to individuals, the community and the nation in the full context of American history.

Mission Goals

Mission goals are the most general of three successively more specific kinds of goals the National Park Service uses to implement the Government Performance and Results Act. Park mission goals, although based on the National Park Service's overall mission goals, are specific to the park and reflect the park's purpose and significance. Mission goals are expressed in terms of desired resource conditions and appropriate visitor experiences.

The alternatives in this draft management plan investigate different ways that park managers may achieve these mission goals. The four mission goals for Petersburg NB are:

Mission Goal One: Preserving and Protecting Resources

The cultural landscapes, historic structures, monuments, grave sites, cemeteries, archeological sites, ethnographic resources and artifacts that are significant to the outcome of the military action or relevant to the understanding of the causes, impacts or legacies of the Civil War and the Petersburg Campaign are protected and maintained in good condition.

Mission Goal Two: Interpretation and Education

The public understands the significant events leading up to, during and arising from the campaign, siege and defense of Petersburg and their impacts on the nation in the full context of American history.



General Grant and his staff at City Point, April 1865.

Mission Goal Three: Visitor Use and Facilities

Visitors safely enjoy high-quality educational experiences that are appropriate to the mission and accessible to all segments of the population.

Mission Goal Four: Organizational Efficiency

The park is a responsive, efficient, flexible and accountable organization, which uses all available resources to accomplish its mission.

DECISION POINTS

Decision points are the major decisions to be addressed in general management level planning and reflect substantially different viewpoints or visions for the future management of park resources and visitors' experiences. While the park's mission, management goals, and other mandates set the parameters for the plan, various approaches to resource protection, use and development are possible.

The following decision points are a distillation of the most relevant issues (concerns, opportunities, interests, expectations and suggestions) that were identified through consultations with park staff and during public workshops and meetings with stakeholders (collectively referred to as scoping). The decision points are the questions that this plan will consider through the development of alternative management concepts, or alternatives, each offering a different approach for managing the park. The decision points reflect choices to be made and evaluated for their respective benefits, environmental impacts and costs. By defining, analyzing, and making these choices, the planning team resolves the broad trade-offs among competing resource values and park experiences.

Decision Points Related to Mission Goal One: Preserving and Protecting Resources

How should the park's natural resources be managed to support the preservation of the park's cultural resources? The natural and topographic features of the battlefields were the basis for the tactics with which the battles were fought and the trench

warfare that set the precedent for wars to come. These important resources represent a unique relationship between cultural and natural resources, the human-made environment and the native landscape. The historic landscape is a key element to understanding:

- extensive troop movements and battles;
- ground cover patterns and terrain that shaped the events;
- the scale of events and extent of campgrounds and support services;
- the physical conditions of the battlefields before, during, and after the battles; and
- the social stories that are rooted there.

Although the importance of these resources is understood and interpreted, there is no underlying philosophy to guide management of these resources and landscapes. Without active management, a significant feature of the battle landscape, the pattern of open and wooded terrain that determined where the armies moved and camps settled, is obscured. Important vistas and viewsheds are integral to a visitor's understanding of troop movements and events. Vegetation, such as brush and trees, impede not only the view of the earthworks and battlefields, but also accessibility for maintenance, interpretation, and protection of archeological resources from relic hunters. The GMP will evaluate ways to balance the environmental conditions of the park as its historic resources are preserved.

How should the park's collections and archives be managed?

The park has a significant collection of over 4,400 historic objects and artifacts that represent a physical record of battles and the lives and times of the people affected by the Petersburg Campaign. The museum collection at the park includes Civil War-era firearms,

ammunition, artillery and equipage, memorabilia, historic furnishings, decorative arts, manuscripts, resource management records, archeological elements, and field collections of archeological artifacts. In addition, more than 1,600 books and thousands of photographs, maps, personal letters, architectural drawings and plans and printed materials are contained in the park's archival collection. These archives are records of the preservation of the battlefields and commemoration of the armies and families that came to Petersburg. Due to the lack of adequate space to consolidate the collections, these items are currently stored in over-crowded and scattered facilities that lack appropriate temperature, humidity, and fire protection controls. These collections are subject to continual degradation and damage until these unfavorable conditions are corrected. Also, there are limited support areas with no secure work area where objects can be spread out for cataloging, study or treatment. This collection is anticipated to expand as research at the park continues. The GMP will explore the development of a new facility to properly store the park's collections and archives.

Recognizing that significant battlefields associated with the Petersburg Campaign are outside current park boundaries, how can these resources and their surrounding landscapes be protected by NPS, individuals, institutions, organizations and other agencies?

Many acres of nationally significant epicenter battle areas associated with the campaign, siege and defense of Petersburg and related to the mission of the park are unprotected. Critical vistas from the park to campaign resources and sites that lie outside

the park are interrupted or blocked by modern development. The localities surrounding the park are experiencing growth and currently have a very strong emphasis on development and business recruitment throughout the entire region. Given current trends, rural counties such as Dinwiddie could be fully built-out by the turn of the next century. The majority of the epicenter battlefields of the Petersburg Campaign are in Dinwiddie County. In 2002, the county updated its Comprehensive Plan and delineated both an Urban Planning Area and Community Planning Area in the northeast corner of the county. These

Decision Points Related to Mission Goal Two: Interpretation & Education

What is the best way to use the park's nationally significant cultural resources including land, earthworks, structures, archeological resources and collections to convey the complex story of the Petersburg Campaign to the visitor?

Because of the complex nature of the Petersburg Campaign and the diversity of



planning areas encompass the proposed boundary expansion lands for the Western Front and Five Forks Battlefield. Together, these planning areas are expected to accommodate approximately 75% of future residential development and 85% of future industrial and commercial development for the entire county. Without action, many of these lands may be lost to development, and currently protected battlefields will serve as "the hole in the doughnut", just as the Eastern Front does in Prince George County and Petersburg. The GMP will evaluate which lands outside the current park boundaries are appropriate for boundary expansion.

resources within the park, understanding the relationship between these resources, and the park's stories and significant events can be difficult for the average visitor. The park provides a unique opportunity to interpret the social, political, and cultural changes associated with the Civil War. But, the existing configuration of the park units does not maximize the public's interaction with the staff or the resources, including the land, the landscape, and artifacts. The park offers visitors opportunities to explore battlefields and forts, plantation buildings, riverfronts, farm fields and monuments, but they must travel to different settings and different

communities. Two significant units (Grant's Headquarters at City Point and Five Forks Battlefield) were acquired in the past couple of decades, and yet these sites have not been fully integrated into the Petersburg NB experience. Overall, there has been no fundamental change in the presentation of the park's story.

The diversity of stories associated with the 292-day Petersburg Campaign is well documented and diverse. There are thousands of interesting stories about hundreds of historical events that could capture the imagination and interest of the visiting public. Park interpretive staff, visitors and participants at the GMP scoping meetings all expressed interest and support for broadening the themes at Petersburg NB.

What levels and kinds of interpretation and education are appropriate, given the geographically dispersed character of the park units?

Currently there are two primary challenges facing the park interpretive staff at Petersburg NB: the ability to effectively tell the entire story within the limited time most visitors allow to see the park; and the disproportionate visitor use of the various park units. The Eastern Front has the highest visitation and is viewed by the majority of visitors as the primary park experience. The park provides little interpretation outside Grant's Headquarters at City Point and the Eastern Front. Consequently, many visitors find their experience at the Western Front and Five Forks Battlefield lacking in comparison. There is inadequate interpretive signage, guides and/or personal programming to provide visitors an understanding of the events that took place on these sites.

The museum exhibits and audio-visual program at Petersburg NB were created in the 1960s. Most of the wayside exhibits in the park are site specific to strategic issues and tactical events that took place on the ground within view of the exhibit. While some waysides, publications, and personal services programs are specific to the significant involvement and compelling stories of U.S. Colored Troops at Petersburg, the park does not interpret slavery or even the broader context of the causes of the war well. The GMP will explore the types of visitor experiences and interpretive infra-structure that is best suited to the various units.



Living History program depicting United States Colored Troop Members

Decision Points Related to Mission Goal Three: Visitor Use and Facilities

How should visitors be oriented to the park, given the multiple points of entry from highways and local roads?

Visitors approach the park from multiple road systems and have multiple entrances and multiple units, separated by several miles, to navigate. Primary orientation is at the current visitor center at the Eastern Front. Visitors have to find their way to the main visitor center, then backtrack a significant distance to pick up the rest of the tour. Very little orientation information is available to visitors who enter the park at the Western Front or Five Forks Battlefield. Currently, the driving tour road is disjointed, poorly signed, and difficult to follow between park units. The existing oneway vehicular transportation pattern is not conducive to longer visitor stays or enhanced understanding of the events or resources. The GMP will consider various methods for improving visitor orientation to the park.



What levels and kinds of visitor facilities are appropriate and where?

The level and type of public facilities have not been updated to meet contemporary needs, such as ADA-compliant building entrances, restrooms, and parking pull-offs for larger vehicles. The number and location of visitor facilities is inadequate. Bathrooms and water are located only at one end of the Eastern Front; Five Forks has one portable bathroom facility. Poplar Grove and the Western Front have services only on a seasonal basis. Additionally, there is no space to convene a large group of visitors and students for hands-on learning. The GMP

will look at ways to meet the increased demand for facilities.

Decision Points Related to Mission Goal Four: Organizational Efficiency

What should the park's role be in the preservation and interpretation of related nationally significant Civil War resources outside the park?

Many sites significant to the Petersburg Campaign lie outside park boundaries. The NPS cannot provide adequate resource protection of nationally significant battlefields, nor interpret the events and their context by themselves. A variety of regulatory mechanisms available to local jurisdictions and interested parties could encourage the conservation of historic resources on private property and/or influence the proposals for private land development. But, many landowners, organizations and local governments desire technical assistance from the park experts. The GMP will consider the types of partnerships necessary to provide resource protection and interpretation outside park boundaries.

How can administrative, maintenance, law enforcement and other operational facilities be provided most effectively?

Four noncontiguous units along a 35-mile long tour route traversing an urban/suburban/rural environment in four different jurisdictions present a challenge to interpretation, maintenance, resource protection, and visitor experience. These multiple, dispersed units create a need for a level of service and law enforcement that is greater than a single unit, discreet park area. The GMP will explore various ways to efficiently manage the park.

ANALYSIS OF BOUNDARY ADJUSTMENT CRITERIA

The battlefields associated with the Petersburg Campaign are threatened. When Congress created the park in 1926, only a fraction of the battlefield acreage associated with the 26 major battles of the Petersburg Campaign was included in the original boundary. In the early 1920s, the landscape surrounding the newly created park retained its rural character with many of the Civil War battlefields remaining undeveloped and the threat of change considered low. Seventyseven years later, gradual but steady, residential and commercial development on the fringes of the park has dramatically lead to the loss of battlefield resources and altered the character of the Civil War landscape. Many of these historic lands are presently in urbanizing settings similar to the situations faced by other battlefield parks and communities such as Fredericksburg and Richmond.

As one of the provisions of Public Law 95-625, the National Parks and Recreation Act of 1978, Congress directed that the National Park Service consider as part of a planning process what modifications of external boundaries might be necessary to carry out park purposes. Subsequent to this act, Congress also passed Public Law 101-628, the Arizona Desert Wilderness Act. Section 1216 of this act directs the Secretary of the Interior to develop criteria to evaluate any proposed changes to the existing boundaries of individual park units. Section 1217 of the Act calls for the NPS to consult with affected agencies and others regarding a proposed boundary change, and to provide a cost estimate of acquisition cost, if any, related to the boundary adjustment.

These legislative provisions are implemented through NPS Management Policies that state the NPS will conduct studies of potential boundary adjustments and may make boundary revisions if authorized by Congress. Boundary adjustments may be recommended if they fulfill at least one of the following criteria:

- To include significant resources or opportunities for public enjoyment related to the purposes of the park.
- To address operational and management issues such as access and boundary identification by topographic or other natural features or roads.
- To protect park resources critical to fulfilling park purposes.



Earthen fort in park.

As a foundation for this evaluation, the park staff relied heavily on the work of the Civil War Sites Advisory Commission (CWSAC). The Commission was created by the U.S. Congress to identify the nation's historically important Civil War sites, determine their relative importance, evaluate their condition, assess threats to their integrity and make recommendations for their conservation and interpretation. In 1993, the CWSAC submitted to Congress, its Report on the Nation's Civil War Battlefields. The report addressed hundreds of battlefield sites throughout the country and presented them by state and in alphabetical order. The attempts to capture Petersburg and the Petersburg Campaign consisted of 108 military actions, 26 of which were major

battles that occurred between May of 1864 and April of 1865. While these engagements happened in an area spread over 176 square miles, the CWSAC report identified core areas for the Petersburg battles that encompasses 100,000 acres. The CWSAC Report defines a core area of a battlefield as that area which encompasses all the critical phases defined for the battle. Phases cover the convergence and deployment of opposing force, the development and tactical execution of the battle, and the disengagement and withdrawal of the forces. The core area encompasses those phases that constituted the most intense fighting during the battle, or involved moments or turning points of the battle. Of the 100,000 acres, only 23,000 acres still retain their historic integrity, simply defined as the resemblance of the battlefield landscape to its Civil War appearance.

In January 2002, the park completed its *Assessment of Integrity Report* which details how the park developed and applied a methodology for determining which of the 23,000 acres meet NPS criteria for national significance, integrity and interpretability.

Assessing National Significance

Recognizing that the preservation by the NPS of the 23,000 acres within the core area boundaries cited by the CWSAC is unrealistic, the park initiated an evaluation process to better identify those lands most critical to the historic setting and this dramatic story in American history. Park staff used the following criteria to reduce the acreage by determining the highest priority for protecting lands that related to the park's authorizing legislation. These include:

 Battles that took place south of the Appomattox River that were directly associated with the siege or defense of Petersburg. • Battles that were identified in the CWSAC report as Class A and Class B.

In the CWSAC report, battles were classified according to their military importance and the impact they had on the outcome of the war. The following definitions were used for this determination:

Class A: Decisive

A general engagement involving field armies in which a commander achieved a vital strategic objective. Such a result might include an indisputable victory on the field or be limited to the success or termination of a campaign offensive. Decisive battle had a direct, observable impact on the direction, duration, conduct, or outcome of the war.

Class B: Major

An engagement of magnitude involving field armies or divisions of the armies in which a commander achieved an important strategic objective within the context of an ongoing campaign offensive. Major battle had a direct, observable impact on the direction, duration, conduct, or outcome of the campaign.

In addition, park staff refined the CWSAC core area acreage by reviewing historical maps and documentation to identify an "epicenter" for each battle. A new term, an epicenter is defined as that portion of the battlefield on which the two armies were directly engaged in hostile combat that had a direct bearing on the outcome of the battle.

After applying criteria for battles associated with the park's authorizing legislation, defining epicenters and using the CWSAC battle classification, park staff narrowed the list of 26 battles to the following (see chart on page 23):

BATTLE	DATE	CLASS
Boydton Plank Road	October 27-28, 1864	В
Crater	July 30, 1864	А
Five Forks	April 1, 1865	А
Fort Stedman/Picket Line Attack	March 25, 1865	А
Globe Tavern	August 18-21, 1864	В
Hatcher's Run	February 5-7, 1865	В
Jerusalem Plank Road	June 21-24, 1864	В
Peeble's Farm	Sept. 30-October 2,1864	В
Petersburg-The Assault	June 15-18, 1864	А
Petersburg-The Breakthrough	April 2, 1865	Α
Reams' Station	August 25, 1864	В
White Oak Road	March 31, 1865	В

In order to further validate the significance of those lands identified, the battlefields were evaluated using the *Guidelines for Identifying, Evaluating, and Registering America's Historic Battlefields* (Andrus, U.S. Department of the Interior, National Park Service, National Register, History and Education, 1992). Under this methodology, significance is defined by four criteria:

Criterion A applies to battlefields that are associated with events that have made a significant contribution to the broad patterns of history.

Criterion B applies to battlefields that are associated with lives of persons important to our past.

Criterion C applies to significant works of architecture or engineering.

Criterion D applies to properties that have yielded or are likely to yield, information important to pre-history or history.

Assessing Integrity

Integrity is the ability of a property to convey its significance. Generally, the most important aspects of integrity for battlefields are location, setting, feeling and association. The best-preserved battlefields appear much as they would have at the time of the battle, making it easy to understand how strategy and results were shaped by the terrain.

The CWSAC report identified 23,000 core acres in close proximity to the park that still retain their historic integrity. Integrity retention was based on the presence of pasture, agriculture use, forest, and National Register properties whose period of significance pre-dated 1865. Battlefields have lost integrity if they are currently covered by urban build-up, are permanently flooded, or are used as quarries or strip mines The park used the following CWSAC report classifications to define integrity:

Good

A battle site with good integrity is essentially unchanged from the historic period with respect to terrain, land use, road network, and mass and scale of buildings.

Fair

A battle site with fair integrity is largely intact with some changes in primary geographical and topographical configuration and mass and scale of the buildings.

Poor

A battle site with poor integrity is significantly altered in terms of its primary geographical and topographical configuration and mass and scale of the buildings. Road construction and changes in land use are usually evident at sites with poor integrity. Sites with poor integrity sometimes retain core parcels (50-200 acres) intact within the generally fragmented landscape.

Lost

A lost site has "changed beyond recognition," meaning that a resident of the time returning to the site today presumably would not recognize his or her surroundings. Lost battlefields may retain small (1-50 acres) parcels suitable for

commemoration; however, the ability to interpret the battle on the landscape has been lost.

Park staff focused their assessment on the epicenters for the 12 battlefields. Each battlefield was evaluated for: Civil War landscape; modern landscape; KOCOA elements — Key terrain, Observation and fields of fire, Cover and concealment, Obstacles (both natural and man-made), Avenues of approach; landscape elements that survive from the Civil War period; landscape elements that are missing from the Civil War period; major landscape interventions since the Civil War period; likelihood of landscape interventions in the future; and adjacency to land with long term protection.

This refined evaluation resulted in the following integrity assessments:

BATTLE	DATE	INTEGRITY
Boydton Plank Road	October 27-28, 1864	Good
Crater	July 30, 1864	Good
Five Forks	April 1, 1865	Good
Fort Stedman	March 25, 1865	Good
Globe Tavern	August 18-21, 1864	Good
Hatcher's Run	February 5-7, 1865	Good
Jerusalem Plank Road	June 21-24, 1864	Good
Peeble's Farm	Sept. 30-October 2,1864	Good
Petersburg-The Assault	June 15-18, 1864	Fair
Petersburg-The Breakthrough	April 2, 1865	Fair
Reams' Station	August 25, 1864	Good
White Oak Road	March 31, 1865	Good

Assessing Interpretability

Finally, park staff evaluated the interpretability of each battlefield. Interpretability was defined as the importance of the events and the ability to provide visitor access to the site. In other words, could a visitor, with access to the battlefield, be able to understand the events that unfolded around them with the assistance of wayside exhibits, walking trails, etc. This idea is important with regard to providing visitors an understanding for the scope and scale of the campaign. Park staff developed and applied the following criteria to assess interpretability:



Artillery display behind Eastern Front Visitor Center.

Good

The landscape is significant to the interpretation of the event, has good integrity and can be accomplished without needing additional staffing.

Fair

The landscape is important to the interpretation of the event, maintains at least fair integrity, but might need additional staffing in order to interpret.

Poor

The landscape does not significantly contribute to the interpretation of the event, its integrity has been compromised and needs additional staff in order to provide effective interpretation.

Lost

The landscape has lost its integrity and cannot be interpreted without major capital investments and staffing.

Based on the assessments, park staff concluded that all 12 battlefields epicenters have good interpretability.

Recommendations

After evaluation of national significance, integrity and interpretability, the park proposed that 12 battlefields totaling approximately 7,238 acres should be considered for boundary expansion at Petersburg NB. The acreage number is based on a recent survey of land records and GIS mapping conducted by park staff and the Northeast Region Lands Division. In addition, four small parcels totaling eight acres are also needed to protect existing resources at Grant's Headquarters at City Point, Poplar Grove National Cemetery and the Eastern Front. The recommended acreage for protection is:

BATTLE	ACRES
Boydton Plank Road	99
Crater	15
Five Forks	1,047
Fort Stedman/Picket Line Attack	879
Globe Tavern	611
Hatcher's Run	1,710
Jerusalem Plank Road	222
Peeble's Farm	88
Petersburg-The Assault	95
Petersburg-The Breakthrough	33
Reams' Station	506
White Oak Road`	1,925
Pecan & Water Street	1
Poplar Grove National Cemetery Roa	d 4
Water Street	2
Winfield Road	1

7,238

Applying NPS Boundary Adjustment Criteria

Do These Significant
Resources or Opportunities
Provide for Public
Enjoyment Related to the
Purpose of Petersburg
National Battlefield?

The Petersburg Campaign is the longest, in both time and distance, sustained combative



 $Union\ soldiers\ in\ captured\ Confederate\ fortifications, April\ 1865.$

military front on American soil. For more than nine months from June 1864 to April 1865, Confederate and Union forces engaged in 26 battles spread over 176 square miles. The boundary expansion will protect existing park resources, preserve nationally significant battlefields and provide access and opportunities for interpretation. The following battlefields will enable the park to tell a more complete story and enable park visitors to appreciate fully the size and scope of the Petersburg Campaign.

Boydton Plank Road (99 acres)

Description of the Engagement - Directed by Maj. Gen. Winfield Scott Hancock, divisions from three Union corps (II, V and IX) and Gregg's cavalry division, numbering more than 30,000 men, withdrew from the

Petersburg lines and marched west to operate against the Boydton Plank Road and the South Side Rail Road. The initial Union advance on October 27 gained the Boydton Plank Road, a major campaign objective. But that afternoon, a counterattack near Burgess' Mill forced a retreat. The Confederates retained control of the Boydton Plank Road for the rest of the winter.

Present Battlefield - Today, much of this original battlefield has been compromised by a post-war rail line (abandoned), traversed by an interstate highway (I-85), and an automobile salvage yard. But the battlefield epicenter retains integrity and the historic feeling. The landscape is excellent for interpreting this important fall offensive move by Grant's army to cut the Boydton Plank Road--which was being used as Lee's intermediate supply line—and the nearby South Side Railroad.

Hatcher's Run (1,710 acres)

Description of the Engagement - On February 5, a Union cavalry division rode out to the Boydton Plank Road via Reams' Station and Dinwiddie Court House in an attempt to intercept Confederate supply trains. The Union V Corps crossed Hatcher's Run and took up a blocking position on the Vaughan Road to prevent Confederate interference. Late in the day, Confederate forces attempted to turn Union forces north of the mill but were repulsed. During the night, Federal forces were reinforced by two divisions. On February 6, Gregg returned to Gravelly Run on the Vaughan Road from his unsuccessful raid and was attacked by elements of Pegram's division and cavalry under W.H.F. Lee. Warren pushed forward a reconnaissance in the vicinity of Dabney's steam sawmill site and was attacked by Pegram's and Evan's divisions. Pegram was killed in the action. Slight skirmishing took place on the 7th but no major attack was made. Although the Union advance was

stopped, the Union forces extended their siege works to the Vaughan Road crossing of Hatcher's Run.

Present Battlefield - This battlefield is divided into two sections: one represents the first day's fight (February 5) and is located a mile north of the second day's fight (February 6-7th). While the fighting covered much territory, the area is still rural and somewhat isolated, helping to retain much of its integrity. The site represents the first Union offensive of 1865 which significantly extended



the Union left flank and set the stage for the spring offensive that would lead to the decisive Union victory for the campaign. The Civil War Preservation Trust owns 170 acres. Possible large-scale development could happen in the future with a current proposal for a gravel quarry adjacent to the first days' battle.

Jerusalem Plank Road, June 21-24, 1864 (222 acres)

Description of the Engagement—On June 21, Union forces crossed the Jerusalem Plank Road and attempted to capture a portion of the Weldon Railroad in order to eliminate one of the major Confederate supply lines into Petersburg. The movement was preceded by two cavalry divisions, which began destroying tracks south of the Confederate defense lines. On June 22, Confederate forces counterattacked and forced Union troops away from the railroad and back to positions on the Jerusalem Plank Road. On June 23, Union forces renewed their offensive and actually reached the Weldon Railroad. Elements of the Union forces were engaged in destroying tracks when the Confederate forces advanced and turned the Federal troops back toward Jerusalem Plank Road. Although the Union Army was driven from their advanced positions at Weldon Railroad, they were able to gain control of Jerusalem Plank Road and extend their siege lines farther to the west in a strong position for launching later offensives to eventually capture the Weldon Railroad.

Present Battlefield -Most portions of this three-day battle have been lost to development, however this epicenter still retains a high degree of historical integrity. This area was also the site of Globe Tavern, an important landmark during the siege. Concurrently, many of the parcels involved in the preservation of this battlefield also include those needed for telling the story of the second battle for the Weldon Railroad. This area is critical to visitor understanding of the significant Union possession of a Confederate supply line and the extension of the front by several miles.

Petersburg—The Breakthrough, April 2, 1865 (33 acres)

Description of the Engagement—With Confederate defeat at Five Forks on April 1, Grant ordered a general assault against the Petersburg lines. On April 2, Lt. Gen. A.P. Hill was killed trying to reach his troops in the confusion. A heroic defense of Fort Gregg by a handful of Confederates prevented the Federal forces from entering the city that night. After dark, Lee ordered the evacuation of Petersburg and Richmond. Grant had achieved one of the major military objectives of the war: cutting off Lee's supply

lines, flushing Lee out of the trenches of Petersburg, which led to the evacuation of Richmond, the Capital of the Confederacy.

Present Battlefield -Because of the expansiveness of this all-day battle, portions of the various engagements comprising it are within multiple epicenters. This parcel is critical to providing visitor understanding of the last series of events that resulted in Lee's evacuation of Petersburg. It is the location where one of General Lee's great commanders, A.P. Hill, was killed after the VI Corps Breakthrough. General A.P. Hill



Graveyard at Oak Grove Methodist Church adjacent to Reams' Station.

commanded the portion of those troops defending Petersburg throughout most of the siege and his tragic death epitomizes the fall of the Confederacy.

Reams' Station, August 25, 1864 (506 acres)

Description of the Engagement—On August 24th, the Union II Corps moved south along the Weldon Railroad, tearing up tracks. On August 25, divisions under Heth's overall command and under division commands of Wilcox and Mahone, attacked in the front while the cavalry under Hampton's overall

command and under the division commands of Barringer and Butler attacked the Union left. Hancock's Corps, under the division commands of Gibbon and Miles along with Gregg, were behind a poorly built set of earthworks at Reams' Station and were overwhelmed. The Confederates captured 9 guns, 12 stand of colors, and many prisoners. Hancock's II Corps was shattered and withdrew to the main Union line near the Jerusalem Plank Road.

Present Battlefield -Despite years of timbering operations, this battlefield maintains its 1864 appearance and has good integrity. This epicenter is important for understanding the progression of actions on the expanding front, the impact of the Confederacy's loss of supply lines, and their attempts to overcome the loss.

The Conservation Fund owns 212 acres and the Civil War Preservation Trust owns 83 acres of the total proposed boundary expansion acreage here.

White Oak Road, March 31, 1865 (1,925 acres)

Description of the Engagement— Following the Union victory of Lewis' Farm, the Confederates withdrew to their entrenchments (built during the winter of '65) along White Oak Road. Grant responded by ordering a series of movements designed to flank Lee's army and eventually gain possession of the South Side Railroad. Engagements at both White Oak Road and Dinwiddie Court House were working in combination and occurred on March 31. Lee had shifted reinforcements to meet the Federal movement to turn his right flank. He placed Fitzhugh Lee's cavalry divisions at Five Forks and with Pickett's division on the extreme right. Federal cavalry under Sheridan were moving toward Five Forks via Dinwiddie Court House.

On March 30th, Confederates under the command of Anderson were in their entrenchments along White Oak Road and Federals under Warren's command pushed forward and entrenched a line to cover the Boydton Plank Road. During the 30th, skirmishing was kept up throughout the day. On March 31st, Lee learned that the Union troops were deploying for an assault on his line and had left a part of their line unprotected. Lee ordered a preemptive assault. Confederate brigades attacked the Union lines before they had completed their formation and threw the Union line into a retreat to their previous positions south of Gravely Run. With the assistance of three brigades, the Union forces counter attacked. After a series of Union thrusts against the wavering Confederate positions on the battlefield, Lee's troops retreated to their works along White Oak Road. In their push forward, the Union troops had gained possession of White Oak Road west of the Confederate entrenchments.

Present Battlefield – As a stage-setting battle for the next day at nearby Five Forks, this extremely significant battlefield was determined eligible for listing on the National Register of Historic Places as a historic district (February 1992). This epicenter contains the last vestiges of Lee's entrenched right flank, the primary portion of the Union approach and resulting series of counter attacks. Confederate earthworks including unique single gun artillery redans still exist and would provide an enhanced interpretive opportunity. The Civil War Preservation Trust preserves 74 acres and includes trails, wayside exhibits and a parking lot that would be included in the boundary expansion.

Do These New Lands Proposed for Boundary Expansion Protect Park Resources Critical to Fulfilling the Park's Purposes? The park is currently comprised of four separate units with a number of individual sites spread over a 37-mile area. Small isolated sites, especially the string of fortifications in the Western Front, have poor access for both resource management and interpretation. These sites have been impacted over the last few years by both residential and industrial development adjacent to the units. Noise, movement and odors from this adjacent development degrades the historic setting and visitor experience in larger units and overwhelms the experience in smaller isolated units. The boundary expansion would protect cultural, natural and scenic resources by preserving lands adjacent to existing NPS sites, and creating greater access for resource management, law enforcement and visitor education.

Crater, July 30, 1864 (15 acres)

Description of the Engagement—On July 30th after weeks of preparation, the Union Army exploded a mine beneath Pegram's Salient. This explosion blew a gap in the Confederate defenses of Petersburg. Soon after, everything deteriorated rapidly for the Union attackers. Unit after unit charged into and around the crater, where soldiers milled in confusion. The Confederates quickly recovered and launched several counterattacks. With the arrival of fresh troops, the break was sealed and the Union forces were repulsed with severe casualties. Ferrero's division of black soldiers was badly mauled. This may have been Grant's best chance to end the Siege of Petersburg.

Present Battlefield -Much of this battlefield, probably the most well known event of the whole campaign, is already preserved by the NPS. This small parcel contains partial remains of Confederate lines north of the Crater itself and located in the confines of Petersburg's Blandford Cemetery, currently under pressure to enlarge. This parcel will

protect the park's existing boundary and an important view shed.

Globe Tavern, August 18-21, 1864 (611 acres)

Description of the Engagement— In conjunction with Union demonstrations north of the James River at Deep Bottom, Union troops under the command of Warren were withdrawn from the Petersburg entrenchments to operate against the Weldon Railroad. At dawn on August 18th, Warren advanced driving back Confederate pickets until reaching the railroad at Globe Tavern. In the afternoon, the Confederate division under the command of Heth attacked driving the Union Division under the immediate command of Ayres back toward the tavern. Both sides entrenched during the night. On August 19th the Confederate division under the command of Mahone, whose division had been hastily returned from north of the James River, attacked with five infantry brigades and rolled up the right flank of Crawford's Union division. Having heavily reinforced Crawford's Division with Willcox's Division, Warren counterattacked and by nightfall had retaken most of the ground lost during the afternoon's fighting. On August 20th the Federals entrenched a strong defensive line at Globe Tayern with Griffin's Division and with Ayres' and Crawford's Divisions extending east to connect with the main Federal lines at Jerusalem Plank Road. On August 21, A. P. Hill probed the new Federal line for weaknesses but could not penetrate the Union defenses. The Battle of Globe Tavern succeeded in extending the Union siege lines to the west and cutting Petersburg's primary rail connection with Wilmington, North Carolina. The Confederates were now forced to off-load rail cars at Stony Creek Station for a 27-mile wagon haul up Boydton Plank Road to reach Petersburg.

Present Battlefield -This battlefield is crucial to understanding Grant's strategy of cutting

Lee's supply lines into Petersburg. Already much of the first two days' fighting (August 18-19) has been lost to an industrial park. The epicenter area to the south and west of it still retains a rural character and holds enough integrity for telling the story of the battle. This battlefield will also protect the park unit at Poplar Grove National Cemetery and maintain the solemnity of the cemetery landscape.

Five Forks, April 1, 1865 (1,047 acres)

Description of the Engagement—Gen. Robert E. Lee ordered Pickett to hold Five Forks at all hazards. At his disposal were brigades from two infantry divisions and two cavalry divisions. At stake was Lee's ability to continue supplying his troops via the South Side Rail Road. Pickett had entrenched along White Oak Road blocking the Union access to Ford's Road with W.H.F. Lee's cavalry covering the right flank to the west and south of White Oak Road. On April 1, 1865, Sheridan's cavalry approached from Dinwiddie Court House with Devin's division following the route of Dinwiddie Court House Road approaching the Confederate's center line of defenses at the Five Forks intersection. Custer's division following the route of Scott's Road approached the Confederate's right. After the Union success at the Battle of White Oak Road, Warren's Corps was able to approach Five Forks from the east via White Oak Road. While Devin and Custer were attacking the right and center of the Confederate line Sheridan directed Warren to assault the Confederate left flank. Although Warren's approach on the Confederate line was misdirected, he inadvertently flanked and overwhelmed the Confederate left flank with the combined movements of divisions under Ayres, Griffin, and Crawford. With the approach of Crawford's division from the Confederate rear, Pickett withdrew his Confederate troops to the northwest in order to save his army

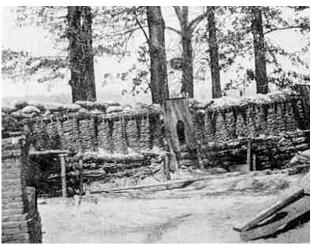
and reunite with the army in Petersburg. The critical rural intersection of Five Forks was lost. This loss opened a direct path to Sutherland Station and the South Side Railroad, Lee's last viable supply line. The next morning, Lee informed Jefferson Davis that Petersburg and Richmond must be evacuated.

Present Battlefield -Considered by contemporary sources as the "Waterloo of the Confederacy," this NPS unit is the most preserved battlefield in the park reflecting the 1865 Civil War landscape. While the current preserved acreage is near the limits set by Congress in establishing the unit, the Izaak Walton League could transfer their 435 acre scenic easement to the NPS for long-term protection of the unit's western boundary. The remaining parcels of the epicenter would protect the unit's eastern boundary and constitute the Federal army marshalling and initial attack area, which will round out the complete interpretation of the battle.

Fort Stedman/Picket Line Attack, March 25, 1865 (879 acres)

Description of the Engagement—With the continual Union build up on the western front, Gen. Robert E. Lee massed nearly half of his army on the Eastern Front in an attempt to break through Grant's defenses and threaten his supply depot at City Point. The pre-dawn assault on March 25 overpowered the garrisons of Ft. Stedman and Batteries X, XI and XII. The Confederates were brought under a killing crossfire, and counterattacks contained the breakthrough, cut off, and captured more than 1,900 of the attackers. Realizing Lee reduced his force on the western front, Grant ordered elements of the II and VI Corps to assault the vulnerable picket lines. The Union success in capturing portions of the picket lines weakened Lee's hold on the Western Front and set the stage for a series of actions that led to the Confederate defeat at Five Forks on April 1 and the fall of Petersburg on April 2-3.

Present Battlefield - The major portion of the Fort Stedman battlefield is preserved at the park's Eastern Front. This new parcel is needed to protect the resources and critical view shed between the park boundary and the eastern portion of Blandford Cemetery. It was used as a marshalling site for the Confederate forces that attacked Fort Stedman and holds the partial remains of the



Interior of Union Fort Stedman, 1865.

Confederate defenses. Approximately seven miles southwest of this parcel is another that played an important role in the aftermath of the Federal victory at Fort Stedman. Simply known as the "Picket Line Attack," the results of this action enabled Federal forces to maneuver themselves into position for the final breakthrough on April 2nd.

Peebles' Farm, September 30-October 2, 1864 (88 acres)

Description of the Engagement—
In combination with Maj. Gen. Benjamin
Butler's offensive north of the James River
at Fort Harrison, Lt. Gen. Ulysses S. Grant
extended his left flank to cut Confederate
lines of communication southwest of
Petersburg. Two divisions (Potter and

Wilcox) under the command of Parke, two divisions (Griffin and Ayres) under Warren, and Gregg's cavalry were assigned to the operation. On September 30th, the Federals marched via Poplar Spring Church to reach Squirrel Level and Vaughan Roads. The initial Federal attack overran Fort Archer, flanking the Confederates, under the command of Dearing, out of their Squirrel Level Road line. In late afternoon, Confederate reinforcements under the command of Heth arrived and slowed the Federal advance. On October 1st the Federals repulsed a Confederate counterattack. Federal troops resumed their advance on October 2nd, captured Fort MacRae which was lightly defended, and extended their left flank to the vicinity of Peebles' and Pegram's Farms. With these limited successes, the offensive was suspended. A new line was entrenched from the Federal works on Weldon Railroad to Pegram's Farm.

Present Battlefield - Preservation of this battlefield epicenter is critical to protect a string of fortifications, the Fishhook, in the Western Front. A portion of the original battlefield was lost a few years ago with the construction of a steel recycling plant. The Civil War Preservation Trust acquired a 500-foot easement buffer (68 acres) to protect the existing park resources at Forts Fisher, Conahey and Urmston which they would like NPS to assume for long-term protection. One NPS fort site, Union Fort Wheaton (also known as Confederate Fort Archer) does not have public access. By preserving the designated parcels, the remaining portion of this three-day battle will provide visitor access for interpretation. With this epicenter, a solid connection between the Union lines and the breakthrough of the Confederate lines, now preserved by Pamplin Historical Park, will be protected.

Petersburg—The Assault, June 15-18, 1864 (95 acres)

Description of the Engagement—On June 15, leading elements of Butler's Army of the James crossed the Appomattox River near Point of Rocks and attacked the Confederate Dimmock Line. The Dimmock Line was a circle of defensive fortifications that encircled Petersburg with both flanks of the line resting on the Appomattox River. While the Confederate defenders on the river north of Petersburg held their position, elements of the thin Confederate line of 2,200 defenders along other portions to the Confederate right were driven from their first line of entrenchments back to Harrison Creek. On June 16, Union forces captured additional sections of the Confederate line and positions along the river were left vulnerable by the Union occupation of a battery located on an adjacent promontory. Under the cover of darkness, during the evening of the 17th the Confederates withdrew from the riverside section of the Dimmock Line and aligned themselves with the rest of the Confederate line—closer to Petersburg. On June 18 when Union forces attacked the Confederate positions on the river, they found that they had been vacated. The new Confederate line of defense surrounding Petersburg was now heavily manned and the greatest opportunity to capture Petersburg without a siege was lost. Consequently, the siege of Petersburg began.

Present Battlefield -As the first major point of contact between Union and Confederate forces, a large portion of this epicenter is included in the park's Eastern Front. The area proposed as part of the expansion will protect the Eastern Front's northeastern boundary and a key view shed from Confederate Battery Five. This property currently is in agricultural use, but is zoned industrial. If developed and depending on its use, it could impact on park resources.

Pecan and Water Street Parking Lot, City of Hopewell (1 acre)

This property completes NPS ownership and facilitates management of a parking area at the City Point Waterfront. This parcel will also assist with controlling truck traffic and intrusions on existing parkland and provide for more efficient maintenance including mowing, tree and shrub trimming and security.

Poplar Grove National Cemetery Road, Dinwiddie County (4 acres)

Located between Poplar Grove National Cemetery and Poplar Grove National Cemetery Road, this property protects the quiet and contemplative atmosphere by screening the visual and noise intrusion of adjacent highway Virginia Route 675.

Water Street, City of Hopewell (2 acres)

This property would protect the viewshed of the historic City Point Waterfront on the James River where General Grant and the Union Army established its logistical headquarters and support operations from which all subsequent military actions in the Petersburg Campaign were supplied.

Winfield Avenue, Prince George County

(1 acre) This property adjacent to the Massachusetts Monument in the Eastern Front, is needed to protect a critical viewshed from the Crater Battlefield. Currently, the trees on this property screen modern development including a motel and major highway inter - change, from visitors on the park's tour road.

The 12 nationally significant battlefield epicenters, and the Poplar Grove National Cemetery Road, Winfield Avenue, and Water Street properties described in this document meet the National Park Service criteria for boundary adjustments and are suitable as potential additions to Petersburg National Battlefield.

Feasibility for Protection

National Park Service policies instruct that any recommendation to expand boundaries be preceded by determinations that the added lands will be feasible to administer considering size, configuration, ownership, cost and other factors, and that other alternatives considered for management and resource protection are not adequate.

Size and Configuration for Management and Ownership

Land tracts and ownership of battlefield epicenters for the potential boundary expansion areas have been identified and mapped through a partnership with the NPS Northeast Region Lands Division. Although not inconsistent with the current management and configuration, park boundaries that would result from implementation of alternatives B, C or D would be more segmented than the existing boundary due to the number and shape of the new battlefields.

Under Alternative B, the 12 battlefield epicenters and four other sites to protect existing resources would include approximately 262 individual parcels and total approximately 7,238 acres. The Water Street parcels can be managed efficiently from Grant's Headquarters at City Point. Three of the battlefields—the Crater, Fort Stedman, and Petersburg—The Assault and the Winfield Road sites—are adjacent to the Eastern Front and could be managed efficiently from that unit. The three battlefields at Globe Tavern, Jerusalem Plank Road, and Peeble's Farm are adjacent to other park fort sites and Poplar Grove National Cemetery and could be managed efficiently from those units. Two battlefields, Hatcher's Run, and Picket Line Attack are within three miles of Poplar Grove National Cemetery and the other NPS fort sites. Ream's Station is five miles away from any of the other Western Front sites and would

be less efficient to manage from current units. Two other battlefields, Boydton Plank Road and White Oak Road are within six miles from the existing Five Forks unit. Proposed additions to the Five Forks Battlefield would protect its eastern and western boundaries. All could be managed efficiently from the current unit.

Under Alternative C, only those battlefield epicenters that protect existing park resources are considered for boundary expansion. These battlefields total approximately 2,030 acres and would include 69 individual parcels. The Water Street parcels can be managed efficiently from Grant's Headquarters at City Point. Three of the battlefields—the Crater, Fort Stedman, and Petersburg—The Assault and the Winfield Road sites—are adjacent to the Eastern Front and could be managed efficiently from that unit. Three battlefields in the Western Front-Globe Tavern, Jerusalem Plank Road and Peeble's Farm are contiguous with existing park fort sites and could be managed as part of upgraded facilities at Poplar Grove National Cemetery. Proposed additions to the Five Forks Battlefield would be contiguous with its current boundary and could be managed efficiently from this site.

Under Alternative D, the 12 battlefield epicenters would include approximately 262 individual parcels and total approximately 7,238 acres. The Water Street parcels can be managed efficiently from Grant's Headquarters at City Point. Three of the battlefields—the Crater, Fort Stedman, and Petersburg-The Assault and the Winfield Road site—are adjacent to the Eastern Front and could be managed efficiently from that unit. The three battlefields at Globe Tavern, Jerusalem Plank Road, and Peebles' Farm are adjacent to other park fort sites and Poplar Grove National Cemetery and could be managed efficiently from those units. The

Picket Line Attack battlefield is within three miles of Poplar Grove National Cemetery and the other NPS fort sites on the Western Front. Two battlefields, Hatcher's Run, and Reams' Station would have new comfort facilities added under this alternative and would require additional maintenance and management. Two other battlefields, Boydton Plank Road and White Oak Road are within six miles from the existing Five Forks unit. Proposed additions to the Five Forks Battlefield would protect its eastern and western boundaries. All could be managed efficiently from that the current unit.

Boundary Expansion Costs

For the purposes of this boundary expansion, the Northeast Region Lands Division prepared a Legislative Cost Estimate for Alternatives B, C and D. A Legislative Cost Estimate is an estimate that outlines the costs associated with acquiring any interest in real property for new park units, proposed park boundary expansions, remainder of tracts to complete existing units, and or changes in estates within existing units. Costs reported in a Legislative Cost Estimate include:

- Estimated real property acquisition and relocation costs on a tract-by-tract basis
- Tax data for Payment in Lieu of Taxes (PILOT) program consideration
- · Appraisal contracts
- Mapping contracts
- · Title contracts
- · Surveying contracts
- Environmental Site Assessment contracts
- · Other contract work

Appendix C contains boundary expansion cost estimates for Alternatives B, C and D. As required for this draft GMP, these costs assume 100% fee acquisition by the NPS. Petersburg NB supports partnership efforts through easements and donations that will contribute to lower acquisition costs.

Agricultural and conservation easments are the preferred methods of battlefield preservation. Easements enable protection of these battlefields from inappropriate development while retaining private ownership and compatible use of the land. Where easements are not possible, and there is interest by the landowner, a range of acquisition methods, such as fee simple acquisition from willing sellers and donation, will be utilized for battlefield preservation. The estimated time period for acquisition of these nationally significant lands is 10-15 years.

Parcels that protect current park resources would be the priority for future acquisition. Development of visitor services and interpretation at these new battlefield epicenters would be minimal and include small parking areas, wayside exhibits, trails and other enhancements to the site.

Adequacy of Other Options for Management and Resource Protection

Other than National Park Service administration, conceivable options for protecting the lands and resources identified as nationally significant include: continued private ownership (the no-action) alternative; a local, state or other federal agency; or non-profit conservation organization.

Continued private ownership would not guarantee protection of the battlefield lands in the near or long term. Although many parcels remain in agricultural use or are undeveloped, these properties are being sold and developed. Pressure for commercial, industrial and residential development will continue along the Interstate 95 corridor from northern Virginia. In the three counties surrounding Petersburg NB, there has been an increase in housing units greater than 20% in the last decade. These nationally significant lands are central to the purpose of Petersburg NB and would provide opportunities for a

uniform interpretive program and public access to these sites. Efforts to protect these battlefields are greatly enhanced if they are placed within the park's boundary.

Protection of the battlefields by a state agency, county or local government may be a viable option. However, no public entity has expressed interest in this role. Local governments in the Petersburg area view the NPS as an appropriate agency to protect the Campaign resources and battlefields. Therefore, protection of these resources is not a priority for them. The NPS is in the best position to work with the state and local governments to foster cooperative and sensitive planning and protection strategies so that these nationally significant resources will be protected in the future.

Three non-profit organizations, the Civil War Preservation Trust (CWPT), The Conservation Fund, and the Izaak Walton League, are already protecting portions of these battlefield lands. The CWPT owns or holds an easement on 396 acres at Hatcher's Run, Peebles Farm, Reams' Station, and White Oak Road; The Conservation Fund owns 212 acres at Reams' Station; and the Izaak Walton League holds an easement on 435 acres at Five Forks.

This proposed boundary expansion includes these lands currently owned by non-profit organizations in order to ensure the long-term preservation of these nationally significant battlefields. Although land conservation is a primary mission of these organizations, they have different priorities, resource stewardship capacities and sustainability challenges than the NPS. These non-profits do not view interpretation or long-term resource stewardship as a primary mission like the NPS. Typically, these organizations protect land by purchasing and retaining the property until a more permanent arrangement is determined.

Public access for interpretation is often restricted for liability and other reasons. A NPS boundary surrounding battlefields such as Reams' Station would allow for cooperative agreements for resource management, visitor use and long term protection if necessary.

There is no guarantee in the long-term that certain properties owned by non-profit organizations would continue to be protected. Portions of these battlefields that shield

Currently, the easement allows for limited housing development and does not protect the plantation home site from changes nor is there access for interpretation. If the property should be offered for sale, without the NPS boundary, the NPS would lose the opportunity to participate in the protection of this significant site. Petersburg NB may never need to acquire these lands and easements, but the authority to protect these battlefields if necessary, is an important tool in fulfilling the park's overall purpose.



Aerial view of the Crater Battlefield, circa 1950.

important resources from the sights and sounds of development or provide unique interpretive opportunities could be lost. For example, the easement held by the Izaak Walton League protects the viewshed at the Five Forks Battlefield, but is also the location of Burnt Quarter, an existing pre-Civil War plantation that was the scene of intense fighting during the battle.

Because these properties proposed for the alternatives in this GMP are nationally significant and deemed appropriate for federal protection, federal land acquisition authority should be established so the NPS can be a viable partner in preservation of these battlefield lands that contribute to the mission of Petersburg National Battlefield.

PARK INTERPRETIVE THEMES

The nine and a half month-long campaign that engulfed this region in 1864-65 had a tremendous impact on the soldiers who fought here, the surrounding communities that were caught up in the conflict and ultimately, the nation. Exploring why the conflict arose, who was involved, whom it affected and how it changed American society are important issues that will aid in the understanding of the Civil War.

Petersburg NB will expand its interpretative themes in order to provide park visitors a more comprehensive understanding of the reasons for which the park was established. Expanding these themes and fostering a more in-depth understanding of the events that occurred here is the most sincere way to commemorate the memory of those whom gave their lives and all who experienced the Campaign events.

An informed constituency understands the value of the resource and is concerned about its fate. Battlefield preservation depends on people who care. One of the best ways to ensure the preservation of the park's resources is to engage the public and help them connect, in their own ways, to the ideas, people and events that occurred here. The more individuals that relate to this story means there will be more who will care about what happened here and, in turn, will seek to preserve these special places. Many of the citizens who attended our public "scoping" meetings for this GMP expressed a desire for the park to provide additional interpretative themes. The City of Petersburg and the State Historic Preservation Officer have expressed the same interest and have endorsed the concept to address a more diverse audience. Discussions on broadened themes at national battlefield parks to include a cross-section of the public including students, women and minorities, families and the elderly have been going on for many decades. At a conference

of NPS park historians in 1940, interpreters and historians realized that visitors to Civil War parks and commemorative areas appreciate more encompassing stories rather than detailed accounts of specific battles and tactics geared to the "enthusiast", "Civil War buff" and specialist. The 1998 report from the superintendents of Civil War battlefields, Holding the High Ground: Principles and Strategies for Managing and Interpreting Civil War Battlefield Landscapes, recommends placing battlefield stories within the social,



Living History program at Siege Encampment exhibit.

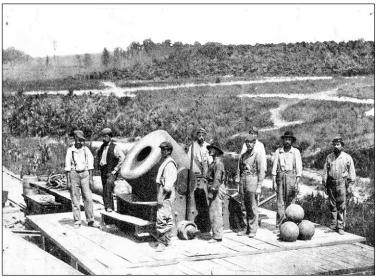
economic and political context of the period. Congress also recognized the need for changes and added language to an appropriations bill that encourages national battlefield parks to offer more interpretation about the causes of the American Civil War. To a large degree, the park's current audience is comprised of Civil War enthusiasts. Although this audience is respected and appreciated, a far larger audience exists that will find value and significance in this important chapter in American history.

Six themes will be used by the park as the foundation of its interpretative program. They touch on various aspects, experiences and viewpoints that surrounded the siege of Petersburg.

Theme One: A Young Nation in Transition

Through the local citizens, and especially the Eppes family, you can explore the many dimensions of the founding and development of a nation that was torn apart by political, economic and social differences and issues not yet fully resolved. The objectives for the interpretive media and programming would include:

 Articulating, in terms of the Eppes, enslaved people, local citizens, soldiers, and politicians, the multiple points of view on the causes of the Civil War



Huge Seacoast mortar "The Dictator", 1864.

- Contrasting the Eppes family as slaveholders with other members of the local community who did not own enslaved people.
- Using the City of Petersburg and its inhabitants as a microcosm of events which led up to the war through primary source materials

Interpretive opportunities included are:

- Causes of the War
- · Plantation and Enslaved Life

- · Civilian Life and Impacts
- Women in the Petersburg Campaign
- African American Experience

Theme Two:

Leadership of Commanders Grant and Lee

During the Civil War, Grant and Lee faced each other as opposing Generals for II months. The Petersburg Campaign consumed 9 1/2 of those II months. In an attempt to wear down and destroy Lee's army, Grant applied "unrelentless" pressure and continual contact in a campaign of a magnitude and concentration unprecedented before or since on American soil. The strengths and weaknesses of the generals and their resources ultimately determined the fate of a nation. The objectives for the interpretive media and programming would include:

- Recognizing how the Union strategy under Grant differed from that implemented by previous Union commanders.
- Describing how the Union military strategy at Petersburg exacerbated war weariness in the North and influenced the i864 presidential election.
- Explaining the Confederate strategic response and its impact on Lee's army.
- Describing the City Point discussions between Abraham Lincoln and his commanders, and how this influenced the terms of the surrender at Appomattox Court House.
- Describing how the Civil War and the Petersburg Campaign changed the political use of war and affected military strategy into the 20th century.

Interpretive opportunities included are:

- · Leadership and Command
- · Supply and Logistics
- · Importance of Railroads
- Soldier Life and Trench Warfare

Theme Three: Military Strategy, Logistics and Tactics

The importance of railroads in the logistics and support of armies define the objectives of the campaign and Petersburg's role in shaping the course of American history. Military strategy, battlefield tactics, logistics operations, weapons and fortifications reflected the evolution from the Napoleonic rules of war toward a more modern, all encompassing, approach. The objectives for the interpretive media and programming

- Defining the rules of war and articulating the distinctions among military strategy, tactics and logistics.
- Explaining which tactical principles field commanders used during the major battles of the campaign.

Interpretive opportunities included are:

- Importance of Railroads
- Supply and Logistics
- · Soldier Life
- · Military Tactics



Union Depot Field Hospital Cemetery at City Point.

would include:

- Comparing the conditions under which Union and Confederate soldiers lived, and their feelings about the war as the campaign progressed.
- Conveying how the wounded were cared for, and where the dead were buried and commemorated.
- Identifying the strategic importance of Petersburg to the Confederate cause, and understanding the Union goal of cutting the supply lines to Richmond and keeping unceasing pressure on Lee's army.

Theme Four: Role of African Americans

During the Petersburg Campaign, African Americans finally took their place as full participants in the army and the Civil War, although not in society as a whole. The objectives for the interpretive media and programming would include:

- Explaining the evolution and deployment of the United States Colored Troops.
- Explaining how some African Americans supported the Confederate army and describing their lives during the Petersburg siege.

- Understanding the political and military decisions affecting African American participation at Petersburg, and in other military actions.
- Contrasting the status and freedoms
 African Americans experienced in the
 Union Army with their experiences in
 general society during and after the war.
- Describing the transformation in African Americans' attitudes, expectations and physical condition from before the War through the late 19th century.

Interpretive opportunities included are:

- African American Experience
- · African American Soldier Life
- National Reunification/Reconstruction

Theme Five: Life During the War

Living under constant fire, the combatants and non-combatants at Petersburg represent a cross-section of old and young, white and black, enslaved and free, men and women, soldiers and civilians, each with different views on the causes, effects, and results of the war. The objectives for the interpretive media and programming would include:

- Describing the daily experience of farmers whose land became battlefields, and of city dwellers and villagers before, during and after the campaign.
- Articulating opposing opinions about the war, slavery and the role of government, citing the experiences of military commanders, soldiers, city civilians, and the families at City Point, Eastern Front, Home Front, Western Front and Five Forks units.

Interpretive opportunities included are:

- · Civilian Life and Impacts
- · Causes of the War
- African American Experience
- Women in the Petersburg Campaign
- · National Reunification/Reconstruction.

Theme Six: The Last Full Measure: Poplar Grove National Cemetery

The headstones of Poplar Grove National Cemetery represent not only those seemingly anonymous soldiers who made the ultimate sacrifice for their nation on the fields of battle around Petersburg, but also the individual cost of war in the form of a son, father, brother, or best friend. The objectives for the interpretive media and programming would include:

- Explaining the post-war development of this National Cemetery for the interment of Northern dead from the Petersburg to Lynchburg battlefields.
- Contrasting this Federal cemetery and its operation with that of Petersburg's Blandford Cemetery where Confederate soldiers are buried
- Describing the role that the Union hospitals at City Point and Point of Rocks played and the eventual establishment of City Point National Cemetery for their dead.
- Conveying how soldiers viewed and dealt with death in the battlefields around Petersburg
- Conveying the commitment these soldiers possessed to be willing to make the ultimate sacrifice for their beliefs.
- Describing how their families were impacted by these deaths and how the families dealt with the loss.
- Explaining the cost of war not only in terms of communities, towns, and cities, but to America as a whole.

Interpretive opportunities included are:

- "The Last Full Measure..."
- · Soldier Life and Trench Warfare
- · Civilian Life and Impacts

RELATIONSHIP TO OTHER PLANS AND PROJECTS

Several NPS plans, either underway or recently completed, have influenced the management and facility/development recommendations in this draft GMP. They are:

Draft Long Range Interpretive Plan (2000)

The park is beginning to reexamine the interpretive themes of the park in light of this GMP and the long range planning processes of the Government Performance and Results Act of 1993 (GPRA). The park is examining visitor survey information, recent scholarship and the changing focus of NPS interpretation on providing broader context in this effort. In 1997, the park identified the mission goal for the park. They then inventoried their goals, the messages provided at each location and the information contained in their programs, exhibits, publications and other media. The GMP provided the park with an opportunity to examine the themes in light of this mission. The preliminary themes are identified in this document. The park staff has continued to refine these themes and is developing a Long-Range Interpretive Plan for the entire park. The outline has been completed and the draft document is expected within the next eighteen months.

City Point Development Concept Plan (1986) and City Point: An Amendment to the Development Concept Plan (1992)

Completed in 1992, this public planning effort evaluated the resources at City Point and developed interpretive, facility development and personnel recommendations to guide future action. Most recommendations have been integrated into this plan. Specific development proposals have been modified to accommodate the broader planning perspective provided by this park-wide management planning effort, and to respond

to subsequent research and archeological information uncovered since the DCP was completed.

Earthworks Management Plans

In 1976, 1988, 1996 and 1997, four consultants examined the earthworks management strategies the NPS and the park were using to develop a protocol to provide visual access for interpretation and to protect the physical resources. The first report, "An Interpretive Earthworks Preservation Guide" (1976), confined itself to Forts Stedman and Fisher. The second effort "Earthworks Management Manual", 1988 provided useful insights into the broad issues required to balance preservation with interpretation; however, many of the specific recommendations have proven to be extremely expensive and difficult to implement. As many of the earthworks are under forest cover, a forester was consulted to examine earthworks covered by trees. The resulting report "Earthworks Management Under Forest Cover", 1996 provided guidance for Petersburg NB as well as other parks.

In 2001, the park finalized a planning document entitled "Preservation of Civil War Earthen Fortifications/Environmental Assessment." The environmental assessment for the project was initiated to identify and assess the impacts of management options for preserving earthen fortifications at the Eastern Front and the Western Front. The park also prepared a manual entitled "Earthwork Management at Petersburg NB". It describes management objectives, conditions, impacts, treatments and maintenance for earthworks in the park.

Government Performance and Results Act Strategic Management Plan 1997

In 1997, each unit of the National Park System developed a strategic management plan in response to the GPRA. As a part of the planning effort, Petersburg NB developed a new significance statement, purpose statements and mission goals. The elements were then refined by the staff and planning team during the GMP planning process. The actions included in this document are based upon these elements.

Draft Collection Storage Plan and Archives Survey, 2003

As part of the GMP process, the Northeast Museum Services Center conducted on-site surveys in 1997 and 2000 to determine the extent of the park's unexhibited collections and archives. Both the Collections Storage Plan and Archives Survey report on existing conditions, identify NPS curatorial standards for storing objects, describe acceptable storage alternatives, and recommend a preferred alternative.

City of Hopewell Comprehensive Land Use Plan, 2001

The City of Hopewell Planning Commission prepared a comprehensive land use plan adopted by the City Council in December 2001. This plan preserves cultural resources through the designation of a Historic District that is designed to "bring attention to the architectural excellence and historic importance of certain buildings, structures, and places and areas of the city". The Historic District currently only applies to the City Point community including the designated area of Petersburg National Battlefield. The district is administered as an overlay zone and regulations focus primarily on the external architectural appearance of buildings with the purpose of maintaining the historic appearance of the neighborhood.

City of Petersburg Comprehensive Plan, 2000

Petersburg first adopted a comprehensive plan in 1968; the most current plan was adopted by the City Council in December 2000. The preservation of the city's cultural resources is focused on 18th and 19th century industrial, commercial and domestic structures, buildings, sites and streetscapes. In 1972, the city enacted a Historic Zoning Ordinance that designated historic districts, six of which are on the National Register of Historic Places, and established a Board of Historic Review to review all changes to buildings within the districts. A dedicated staff person to historic preservation efforts in the city is based in the Department of Planning and Community Development and coordinates the Architectural Review Board and other related activities.

Dinwiddie County Comprehensive Plan, 2002

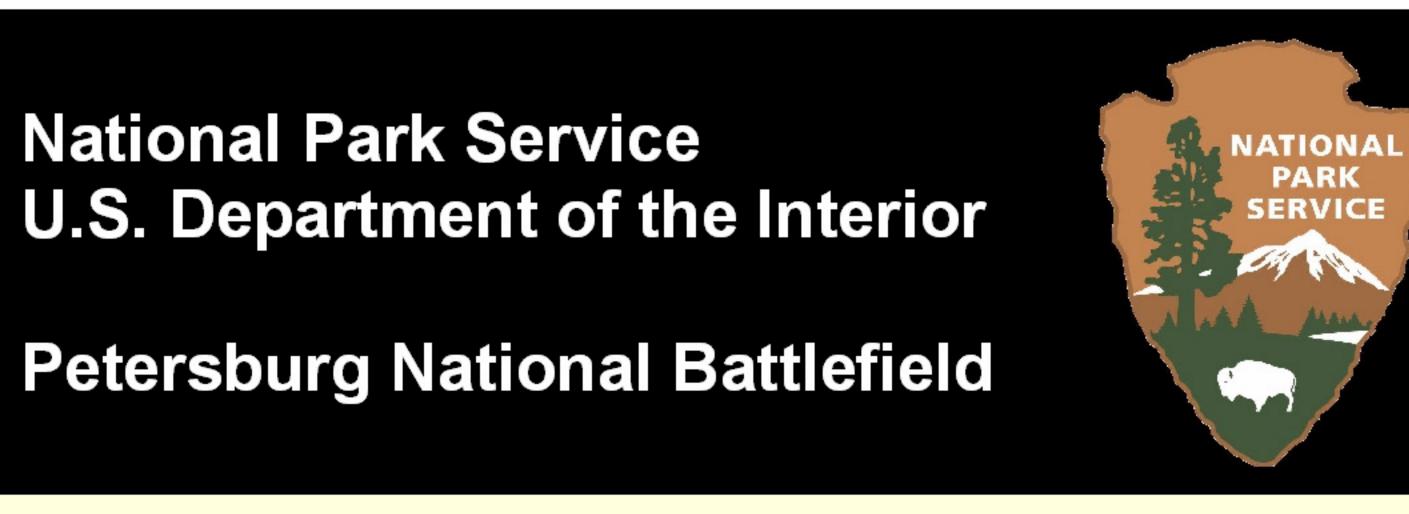
The Dinwiddie County Planning
Commission undertook a complete revision
of the 1996 comprehensive plan that resulted
in the Dinwiddie Comprehensive Plan
Update in 2002. The plan designated three
planning areas, Community, Urban and Rural
Conservation, and projected levels of growth
for each over the next 10 years. Although the
plan supports Petersburg NB and the
preservation of battlefields and related Civil
War resources, there is currently a lack of
preservation zoning ordinances or other
mechanisms for protection.

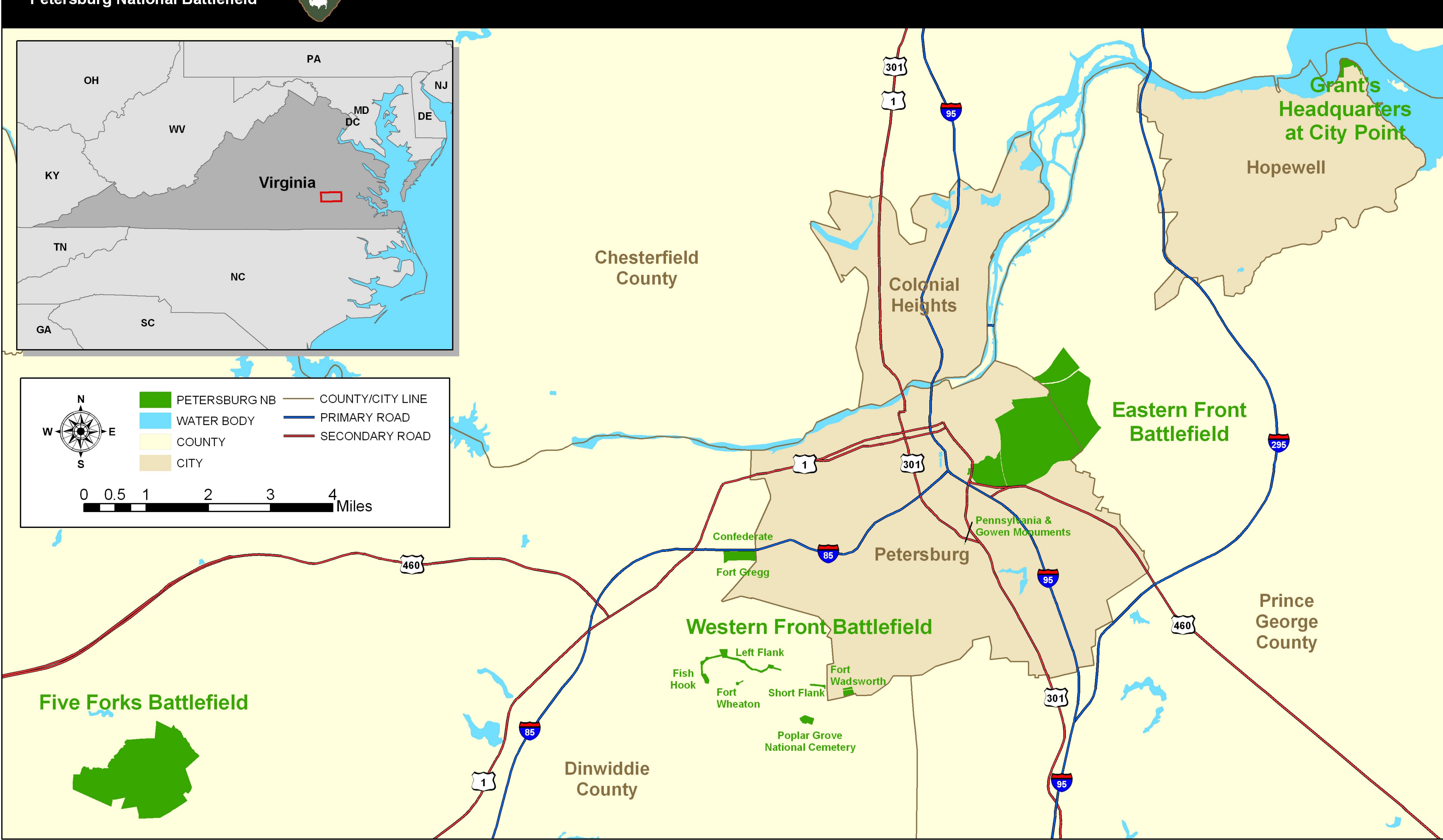
Prince George County Comprehensive Plan, 1998

The Prince George County Comprehensive Plan was first adopted in 1978 and most recently updated in 1998. The park is located within the Prince George Planning Area and contains the majority of the residential, commercial and industrial land use in the county. The plan encourages the preservation of the historical character of designated landmarks, including Petersburg NB, by balancing new development with the conservation of cultural and historical structures and landscapes. There is currently a lack of preservation zoning ordinances or other mechanisms for protection.

Summary of Alternatives

Alternative A: No-Action	Common	Alternative B	Alternative C	Alternative D
Mission Goal One: Pres	erving & Protecting Resou	rces		
The park's acreage ceiling remains at current levels, with minor boundary adjustments as needed. All resources are stabilized and maintained in their current conditions, following current management practices. Limited interpretive vistas are maintained in the areas immediately surrounding the principal fortifications on selected battlefields. Collections and archives remain in existing spaces that lack appropriate environmental conditions, storage, access and security. Monuments are maintained and preserved using NPS standards. Poplar Grove National Cemetery would continue to be managed as is.	Resources, including historic structures, landscapes, archeological sites, monuments and collections that contribute to the significance of the park are stabilized, preserved and maintained in good condition. Poplar Grove National Cemetery is rehabilitated to reflect the original sense of contemplation, quiet, and solemnity. Natural systems are managed to maintain a healthy ecosystem while protecting the park's cultural resources. Agricultural leasing activities maintain the rural character while protecting natural and cultural resources. Collections and archives are housed in a modern facility and preserved using contemporary conservation practices. No new monuments are installed in the park.	Battlefield Preservation Zone The park's boundary is sufficient to preserve the nationally significant landscapes and battlefields associated with the Petersburg Campaign. Battlefield Interpretive Zone Forts, earthworks, structures, roads and objects integral to the battles are preserved to reflect the complexity of the campaign. Historic Interpretive Zone The historic resources of City Point are preserved to reflect the continuum of uses through time.	Battlefield Preservation Zone The boundary is adequate to protect existing park structures, landscapes and battlefields. Battlefield Interpretive Zone Selected cultural resources— viewsheds, structures and earthworks— are rehabilitated to reveal and demonstrate military engineering and strategies. Historic Interpretive Zone Appomattox Manor and associated buildings at Grant's Headquarters at City Point are rehabilitated to reflect the diverse layers of history.	Battlefield Preservation Zone The park's boundary is sufficient to provide visitors opportunities to access and experience the nationally significant landscapes and battlefields of the Petersburg Campaign. Battlefield Interpretive Zone The major battlefields that defined the 1864-1865 landscape—the pattern of forested to open fields-are rehabilitated so visitors can be fully involved in understanding the actions of the battles. Historic Interpretive Zone The cultural landscape at City Point is rehabilitated to reflect the primary historic period of 1864-1865 while respecting the diverse layers of history.
Mission Goal Two: Inte	rpretation & Education			
Auto-tour, ranger-led guided tours and use of walking trails at key sites continue to be the primary visitor experience. Interpretive themes remain unchanged; the audience remains unchanged. Educational programming reaches out to the Petersburg School District and other area schools.	Interpretive themes are expanded to convey a broader range of stories, activities, events and experiences related to military, social, political and economic issues surrounding the Petersburg Campaign in the context of the Civil War. Visitors are actively encouraged to visit key sites in the region that are related to the Petersburg Campaign. Partnerships with local school districts, universities and local businesses are expanded to provide opportunities for learning about the Petersburg Campaign.	Battlefield Preservation Zone Through wayside exhibits and trails, visitors experience the quiet natural and pastoral setting of the battlefields. Battlefield Interpretive Zone Visitors use the park's tour road, structures, and battlefields along with wayside exhibits, guided tours and other means to understand the battle events and importance of preservation. Historic Interpretive Zone Visitors use Appomattox Manor, Grant's Cabin and the waterfront at City Point along with wayside exhibits and guided tours to understand the site's diverse layers of history. Visitors use the wayside exhibits, self-guided tours, and seasonal presentations to experience the historic setting of Poplar Grove National Cemetery.	Battlefield Preservation Zone Through wayside exhibits and trails, visitors experience the quiet natural and pastoral setting of the battlefields. Battlefield Interpretive Zone Visitors experience a comprehensive and dynamic interpretive program through enhanced media, interactive exhibits, special presentations and ranger activities. Historic Interpretive Zone Visitors experience the continuum of uses over time through enhanced media, living history presentations and special programs to understand City Point's importance as an early settlement, plantation, Civil War logistical headquarters and supply base. Visitors use the historic streetscape in Old Town Petersburg along with guided tours, museums, wayside exhibits and other means to understand the impacts of the siege on the city. Enhanced interpretive media, special presentations and guided tours, at Poplar Grove National Cemetery, are used by visitors to understand the ultimate sacrifices of war.	Visitors move through the rehabilitated 1864/1865 battlefield landscapes using trails, wayside exhibits and guided tours to explore and understand the battle actions. Battlefield Interpretive Zone Movement through and experience of the rehabilitated 1864/1865 landscape helps the visitor understand the various decisive battles that helped shape the Campaign. Historic Interpretive Zone The rehabilitated historic buildings and features associated with Appomattox Manor landscape, Grant's Cabin and the waterfront at City Point are used by visitors along with guided tours, enhanced media and wayside exhibits to understand the continuum of uses through time. Visitors use the historic streetscape in Old Town Petersburg along with guided tours, museums, wayside exhibits and other means to understand the impacts of the siege on the city. The historic features and setting of Poplar Grove National Cemetery, along with guided tours, wayside exhibits and special presentations, are used by visitors to understand the commemorative landscape.
Mission Goal Three: Vi	sitor Use & Facilities			
Existing facilities continue to provide for visitor orientation, interpretation, comfort and recreation, with limited development of new facilities. The system of tour roads and directional signage are difficult to understand.	Major visitor services, facilities and support uses are located where they would have little or no impact on significant cultural landscape resources. Visitor facilities are adequate to accommodate a range of visitor services. Alternative modes of transportation between park units are available with the supporting infrastructure, tracing the distance and progression of the campaign. Visitors use the way-finding system of maps, signage and other materials to easily find park units.	Visitors receive primary orientation to the park, its resources and an overview of the Petersburg Campaign at the Eastern Front Visitor center. Historic Interpretive Zone Appomattox Manor serves as a contact station providing information about that site and directing visitors to the Eastern Front Visitor Center. Comfort facilities are improved at Poplar Grove National Cemetery.	Battlefield Interpretive Zone The improved interpretive center provides visitors with a full range of services, orientation to the park, and an understanding of the Eastern Front stories and resources. Historic Interpretive Zone The historic Bonaccord House is rehabilitated as a visitor contact station and provides a full orientation to the park, campaign and local stories. The development of a new visitor contact station that orients visitors to historic resources in Old Town, the park and the region is explored with the City of Petersburg and other partners. A new visitor contact station at the Poplar Grove superintendent's lodge orients visitors to western battlefields, the park and the region. Park Development Zone The historic Operations building is rehabilitated to serve as the park's new education and training facility.	Battlefield Interpretive Zone Visitors receive orientation to the park, its resources and an overview of the Petersburg Campaign at the Eastern Front Visitor Center. Historic Interpretive Zone The historic Bonaccord House is rehabilitated as a visitor contact station and provides a full orientation to the park, campaign and local stories. The development of a new visitor contact station that orients visitors to historic resources in Old Town, the park and the region is explored with the City of Petersburg and other partners. A new visitor contact station at the Poplar Grove superintendent's lodge orients visitors to western battlefields, the park and the region. Comfort facilities are provided at Hatchers Run and Reams Station. Park Development Zone The historic Operations building is rehabilitated to serve as the park's new education and training facility.
Mission Goal Four: Organ The park continues to be an advocate for battlefield conservation and maintains its cooperative and collaborative relationships with associations and local jurisdictions. Park maintenance, administration and housing of seasonal employees are accommodated in existing buildings.	The park fosters partnerships and participates in programs and initiatives to preserve battlefield resources related to the Petersburg Campaign. Existing partnerships are maintained and strengthened, and new partnerships are forged, expanding NPS' ability to protect park resources and provide high quality visitor interpretation and experience. There is increased collaboration among NPS Civil War parks in the region.	Same as "Common".	Same as "Common".	Same as "Common".







Management Alternatives

Management Alternatives

This draft GMP for Petersburg NB contains four alternatives for determining future park management. Each alternative provides a different approach for protecting and preserving resources, providing a high quality visitor experience and facilities, and creating partnerships. The alternatives are organized by mission goals, management zones, and management prescriptions.

Park mission goals reflect the park's purpose and significance and are based on NPS's service-wide mission goals. Mission goals are very broad and help define the vision a park is striving to achieve. Identified under each mission goal are four management zones: battlefield preservation, battlefield interpretive, historic interpretive and park development. The park is divided into these zones to help visitors and staff understand the types of resource conditions, visitor experience and levels of use that are appropriate. In each of these zones, more detailed descriptions of desired future conditions and activities are known as management prescriptions. Each management prescription has action items that suggest how mission goals may be realized.

Management Prescriptions

Management prescriptions are the core of each GMP and provide the foundation for all subsequent decision-making in the park. Management prescriptions further define mission goals. These detailed statements clearly define the specific resource conditions and visitor experiences that are to be achieved and maintained for the park's various resources and areas over time. The kinds and levels of visitor use, management actions and development that are appropriate

for maintaining those desired conditions are identified. Management prescriptions become the primary source of reference for park managers and staff, who must determine if a specific action to be taken is consistent with the direction established and agreed upon for the park.

Taken together, the framework just described provides park managers and staff with a basis upon which to make their decisions for existing issues as well as future problems currently not apparent. The framework is not meant to take the place of more detailed development and implementation plans, such as collections management plans, maintenance guides and resource management plans.

OTHER ALTERNATIVES CONSIDERED

As part of the evolutionary process associated with creating alternatives for this GMP, many concepts have been given serious consideration. Like fitting pieces of a large puzzle together, many ideas have been considered, modified, rejected or accepted. The reasons for ultimately accepting or rejecting a concept are varied and sometimes very complex. Two other concepts were considered by the GMP planning team, but were either rejected or modified as alternatives.

Hub & Spoke

The Hub and Spoke concept, first articulated by the City of Petersburg, received much consideration and was analyzed carefully by the GMP planning team. Under this concept, visitors would start their park experience at a new visitor center in the Old Town section of the city of Petersburg. From this central point of contact, visitors would then be encouraged to go to the Eastern Front, Grant's Headquarters at City Point, Poplar Grove National Cemetery, the Western Front and Five Forks Battlefield. Congress and the Office of Management and Budget are not supportive of building visitor centers

Linear

The Linear concept was suggested as the result of trying to find a way to communicate more clearly the very complex and lengthy story of the Petersburg Campaign. Under this concept, visitors would begin their visit at Grant's Headquarters at City Point and travel to the Eastern Front, Western Front and the Five Forks Battlefield, following the progression of the Campaign. The team suggested that the story, once started, would be so compelling that visitors would extend their stays to see the story to the end. This concept was rejected because most visitors will spend much smaller blocks of





Community members participating in the GMP planning process.

where there is no track record of visitation or public need. Therefore, the concept of the park owning and operating a visitor center in Old Town Petersburg, especially since the current park visitor center is only two miles away, was not accepted. However, the park embraces the concept of partnering with the city of Petersburg to staff and co-operate a visitor contact station in Old Town that showcases Civil War historical resources of the region and serves as a meeting point for historical interpretation offered by NPS staff and others.

time with the hope of coming away with something that resonates with them and not everyone wants to follow the action of the soldiers on the battlefield.

Generally, the Linear concept gave way to a different idea. Each visitor will find or seek or be directed to an aspect to the Civil War that interests them. If the experience is a good one, it is our hope that they will return to learn more about the Civil War and the Petersburg Campaign.

PRESERVATION TREATMENTS AND THEIR RELATION TO THE ALTERNATIVES

Many of the management areas, identified above, require specific preservation treatments of cultural landscapes, historic buildings or archeological and ethnographic sites. The terms used to describe these actions have specific definitions and are described in the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. This document defines the principles that federal agencies must follow when they stabilize or alter historic buildings, landscapes or sites.

The alternatives in this plan include preservation treatments consistent with the Secretary's Standards. As a part of the planning process, a number of different concepts were evaluated. Through public review and consultation with other public agencies and the NPS, the concepts were refined to identify the most appropriate treatments. Of the four levels of treatment—restoration, reconstruction, rehabilitation and preservation, only two apply: preservation and rehabilitation.

Preservation is the process of applying measures necessary to sustain existing form, integrity and materials of a historic property. Work includes stabilizing the property and focuses on ongoing maintenance and repair of historic materials and features. Preservation maintains the existing character of the resource. Most of the activity that takes place on the battlefields today is preservation; buildings, monuments and landscapes are stabilized and repaired to maintain their existing character. This treatment would include the removal of large trees that can damage the earthworks upon

which they grow due to wind throw and uprooting.

Rehabilitation makes possible compatible uses for properties through repair, alteration and addition while preserving significant historic features that convey historical values. Rehabilitation starts with identifying, protecting, retaining and preserving historic features. Changes that have acquired significance in their own right are generally retained and preserved. Historic features



Removing fallen trees helps preserve earthworks.

that have been changed or have deteriorated may be repaired. For example, such work could stabilize a building deteriorating due to a poorly engineered roof. Rehabilitation could also allow for the replacement of missing historic features like fences. Finally, rehabilitation permits alterations and additions for new use—an example could be the adaptation of a residential building for compatible commercial or visitor use as long as the historic appearance and character are retained.

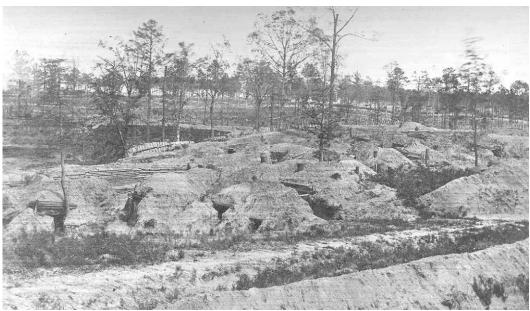
MANAGEMENT ZONES

Petersburg NB will be divided into four zones that will identify how the different areas of the park will be managed to achieve desired resource conditions and to serve visitor needs. The zones are intended to protect park resources and make a range of quality activities available for visitors. The zones give visitors an understanding of where certain activities are and are not allowed. They also tell park managers where

limited by physical means or restricted to certain times. Modifications will be confined to those needed to protect resources from human impacts, manage the level of use and provide for public safety.

Visitor Experience and Facilities

The zone would provide a sense of being immersed in a natural landscape and it would feel somewhat distant from most comforts and conveniences. Quiet generally would be expected, but occasional noise would be



Gracie's Salient, Confederate fortifications.

development can and cannot be added and the intensity of management that is appropriate in different parts of the park.

Battlefield Preservation Zone Resource Conditions

This zone includes historic battlefield landscapes that are primarily in a natural and/or pastoral setting of forest, open fields and agriculture.

Level of Management

Actions will be primarily to protect natural and cultural resources. Access may be

tolerated. Encounters with other visitors would be infrequent, except during peak season. Facilities would include interpretive trails, kiosks, wayside exhibits and limited comfort areas.

Battlefield Interpretive ZoneResource Conditions

This zone includes primarily cultural resources such as earthworks, monuments and objects located in both natural and manipulated landscapes.

Level of Management

Intensive management will often be required to protect resources and to ensure public safety. Modifications will be necessary to protect resources and manage levels of use.

Visitor Experience and Facilities

This zone would offer visitors a fairly structured experience with on-site interpretation and education. Visitors would get an overview of park resources and significance in a short time frame and with a minimum of physical exertion. Park orientation and interpretation of primary

Historic Interpretive Zone

Resource Conditions

Settings are primarily formal and involve housing patterns and manipulated landscapes. The character is often defined by groupings of historic elements such as buildings or districts that are surrounded by cultural or natural landscapes. All sites are listed on the National Register of Historic Places.

Level of Management

Cultural landscapes will be managed to perpetuate a particular historical, cultural or



Ranger-guided tour with school group on battlefield.

park themes would be important elements of this experience. Sightseeing, learning about the battlefields, short walks, and attending interpretive programs would be common activities in this area. Orientation and interpretation facilities such as visitor centers, contact stations, trails, kiosks, wayside exhibits and other interpretive media would be appropriate.

agricultural scene. Intensive management will often be required to protect resources and to ensure public safety. Modifications in these areas will be in harmony with the period of significance and will be confined to those necessary to protect the historic resources and manage appropriate levels of public use at each site.

Visitor Experience and Facilities

Visitors would have a sense of being in a historical area and seeing something that adds to the cultural character of the Civil War and region. Self-guided or ranger led walking tours through areas with historic buildings, fences, walkways, and gardens would be important for the experience. Orientation and interpretation facilities such as contact stations, kiosks, wayside exhibits and other interpretive media would be appropriate.

Park Development Zone Resource Conditions

This zone contains a developed environment, although the surrounding setting may be natural or historic. Although buildings, structures, and other signs of human activity would be fairly obvious, there would be natural elements present too.

Level of Management

The zone would be confined to relatively small areas for operational needs and public use. Administrative, maintenance and operational functions may require intensive management. Active management of recreation will help ensure resource protection and public safety.

Visitor Experience and Facilities

In this developed zone, facilities would be convenient and accessible. The probability of encountering NPS staff would be very high. Facilities within the zone include park headquarters, ranger stations, trails, parking areas, and associated infrastructure.

The following types of NPS facilities are present in the development zones:

The Eastern Front Visitor Center
 The park's only visitor center, this facility provides a variety of services including restrooms, orientation, interpretation (e.g., introduction to the park, themes,

all manners of interpretive media), trip planning, item sales (interpretive and informational) and fee collection.

Visitor Contact Stations

Unlike the full service visitor center, these facilities provide limited orientation and interpretation focused at individual units. Restrooms are available and sometimes there are items for sale.

Comfort Areas

Usually located in isolated areas and include either portable or stationary bathroom facilities.



Gazebo at Poplar Grove National Cemetery, Memorial Day 2003.

ALTERNATIVE A: CONTINUATION OF CURRENT MANAGEMENT PRACTICES (NO-ACTION)

This no-action alternative identifies the current management direction and provides a baseline with which to compare the other alternatives, as required by the National Environmental Policy Act (NEPA).

Alternative A retains the management guidance and direction of the 1965 Master Plan, including its identification of significant resources, its boundaries as modified by recent legislation, and policies for battlefields and historic properties. The park's 1965 Master Plan does not contain management zones or management prescriptions because they are a new concept now mandated under NPS Director's Order 2: Planning. Therefore, Alternative A focuses on existing conditions and resources and will not describe either management zones or prescriptions.

Preserving & Protecting Resources

The park's acreage ceiling of 2,659 acres remains at current levels, with minor boundary adjustments made as needed. Minimal portions of eight nationally significant battlefields, the Crater, Five Forks, Fort Stedman, Initial Assault, Final Assault, VI Corps Breakthrough, IX Corps Assault, and Peebles' Farm are protected.

Earthwork management and preservation work continues following current management practices on selected earthworks throughout the park. Areas immediately around the existing interpretive stops (Battery 5, Battery 8, Battery 9, Fort Stedman, Crater, Five Forks, and Fort Wadsworth) are maintained as fields. Other

battlefield lands inside the park not used for visitor services or park purposes would remain forested. These resources—battlefields, batteries, forts, earthworks, and salients—are stabilized and preserved in their present condition. Maintenance activities include mowing, trimming and tree management. Physical access remains limited to authorized trails and observation points.

The historic structures throughout the park remain in their current condition and are maintained using current management practices. Historic buildings in the park in active use or that are being stabilized would not be allowed to deteriorate further. At a minimum, they are made weather-tight, structurally stable and resistant to vandalism.

City Point continues to retain its historic residential character on the bluff and its natural and recreational character on the waterfront, demonstrating a continuum of uses through time including the legacy of the Eppes Family. Appomattox Manor, its outbuildings and Grant's Cabin continue to be stabilized and maintained in their current condition. Major repairs to the Appomattox Manor house foundation would continue. The domestic landscape consisting of the remaining formal gardens at Appomattox Manor, Hunter House, Bonaccord and Naldara are maintained in their current conditions.

Collections and archives remain in the basement of the Eastern Front visitor center and at City Point lacking appropriate environmental conditions, storage, access and security. Monuments are maintained and preserved using current NPS standards. Cleaning, repointing and preservation treatments are applied as necessary. Archeological collections continue to be stored and assessed at City Point.

Poplar Grove National Cemetery continues to be managed and maintained in its current

condition, using NPS policies. Headstones remain in their horizontal position. Park staff continues to remove hazard trees and stabilize grave disturbances.

Natural resources continue to be monitored and managed, including eradication of invasive and exotic species. Baseline data for natural resources, flora and fauna, and stream quality continues to be developed and mapped.

Interpretation & Education

The visitor experience begins with an overview of the events at the Eastern Front and continues with a tour of NPS sites: major fortifications, portions of four battlefields and City Point, including Appomattox Manor and Grant's Cabin. Auto-tour, ranger-led guided tours and use of walking trails at key sites continues to be the primary visitor experience.

The chronological, self-guided auto tours (Battlefield and Siege Line) of the battlefields remain unchanged. Visitors are brought to or past the major military engineering sites and battlefields within the park. At the primary interpretive sites or destinations, existing vistas focus first on major fortifications and second on the area between the lines or on an overlook towards a military objective. At other interpretive sites, which usually comprise a single fort, the views are more restricted and focus on a single structure only.

The interpretive message continues to emphasize battle chronology, the Union and Confederate commanders, an overview of the Petersburg Campaign, and a limited introduction to military exercises, army organizations and people whose lives were interrupted by the war. Visitors can continue to research military history, including details of the events and participants of the

campaign. The park provides genealogical assistance to individuals looking for information on family members involved in the campaign.

Visitors to Grant's Headquarters at City Point continue to receive interpretive services on the grounds, at Appomattox Manor where they can see two furnished rooms, and at Grant's Cabin where they can see inside. Interpretative stories convey the unit's rich history, including pre-European contact, colonial-era life, the plantation system and Eppes family, and the social,



General Grant's reconstructed cabin headquarters at City Point.

political and economic changes resulting from the end of the war. Grant's use of the site as a combined command headquarters and Lincoln's periodic visits are explained. The logistical and supply operations supporting the Union armies, the strategic importance of City Point, as the site of converging railroads, rivers and roads is emphasized.

In the Western Front, interpretation is structured around the gradual encirclement of the city by Grant's army as it continuously cut Lee's supply lines (railroads and roadways) as well as military engineering and tactics associated with the Union siege line, Confederate defense line, and the Confederate Fort Gregg battlefield. These sites include Weldon Railroad, Peebles' Farm, and Final Assault. This is accomplished through a driving tour, wayside exhibits and occasional guided tours by rangers. Poplar Grove continues to be a contemplative, solemn tribute to fallen Civil War soldiers. Tours here are mainly self-led using wayside exhibits, but a ranger-led tour can be requested.

programming reaches out to the region's schools and provides interpretive programs to help add a dynamic dimension to their history curriculum.

Visitor Use & Facilities

Primary visitor contact is provided at the Eastern Front Visitor Center. The existing visitor center continues to provide orientation and interpretation services for the entire park. Open year-round, it has an information desk, restrooms, interpretive



Current interpretive program describes battle action.

At Five Forks, interpretation is structured around the tactics of the Battle of Five Forks and its impact on the Final Assault and the evacuation of Petersburg. Tours and presentations are offered on a limited schedule.

The park's primary audience is retained including Civil War and national park enthusiasts, local elementary schools, park neighbors and community members seeking a scenic and/or recreational experience. The park reaches out to the community and visitors with limited school, vacation camp and special events. Educational

media, interpretative staff offices, and a bookstore operated by a cooperating association. No new orientation, comfort or recreational facilities are developed.

Appomattox Manor continues to orient visitors to Grant's Headquarters at City Point and provide directions to the Eastern Front visitor center and other areas of the park. Orientation and interpretive services are provided by rangers, a site bulletin located at the parking lot and wayside exhibits. Visitor comfort facilities are available in Appomattox Manor. Recreational opportunities include walking and fishing along the riverbank.

Poplar Grove serves as the only visitor orientation in the Western Front with limited hours during the summer months. A seasonal contact station/comfort station is available with wayside exhibits.

A visitor contact station is provided at Five Forks Battlefield where four public roads bisect the park and meet in the middle at the core of the battlefield. Visitors receive limited interpretive information and there are exhibits, pull-offs, wayside exhibits and trails to learn about the battle. A portable bathroom facility is available adjacent to the parking area.

The system of tour roads and directional signage continues as presently designed. Visitors continue to use park tour roads and public roads to travel between park units. The primary tour routes continue to be the Battlefield Tour in the Eastern Front and the Siege Line Tour of the Western Front and Five Forks.

Multi-use trails continue to provide access for pedestrians, bikers and equestrians on a limited basis, into sections of the park beyond the main interpretive destinations. Interpretive trails continue to bring visitors from the parking lots to the primary interpretive destinations in all units. Use is controlled by limiting parking and access points and by closing trail sections when weather or use poses threats to the resource.

Organizational Efficiency

The park continues to be an advocate for battlefield preservation and maintains its cooperative and collaborative relationships with associations and local jurisdictions. Local jurisdictions and landowners interested in battlefield preservation continue to request technical assistance from the park. NPS staff continues to provide information about historic events and evaluations of resource conditions and continues to work with local jurisdictions to

enhance their capacity for battlefield conservation, appropriate recreational use and public education.

Existing partnerships and outreach continue with local school districts for educational programming. State and national non-profit agencies such as the Conservation Fund, Civil War Preservation Trust, Virginia Civil War Trails, Izaak Walton League, National Park Foundation and others cooperate with the park on battlefield and Civil War resource protection and conservation. The city of Hopewell, the city of Petersburg and Dinwiddie County work together with the park for recreation and tourism. Partnerships continue with the Virginia Department of Conservation and Recreation, North Carolina State University, the University of Richmond, Virginia Commonwealth University, Virginia Polytechnic Institute and State University (Virginia Tech) and the College of William and Mary for natural resources studies such as herpetology and flora inventories. The Veterans Administration consults with the park on matters related to Poplar Grove National Cemetery.

Park maintenance, administration and housing of seasonal employees are accommodated in existing buildings. Offices, equipment and materials storage, shops, and employee housing are accommodated in historic and non-historic buildings in the park. Construction is limited to ongoing maintenance and upgrades to meet new building codes or federal standards. The existing visitor center continues to house administrative, interpretive and maintenance functions for the Eastern Front and the entire park. Planning for expansion of the existing maintenance facility will continue. The existing bookstore concession is maintained in its existing condition and cooperative marketing and promotion efforts continue. The cooperating association continues to stock and operate a store and NPS provides space for the retail operation and inventory storage.

Alternative A: No-Action

Current Management Direction	Current Actions Taken		
Preserving and Protecting Resources The park's acreage ceiling remains at current levels, with minor boundary adjustments as needed.	Continue to pursue minor boundary expansions defined in 1983 land Protection Plan.		
Stabilize and maintain all resources following current management practices.	Maintain historic structures in their current condition using 1995 Statement for Management. Continue current earthwork management practices. Continue developing and mapping baseline natural resources data.		
Collections and archives remain in existing spaces that lack appropriate environmental conditions, storage, access and security.	Keep the existing collections, artifacts, archives and library in the basement of the Eastern Front visitor center. Protect the cannon tube collection in its current location. Maintain the library and Civil War soldiers' database.		
Limited interpretive vistas are maintained in the areas immediately surrounding the principal fortifications on selected battlefields.	Continue removing trees from Forts Friend and Haskill and Colquitt/Elliot's Salients. Maintain grass cover on rehabilitated earthworks. Maintain the 25 acres of open area around Fort Urmston and Taylor Farm.		
Monuments are maintained and preserved using NPS standards.	Cleaning, repointing and preservation treatments are applied as necessary.		
Interpretation and Education Auto-tour, ranger-led guided tours and use of walking trails at key sites continue to be the primary visitor experience.	Continue existing interpretive tours and programs. Continue directing visitors to use the self-guided auto tour. Continue using existing brochures and other printed media to provide information and directions.		
Interpretive themes remain unchanged.	Continue interpretive program that emphasizes battle strategies, military life and history and an overview of the Petersburg Campaign.		
An overview of the Petersburg Campaign is provided at the current visitor center and is structured around the opening battles and the start of the siege.	Continue existing interpretive program.		
Educational programming reaches out to the Petersburg School District and other area schools.	Continue existing educational outreach programs.		
Poplar Grove National Cemetery is a contemplative, quiet and solemn tribute to fallen Civil War soldiers.	Maintain wayside exhibits.		

Alternative A: No-Action

Current Management Direction	Current Actions Taken		
Visitor Use and Facilities The system of tour roads and directional signage are difficult to understand.	Maintain park tour roads in their existing conditions. Maintain existing signage, brochure and other public information as is.		
The existing visitor center continues to provide orientation and interpretation services for the entire park.	Maintain the existing visitor orientation and information services provided at the Eastern Front.		
Existing facilities at Appomattox Manor, Poplar Grove and Five Forks continue to provide visitor orientation services and recreation opportunities.	Maintain existing visitor center in its current condition. Maintain parking lot and one-way tour road. Maintain existing picnic area. Maintain trail system for hiking, biking and horseback riding.		
Organizational Efficiency The park continues to be an advocate for battlefield conservation and maintains its cooperative and collaborative relationships with local jurisdictions and associations.	Participate in planning efforts of local jurisdictions. Attend local planning meetings and hearings.		
Continue existing partnerships with local governments, universities and conservation organizations for preservation and interpretation.	Provide technical assistance to local battlefield owners. Continue collaboration with universities, the Conservation Fund, CWPT and others.		

MANAGEMENT PRESCRIPTIONS COMMON TO ALL ACTION ALTERNATIVES

This section defines the management prescriptions that are common to action alternatives B, C and D. Resource preservation and rehabilitation, interpretation and education, visitor use and facilities and organizational efficiency prescriptions and possible actions common to all the action alternatives are discussed. Management Prescriptions Common to All Action Alternatives form the foundation from which Alternatives B, C and D are further developed and differentiated.

Management prescriptions and actions unique to each alternative are then described. The order in which prescriptions and actions are listed does not indicate priority or likelihood for funding. A summary chart describes actions as examples of those most likely to occur, but the desired condition (management prescription) could be achieved in many ways.

Preserving & Protecting Resources

Resources, including historic structures, landscapes, archeological sites, and monuments that contribute to the significance of the park are stabilized, preserved and maintained in good condition. Petersburg NB has 118 historic structures, including buildings, monuments, and earthworks, on the NPS "List of Classified Structures" as well as 4,400 collection items, thousands of archival materials and more that 2,600 acres of land to preserve and protect. Much of the day-to-day work of

park maintenance and professional staff, and a large portion of the park's annual spending, is dedicated to the protection, preservation and maintenance of the park's historic resources.

With so many resources, and within the constraints of limited staffing and funding, managers must often make difficult decisions regarding which resources should be protected first and how limited funding and staff should be distributed. As part of the process of developing the park's significance statements, the priority resources that contribute to this significance were identified and are included on page 14. This information is a guide for managers so they can ensure that limited funding and staff are being programmed to take care of the park's most significant resources. However, park managers must also balance resources to ensure that all contributing resources are protected and preserved, no matter where they fall in the resource priorities.

Protecting historic buildings from fire, controlling erosion on earthworks, and stabilizing and preserving monuments are just a few of the hundreds of actions that may result from this prescription.

Poplar Grove National Cemetery is rehabilitated to reflect the original sense of contemplation, quiet, and solemnity.

Developed in 1868, Poplar Grove has many historic features that contribute to the cemetery setting. The features and setting at Poplar Grove would be rehabilitated according to the recommendations of a cultural landscape report and treatment plan. This report and plan would guide the level of rehabilitation and suggest the most appropriate actions for preserving, repairing and maintaining the structures, headstones and setting of the national cemetery.

Collections and archives are housed in a modern facility and preserved using contemporary conservation practices.

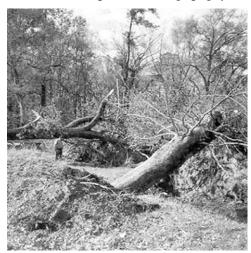
As part of the GMP planning process, the NPS Northeast Museum Services Center conducted an inventory and analysis of the park's collections and archives. The Collection Storage Plan (2003) and the Archives Survey (2003) provide information about resource issues, conditions and makes recommendations for preservation and protection. One of the primary recommendations from both plans is the placement of the collections and archives into a modern facility with controlled atmospheric conditions, security and with adequate space for the growing archeological collections. These resources are now housed in facilities in the Eastern Front and at City Point that do not meet contemporary archival and conservation best practices methods. Placing the collections and archives in an adequate facility would not just arrest their deterioration, but would also allow staff, scholars, students and visitors secure and appropriate access.

The Collections Storage Plan provided alternatives for development of an appropriate facility. These include: an interagency agreement with Fort Lee for space in their Regional Archaeological Curation Facility; adaptive reuse of the Operations building; adaptive reuse of Hunter House; and new construction. After careful consideration of the advantages and disadvantages of each curatorial facility alternative, the park favors an interagency agreement with Fort Lee. The Regional Archaeological Curation Facility is a central repository for the unexhibited cultural resources of federal agencies. The facility provides environmental controls, dedicated storage space, a research/wet lab, centrallymonitored intrusion detection and fire

suppression systems, restricted access and a dedicated curator. It is centrally located among the units and is in close proximity to interpretive and resource management staff

Natural systems are managed to maintain a healthy ecosystem while protecting the park's cultural resources.

At Petersburg NB, natural resources, such as streams, trees, vegetation and topography,



Damage to earthworks caused by windthrown trees.

would be managed to protect the character and quality of the park's significant cultural resources and to provide important interpretive views. In some cases, cultural resource management goals do not allow natural processes such as tree growth to continue unimpeded. Similarly, interpretive goals often require modifying resource management strategies to achieve a desired visitor experience. Therefore, when developing resource management strategies, any competing objectives must be balanced and a preliminary strategy adopted.

Over the next few years, the park will continue conducting natural resource inventories and studies, in partnership with

state agencies and universities such as the Virginia Department of Conservation and Recreation, North Carolina State University, the University of Richmond, the Virginia Commonwealth University, Virginia Tech and the College of William and Mary. This information baseline will be the foundation for developing base maps to document existing conditions of natural (flora and fauna) and cultural resources on park-owned and potential new lands. Other actions that might result from this prescription include establishing vegetation strategies to eradicate invasive and exotic species, developing conservation partnerships with local, state and federal agencies to maximize species and habitat diversity and cooperating with agencies to monitor and protect resources.

Agricultural leasing activities maintain the rural character while protecting natural and cultural resources.

The agricultural program is a key component in managing the Eastern and Western Fronts and the Five Forks Battlefield. The fields reflect the agrarian character of the antebellum South and the post-Civil War era, and are an important cultural resource. They provide food and shelter for wildlife and visual diversity for visitors in a largely forested landscape. The clearing of woodland to open up interpretive vistas and historical open battlefield landscapes proposed in the alternatives would increase the open areas in the park, some of which would be placed in agricultural use. This would expand the agricultural leasing program. The amount of acreage to be introduced in the leasing program would differ by alternative.

Many of the nationally significant battlefields in Dinwiddie County proposed in the boundary expansion are considered prime agricultural lands. Both the park and Dinwiddie County, as stated in its 2001 Comprehensive Plan, are committed to the preservation of the pastoral landscape. As one of the mechanisms for landscape preservation, the park will work with landowners and the county to secure agricultural easements in the proposed expansion areas. A more detailed description of the prime and unique agricultural lands is included in The Affected Environment Chapter on page 104.



Reams' Station.

Some of the actions under this prescription might include: adjusting the mix of field crops to reflect desired landscape patterns; scheduling management activities (mowing, seeding, fertilizing, etc.) to protect wildlife, encourage diversity of the plant community, limit runoff and protect water quality in streams; and modifying management activities and the use of agricultural equipment to protect archeological resources in the area.

No new monuments are installed in the park.

The park has more than 20 monuments spread throughout the four units, each commemorating individuals or events associated with the Petersburg Campaign. Often, the monument does not impart enough information to satisfactorily convey the depth or relevance of the person or event being commemorated. During the nine-and-

a-half month Petersburg Campaign, 70,000 casualties occurred and hundreds of unique and notable events happened. If commemoration of each of these incidents were permitted, the landscape would be overrun and the integrity of the visitor experience would be diminished. If unchecked, the aggregate effect of all monuments would further impact the ambience, viewshed and interpretability of the battlefield. Allowing the addition of more monuments would also further tax the park's maintenance efforts. Petersburg NB would encourage groups or individuals wishing to commemorate battlefield activities to find other means and mechanisms to do so.

Interpretation & Education

Interpretive themes are expanded to convey a broader range of stories, activities, events and experiences related to military, social, political and economic issues surrounding the Petersburg Campaign in the context of the Civil War.

A new interpretive program would be developed on the broader military, political and social causes and impacts of the Campaign. The broadened themes would help to tell currently "untold" stories.

The new themes would not just relay military tactics and engineering, but would include a much broader social context such as the role of women during the siege, African-American troops, slave and plantation life and the experiences of ordinary Petersburg citizens.

Exhibits and resources would be used to complement the expanded interpretive themes and stimulate the visitor's interest in touring historic sites where distinct stories could provide a fuller understanding of the park's concepts and themes. The presentations

at the visitor center and other historic sites would be developed with the assistance of scholars, interpretive designers, educators and the local community.

Research would continue to be an important function for the Petersburg NB staff, but its focus would be on the broader context of the campaign and the new expanded interpretive themes. The park's ethnographic resources would be studied. From them, stories could be found that illustrate differing points of view and impacts that these events had on lives of individuals, families and communities. A special effort would be made to work with local scholars and universities on the stories of African-Americans. The information provided would be used in new exhibits, publications and programs.

Visitors are actively encouraged to visit key sites in the region that are related to the Petersburg Campaign.

Many of the sites that are crucial to understanding the Campaign are outside of the park boundary, requiring cooperation between NPS and the managers and interpreters of those places. Of particular interest is the city of Petersburg where residents endured the longest siege on American soil.

By coordinating with managers of key regional sites, a richer Civil War story can be told, attracting a wider audience base. Among the information available about the park at visitor and contact stations, visitors would be able to also get information on other regional NPS and non-NPS sites that commemorate, interpret or preserve Civil War actions, artifacts and locations. Other sites include Pamplin Historical Park, Violet Bank and the Siege Museum. Numerous entities manage the region's sites, and the hours of operation as well as the quality and

amount of interpretive information provided vary widely. Joint initiatives will help to make it easier for the visitor to get to the region's many resources. Partnership efforts can provide seasonal programs and special events that attract a diverse audience. Regional culture, art and music can be integrated into interpretive programs and events, providing a richer experience.

Partnerships with local school districts, universities and local businesses are expanded to provide opportunities for learning about the Petersburg Campaign.

The park's expanded educational goals include partnering with schools and teachers to create pre- and post-visit lesson plans and materials. Partnering with local businesses and other organizations will help to fund transportation needed for lower-income schools for site visits and materials needed to create a dynamic learning experience such as educators' guides, traveling trunks and interpretive media geared to different age groups such as brochures, CDs and web site.

Major visitor services, facilities

Visitor Use and Facilities

and support uses are located where they would have little or no impact on significant cultural landscape resources.

As the park has been developed over the last 78 years, policy guidance on the placement of both visitor facilities and administrative buildings has been adapted to reflect the importance of cultural landscapes and preservation of the historic scene. Previous NPS practices frequently located visitor centers, parking lots and other interpretive support functions either within or immediately adjacent to the battlefields where these facilities and the visitors using

them adversely impact historic landscapes. The current Eastern Front Visitor Center, parking area and maintenance yard, are situated prominently on the Petersburg Assault battlefield making it difficult to convey the troop movements and battle action to visitors. At Five Forks Battlefield, a converted gas station situated at the historic intersection serves as a visitor contact station and disturbs the most significant interpretive area of the battlefield.

Over the next 20 years as the park expands and develops, any new facility would be located away from significant cultural landscape resources. The current visitor contact station that serves the Five Forks Battlefield, would be removed. A modern building would be constructed, sensitive to contributing resources and viewsheds and serve to orient visitors to the battlefield and park, house exhibits and accommodate storage and administrative uses. Portions of the park's trail system that intrude on interpretive vistas and viewsheds would be relocated. The system of trails in the Eastern Front brings visitors into the cores of the Crater and Fort Stedman battlefields. The sections that intrude on the interpretive vistas would be relocated so that they circle the vistas, rather than intrude on them. New trails would not be located where use, steep slopes and drainage patterns would damage natural resources. Trails in the Eastern and Western Fronts that are located in sensitive areas would also be relocated. As trails are relocated, the existing connections between the recreational trail system and the historic trail system would be eliminated to severely limit the intrusion of recreation users close to primary interpretive vistas.

Visitor facilities are adequate to accommodate a range of visitor services.

Ideally, a range of visitor facilities would be available to accommodate the varying types

of experiences, programs and educational presentations that can happen in any given NPS park. At Petersburg NB, the existing visitor center at the Eastern Front accommodates many of those activities, although not always adequately. The visitor center cannot accommodate large groups of visitors and there is not an adequate or versatile meeting or presentation space. To solve this problem, the park would renovate the existing historic Civilian Conservation Corps-era Operations building as an education and training facility. Visitor comfort facilities are not adequate in all the units, for example they are only available seasonally at Poplar Grove. The park would make improvements to the comfort facilities at the Poplar Grove superintendent's lodge and make them available year-round. At the Five Forks Battlefield, visitor services are currently provided in a small, former gas station with limited exhibit space. There are no restrooms available, only a single portable toilet located in the parking lot and no self-contained potable drinking water. Current conditions do not meet federal, state or local health codes. The visitor parking area adjacent to the building has only enough room for five vehicles and no adequate bus parking. There are no maintenance facilities or equipment storage areas meeting the minimum requirements necessary within 21 miles of the site. Extremely hazardous conditions exist for visitors. The contact station is located on one side of an intersection; exhibits and national historic landmark monuments are located on the other. Visitors must cross several twolane roads with 45-55 mile per hour speed limits without crosswalks, signage, reduced speeds, or traffic signals. Serious motor vehicle accidents have occurred including park structures and buildings being struck and damaged. A new visitor contact station, located away from the historic intersection, would be developed and include restrooms, interpretive exhibits, staff offices, adequate parking, maintenance areas and trails.

Visitors use the way-finding system of maps, signage and other materials to easily find park units.

The way in which visitors receive and use information about the park and its programs will be updated and improved. Because the park's units are not contiguous, it is imperative that the signage system inside and outside the park's boundary be cohesive and strategically and logically placed. This task



Park ranger explaining the firing of a Civil War cannon.

will take a considerable amount of planning and coordinating with local jurisdictions and partners interested in a larger, regional signage endeavor. The park would also update the existing park brochure, web site and other orientation materials to reflect the new unit names and facilities.

Alternative modes of transportation between park units and other significant battlefield resources and sites are available with the supporting infrastructure, tracing the distance and progression of the campaign.

For many visitors to popular National Park sites, especially during peak summer season,

the anticipated park experience is being diminished by the very reason people seek vacations - relief from traffic jams, accidents, noise and exhaust fumes. Many road systems that connect travelers to parks are experiencing the effects of poorly planned transportation systems and sprawl. At Petersburg NB, the movement between four noncontiguous units along a 37-mile long tour route traversing an urban/ suburban/ rural environment is a challenge to most visitors. With increasing residential and commercial development along primary road systems in the next 20 years, the park experience would be compromised.

The park will explore alternative transportation options for traveling between park units by means other than automobiles. This could be accomplished by shuttle buses, local transit or by biking along a trail system. The park will pursue funding for transportation feasibility studies that research, analyze and recommend a system best suited to the region and park.

The development of a multi-use trail system that connects significant battlefields in Dinwiddie County and potentially other recreational trails and sites would accomplish many objectives. First, the trails would enable visitors to get out of their cars and truly experience the landscape, the resources and the extensive scale of the campaign. Second, the trails would provide opportunities for active recreation including walking, jogging, bicycling and in some locations horse-back riding. Third, alternative modes of transportation would help the region attain air-quality standards. The park will coordinate with the Dinwiddie County Battlefield Trails project to look at opportunities to connect the battlefields.

Organizational Efficiency

The park fosters partnerships and participates in programs and initiatives to preserve battlefield resources related to the Petersburg Campaign.

Park managers recognize that volunteers and cooperators greatly expand the park's ability to protect and interpret its resources beyond what would be possible with federal funds alone. For all the action alternatives, the park would maintain and strengthen current relationships, but also seek to foster new ones to preserve battlefield resources. These active partnerships would find innovative ways to protect resources outside park boundaries, to establish new county or state parks, to raise funds and to increase public awareness of the impending loss of Civil War resources. The initiation and implementation of a battlefield conservation effort would require partnerships with landowners, nonprofit organizations, business interests and local jurisdictions.

The park would increase its advocacy of battlefield conservation for the many sites significant to the campaign that lie outside park boundaries. Park staff would encourage landowners to pursue a variety of regulatory mechanisms useful in the battlefield conservation effort and available to local jurisdictions and interested parties including zoning, historic, cultural and agricultural easements

These efforts would also include working with local jurisdictions, landowners and others on issues of growth adjacent to the park boundaries. The park would consult with local governments and agencies to address and encourage planning and development initiatives that have the potential to affect Petersburg NB and its resources, including the uses of adjacent

properties. Significant areas of the lands around the Western Front and Five Forks Battlefield have been identified as targets for growth in the next decade.

Existing partnerships are maintained and strengthened, and new partnerships are forged, expanding NPS' ability to protect park resources and provide high quality visitor interpretation and experience.

The park already has numerous examples of protecting resources of the Petersburg Campaign within its boundaries by assistance from interested groups, individuals and organizations. They provide funds, time and equipment for critical park management projects. The park would increase its ability to protect resources through these existing relationships and by forging new ones.

NPS could expand its technical assistance to the City of Petersburg for the protection of Civil War resources. Petersburg NB and the City of Petersburg have worked on collaborative projects and they share resource protection concerns. The City owns Centre Hill Mansion and earthwork resources on Flank and Defense Roads, which were originally part of the park. Petersburg NB could provide technical assistance to the city on specific resource issues, and lend its expertise to the city in other activities that would support the park visitor's experience.

Existing partnership and coordination efforts with the City of Hopewell, Hopewell Tourism and the Historic Hopewell Foundation would continue on such issues as preserving and protecting waterfront resources and encouraging tourism. Discussions would also be initiated with local, state and federal transportation agencies on issues such as

maintenance, planned construction and general safety concerns on public roads within and adjacent to park boundaries and transportation options available to park visitors.

There is increased collaboration among NPS Civil War parks in the region.

There would be increased collaboration among NPS Civil War parks in the region with coordinated interpretive programs and materials at Fredericksburg and Spotsylvania NMP, Richmond NBP, Petersburg NB and Appomattox Court House NHP. Each site would provide visitors with a clear understanding of the flow of events and decisions during the last years of the Civil War. In each park, NPS staff would emphasize this larger story while providing visitors with an experience of the events associated with the individual park.

Having a coordinated NPS information program would increase visitation, understanding and education. Some actions the parks might take together would be developing a unified tour of all four parks, augmenting existing brochures and programs with materials about the larger story and initiating interpretive 'summits' to foster collaboration among park staff and superintendents.

There is concurrent jurisdiction for law enforcement operations in the park.

Petersburg NB currently is a confusing hodge-podge of legislative jurisdictions. The ability of the NPS to accept responsibility for law enforcement activities occurring within the park is directly related to the jurisdictional status of these lands.

Exclusive jurisdiction requires that law enforcement must be provided by the United States. The Federal government possesses all the authority of the State, subject only to the right of the State to serve criminal and civil process for actions occurring outside the unit. Recent studies have shown that NPS law enforcement is understaffed, and in areas under exclusive jurisdiction, the effectiveness of NPS officers is limited since they are unable to call upon State and local law enforcement for backup or investigative services for crimes committed in such areas.

Concurrent jurisdiction would be advantageous to Federal, Commonwealth, and local law enforcement authorities since it would allow NPS law enforcement officers to enforce both Federal and Commonwealth of Virginia laws and regulations within boundaries of the park thereby enhancing public safety by supplementing Commonwealth and local law enforcement within the park. In addition, concurrent jurisdiction would allow more efficient administration of justice by allowing NPS officers to charge crimes which are not covered under Federal law and petty offenses such as motor vehicle traffic violations which are more effectively handled in Commonwealth Court rather than Federal District Court which would also enhance public safety. Concurrent jurisdiction does not effect the status of the Commonwealth or the NPS' traditional legal prerogatives, responsibilities and functions within the park.

Conversely, in areas under proprietary jurisdiction, the NPS can only enforce Federal laws and regulations which may not cover all types of potential criminal activity and requires that defendants be tried before a Federal District Court Magistrate or Judge which in some cases may not be the most efficient means of administering justice. The Assimilative Crimes Act, 18C.F.R.13, is not available in areas of proprietary jurisdiction to incorporate State laws, and therefore the burden of most felony investigation, arrests and prosecutions within the park falls on Commonwealth and local law enforcement.

A current breakdown of these jurisdictions and locations are: Eastern Front—919 acres,

exclusive; 541 acres, proprietary and 5 acres held concurrently. The Grant's Headquarters at City Point Unit has 19 acres held concurrently, as is the Five Forks Battlefield Unit with 1,115 acres. In the Western Front, Poplar Grove National Cemetery's 12 acres is exclusive with the remaining satellite sites, (approximately 96.49 acres) administered under proprietary jurisdiction. These areas, particularly in the Eastern and Western Front Units, cross county and city boundaries, which only adds to the confusion. Jurisdictions are determined by dates of acquisition, deed language and the associated State and Federal law at the time of acquisition. For instance, a parcel acquired in 1981 may carry a different jurisdiction to one acquired prior to 1940. Due to this confusion, commissioned law enforcement personnel are required to carry with them a ream of color-coded boundary maps, so as not to infringe on the legislative rights of localities or the State. This may cause hesitancy in action or reaction that could prove potentially harmful to the officer and the resource.

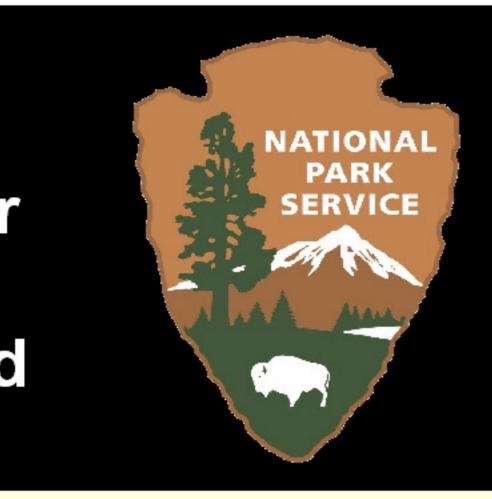
The NPS will pursue complete conversion to concurrent jurisdiction at Petersburg NB. This would require the Department of Interior retrocede exclusive jurisdiction to the Commonwealth of Virginia over areas currently under exclusive jurisdiction, and the Commonwealth to grant concurrent jurisdiction to the United States over those areas as well as areas currently under proprietary jurisdiction. The objective would be to establish a partnership between the NPS and the Commonwealth of Virginia in the administration and management of Petersburg NB lands. Concurrent jurisdiction would provide the flexibility to manage the park in a uniform manner and enable management to carry out the civil or criminal process as desired. Local law enforcement officials will be able to provide assistance anywhere in the park without interference from the patchwork of existing jurisdictions thereby improving our resource protection and service to the public.

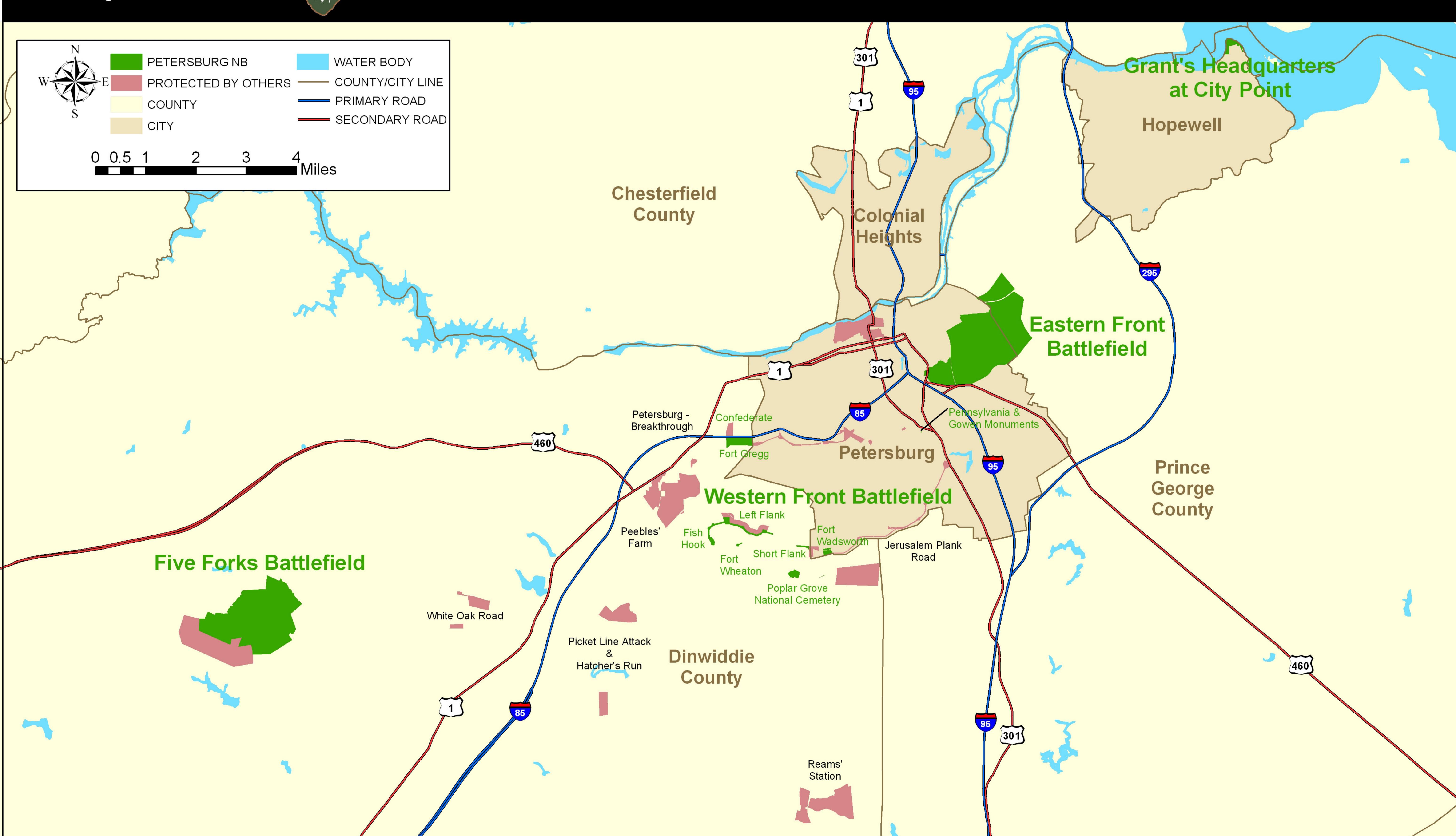
Common to All Action Alternatives

Management Prescriptions	Examples of Actions That Could Be Taken	
Preserving and Protecting Resources Resources, including historic structures, landscapes, archeological sites, monuments and collections that contribute to the significance of the park are stabilized, preserved and maintained in good condition.	Performing routine maintenance, preservation actions, repair and restoration of historic structures. Maintaining selected earthworks by removing trees, controlling erosion and proper seed selection. Preserving monuments by utilizing best practices methods.	
Poplar Grove National Cemetery is rehabilitated to reflect the original sense of contemplation, quiet, and solemnity.	Develop a cultural landscape report and treatment plan.	
Collections and archives are housed in a modern facility and preserved using contemporary conservation practices.	Developing a new facility to house the park's significant collections and artifacts according to contemporary archival and conservation practices.	
Natural systems are managed to maintain a healthy ecosystem while protecting the park's cultural resources.	Establishing vegetation strategies to eradicate invasive exotic species. Developing conservation partnerships with local, state and federal agencies to maximize species an habitat diversity. Developing base maps to document existing conditions of natural (flora and fauna) and cultural resources on park-owned and potential new lands Cooperating with agencies to monitor and protect resources. Developing battlefield vegetation management strategies.	
Agricultural leasing activities maintain the rural character while protecting natural and cultural resources.	Adjusting the mix of field crops to reflect desired landscape patterns. Scheduling management activities (mowing, seeding, fertilizing, harvesting, etc.) to protect wild limit runoff and protect water quality in streams. Modifying management activities and the use of agricultural equipment to protect archeological resources in the area.	
No new monuments are installed in the park.	Providing a clear and concise public information brochure to illustrate justifications for this NPS policy. Offering assistance to those groups seeking to install new monuments to find other means of commemoration.	
Interpretation and Education	Developing interpretive programming to tell the "untold" stories.	
Interpretive themes are expanded to convey a broader range of stories, activities, events and experiences related to military, social, political and economic issues surrounding the Petersburg Campaign in the context of the Civil War.	Presenting and interpreting the expanded, broader themes as they are relevant to each of the units. Using the resources at each unit to illustrate an aspect, circumstance or outcome of the Petersburg Campaign. Developing exhibits, interpretive media, materials and other information to orient visitors to new	
	themes.	
	Creating a Comprehensive Interpretive Plan.	
	Identifying and studying the park's ethnographic resources.	
	Partnering with school districts to promote educational programs.	
Visitors are actively encouraged to visit key sites in the region that are related to the Petersburg Campaign.	Expanding and coordinating interpretive, promotional and marketing relationships with owners and managers of historic sites and museums relating to broader interpretive themes of the Civil War. Working with partners to expand the existing audience base. Providing seasonal programs and special events to celebrate history, culture, art and music. Encouraging visitation to the more isolated areas and drawing attention to newly accessible areas. Creating integrated and comprehensive visitor-orientated materials. Expanding partnerships with local school districts for educational programming.	

Common to All Action Alternatives

Management Prescriptions	Examples of Actions That Could Be Taken
Interpretation and Education continued	
Partnerships with local school districts, universities and local businesses are expanded to provide opportunities for learning about the Petersburg Campaign.	Creating interpretive and educational materials geared towards children and young adults. Maintaining a genealogical research assistance program, access for scholars and the Civil War soldiers' registry program.
	Initiating scholarship and public education partnerships with local scholars, universities and organizations to expand the information available to the public.
Visitor Use and Facilities	Rehabilating the current Five Forks visitor contact station from the historic intersection.
Major visitor services, facilities and support uses are located where they would have little or no impact on significant cultural resources.	Constructing a new multi-use building at Five Forks that could accommodate exhibits, visitor orientation, maintenance storage, offices and restrooms.
on significant cultural resources.	Removing or relocating trails that intrude on resources.
Visitor facilities are adequate to accommodate a range of visitor services.	Rehabilating the historic CCC—era Operations building for educational programming and training space.
Visitors use the way-finding system of maps, signage and other materials to easily find park units.	Creating a new park brochure.
signage and other materials to cashy ma park ands.	Developing and implementing a way-finding system for the park. Coordinating with proper entities to determine appropriate locations for signs.
Alternative modes of transportation between park units are available with the supporting	Partnering with Dinwiddie County at Five Forks and Western Front to link trails.
infrastructure, tracing the distance and progression of the Campaign.	Conducting a feasibility study to provide a non-polluting shuttle bus between park units. Providing bike racks at each unit.
or the campagn.	Working with interested citizens, businesses, elected leaders and local, state and federal agencies to provide public transportation options among sites, to develop rail and river visitor experiences, and to implement a multi-use trail system connecting all battlefields.
	Conducting a Transportation and Circulation Study.
Organizational Efficiency	Assist local governments and organizations with planning and development initiatives.
The park fosters partnerships and participates in programs and initiatives to preserve battlefield resources related to the Petersburg Campaign.	Coordinating and communicating with local and state transportation agencies on issues relating to public roads adjacent to the park.
Existing partnerships are maintained and strengthened, and new partnerships are forged, expanding NPS' ability to protect park resources and provide high quality visitor interpretation and	Providing increased opportunities for collaboration with universities, scholars, historians and the public on visitor experiences.
experience.	Assist Hopewell and Petersburg with waterfront development for recreation and interpretation.
	Developing a unified tour of all four parks.
	Augmenting existing brochures and programs with materials about the larger story.
There is increased collaboration among NPS Civil War parks in the region.	Developing tour and visitor center exhibits that would be used in all the parks with minor variations in emphasis.
	Initiating interpretive 'summits' to foster collaboration among park staff and superintendents.





ACTION ALTERNATIVES

ALTERNATIVE B: SAVING THE BATTLEFIELDS

Under this alternative, the park's priorities for staffing and funding are focused on battlefield preservation both inside and outside current park boundaries. A proposed boundary expansion of 7,238 acres would be pursued with the majority of these epicenter lands in Dinwiddie County.

The historical and contextual importance of Petersburg, the surrounding battlefield lands, and the obligation to protect the "bloodsoaked ground" for future generations is emphasized in expanded interpretive themes. Visitor interpretation and services currently underway will remain as is, with an added layer regarding the importance of the park's preservation efforts and strategies. Educational outreach will target both students and adults for innovative learning.

Visitors will continue to use the Eastern Front VC as the main point of entry and orientation. Auto-tour, ranger-led guided tours and use of walking trails at key sites continue to be the primary visitor experience with most tours and presentations taking place at the Eastern Front. Since the highest concentration of important battlefields is located at the Eastern Front, visitor contact and resources would be maximized there. Appomattox Manor at Grant's Headquarters at City Point will still provide limited visitor services. A new visitor contact station at Five Forks Battlefield would be developed. The park would partner with the city of Petersburg on interpretive programs and tours on a limited, special-event seasonal basis.

Partnerships that promote battlefield preservation receive the most consideration in terms of outreach and staff efforts. Technical assistance to surrounding localities and local landowners will be an integral part of the park's advocacy role.

Preserving & Protecting Resources

Battlefield Preservation Zone

The park's boundary is sufficient to preserve the nationally significant landscapes and battlefields associated with the Petersburg Campaign.

Many battlefields and earthworks of the Petersburg Campaign, currently outside park boundaries are unprotected. Surrounding

boundaries, are unprotected. Surrounding land uses and potential commercial, industrial and residential future development pose new threats to resources inside and outside park boundaries. Under this alternative, the park would preserve the 7,238 acres of nationally significant battlefields recommended in the boundary expansion analysis. These battlefields include: Boydton Plank Road, Crater, Five Forks, Fort Stedman/Picket Line Attack, Globe Tavern, Hatcher's Run, Jerusalem Plank Road, Peebles' Farm, Petersburg-Assault, Petersburg-Breakthrough, Reams' Station, and White Oak Road. The park's boundary would also be adjusted to include three acres on Water Street at Grant's Headquarters at City Point, one acre on Winfield Road adjacent to the Eastern Front and four acres adjacent to Popular Grove National Cemetery. The acreage ceiling would be adjusted and the park boundary would expand by a total of 7,238 acres broken down by: Grant's Headquarters at City Point (3 acres), Eastern Front (192 acres), Western Front (5,996 acres) and Five Forks Battlefield (1,047 acres).

Under this alternative, the proposed boundary expansion acreage would be divided among the following management zones:

Zone	Acres	% of Total Acreage
Battlefield Preservation	7,076	97.8
Battlefield Interpretive	111	1.5
Historic Interpretive	7	.1
Park Development	44	.6

Battlefield Interpretive Zone

Forts, earthworks, structures, roads and objects integral to the battles are preserved to reflect the complexity of the Campaign.

The enabling legislation for Petersburg NB directs the park "to preserve for historical purposes the breastworks, earthworks, walls, or other defenses and shelters used by the armies within the battlefields at Petersburg."



Confederate Fort Mahone, 1865.

One of the primary responsibilities of park staff is to maintain, repair and stabilize these Civil War resources. More than 50 structures are on the NPS List of Classified Structures, including twenty miles of earthworks and eleven fortifications.

Most of the work that takes place on battlefields today is preservation. Preservation maintains the existing character of the resources. The park would preserve the earthworks and forts following the guidelines of the "Earthwork Management Manual" (2000) which includes removing hazard trees, clearing vegetation cover and

reseeding. Resources such as cannons and monuments would have appropriate treatments to clean, repair and protect the surface from environmental degradation.

Historic Interpretive Zone

The historic resources of City Point are preserved to reflect the continuum of uses through time.

Grant's Headquarters at City Point has a settlement history that can be dated as far back as 10,000 years, and includes Native American, Colonial, enslaved, plantation and pre- and post-Civil War history. The historic residential character of the bluff would be maintained and preserved to interpret the domestic, enslaved, plantation, commercial, industrial and military history of City Point. Together, the buildings, fences, walkways and vegetation afford an opportunity to understand how the site has progressed through time.

The draft Cultural Landscape Report (1999) for Appomattox Manor makes recommendations for the preservation of features and structures associated with the Eppes family properties and landscapes. Some of the actions the park would take include repairing the foundation of the Manor, replacing missing stones from historic walkways, replacing trees on the property consistent with documented locations and species, and maintaining and stabilizing Grant's Cabin.

Interpretation & Education

Visitors would be directed to begin at the Eastern Front visitor center where they would receive an overview of the Petersburg Campaign. At each unit, visitors would have access to interpretive information, presentations and tours that would emphasize relevant themes and emphasize

how that unit fit into the context of the Campaign and the Civil War. The expanded themes would be presented and integrated into each unit. Each unit's resources would be used to illustrate a concept, story or phenomenon. Virtual experience is highlighted. Educational CD-ROMs and kiosks will focus primarily on battlefield preservation and earthworks management. On-line chats with authors, historians, and park rangers will be available to park visitors both local and distant.

signage along the driving tour and the availability of compact discs and audio tapes that explain the major battle actions, enhance the visitor experience.

Battlefield Interpretive Zone

Visitors use the park's tour road, structures and battlefields along with wayside exhibits, guided tours and other means to understand



Park ranger describes a soldier's life in the trenches.

Battlefield Preservation Zone Through wayside exhibits and

trails, visitors experience the quiet natural and pastoral settings of the battlefields.

Much of the existing and proposed new battlefields in the park would have limited development and be inaccessible by foot to visitors. Preserved fields, forests and agricultural lands provide a scenic setting. Pull-offs, wayside exhibits, and select trails help visitors to understand the landscape and resources. The placement of additional

the battle events and the importance of preservation.

In the Eastern Front, the visitor center will continue to provide the most comprehensive programs in regard to the Petersburg Campaign and its context in the Civil War using the expanded themes. As the initial point of contact for most visitors, an overview of all the park units and their relevance to the Campaign will be available here, encouraging visitors to visit all units within the park. Using the tour road, and ranger-led tours, visitors will understand how earthworks, structures and the Crater helped to shape the actions that took place

east of Petersburg at the start of the siege. The park would add more wayside exhibits, self-guided walks, driving tours and brochures to reflect the expanded themes. Software programs would be provided for the "virtual" visitor, both local and distant, to explore the battlefields, study the importance of supply lines and logistics, examine troop movements and command decisions at the siege.

In the Western Front, new and existing lands will provide a greater understanding of the battle actions that took place there and their relevance within the entire Campaign. New waysides, limited trails, tours and special events would be developed. Expanded exhibits, guided tours, and programs would be developed in conjunction with the new visitor contact station. A self-guided hike around the Five Forks Battlefield with new wayside and trailhead exhibits and brochures would help the visitor to understand battle actions and expanded themes.

Historic Interpretive Zone

Visitors use Grant's Cabin, Appomattox Manor, and the waterfront at City Point along with wayside exhibits and guided tours to understand the site's diverse layers of history. Grant's Cabin, Appomattox Manor, the grounds, and its outbuildings will continue to be the primary interpreted resources at City Point, illustrating the site's varied and complex layers of history. The expanded themes would be reflected in tours, special events and presentations. Walkways and trails enable visitors to move through gardens, residential areas and the James River waterfront. Educational CD-ROMs and kiosks focus on erosion issues and preservation of waterfront.

Visitors experience the historic setting at Poplar Grove National Cemetery through wayside exhibits, self-guided tours, and seasonal presentations.

Poplar Grove would continue to offer seasonal and ranger-requested guided tours. Visitors would use wayside exhibits and printed materials to understand the history of the site. The cemetery would continue to be experienced in its quiet, solemn setting where the sacrifices of war are best portrayed.



Visitor Use & Facilities

Battlefield Interpretive Zone

Visitors receive primary orientation to the park, its resources and an overview of the Petersburg Campaign at the Eastern Front Visitor Center.

Visitors would continue to be directed to begin at the Eastern Front visitor center and

bookstore would continue to be operated by a cooperating association.

Historic Interpretive Zone

Appomattox Manor serves as a contact station providing information about that site and directing visitors to the Eastern Front Visitor Center.

The existing visitor contact station at Appomattox Manor would continue to



Current Eastern Front Visitor Center.

receive orientation and interpretation information for the park and all its units. The visitor center would provide information about interpretive programs, presentations and other park activities. Information would also be available about regional attractions, including other NPS Civil War parks. All the existing facilities and infrastructure-comfort stations, parking lots, wayside exhibits, trails and the park tour road-would be maintained in their current condition. The education and interpretation services would be updated to reflect the new themes and a new program, schedule and map would be developed. The

provide orientation and interpretation information about City Point. The comfort facilities, parking lot, wayside exhibits and information stations would continue to serve visitors in the same manner.

Comfort facilities are improved at Poplar Grove National Cemetery.

The superintendent's lodge will be improved to provide better visitor comfort facilities at Poplar Grove.

Organizational Efficiency

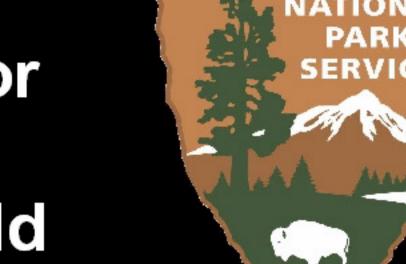
Same as "Common to All Alternatives".

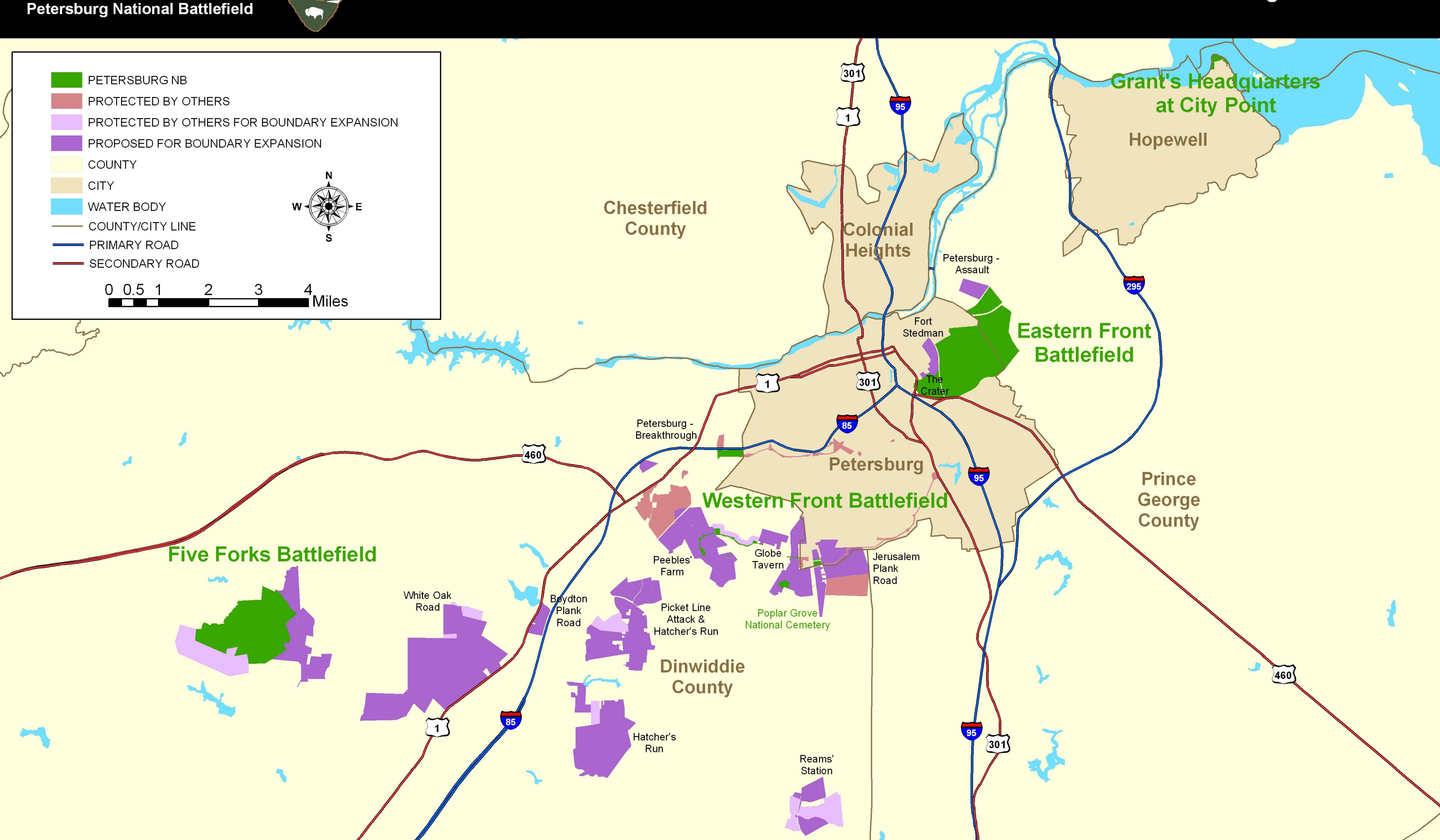
Alternative B: Saving the Battlefields

Management Prescriptions	Examples of Actions That Could Be Taken	
Preserving and Protecting Resources Battlefield Preservation Zone The park's boundary is sufficient to preserve the nationally significant landscapes and battlefields associated with the Petersburg Campaign,	Seeking new legislation to remove the acreage ceiling allowing the park to accept nationally significant battlefields.	
Battlefield Interpretive Zone Forts, earthworks, structures, roads, and objects integral to the battles are preserved to reflect the complexity of the Campaign	Wheaton and Battery 27 open and visible to visitors. Selecting vistas to remain under light forest cover. Selecting areas to be maintained as open fields. Updating and using the Earthworks Management Report	
Historic Interpretive Zone The historic resources of City Point are preserved to reflect the continuum of uses through time.	Preserving the domestic landscape and formal garden remains of Appomattox Manor, Hunter House, Bonaccord and Naldara. Preserving the passive recreation area along the James River. Preserving historic structures in their current conditions.	
Interpretation and Education Battlefield Preservation Zone Through wayside exhibits and trails, visitors experience the quiet, natural and pastoral settings of the battlefields.	Incorporating battlefield preservation efforts and challenges in the education program. Providing a more comprehensive overview of the Petersburg Campaign, encouraging visitation of other units.	
Battlefield Interpretive Zone Visitors use the park's tour road, structures and battlefields along with wayside exhibits, guided tours and other means to understand the battle events and the importance of preservation.	Putting the battles of the Western Front within the larger context of the Petersburg Campaign. Updating visitor printed information to reflect the addition of new resources and updated themes.	
Historic Interpretive Zone Visitors use Grant's Cabin, Appomattox Manor, and the waterfront at City Point along with wayside exhibits and guided tours to understand the site's diverse layers of history.	Update and maintain wayside exhibits. Update printed materials.	
Visitors experience the historic setting at Poplar Grove National Cemetery through wayside exhibits, self-guided tours, and seasonal presentations.	Update and maintain wayside exhibits. Update printed materials.	

Alternative B: Saving the Battlefields

Management Prescriptions	Examples of Actions That Could Be Taken
Visitor Use and Facilities Battlefield Preservation/Interpretive Zones Visitors receive primary orientation to the park, its resources and an overview of the Petersburg Campaign at the Eastern Front Visitor Center.	Orientation information is updated and improved based on new park boundary. More comprehensive information about other attractions in the region is made available.
Historic Interpretive Zone Appomattox Manor serves as a contact station providing information about that site and directing visitors to the Eastern Front Visitor Center.	Maintain visitor orientation and comfort services provided at Appomattox Manor. Maintain parking lot and stream bank along Water Street at City Point in their existing conditions. Maintain fishing access at City Point.
Comfort facilities are improved at Poplar Grove National Cemetery.	Updating the superintendent's lodge. Updating information about the unit based on the new boundary.



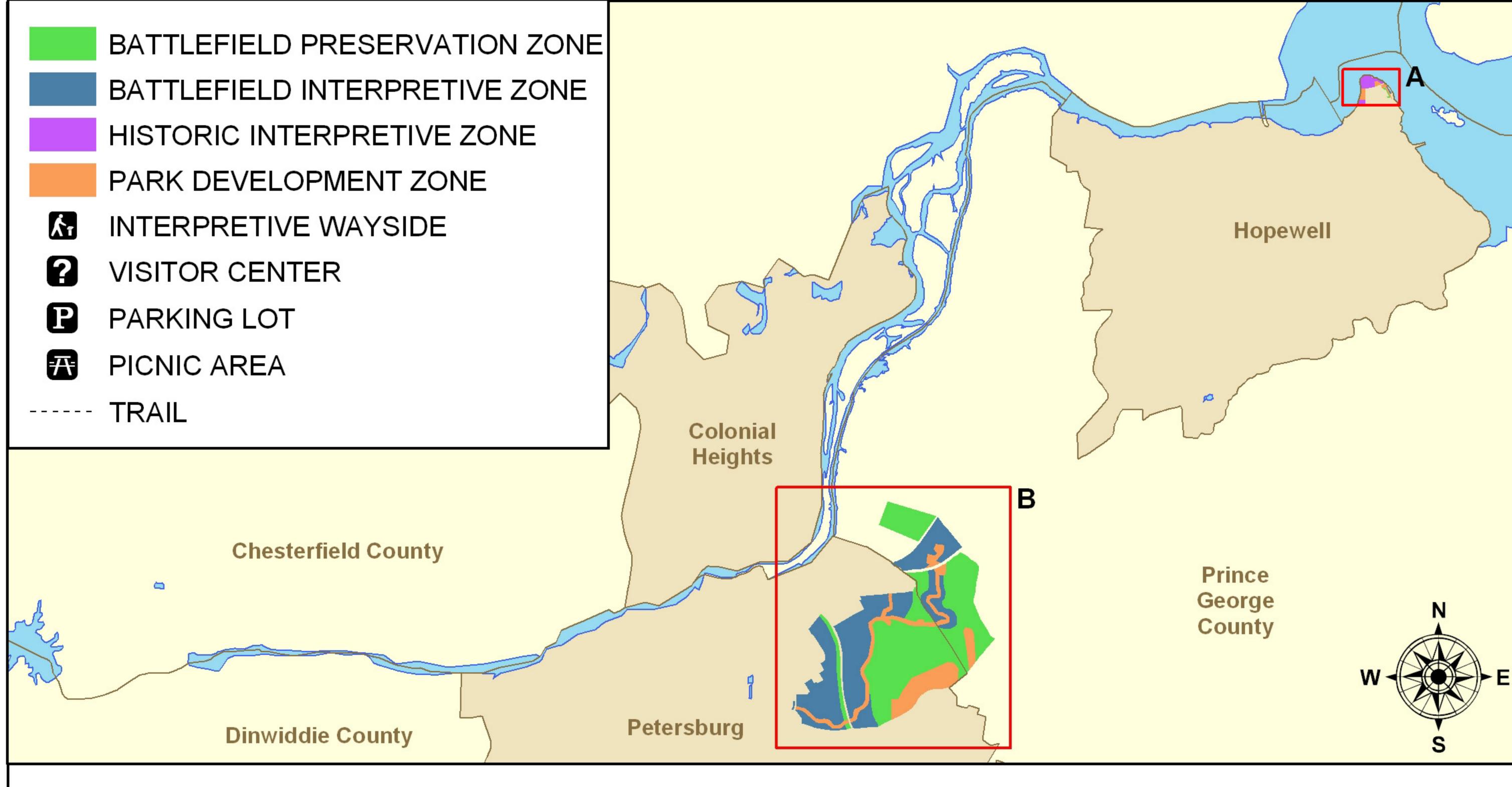


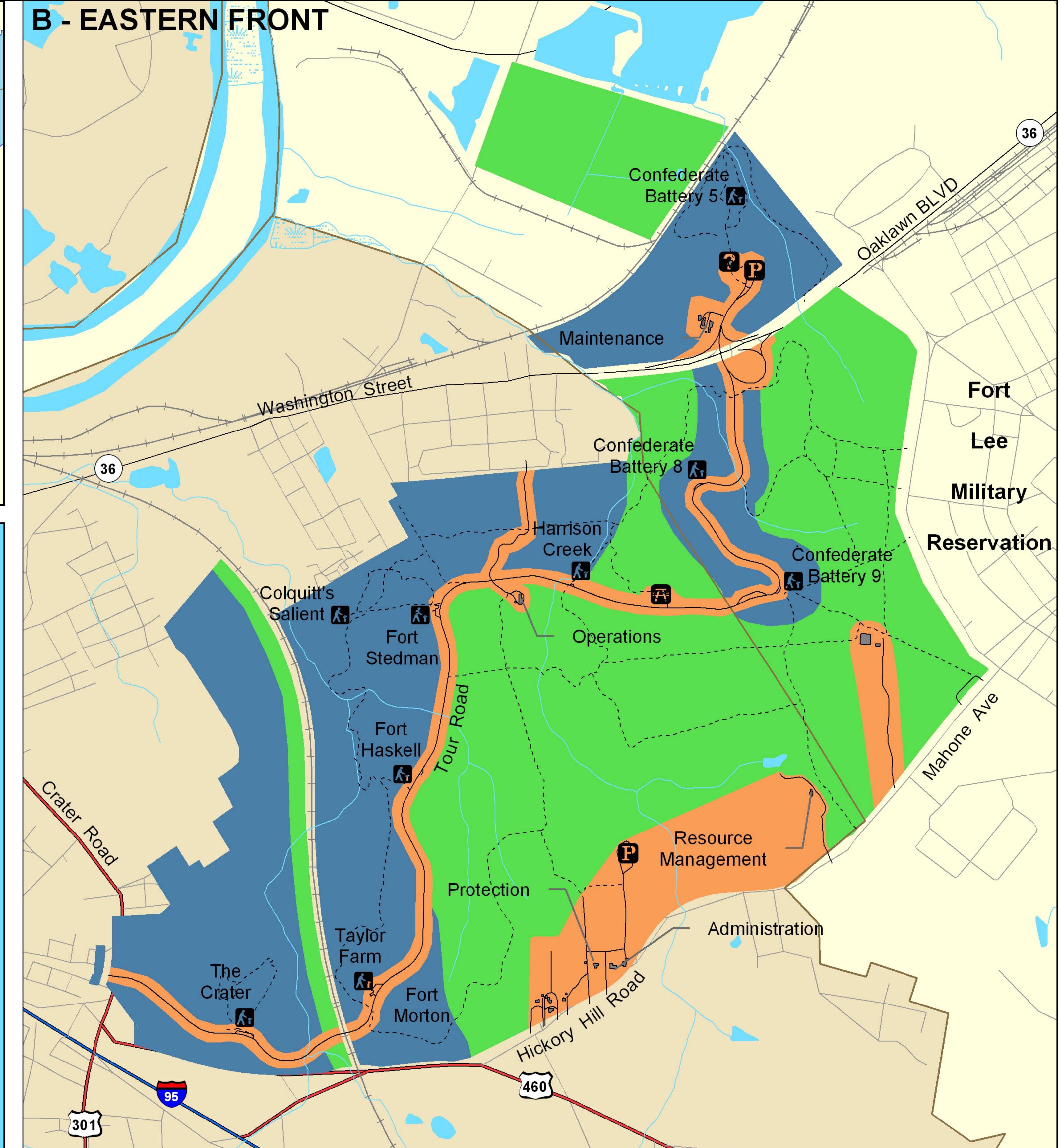
National Park Service
U.S. Department of the Interior
Petersburg National Battlefield

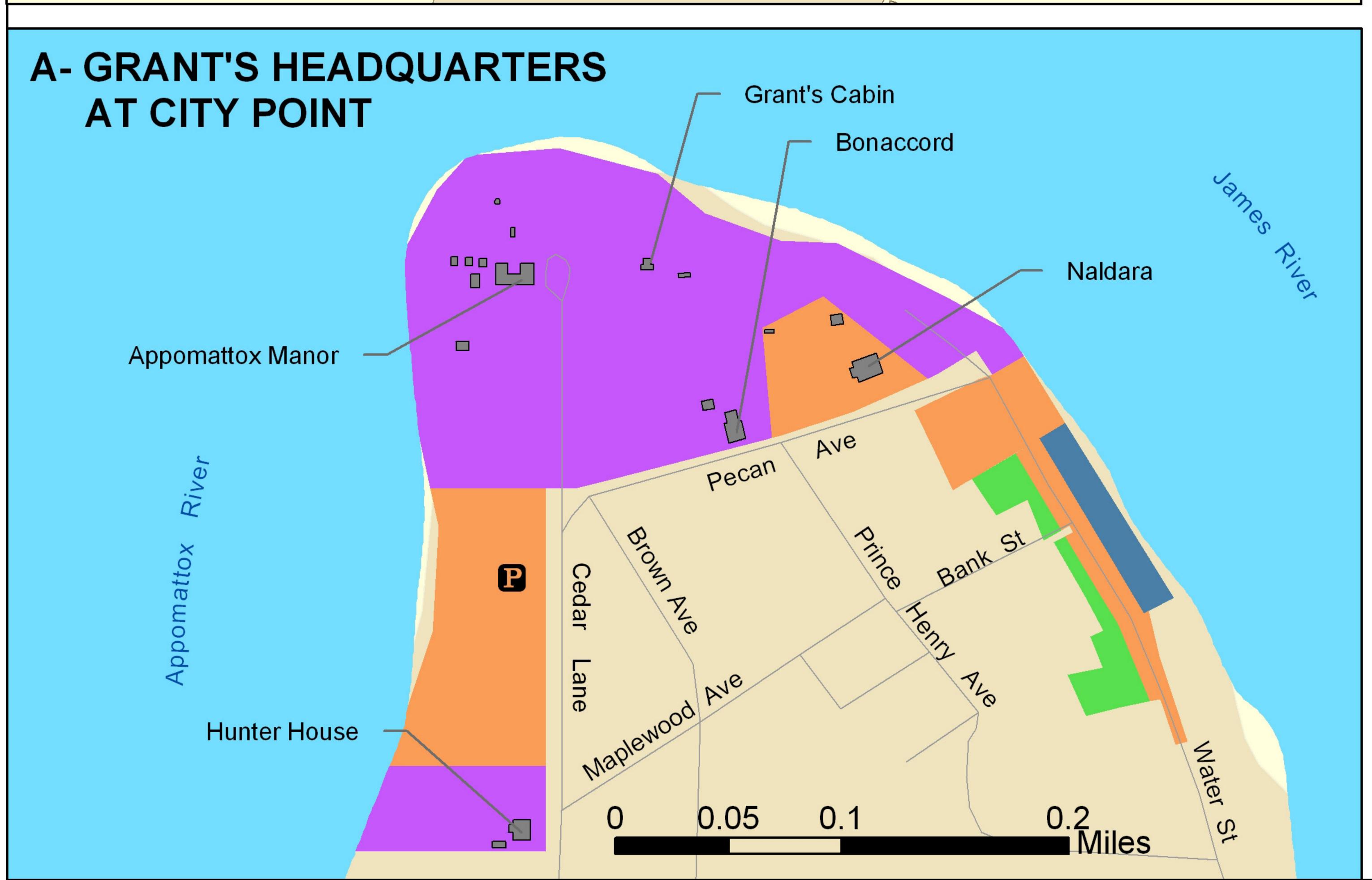


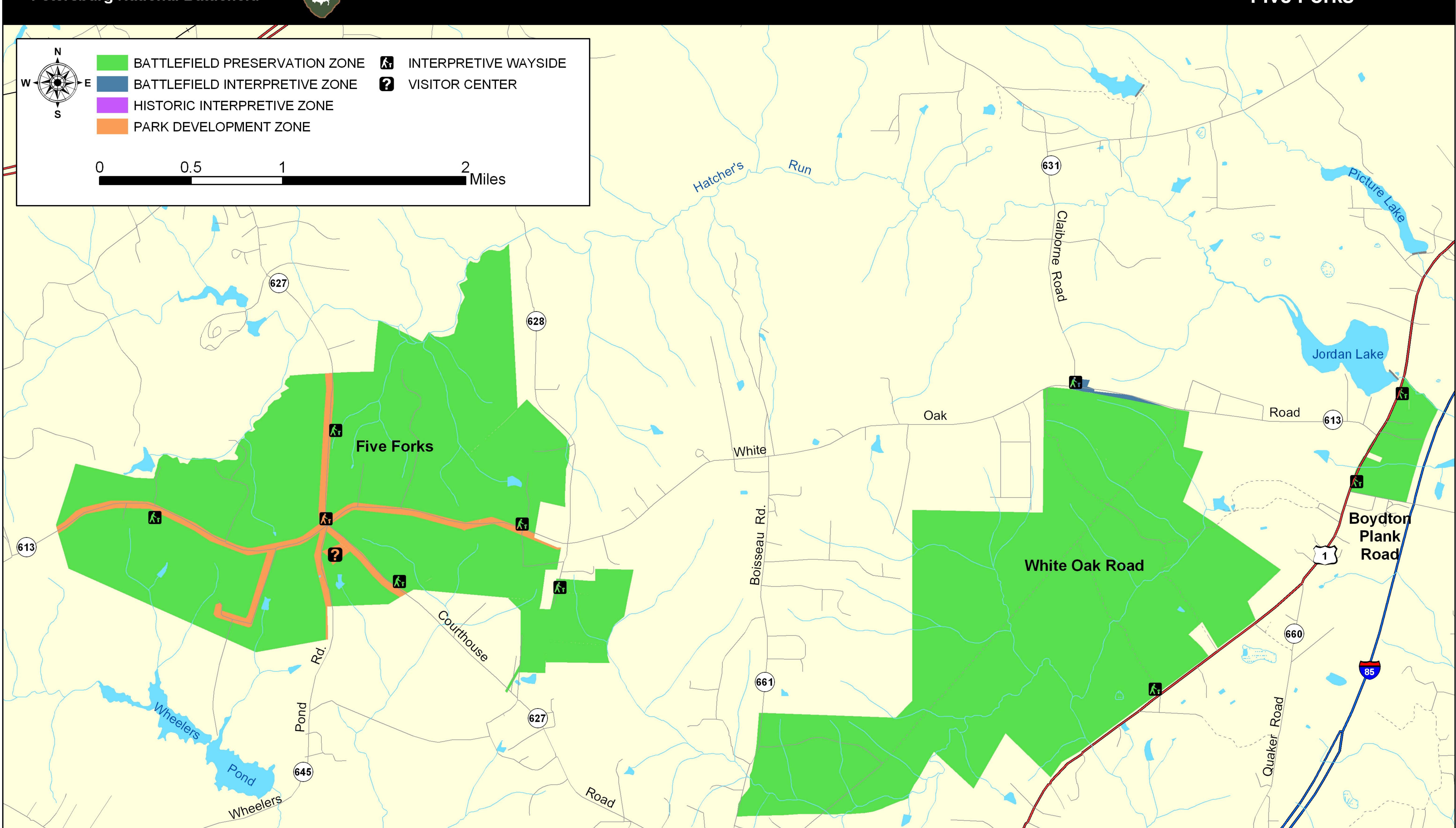
Alternative B

Management Zones Eastern Front &
Grant's Headquarters at City Point









ALTERNATIVE C: TELLING THE STORIES

This alternative focuses the park's priorities on creating dynamic interpretation with resources geared towards interactive and animated programs using modern technology where appropriate, the latest interpretive tools and staff. There is a limited boundary expansion of 2,030 acres for protecting existing resources and providing better access for interpretation.

A more complete Civil War understanding is emphasized-causes of, experience during, and reconciliation after the war-including relevance of the war to people today. The existing visitor center is upgraded to provide for more interpretive media and exhibits. Production of a comprehensive virtual guide through Petersburg NB on the web site will provide basic information for students and visitors to learn about the park without having to visit. Students can take a "virtual reality" field trip through the battlefield and "chat" with rangers while on this tour, without coming to the park.

Visitors begin and are oriented to the Petersburg Campaign at any of the five park units. At each unit, a full and comprehensive interpretive program is available, with each unit's story explained within the campaign. New programs and facilities would be developed at Grant's Headquarters at City Point, the new Home Front unit in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield.

Partnerships with organizations and localities are the mechanism by which nationally significant battlefields outside the park's boundary are preserved. Park staff would provide technical assistance and increase its advocacy role in the community. Partnerships with scholars, historians and educational institutions would also be pursued.

Preserving & Protecting Resources

Battlefield Preservation Zone

The boundary is adequate to protect existing park structures, landscapes and battlefields.

In several locations, commercial, industrial and residential development can be seen from the park. Intrusions from adjacent uses, such as noise and visual infringements diminish the visitor experience. The boundary expansion of 2,030 acres would protect cultural, natural and scenic resources by preserving lands adjacent to existing NPS sites, and creating greater access for resource management, law enforcement and visitor education. These battlefields are the Crater, Five Forks, Fort Stedman/Picket Line Attack, Globe Tavern, Peebles' Farm, and Petersburg-Assault. The park's boundary would also be adjusted to include three acres on Water Street at Grant's Head- quarters at City Point, one acre on Winfield Road adjacent to the Eastern Front, and four acres adjacent to Poplar Grove National Cemetery. The acreage ceiling would be adjusted to include: Grant's Headquarters at City Point (3 acres), Eastern Front (192 acres), Western Front (927 acres) and Five Forks Battlefield (908 acres).

With the focus of this alternative on interpretation—including the expansion and delivery of these themes to visitors—the park would continue its battlefield preservation efforts through advocacy, technical assistance and education. Staff would be trained to provide conservation development information to landowners, similar to the way park staff now provides historic information.

Under this alternative, the proposed boundary expansion acreage would be divided among the following management zones:

Zone	Acres	% of Total Acreage
Battlefield Preservation	1,334	65.0
Battlefield Interpretive	645	32.0
Historic Interpretive	7	.4
Park Development	44	2.6

Battlefield Interpretive Zone

Selected cultural resourcesviewsheds, structures, and earthworks-are rehabilitated to reveal and demonstrate military engineering and strategies.

Under this alternative, only selected features would be used to demonstrate, reveal and highlight military engineering and strategies. Existing field and forest patterns would be



Reconstructed tunnel entrance at the Crater.

maintained on remaining battlefield lands. All forts would be managed in as an open a condition as possible to protect the resources, to encourage site visitation and to provide limited interpretive views within the forts themselves. The draft Cultural Landscape Reports for the Crater Battlefield and Fish Hook/Federal Left Flank Siegeworks and the Environmental Assessment for the Preservation of Civil War Earthen Fortifications would provide guidance on site locations and treatments.

The Petersburg Assault, Fort Stedman and Crater battlefields would be cleared and maintained with limited forest cover to reveal fortifications, the field of battle, and the features that influenced the outcome of these three battles. At Five Forks, the features revealing troop movements would be rehabilitated.

Historic Interpretive Zone

Appomattox Manor and associated buildings at Grant's Headquarters at City Point are rehabilitated to reflect the diverse layers of history.

Appomattox Manor—the earliest part of which was built in 1763-would be rehabilitated as a historic house museum, demonstrating in part the plantation life of a southern wealthy family. The outbuildings would also be rehabilitated for interpretive



Appomattox Manor at Grant's Headquarters at City Point.

purposes, they include a kitchen/laundry house, dairy, two smokehouses and garage. Inside the Manor, a children's Activity and Learning Center would be developed in the current kitchen.

The Bonaccord House would be rehabilitated as a visitor contact station with orientation program, exhibits, video and would serve as the book sales area. Exhibits in the house will be designed to provide visitors an understanding and appreciation for the significance of City Point as the Headquarters for General Grant and the logistical base for the Union army. Two other historic Eppes family buildings, Hunter House and Naldara, would be stabilized and preserved for park administrative use.

The James River waterfront would be maintained in its current condition, including the existing agreements for maintenance with the City of Hopewell.

Interpretation & Education

Battlefield Preservation Zone

Through wayside exhibits and trails, visitors experience the quiet natural and pastoral setting of the battlefields.

Much of the existing and proposed new battlefields in the park would have limited development and be inaccessible by foot to visitors. Preserved fields, forests and agricultural lands provide a scenic setting.



 $Interpretive\ trail\ at\ White\ Oak\ Road\ Battlefield.$

Pull-offs, wayside exhibits, and select trails help visitors to understand the landscape and resources. The placement of additional signage along the driving tour and the availability of compact discs and audio tapes that explain the major battle actions, enhance the visitor experience.

Battlefield Interpretive Zone

Visitors experience a comprehensive and dynamic interpretive program through enhanced media, interactive exhibits, special presentations and ranger activities.

The Eastern Front Visitor Center would be upgraded to provide a comprehensive and dynamic interpretive program. Program

would be tailored to various audiences and age groups with unique opportunities to illustrate one or more of the interpretive themes. The auditorium would be expanded and new audio-visual aids, such as a movie, would be developed. New exhibits, including a kiosk, would be developed to reflect the expanded themes. The park would expand its outreach programs and traveling exhibits (i.e. traveling trunks), classroom programs and educational CD-ROM. The resources at the Eastern Front are some of the most important and unique examples of military engineering and strategy. Rangers would use selected earthworks and other resources to fully demonstrate various military actions and strategies. Visitors would also be able to receive orientation to destinations based on their interests and time.

Visitors to the Western Front would experience the sheer number and concentration of forts depicting military strategy and movement of the opposing armies through special ranger led tours and self-guided auto tours. The Poplar Grove National Cemetery visitor contact station would provide enhanced media on the battles and themes of the Western Front. New wayside exhibits, the placement of additional signage along the driving tour and the availability of compact discs and audio tapes that explain the major battle actions, will help the visitor experience.

Historic Interpretive Zone

Visitors experience the continuum of uses over time through enhanced media, living history presentations and special programs to understand City Point's importance as an early settlement, plantation, Civil War logistical headquarters and supply base.

Visitors to Grant's Headquarters at City Point will experience the continuum of uses over time through enhanced media, living history, presentations and special programs to understand City Point's importance as a Colonial settlement, plantation, logistical headquarters and Civil War supply base. Visitors will appreciate and understand events which took place at City Point by using a full array of services, which might include exhibits, audiovisual programs, walks, talks, tours and self-guided activities.

The Bonaccord House would be rehabilitated as a visitor contact station with orientation program, exhibits, video and would serve as the book sales area. Exhibits in the house will be designed to provide visitors an understanding and appreciation for the significance of City Point as the Headquarters for General Grant and the logistical base for the Union army.

Visitors will use the historic streetscape in Old Town Petersburg along with guided tours, museums, wayside exhibits and other means to understand the impacts of the siege on the city.

The City of Petersburg can offer a truly unique perspective on the Civil War as a city under siege. Civilian life, including how the lives of women, children and the elderly were effected is a compelling story that is best told in the actual location of the events. Many buildings and features of the historic urban streetscape that existed and endured attack during the war are still in historic Old Town Petersburg. Visitors would use wayside exhibits, kiosks and other media located with the visitor contact station to understand the important stories. Self-guided, ranger led and museum tours provide a personal connection to the important themes and enhance the visitor experience.

Enhanced interpretive media, special presentations and guided tours, at Poplar Grove National Cemetery, are used by visitors to understand the ultimate sacrifices of war. Visitors will use the rehabilitated superintendent's lodge with its new exhibits, and interpretive media to better understand the lives and legacies of Civil War soldiers in the Petersburg Campaign. Special presentations, events and tours, respectful of this solemn place, will enhance the visitor experience. The availability of a new interactive computer system will enable visitors to search through

a Civil War Soldiers and Sailors System database,

for the names and images of interred soldiers

at Poplar Grove and other National Cemeteries.

Visitor Use & Facilities

Battlefield Interpretive Zone

The improved Eastern Front Visitor Center provides visitors with a full range of services, orientation to the park, and an understanding of the Eastern Front stories and resources.

The Eastern Front Visitor Center would be upgraded and provide a comprehensive and dynamic interpretive program where visitors can also receive orientation to destinations based on their interests and time and providing a unique opportunity to illustrate one or more of the interpretive themes.

Historic Interpretive Zone

The historic Bonaccord House is rehabilitated as a visitor contact station and provides a full orientation to the park, campaign and local stories.

The Bonaccord house would be rehabilitated to serve as a visitor contact station with comfort facilities, interpretation and administrative offices. The facility would provide orientation to the City Point unit and the entire park.

The development of a new visitor contact station that orients visitors to historic resources in Old Town, the park and the region will be explored with the City of Petersburg and other partners.

The park will explore how it can assist the city to develop a visitor contact station in historic Old Town. The facility would provide interpretive programs and tours related to Petersburg themes and stories and help direct visitors to related attractions and accommodations in the area. The park would provide technical assistance to locate a suitable building for such a facility and help find other partners that can assist in funding, fund raising as well as tourist—and history-related programs. Park interpretive staff would participate in special events, programs and tours, and may also provide part—or full-time staff.

A visitor contact station at the Poplar Grove superintendent's lodge will orient visitors to western battlefields, the park and the region.

Rehabilitating the superintendent's lodge at Poplar Grove will provide a much needed visitor contact, comfort and information station. The contact station will provide much more information on Poplar Grove National Cemetery and help visitors plan their tour of the Western Front and the park. A facility will also enable higher quality interpretive programs and tours to occur more frequently.

Park Development Zone

The historic Operations building is rehabilitated to serve as the park's new education and training facility.

The park's existing Operations building, currently a multi-use training facility, would be rehabilitated to provide increased capacity for education, training and outreach. The site currently is used for employee training and development, public meetings, special events, a maintenance staging area, miscellaneous storage and an education outreach center. The existing restrooms, parking and space configuration are not sufficient to meet staff or public needs. New improvements would include adequate restrooms, safer parking areas, road, trails and walkway repairs and the addition of a "parks as classrooms" shelter.

Organizational Efficiency

Same as "Common to All Alternatives"

Alternative C: Telling the Stories

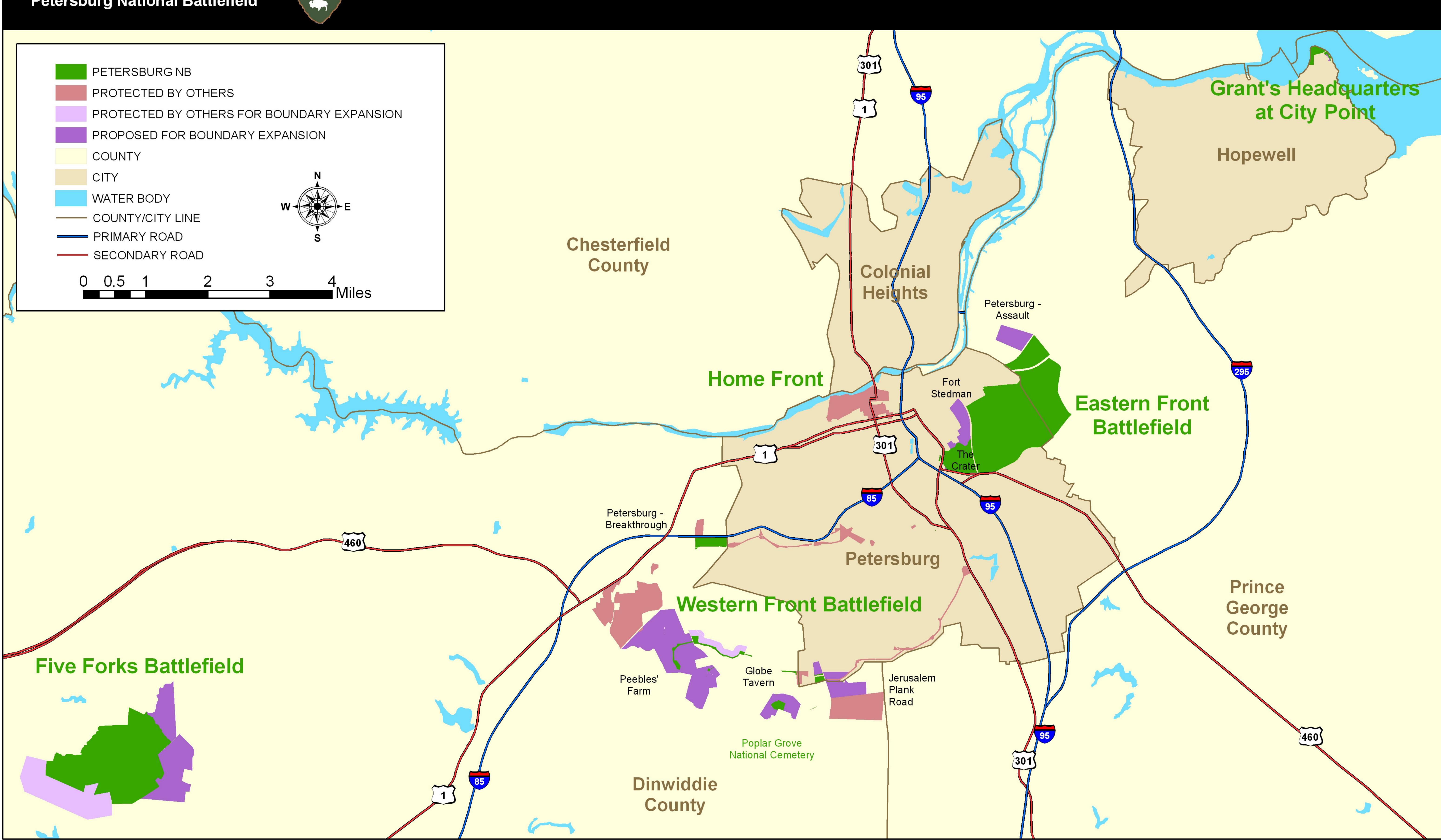
Management Prescriptions	Examples of Actions That Could Be Taken	
Preserving and Protecting Resources Battlefield Preservation Zone The boundary is adequate to protect existing park structures, landscapes and battlefields.	Acquiring authorization to assist landowners and communities with the conservation of lands associated with Class A battlefields of the Petersburg Campaign. Training staff to provide conservation development information to landowners, similar to the way park staff now provides historic information. Working with localities to identify appropriate techniques to conserve lands that are not currently protected under a long-term plan or agreement. Initiating a strategy to raise funds and manage resources over time.	
Battlefield Interpretive Zone Selected cultural resources-viewsheds, structures and earthworks-are rehabilitated to reveal and demonstrate military engineering and strategies.	Updating and using the Earthworks Management Report. Selecting and maintaining the areas to be used for interpretive purposes. Selecting and maintaining areas and features to remain as open field or light forest cover.	
Historic Interpretive Zone Appomattox Manor and associated buildings and Grant's Headquarters at City Point are rehabilitated to reflect the diverse layers of history.	Rehabilitating the historic buildings for interpretation and park administrative use. Rehabilitating the domestic landscape and formal garden remains of Appomattox Manor, Hunter House, Bonaccord and Naldara. Maintaining the passive recreation area along the James River.	
Interpretation and Education		
Battlefield Preservation Zone Through wayside exhibits and trails, visitors experience the quiet, natural and pastoral settings of the battlefields.	Using advanced media to convey how and why the Crater and Battery V were built and used. Demonstrating the impact Civil War engineering had on future wars.	
Battlefield Interpretive Zone Visitors experience a comprehensive and dynamic interpretive program through enhanced media, interactive exhibits, special presentations and ranger activities.	Updating interpretive themes and tailoring programs to different age groups. Upgrading interpretive media to present more dynamic and compelling stories.	
Historic Interpretive Zone Visitors experience the continuum of uses over time through enhanced media, living history presentations and special programs to understand City Point's importance as an early settlement, plantation, Civil War logistical headquarters and supply base.	Interpreting Appomattox Manor as a historic house-museum. Expanding the themes at Appomattox Manor, the grounds and outbuildings and the waterfront by including the stories of plantation and slave life, the Underground Railroad, the Eppes family and use of the grounds by Grant. Scheduling tours, special events, and presentations regularly.	
Visitors use the historic streetscape in Old Town Petersburg along with guided tours, museums, wayside exhibits and other means to understand the impact of the siege on the city.	Helping the City of Petersburg establish orientation facilities and services in historic Old Town. Scheduling tours, special events, and presentations regularly in Old Town Petersburg. Partnering with Petersburg to establish interpretive programs and themes.	
Enhanced interpretive media, special presentations and guided tours at Poplar Grove National Cemetery are used by visitors to understand the ultimate sacrifices of war.	Updating interpretive media, wayside exhibits, presentations and tours to educate visitors about the cemetery. Providing information about the efforts being taken to preserve records and establish a database of Those interred in National Cemeteries.	

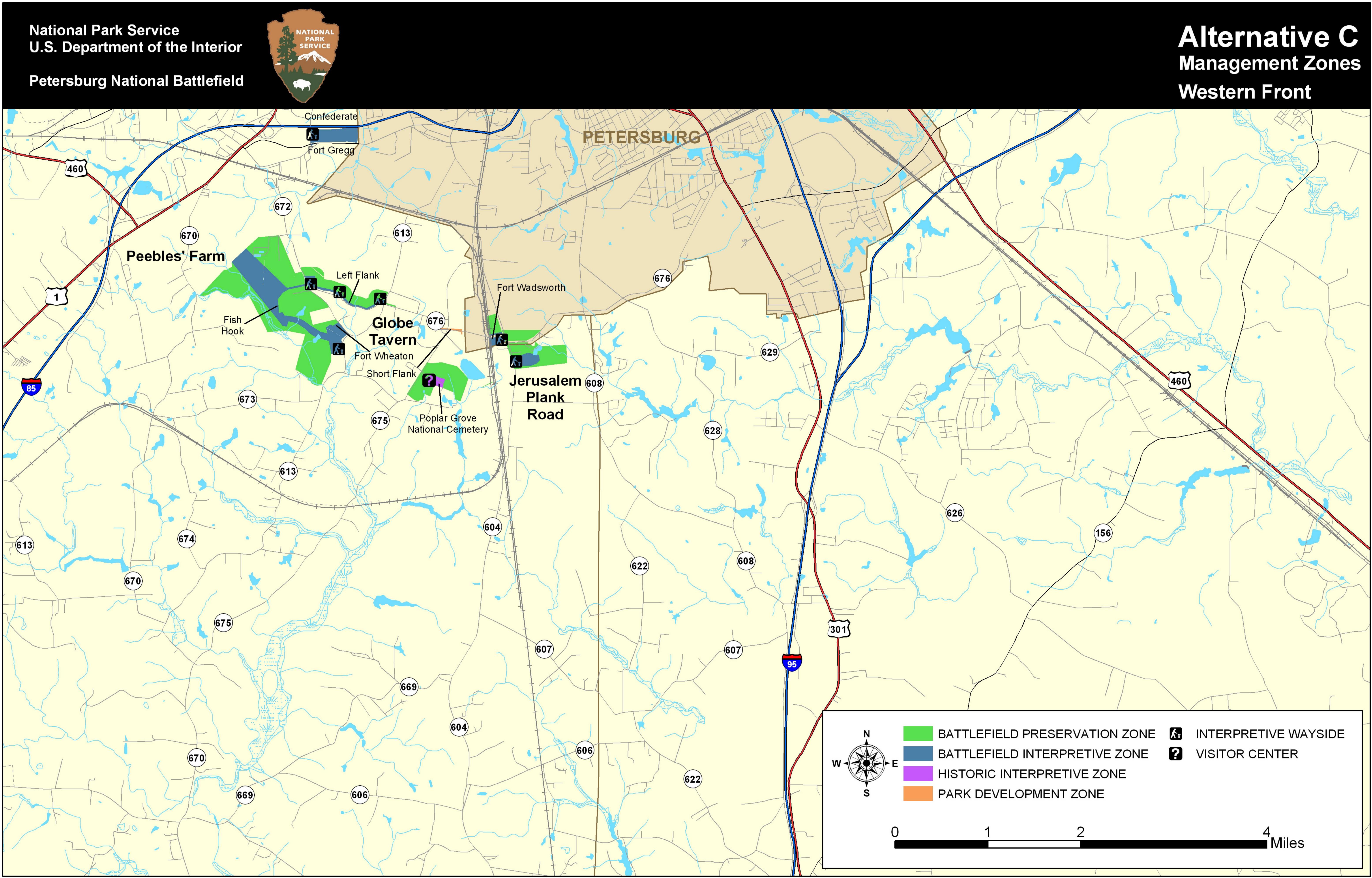
Alternative C: Telling the Stories

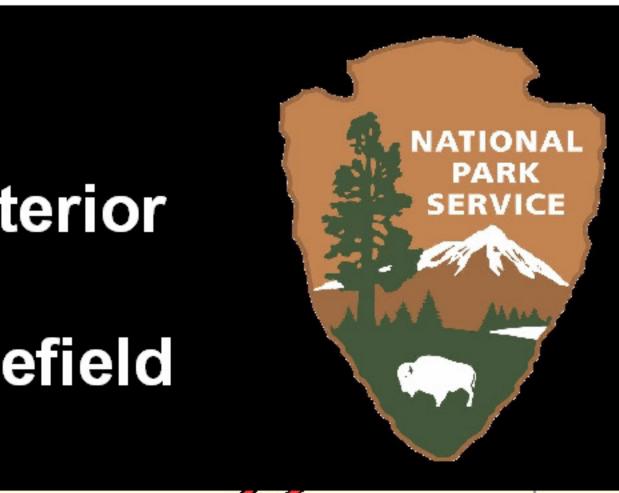
Management Prescriptions	Examples of Actions That Could Be Taken		
Visitor Use and Facilities Battlefield Interpretive Zone The improved interpretive center provides visitors with a full range of services, orientation to the park, and an understanding of the Eastern Front stories and resources. Historic Interpretive Zone The historic Bonaccord House is rehabilitated as a visitor contact station and provides a full	Preparing plans for upgrading and improving the existing visitor center. Updating visitor information brochures to reflect expanded themes at all the units and to help plan itineraries. Updating wayside exhibits. Creating a rehabilitation plan for Bonaccord which provides for visitor contact and comfort space, exhibition space and bookstore.		
orientation to the park, Campaign and local stories.	Updating informational materials to direct visitors to begin at Bonaccord when they are at City Point.		
The development of a new visitor contact station that orients visitors to historic resources in Old Town, the park and the region will be explored with the City of Petersburg and other partners.	Helping the city to find a suitable facility. Providing the city with technical assistance. Helping the city to find suitable partners to rehabilitate, fund and staff the new facility. Participating in interpretive programs with the city. Updating brochures and other interpretive media to include events and programs in Old Town Petersburg.		
A new visitor contact station at the Poplar Grove superintendent's lodge will orient visitors to western battlefields, the park and the region.	Creating a facility rehabilitation plan. Updating park information brochures.		
Park Development Zone The historic Operations building is rehabilitated to serve as the park's new education and training facility.	Creating a facility rehabilitation plan.		

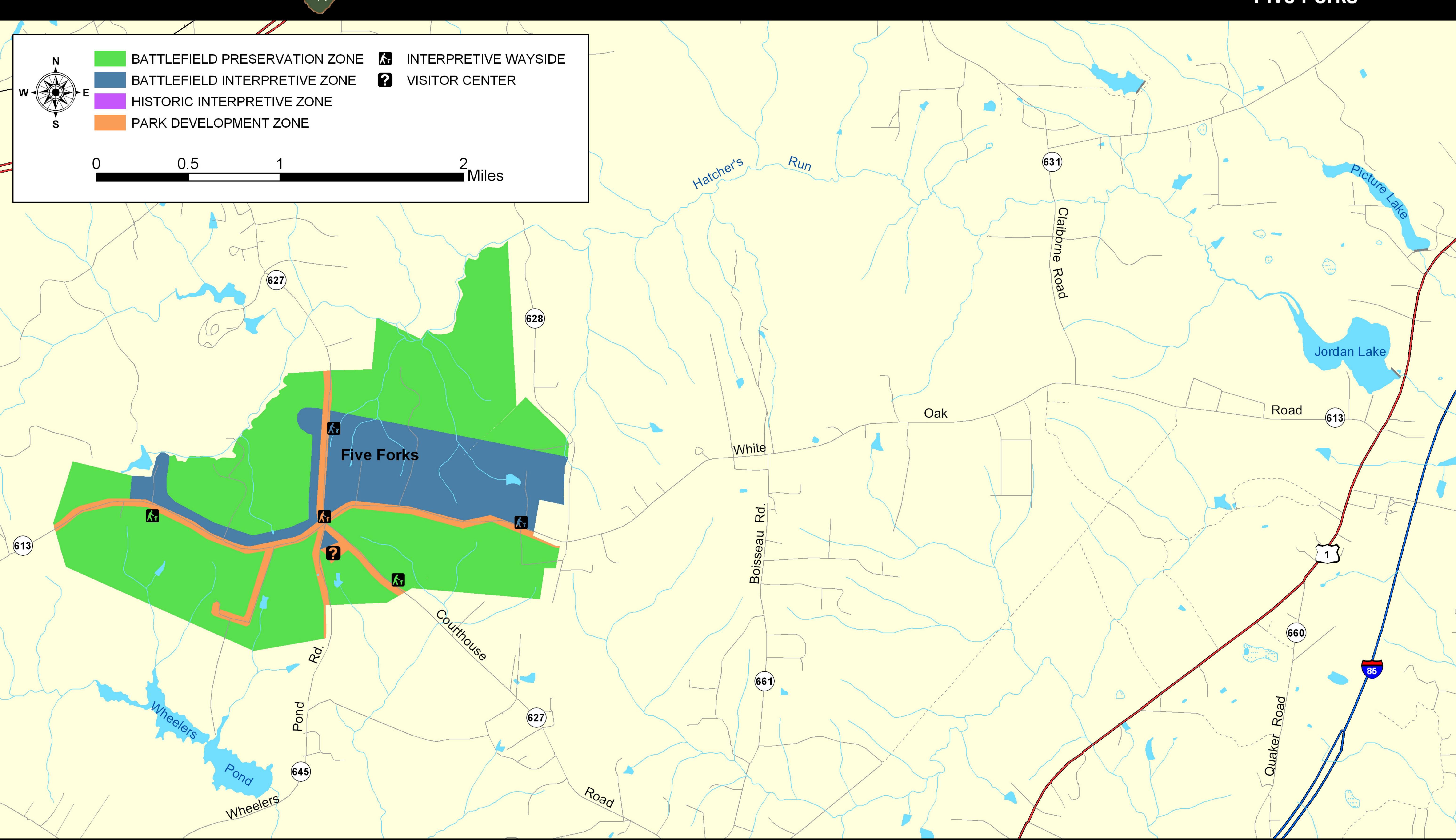












ALTERNATIVE D: THE LANDSCAPES TELL THE STORIES

In this alternative, the cultural landscape is the mechanism by which all the Civil War stories are told. A major boundary expansion of 7,238 acres would preserve nationally significant battlefields, existing park resources and create opportunities for visitors to access these significant Civil War landscapes and resources.

The interpretive program is dynamic and interactive, conveying a more comprehensive Civil War story by making full use of available resources. The experience is much more compelling, as visitors are immersed in the landscape upon which battles were fought. Efforts by which NPS and others are protecting battlefields and other Civil Warrelated resources are emphasized.

Visitors can begin and be fully oriented at any of the five park units. At each unit, a full and comprehensive interpretive program is available, with each unit's story explained within the campaign. New programs and facilities would be developed at Grant's Headquarters at City Point, the new Home Front unit in Old Town Petersburg, Poplar Grove National Cemetery and Five Forks Battlefield.

Partnerships with localities and organizations that promote battlefield preservation and further Civil War understanding and interpretation are pursued.

Preserving & Protecting Resources

Battlefield Preservation Zone

The park's boundary is sufficient to provide visitors opportunities to access and experience the nationally significant landscapes and battlefields of the Petersburg Campaign.

Preserving the nationally significant battlefields and landscapes of the Campaign would enable the park to expand and enrich its interpretive efforts and tell a richer, more



Industry adjacent to Western Front Battlefield.

demonstrative story by getting the visitor out on the landscape. As a result of this increased access, the public would be able to understand the large movements of the armies and how the landscape features influenced the tactical decisions made by Union and Confederate commanders during the battles. Under this alternative, the park would preserve the 7,238 acres of nationally significant battlefields recommended in the boundary expansion analysis. These battlefields are Boydton Plank Road, Crater, Five Forks, Fort Stedman/Picket Line Attack, Globe Tavern, Hatcher's Run, Jerusalem Plank Road, Peebles' Farm, Petersburg-Assault, Petersburg-Breakthrough, Reams' Station, and White Oak Road. The park's

boundary would also be adjusted to include two acres on Water Street at Grant's Headquarters at City Point and one acre on Winfield Road adjacent to the Eastern Front and four acres adjacent to Poplar Grove National Cemetery. The acreage ceiling would be adjusted and the park boundary would expand by a total of 7,238 acres broken down by: Grant's Headquarters at City Point (3 acres), Eastern Front (192 acres), Western Front (5,996 acres) and Five Forks Battlefield (1,047 acres).

Under this alternative, the proposed boundary expansion acreage would be divided among the following management zones:

Zone	Acres	% of Total Acreage
Battlefield Preservation	5,517	76.2
Battlefield Interpretive	1,668	23.1
Historic Interpretive	7	.1
Park Development	44	.6

Battlefield Interpretive Zone

The major battlefields that define the 1864-1865 landscape-the pattern of forested to open fields-are rehabilitated so visitors can be fully involved in understanding the actions of the battles.

This prescription will achieve to the fullest extent practical, a rehabilitation of the major battlefields that defined the 1864/1865 landscape, the pattern of forested to open fields. An interpretive experience free of modern intrusions in which the visitor could be fully involved in understanding the actions of the battles is emphasized. Bringing visitors out on the resources, and immersing them in the landscape in which significant Civil War battle actions occurred is one of the defining hallmarks of this alternative. Features that would be revealed in this prescription

include the earthworks and land between them, the roads and railroads (where possible), trees and topography that provided key terrain, obstacles, cover and concealment, and avenues of approach.

At the Eastern Front, the epicenter of the Crater and Fort Stedman battlefields would be cleared and new interpretive vistas established through the removal of trees and park development at the Petersburg Assault battlefield. In the Western Front, uninterrupted views of the fields of battle as well as important man-made and natural features that influenced tactical decisions and often the outcome of the conflict would be conveyed through interpretation. Revealing major fields of fire and views critical to the battles could be obtained by rehabilitating the landscape to its 1865 condition at Five Forks Battlefield. This would allow the events that occurred here to be better understood. The pattern of forested and open lands would be revealed and maintained, in part by managing the agricultural leasing program. The "draft Cultural Landscape Reports for the Crater Battlefield and Fish Hook/Federal Left Flank Siegeworks and the Environmental Assessment for the Preservation of Civil War Earthen Fortifications" would provide guidance on site locations and treatments. New cultural landscape reports for each of the battlefields associated with the boundary expansion would be developed.

Historic Interpretive Zone

The cultural landscape at City Point is rehabilitated to reflect its significant period of 1864-65 while respecting the diverse layers of history.

The cultural landscape of Grant's Headquarters at City Point would be rehabilitated to provide visitors an understanding and appreciation for the significance of City Point as the headquarters for General Grant. This

site is significant as the place he directed military events of the Union army, his discussions with President Lincoln concerning terms of surrender and reconstruction and as the logistical base for the Union army. The landscape surrounding Grant's cabin and the James River waterfront would reflect a greater presence at City Point. Visitors would be allowed to enter the cabin accompanied by park staff.

Appomattox Manor would be rehabilitated as a historic house museum and demonstrate

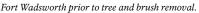
Interpretation & Education

Battlefield Preservation Zone

Visitors move through the battlefields using trails, wayside exhibits and guided tours to explore and understand battle actions and outcomes.

The interpretive program would be enhanced by incorporating the new themes





the life of the Eppes family, who owned the site's plantation. The grounds, gardens, views and outbuildings would also be rehabilitated for interpretive purposes. They include a kitchen/laundry house, dairy, two smokehouses and garage. Bonaccord would be rehabilitated as a visitor contact station and Hunter House and Naldara would be stabilized and preserved for park administrative use.



Fort Wadsworth after clearing and hydroseeding. into tours, presentations and wayside exhibits. The interpretive program at each unit will be taken to a higher level by encouraging the visitor to use the landscape as a way of understanding the conditions and battle actions that are unique to the unit, the campaign and the war. The resources at each unit will be used to demonstrate the military, social, political and economic ideas inherent in each theme.

Battlefield Interpretive Zone

Movement through, and experience of the rehabilitated 1864/1865 landscape helps the visitor understand the various decisive battles that helped shape the campaign.

This landscape is critical to visitor comprehension of: the massive scale and scope of the campaign; the strategic advantages, disadvantages, and interdependent relationship between different fortifications within a complex network of trenches, batteries, and forts; the proximity of opposing lines, the defensibility of positions, and the vulnerability of troops within those lines; and the contrasting complexity and simplicity of engineering for trench warfare. Interpretation would be updated and improved to reflect the new themes and would be structured around the battles fought east of Petersburg at the start of the siege. Strategic battle actions, military tactics and engineering will be conveyed by encouraging visitors to experience the landscape by trails, ranger-led and self guided tours.

Visitors experience the solemn

and commemorative landscape at Poplar Grove.

Visitors to the cemetery will experience a place much closer in design and atmosphere to the original cemetery, established in 1868. The replaced headstones will evoke the original intentions of the designer, commemorating those fallen in battle. New waysides and updated interpretive programs reflect new themes and stories unique to this unit. Tours, special events and presentations are scheduled regularly.

Visitor Use & Facilities

Battlefield Interpretive Zone Comfort facilities are provided at Hatcher's Run and Reams' Station battlefields.

As the battlefields included as part of the boundary expansion are developed in the Western Front, comfort stations would be developed in existing structures at Hatcher's Run and Reams' Station battlefields.

Historic Interpretive Zone

Same as "Alternative C".

Organizational Efficiency

Same as "Common to All Alternatives".

Alternative D: The Landscape Tells the Stories

Management Prescriptions	Examples of Actions That Could Be Taken	
Preserving and Protecting Resources		
Battlefield Preservation Zone The park's boundary is sufficient to provide visitors opportunities to access and experience the nationally significant landscapes and battlefields of the Petersburg Campaign.	Seeking new legislation to remove the acreage ceiling allowing the park to accept lands of nationally significant battlefields and buffer lands to protect existing resources.	
Battlefield Interpretive Zone The major battlefields that define the 1864-1865 landscape-the pattern of forested to open fieldsare rehabilitated so visitors can be fully involved in understanding the actions of the battles.	Determining criteria to be used to select which viewsheds, battlefield cores, fortifications and other man-made and natural features should be opened, cleared or revealed. Rehabilitating basic 1864/65 pattern of forested to open lands at Stedman and Crater Battlefields.	
Historic Interpretive Zone The cultural landscape at City Point is rehabilitated to reflect its significant period of 1864-1865 while respecting the diverse layers of history.	Rehabilitating the cultural landscape of Appomattox Manor, Hunter House, Bonaccord and Naldara. Rehabilitating the historic buildings for interpretation and park administrative use. Maintaining the passive recreation area along the James River.	
Interpretation and Education Battlefield Preservation Zone Visitors move through the battlefields using trails, wayside exhibits and guided tours to explore and understand battle actions and outcomes.	Updating interpretive programs to reflect new themes and incorporating themes and stories unique to this unit. Scheduling tours, special events, and presentations regularly. Structuring interpretation programs out on the landscape among resources and encouraging self-guided tours. Updating brochures and wayside exhibits.	
Battlefield Interpretive Zone Movement through and experience of the rehabilitated 1864/1865 landscape helps the visitor understand the various decisive battles that helped shape the Campaign.	Updating interpretive programs to reflect new themes and incorporating themes and stories unique to this unit. Enhancing visitor experience and understanding by revealing features that influenced the course of the battle. Revealing military engineering features and those portions of the cores of battlefields where the heaviest fighting occurr Rehabilitating selected portions of battlefields to their 1864/65 patterns. Relocating NPS facilities within the primary interpretive destinations to areas that would not impact the interpretive experience where and when feasible. Updating brochures and wayside exhibits.	
Historic Interpretive Zone The rehabilitated historic buildings and features associated with Appomattox Manor landscape, Grant's Cabin and the waterfront at City Point are used by visitors along with guided tours, enhanced media and wayside exhibits to understand the continuum of uses through time.	Updating interpretive programs to reflect new themes and incorporating themes and stories unique to this unit. Enhancing the visitor experience by encouraging visitors to explore resources such as the viewsheds and landscape, including the river. Updating brochures and wayside exhibits.	
Visitors use the historic streetscape in Old Town Petersburg along with guided tours, museums, wayside exhibits and other means to understand the impacts of the siege on the city.	Coordinating and assisting the City of Petersburg to provide guided tours, programs and presentations. Collaborating with the City on interpretive themes and highlights. Updating brochures and wayside exhibits.	
The historic features and setting of Poplar Grove National Cemetery, along with guided tours, wayside exhibits and special presentations are used by visitors to understand the commemorative landscape.	Updating interpretive programs to reflect new themes and incorporating themes and stories unique to this unit. Scheduling tours, special events and presentations regularly. Updating brochures and wayside exhibits.	

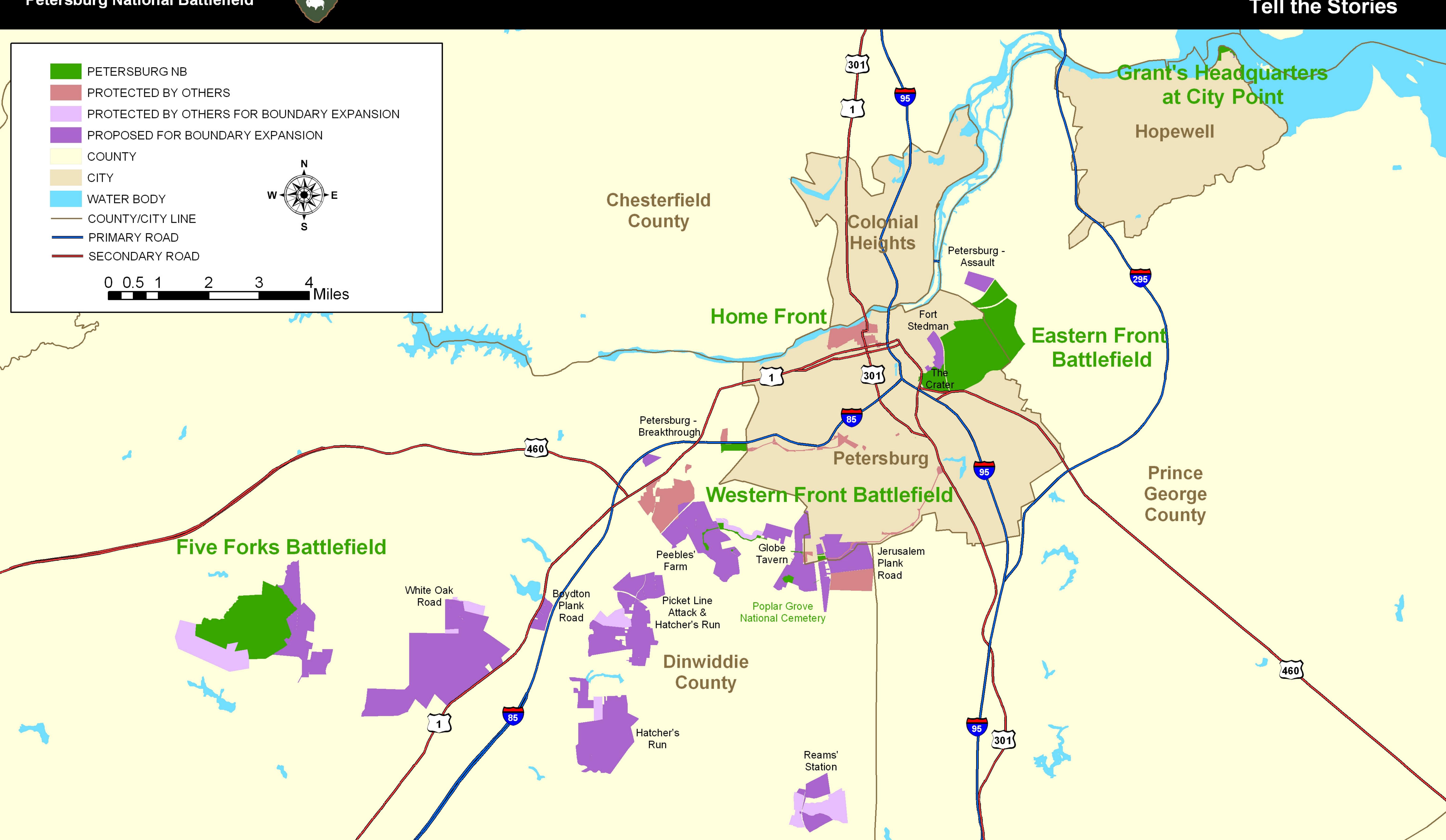
Alternative D: The Landscape Tells the Stories

Management Prescriptions	Examples of Actions That Could Be Taken
Visitor Use and Facilities Battlefield Interpretive Zone The improved interpretive center provides visitors with a full range of services, orientation to the park, and an understanding of the Eastern Front stories and resources.	Adding handicapped accessibility features. Providing secondary comfort stations at two additional sites.
Historic Interpretive Zone The historic Bonaccord House is rehabilitated as a visitor contact station and provides a full orientation to the park, Campaign and local stories.	Rehabilitating Bonaccord to include visitor information, orientation, interpretation and comfort space. Providing for recreation such as picnicking, fishing and other pursuits, if not incompatible.
The development of a new visitor contact station that orients visitors to historic resources in Old Towne, the park and the region will be explored with the City of Petersburg and other partners.	Helping the city to find a suitable facility. Providing the city with technical assistance. Helping the city to find suitable partners to rehabilitate, fund and staff the new facility. Participating in interpretive programs with the city. Updating brochures and other interpretive media to include events and programs in Old Town, Petersburg.
A new visitor contact station at the Poplar Grove superintendent's lodge will orient visitors to western battlefields, the park and the region.	Creating a facility rehabilitation plan. Updating park information brochures.
Comfort facilities are provided at Hatcher's Run and Reams Station Battlefields.	Determining best locations for comfort stations. Updating visitor information as to location of comfort stations.
Park Development Zone The historic Operations building is rehabilitated to serve as the park's new education and training facility.	Developing a design plan that includes training, education and presentation space while respecting the historic integrity of the building.

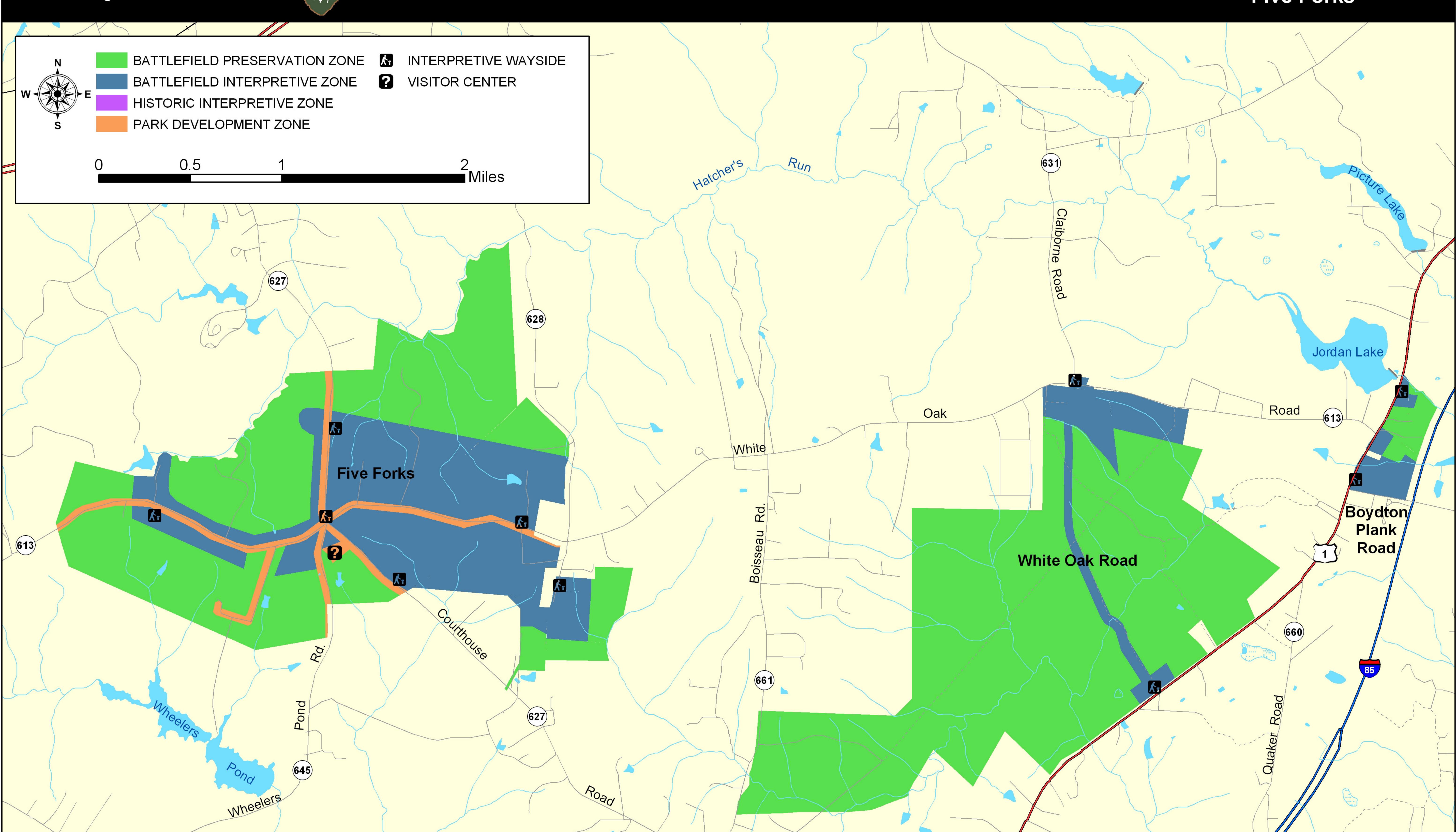
Alternative D
The Landscapes
Tell the Stories

Petersburg National Battlefield











The Affected Environment

The Affected Environment

This chapter describes the existing environment that could be affected by actions proposed in this Draft GMP/EIS. The specific topics detailed in this chapter include cultural resources, natural resources, the social and economic environment, visitor experience and park operations. The topics were developed to focus and compare environmental impacts among the alternatives. These topics were selected based on federal law, regulations, executive orders, NPS management policies and concerns expressed by the public or other agencies during scoping and comment periods. The conditions described establish the baseline for the analysis of effects found in the next chapter, Environmental Consequences.

IMPACT TOPICS ELIMINATED FROM FURTHER ANALYSIS

The impact topics eliminated from further evaluation are briefly discussed below and will not be analyzed in detail in this document.

Sacred Sites and Indian Trust Resources

There are no federally recognized Native American tribes in the Commonwealth of Virginia, consequently, no consultations to determine the presence of Sacred Sites have been conducted to date. The Virginia State Historic Preservation Officer has requested that we consult with the Virginia Council On Indians during the public review process. Futhermore, if any unknown significant resources were uncovered during ground-disturbing activity, procedures appropriate to the Native American Graves Protection and Repatriation Act would be instituted.

Public Health Issues

There are no public health issues associated with any of the alternatives.

Hazardous Materials

None of the lands currently owned by the park are known to contain hazardous materials. Lead paint exists in the historic buildings at City Point and the park has had experience removing and encapsulating the material in construction projects over the past five years within portions of these buildings. This topic was therefore eliminated from further consideration with the proviso that the lead paint and other toxic materials would be removed, encapsulated or otherwise addressed according to federal guidelines if (1) the building is used for housing and that employee has a child under the age of seven years of age or (2) if the building is used as a public space and the paint is loose or flaking. However, before any construction occurs, written certification of the absence of hazardous materials would be required.

The presence of hazardous materials will have to be evaluated for each transaction at the time of each acquisition or transfer of property to Petersburg National Battlefield when and if additional lands are acquired.

Climate

None of the alternatives have any potential to affect climate in the Petersburg project area.

Groundwater Quality

None of the alternatives have any potential to affect the quality of groundwater in the Petersburg project area.

Floodplains

None of the alternatives have any potential affect on local flood plain areas.

Rare, Threatened and Endangered Species

The Division of Natural Heritage of the Virginia Department of Conservation and Recreation did not identify any protected species occurring on the Petersburg National Battlefield during the surveys they conducted in the period 1990 through 1991. Granitic Flatrock, a unique (but not legally protected) vegetation community has recently been identified at Five Forks in an area of natural open space. Currently new surveys are underway to create an ecological inventory database for Petersburg. Lands proposed for addition to the Petersburg boundary are not included in the current ecological surveys. Specific impacts to rare, threatened or endangered species are unknown. Results from the proposed ecological inventory surveys would have to be considered in evaluating specific development actions on new or existing lands.

IMPACT TOPICS FOR ANALYSIS

CULTURAL RESOURCES

The National Park Service is steward to many of America's most important natural and cultural resources and is charged with their preservation-unimpaired for the enjoyment of present and future generations. Petersburg National Battlefield, like many other units in the park system, has cultural resources-the material evidence of past human activities. These resources are finite and nonrenewable and begin to deteriorate almost from the moment of their creation. Conforming to the spirit of the NPS Organic Act of 1916 and various historic preservation laws, park management activities must reflect awareness of the irreplaceable nature of these material resources. Therefore, park cultural resource management involves research, evaluation, documentation, registration of park resources, and setting priorities that ensure these resources are preserved, protected, and interpreted to the public.

Formal Designations of the Park's Resources

Petersburg NB is listed on the National Register of Historic Places. The Register is the nation's official list of cultural resources worthy of preservation and is part of a program to coordinate and support public and private efforts to identify, evaluate and protect our historic and archeological resources. It was included among the cultural NPS parks with no formal National Register documentation placed in the Register through the National Historic Preservation Act of 1966. The historic context for battlefield, earthworks, and other individual property types within Petersburg NB was established in a National Register Multiple Property Listing in February 2000.

The historic context for Civil War Era national cemeteries, including Poplar Grove National Cemetery, was established in October 1994. Portions of the park have been documented and are registered as individual properties, or as part of a district. Appomattox Manor is a National Register property. Grant's Headquarters at City Point is part of the City Point Historic District. The Five Forks Battlefield is a National Historic Landmark.

Historic and Designed Landscapes

A cultural landscape is a reflection of human adaptation and use of natural resources. It is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and types of structures that are built. The character of a cultural landscape is defined by physical materials such as roads, buildings, walls, and vegetation and by use reflecting cultural values and traditions. Shaped through time by historical land use and management practices, as well as politics and property laws, levels of technology, and economic conditions, cultural landscapes provide a living record of an area's past, a visual chronicle of its history. The dynamic nature of modern human life, however, contributes to the continual reshaping of cultural landscapes. They are a good source of information about specific times and places, but at the same time, their long-term preservation is a challenge.

Four distinct cultural landscapes are found as part of the Petersburg Campaign: the Civil War battlefields; the plantation setting of Appomattox Manor and Grant's Headquarters at City Point; Poplar Grove National Cemetery; and historic Old Town

Petersburg. The principal cultural landscapes at the park are the core areas of the Petersburg Campaign battlefields. These core areas contain cultural resources such as earthworks, archeological sites and farm buildings. Topography, watercourses, and other physiographic features helped to define tactical and strategic military positions. In general, remnants of open fields and forested areas, farmsteads, and earthen fortifications can be most easily found within park boundaries and lands proposed for boundary expansion.

On the eve of the Civil War, Petersburg was a bustling economic and trading center for south Virginia and beyond. Located on the Appomattox River and a hub of railroad activity, it was well suited for the trade carried on there. The outlying area surrounding Petersburg was farmland where a variety of crops were raised. The landscape was one of largely flat open fields and forested lands occasionally pierced by creek ravines. Several railroads and major roads crossed the fields. Antebellum plantation dwellings, slave quarters, agricultural buildings, and smaller farmsteads could be found there and along the major thoroughfares that funneled people and goods into Petersburg. Further to the east, the village of City Point was a port for the area. It was in large part, these important transportation links-the rivers, railroads and roads-that brought the Civil War to the city's doorstep in the late spring of 1864.

Appomattox Manor and other historic buildings, which include the restored cabin occupied by General Ulysses S. Grant during the Petersburg Campaign, provide a glimpse of plantation life during and after the Civil War. The grounds and gardens around the historic structures were largely developed

during the early 20th century. Cast-iron and stone entrance gates and a fence were installed along Pecan Avenue and Cedar Lane in 1916. Landscape remnants include the drives and paths around each of the houses, major ornamental plantings, a large open lawn and partially restored ornamental gardens.

Poplar Grove National Cemetery is a designed landscape, with a unified layout and structural features. It is managed as a modern cemetery with headstones considered modern commemorative resources. The elements of the historic landscape include: a carriage lane built from the Vaughan Road entrance to the flagpole; associated structures including the lodge, stable and utility building; a bandstand; monument and section markers; and the wall surrounding the cemetery grounds.

As the historic urban center for the region during the Civil War, sections of Old Town Petersburg comprised of three contiguous National Register Districts: Old Town Historic District, Centre Hill Historic District, and Courthouse Historic District will be designated as the park's new "Home Front" unit. This area-bound by the Appomattox River to the north, Washington Street to the south, 5th Street to the east and Canal Street to the west-contains much of Petersburg's mid-19th century business and residential area. Located within the District are some of the major Civil War related historic resources including numerous buildings, roads, bridges and the Appomattox River.

Historic Structures Buildings

Appomattox Manor in City Point is sited prominently on the high bluff over the rivers,

and was built by the Eppes family, leaders in the community for more than 300 years. The manor house served as the center of a large family plantation, with fields in what is now Hopewell, across the Appomattox River and on a James River island. During the Civil War, federal forces occupied the Appomattox Manor grounds. Most of the manor house remained empty, although some downstairs rooms were used as offices. The oldest part of the house was built in 1763, and as the fortunes of the family improved, wings were added in 1840-41, 1854 and 1916. In the early 1980s, the NPS stabilized the manor house, restored the roof to its early 20th century appearance, and adapted the interior for use as offices and exhibit space.

Outbuildings to the west of the house include a kitchen/laundry house (c. 1836), a dairy (c. 1836), two smokehouses (c. 1825 and c. 1836), and a garage (c. 1917 over a 19th-century ice pit). Visitors are not permitted in these dependencies on a regular basis. The manor's garage and gazebo are close to the Appomattox slope, and are being undermined due to erosion at the top of the slope.

Grant's Cabin stands 100 yards east of the main house. During the summer of 1864, the troops and their commanders lived in tents on the front yard of Appomattox Manor. When it became clear that the campaign would last into the winter, cabins replaced tents. Those of Grant's staff were located east of the manor house on the flat area, in a line facing the river. At the center of the line, a two-room log cabin was built in November of 1864 for General Ulysses S. Grant's office and bedroom. After the war, the cabin was dismantled and displayed in Philadelphia. The NPS rebuilt it at Appomattox Manor in 1983, slightly off its original location. The cabin was restored at that time, using as

much of the original fabric as was available. Due to poor maintenance while in Philadelphia, little of the cabin's original exterior survives. The cabin is in good condition.

Along Pecan Avenue east of the main gate to Appomattox Manor stands Bonaccord, a two and one half-story brick house. Built in the Greek Revival style between 1842 and 1845, Bonaccord was originally the rectory for St. John's Episcopal Church. Purchased in 1903 by the Eppes family, the house was modified in 1916 and used as a family residence and rental property until the NPS acquired it in 1986. The property also contains an early 20th-century prefabricated garage.

Bonaccord is significant because it existed at the time of the Civil War and was one of the Eppes family homes. It is a contributing element in the historic district. NPS currently uses the building on a limited basis for storage. A preliminary architectural assessment of the structure indicates a high degree of integrity on both the interior and exterior. The building was last renovated in the 1950s and there is lead-based paint on the interior surfaces; heating, plumbing and electrical systems are obsolete and require replacement.

The historic buildings in the Western Front are located in Poplar Grove National Cemetery. They include the lodge (1868), stable and utility building (1929), built to assist visitors and facilitate cemetery maintenance. The lodge is currently used for occasional park operations, and the stable and utility building is used to store maintenance equipment. The buildings are in good condition.

Vernacular Buildings

For this GMP, the term vernacular building—an architectural style— is used to designate the buildings in Five Forks. The unit's building inventory is not complete, and their significance has not been determined.

The vernacular buildings at Five Forks include two mid-20th century barns, a mid-20th century former gas station that serves as the visitor contact station, and numerous structures on four post-Civil War tenant farms. The visitor contact station is a visual intrusion on the battlefield. It is in the middle of the site's key interpretive vista, obscuring the primary military objective for the Union army and the strongest defensive position for the Confederates. The four tenant farms were established after the Civil War on the Gilliam plantation. Descendants of one of the tenant families remain on the farm under a life tenancy agreement.

Earthworks

During the war, the landscape surrounding Petersburg was dramatically altered by the construction of defensive structures called earthworks. These earthworks were engineering marvels, many containing elements not duplicated elsewhere and were the precursor to trench warfare employed in World War I. Many different types of earthworks were built at Petersburg including: battery, breastwork, fort, redan, redoubt and salient. The earthworks are the largest historic resource in the park totaling more than 20 miles. Many of these earthen features are on the List of Classified Structures.

The Dimmock Line, an extensive Confederate defense line, was built to defend the ridge overlooking Petersburg. It protected the main rail lines and yards in Petersburg, and the railroad bridge crossing the Appomattox to supply Richmond. The Dimmock Line contained 55 batteries along a ten-mile line resting on the southern bank of the Appomattox River, protecting the city on three sides.

The Federal siege line was anchored on the Appomattox River at Battery V (north of the visitor center) and expanded westward for 10 miles. The line incorporated portions of the Dimmock Line and other former Confederate positions that had been overrun. Most of the line's Union earthworks and associated encampments, depots and other sites lie outside the park.

World War I-era earthworks are located in the area between Battery 7 and Fort Friend east of the tour road and were used by the US Army during World War I (1917-1918) as a training center for soldiers. A series of earthworks, which include trenches, a powder magazine and revetments, survive today. These are among the few surviving examples of WWI earthworks and they lie within sight of Civil War earthworks.

Fort Sites

The Union earthworks were built as post-battle positions after the battles of Weldon Railroad and Peebles' Farm. The park contains minimal battlefield lands for these two battles, and the earthworks are important interpretive resources. The fort sites are generally small and widely separated from one another. The areas surrounding the sites are less suburbanized as one moves west, but development is quickly encroaching. Access is generally limited due to remote locations and limited facilities. There are few waysides, and only informal foot trails lead to the interiors of these sites.

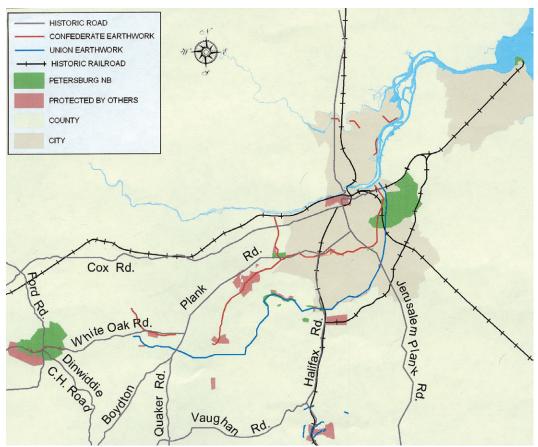
Relatively few earthworks were constructed for the Battle of Five Forks because the land was occupied for only a short time.

Confederate defenders hastily built earthworks on a line parallel to White Oak Road, the anticipated Union line of attack. Three sections of this fortified line survive: the "angle" north of the road, a small segment north of the road, and another south of the road. The Confederate forward outpost, part of the defensive works employed in the final action of the Five Forks battle, also survives.

Railroads

The landscape contains a few remaining signs of the US Military Railroad, a Civil War line established to ensure that Union troops were well supplied during the Petersburg Campaign. When the Army of the Potomac established its headquarters at City Point, it co-opted the damaged rail lines of the Petersburg and City Point Railroad and reconstructed the line as the US Military Railroad. The army built an engine house and yard at the base of the bluff, bringing cars and engines to City Point via barge. The rail line ran from the depot to Battery IV behind the visitor center at a point three miles east of Petersburg, where it extended southwest of the city for 21 miles. The line grew as the Union army consolidated its military victories: after each gain, the army reinforced temporary earthworks and built new railroad lines to support the next assault.

By June of 1865, the tracks had been removed where a pre-war railroad had not existed. Most of the evidence of the railroad has vanished from City Point. Only one of the original half-dozen spur tracks into the depot survives, and a cut through the bluff to the south of the historic district remains. The two existing railroad lines in the Eastern



Transportation corridors during the Petersburg Campaign.

Front follow the basic alignment of the Civil War rail lines that were the objectives of several offensives. One line, the Norfolk & Petersburg Railroad, is on the western boundary of the Eastern Front and cuts through the unit on the southeast and linked the port of Norfolk with Petersburg. The Petersburg and City Point Railroad, an eastern extension of the South Side Railroad at the time of the war, is located on the northern border of the Eastern Front in the area of the visitor center. Both lines are now part of the CSX system. The lines are

important in interpreting the offensives. Petersburg & Weldon Rail Line (now State Route 604 (Halifax Road) played an important role in connecting Petersburg to the rest of the South and in providing supplies for Lee's forces. The line ran from Petersburg south to Weldon, North Carolina, where it connected with another line to the Port of Wilmington. The Atlantic Coast Line Railroad, now part of CSX, was the connection through the City of Petersburg in 1867. After the war, the Petersburg & Weldon line was consolidated into this rail line.

Roads and Road Traces

An important military objective of both the Initial Assault and Crater battles was control of the strategic roads east of the city. Traces of four roads have been integrated into the Eastern Front's trail system.

- Baxter Road Trace linking Petersburg and Norfolk. This was a supply route used by both sides. Union forces advanced along the upper portions during the Initial Assault. Part of the trace is included in the park's trail system, while another portion has been eroded and is reverting to forest.
- Jordan Point Road Trace connecting
 Petersburg with Jordan Point on the James
 River, was used by Federal troops as a
 major transportation corridor during the
 Petersburg campaign.
- Prince George Court House Road Trace, connecting Petersburg with the Prince George County Court House. In 1864 it served as the avenue of advance for Federal troops during the Initial Assault, and was a primary connection between the Union front lines and Meade's Station, a major depot and hospital site.
 The historic trace is evident in sections, beyond Fort Stedman and the eastern park boundary.
- Shand House Road provided access from the Shand House to Baxter Road and Prince George Court House Road. Both Confederate and Federal armies used it for troop and supply movements.

Two through-roads (White Oak and Courthouse) and a road that terminates at the crossing (Wheelers' Pond) create the 'five forks' that give the junction its name. All were Civil War roads that have been subsumed into the state highway system as two-lane paved routes. All have been re-

engineered; they have higher crowns, deeper side ditches, and are wider and more level than they were at the time of the Civil War. However, their basic alignment has changed little since the Civil War. The road names and route numbers are Dinwiddie Court House Road (VA Route 627), White Oak Road (VA Route 613) and Wheelers Pond Road (VA Route 645). White Oak Road is a major collector road for the county.

A number of Civil War-era farm lanes or paths are still visible, although due to limited use or neglect they are in poor condition. They include a wagon road connecting Court House Road and White Oak Road and a road used for the Confederate escape at the west end of the park unit.

Archeological Resources

Archeological resources are the physical remains of the earthworks, battlefields, and farming complexes that contain the undocumented history of wartime Petersburg whose study would allow greater understanding of a wider range of its inhabitants, military or civilian, slave or free, throughout the conflict. Sites possessing high integrity, especially those containing information applicable to broad historical and anthropological questions, are nationally significant.

The pre-European archeological resources of the City Point Unit are potentially nationally significant and potentially eligible for consideration as a national historic landmark. Archeological data that support this conclusion was compiled during three separate survey and excavation projects. A 1981 systematic survey of the current parking lot at the western end of the park revealed the presence of prehistoric features. Investigators determined that the slight rises on the property were likely to yield additional archeological resources if

surveyed in an appropriate manner. A 1982-83 limited testing program in the vicinity of Grant's cabin and the 1983 systematic survey of the grounds around Appomattox Manor confirmed the likelihood of the 1981 hypothesis. During these investigations, archeologists discovered prehistoric materials in intact contexts, usually at the higher elevations; and materials associated with historic construction and occupation in

Archeological investigations focusing on the Civil War period were designed to find the original site of Grant's cabin. The rebuilt cabin was located offset from the original site to avoid disturbing subsurface remains. Other Civil War-era artifacts have been found throughout the property, with a large concentration located in a trash midden south of the house. Resources related to the Union Army's port facilities might be



Ruins of Taylor House Kitchen.

disturbed contexts. Due to the small size of test areas, no definitive identifications were made of prehistoric features. Still, the volume of 21 lithic remains led investigators to conclude that the City Point Unit was occupied extensively, if not continuously, over the past 10,000 years.

Evidence of the rich potential of City Point as a major pre-European site has also been revealed in artifacts uncovered as erosion has occurred on the Appomattox River slope. The erosion has been caused by the undermining of the slope at its base, along the shoreline. Continued erosion will threaten these important archeological resources. Historic archeological resources include domestic and Civil War-related sites. Evidence of a dwelling built much earlier than Appomattox Manor survives some 20 feet north of the present house.



Eppes Plantation dairy and Smoke House, City Point.

located underwater or alongside the riverbank. Artifacts recovered from site excavations have been catalogued and are now stored in the manor.

Very little archeological testing has been done at the Eastern Front beyond investigations at the Crater. The investigations between 1937 and 1962 focused on locating the mine entrance. A later study in 1981 on the Confederate picket line shed light on the general conditions of soldiers' lives in the trenches. The earthen fortifications at Petersburg NB were developed, maintained and lived in by almost 200,000 soldiers for almost a year. The 1981 study found that soldiers built coal fires for warmth, and melted spent lead into unusual shapes to while away the time. The only prehistoric site to have been discovered, from the Late Archaic Halifax period, was found in

association with a small assemblage of stone tools from the Taylor house site at the Initial Assault Battlefield.

Four historic below-ground sites have been identified: the Taylor House, the Hare House, the Friend House and Jordan House. They were the locations of 18th and 19th century farmhouses overrun during the Civil War and occupied by Confederate or Union armies; all were destroyed by the armies or by Union fort-builders scavenging for materials. Limited archeological investigations have been conducted on two sites. There is documentary evidence for other late-18th and early 19th-century domestic sites. Detailed archeological and documentary research would be required to prepare an inventory of the resources associated with these sites.

Formal archeological investigations have not been conducted at the many battlefields at the Western Front. Some Civil War-era artifacts have been found, and it is anticipated that excavations would reveal artifacts within the interior of the forts.

At Five Forks, an archeological survey of the unit in 1989 concluded that small Archaic Period camps and extraction sites are likely to be found. Evidence of Paleo-Indian occupation is also likely, as a site from that period has been found in the surrounding area. The tenant farms and evidence of earlier homesteads indicate the presence of archeological resources that could document agricultural operations from the 18th century to the recent past.

Ethnographic Resources

The Eppes family was a powerful force in the community in the 18th and 19th centuries. Dr. Richard Eppes was a leader in local discussions on secession, and a major player in the politics and economy of the region after the war. Over the past five years, park staff have compiled and studied the Eppes family plantation records, which are among the most complete of similar family records held in the NPS system. They have charted the genealogy of the family, and have gained detailed knowledge about the conditions of pre-war plantation life.

The decade of the 1860s is of particular interest in this research effort because of Dr. Richard Eppes, the plantation owner at that time. Born and raised at City Point, he was in many ways like other James River plantation owners; however, Eppes married a society woman from Philadelphia. The family records have the potential to illustrate how the conflicting values and opinions that led up to the Civil War are expressed in a single family. The records could be used to trace former Eppes slaves after the Emancipation and Civil War, providing information to illustrate the impact of the war on slaves and freedmen in the South.

No formal ethnography has been done in conjunction with the other units. Information on the Gilliam family plantation associated with Five Forks is contained in the University of Virginia library, and informal oral histories of family members have been recorded. Post Civil War tenant farming has not been well documented. Many Civil War-era families are still represented in the area and have indicated an interest in further documentation. Ethnographic study is expected to yield new information about the impacts of the battle and the war on local people.

Monuments and Commemorative Resources

The Eastern Front contains the majority of Petersburg NB monuments. The existing monuments memorialize war dead and the events of the siege and battles. They contribute directly to the park's mission. One of the legislative purposes of the park is to commemorate the campaign, siege and defense of Petersburg and to be a permanent memorial to restored peace between the e



Jordan Family cemetery near Confederate Battery V.

states. Most monuments were erected by Civil War veterans, but others have been added in the mid- and late 20th century.

The Eastern Front also contains a cemetery, a family burial ground in a wooded area near the Jordan house site. Marble stones mark the graves of Josiah Jordan, the Civil War-era owner of the property, and members of his family. It is located east of the visitor center parking area.

The Western Front has two monuments—the Gowen and Pennsylvania Monuments-that commemorate one of the battles of the Final Assault, the Federal IX Corps Assault. The assault was against Rives' Salient and Fort Mahone on the Confederate Line. The monuments occupy tiny sites that are not much larger than their bases in a south Petersburg business district, surrounded by city streets and commercial land uses.

Poplar Grove National Cemetery, in Dinwiddie County south of Petersburg, was established in 1866 as part of the national cemetery system for veterans of American wars. It occupies the encampment site of the 50th New York Volunteer Engineers Regiment and the Poplar Grove log church built during the Petersburg Campaign. Buried here are 6,181 soldiers who died in the Petersburg and Appomattox campaigns. The soldiers' remains were recovered between 1866 and 1869 from battlefields throughout central and southern Virginia.

The headstones originally stood upright, but in 1934 they were laid flat to facilitate mowing. In the intervening years, many of them have been chipped and inscriptions eroded due to the softness of the stones and to water ponding on surfaces. The headstones are considered commemorative resources.

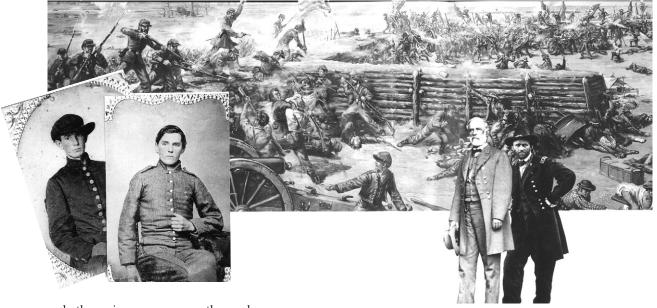
Five Forks has two monuments, both located at the junction. They are the Battle of Five Forks Monument and the Five Forks National Historic Landmark plaque.

Library, Collections and Archives

An extensive library of scholarly works, popular information and primary sources on the Civil War is housed in the basement of the visitor center. The Civil War soldiers' data bank also resides in this facility, as do collections of Petersburg Campaign-related photographs, maps, memorabilia and other printed materials. The library collection is known for its many memoirs, unit histories

A significant collection of cannon tubes, representing many types of cannon used during the Civil War period, is housed near the visitor center. Some tubes have been mounted and are displayed in the park.

A collection of large paintings depicting historic events of the campaign is now archived in park storage areas. The paintings were part of the wayside program and were hung at interpretive stops along the tour



and other primary sources on those who saw action during the Petersburg Campaign. There is also substantial information on other individuals, units and activities related to the Civil War. The collection is used both by Petersburg NB staff for scholarly work and by individuals for genealogical and other research.

The park also houses artifacts and period memorabilia, including uniforms, weapons, insignia and other items, that have been donated to the park or found during archeological excavations in the park.

route. Reproductions have been substituted for the originals.

The visitor center provides minimal acceptable conditions for the storage of the park's collections. However, it does not have space to accommodate future growth. The number of archeological artifacts is expected to increase as comprehensive surveys and project-based investigations are undertaken. In addition, it does not house all of the park's collection as some archives and artifacts are stored at the City Point Unit.

NATURAL RESOURCES

Climate

The Petersburg-region climate is typical of the Mid-Atlantic portion of the East Coast, with warm, humid summers and generally mild winters. The growing season averages approximately 190-200 days. Average winter temperatures range between 27° and 53°F with an average January temperature of 38.4°F. Summer temperatures average between 66° and 87°F with an average July temperature of 77°F. The average annual rainfall is 44.7 inches and the average annual snowfall is 9.6 inches. The year-round average relative humidity is 65 to 70 percent, with summer values frequently exceeding 85 percent.

Air Quality

The National Park Service seeks "to perpetuate the best possible air quality in parks because of its critical importance to visitor enjoyment, human health, scenic vistas, and the preservation of natural systems ... [and] will assume an aggressive role in promoting and pursuing measures to safeguard [air quality related values] from the adverse impacts of air pollution". NPS Natural Resources Management Guidelines include the following management activities with respect to air resource management:

- inventorying air quality related values associated with each park
- monitoring and documenting the condition of air quality and related values
- evaluating air pollution impacts and identifying causes.

These objectives and activities are based on authorities contained in the NPS Organic Act of 1916, the individual acts establishing the parks, the Clean Air Act, and other Federal statutes. The NPS Organic Act provides the fundamental basis for the protection and

preservation of park resources vulnerable to the impacts of air pollution. Moreover, one of the stated purposes for the enactment of the Clean Air Act is to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population". Recognizing the value of pristine air quality in specially designated areas such as national parks and wilderness areas, the Congress amended the Clean Air Act in 1977 by adding a section to protect the air quality in these areas from any further degradation. One of the purposes of the Prevention of Significant Deterioration (PSD) Section of the Clean Air Act is "... to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic or historic value."

To accomplish this goal, Congress established a classification system for areas having air quality better than the national ambient standards. The Clean Air Act provides the highest degree of protection in areas designated as class I, allowing only very slight deterioration of air quality over baseline conditions in these areas. These areas include all national parks greater than 6,000 acres and national wilderness areas greater than 5,000 acres in existence at the time the 1977 amendments were enacted (August 7, 1977).

The federal Clean Air Act, as amended in 1990, requires the United States Environmental Protection Agency (EPA) to identify national ambient air quality standards (NAAQS) to protect public health and welfare. Standards have been set for six pollutants:

- ozone (O₃)
- carbon monoxide (CO)

- nitrogen dioxide (NO2)
- sulfur dioxide (SO₂)
- particulate matter less than 10 microns (PM10)
- lead

EPA also promulgated a revised NAAQS for O₃ and a new NAAQS for particulate matter less than 2.5 microns (PM2.5). However, in the spring of 1999, a U.S. Court of Appeals panel remanded the standard to EPA for further consideration. These pollutants are called criteria pollutants because the standards satisfy criteria specified in the Clean Air Act. An area where a standard is exceeded more than three times in three years can be considered a non-attainment area. Nonattainment areas are subject to planning and pollution control requirements that are more stringent than in those areas where standards are met. While air quality in an air basin is usually determined by emission sources within the basin, pollutants transported from upward air basins by prevailing winds may also affect air quality.

Prince George and Dinwiddie Counties both achieve ozone attainment status according to the Environmental Protection Agency (EPA) standards. However, the City of Hopewell, because of its inclusion in the Richmond ozone maintenance area, was classified as having moderate non-attainment for ozone in 1991 (based on the 0.12 ppm ozone 1-hour average). The maintenance area status was reached as attainment in 1997 after several years of compliance and reductions in ozone levels.

Noise and Soundscapes

National Park Service Director's Order #47 (DO-47) articulates soundscape preservation and noise management policies that require, "to the fullest extent practicable, the protection, maintenance or restoration of the

natural soundscape resource in a condition unimpaired by inappropriate or excessive noise sources."

Natural soundscapes exist in the absence of human-caused sound and are the aggregation of natural sounds that occur in parks, together with the physical capacity for transmitting natural sound. Natural sounds occur within and beyond the range of sounds that humans can perceive, and can be transmitted through air, water or solid materials. Noise is generally defined as an unwanted or undesired sound, often unpleasant in quality, intensity, or repetition.

The preservation or restoration of natural resources, including soundscape, is an important and inherent part of the mission of the National Park Service. Soundscape and natural sound is also an inherent component of the Organic Act which protects "the scenery and the natural and historic objects and the wild life...". Quiet, natural sound, solitude and tranquility are as important to visitors as scenery. The preservation and protection of soundscape is intrinsic to cultural and commemorative areas and settings such as memorial, battlefields, prehistoric ruins and sacred sites.

Poplar Grove National Cemetery is a commemorative area where quiet is a necessary component of the resource. The battlefields of the park are also commemorative in nature and are better experienced without the intrusion of modern sounds.

The primary source of noise at the Eastern Front unit of Petersburg NB is traffic on I-95, the major interstate highway on the east coast, and to a lesser extent, existing roadways, such as Route 36 on the north side

of the unit. Traffic-generated noise is less of an issue at the other park units, such as Grant's Headquarters at City Point which is located at the terminus of a city road in Hopewell. Although four roads intersect Five Forks, traffic volumes are not high on these roads at this time. Noise associated with residential and commercial development affects other park units. For example, an industrial steel fabrication installation near Fort Fisher represents a periodic source of noise that impacts the visitor's experience at that site.



NPS staff inventorying road conditions.

Energy and Green Operations

Actions to promote sustainable development in the design, retrofit, and construction of park facilities have associated energy conservation and air quality benefits. These include actions that reduce or replace consumption of conventional fossil fuels and/or reduce the consumption of other resources either directly or indirectly. For example, the park has several solar-powered audio wayside exhibits. Reductions in potable and non-potable water

consumption also achieve concurrent reductions in energy consumption and associated air emissions. Acquisition of energy efficient appliances whenever possible also is an incremental energy saving measure that has associated air quality benefits.

Alternative fuel vehicles are recognized as a means of reducing park-generated air emissions and petroleum energy consumption. For example, the park has owned and operated several propane dual-fuel pickup trucks since 1992, and also has one electric-powered utility cart. Other opportunities to reduce energy consumption that have been implemented by other park units include the utilization of biodiesel fuel, which is a domestically produced, renewable fuel that can be used in unmodified diesel engines with the current fueling infrastructure. The most widely used biodiesel fuel is B20, which is a blend of 20 percent vegetable oil, fats, or grease and 80 percent diesel fuel. In addition to displacing some conventional diesel fuel, it reduces emissions such as particulate matter, carbon monoxide, hydrocarbons, and air toxics. However, the feasibility of its adoption is highly dependent on its local availability and cost relative to conventional fuel.

The park has also considered an improved transportation system that would both improve visitors' experience of the park and reduce visitor vehicle energy consumption and air emissions. Such a system could be a new shuttle service that would circulate within the Eastern Front and perhaps circulate to some of the other units. The park will pursue further study on the feasibility of alternative transportation system services.

Geology, Soils and Topography

Geologic monitoring can be used to detect long term environmental change, provide insights into the ecological consequences of those changes and to help determine if the observed changes dictate a corrective action in management practices. Geologic indicators can be used to assess whether environmental change is within a normal or anticipated range of variation. Geologic indicators include measurements of change in volcano activity, earth movement, glacier advance and retreat, shoreline movement, sand dune movement or mobilization, sediment storage and loading, soil erosion, thermal feature activity and temperature change, and slope and rock stability, among others.

In the vicinity of Petersburg NB, Interstate 95 delineates the "fall line", a geological transition between the Piedmont and Atlantic Coastal Plain physiographic regions. Portions of Petersburg NB lands in Dinwiddie County lie on the eastern edge of the Piedmont Region; the remainder of the park lies in the Atlantic Coastal Plain region. Lands proposed for boundary expansion are included in either the Piedmont or Atlantic Coastal Plain physiographic regions.

Soil is defined as the unconsolidated portion of the earth's crust modified through physical, chemical, and biotic processes into a medium capable of supporting plant growth. Soil properties influence natural and cultural resources and the physical infrastructure in parks. Soil surveys provide an orderly, on-the-ground, scientific inventory of soil resources. The inventories include maps of the locations and extent of soils, data about physical and chemical properties of those soils, and information derived from those data about potentialities

and problems of use on each kind of soil. The information is in sufficient detail for application by park managers, planners, engineers, and scientists to specific areas of concern. This systematic inventory of soil resources facilitates effective management in each park. The NPS Soil Inventory and Mapping (I&M) Program supports soils mapping and inventories based on standard terminology and techniques of the National Cooperative Soil Survey.

City Point lies at the confluence of the Appomattox and James Rivers. The bluff overlooking the river falls 40-feet to the shoreline. Due to the loose soils and absence of rock outcrops, typical of coastal plains, the bluff has experienced periodic sloughing. The saturation of the soils at the shoreline, stormwater runoff and the undercutting of the bank cause this natural process of erosion by the river currents. Erosion of the bluff deposits sediment into the rivers at City Point. The bluff and shoreline has been stabilized by the installation of a 1,500-foot section of riprap along the shoreline. It has been successful in limiting damage from erosion on this section of the bluff, however, erosion continues on the remainder of the shoreline. Erosion will continue until the natural angle of equilibrium is reached and the bluff stabilizes.

Mainly sedimentary rocks and unconsolidated or partially consolidated sands, clays and gravels underlie the Atlantic Coastal Plain. Igneous, sedimentary and metamorphic rocks underlie the Piedmont. Due to the composition of the Piedmont geology the soils are mainly derived from acid crystalline rocks (gneiss, granite, and schist groups) which develop into loams and clays. The predominant soil type in the Eastern Front is Emporia and Norfolk sandy loam. Soils in

the Five Forks Unit are well-drained sandy loam with a clay loam subsurface. Most of the land is well drained.

Generally, Petersburg NB topography is characterized as gently rolling countryside. The elevation ranges between 40 feet along the flood plain of the Appomattox River to 168 feet above sea level in the Eastern Front and 302 feet at the Five Forks Unit.

Prime and Unique Farmland and Agriculture

The USDA defines and designates both Unique and Prime farmlands, which are two separate classifications of highly productive soils. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods.

Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or yields of specific crops. Petersburg NB contains no Unique farmlands.

Most of the soils types underlying the Petersburg NB are considered to have agricultural value, however, the USDA does not designate prime farmland in federally held property such as Petersburg NB.

In Prince George County and Dinwiddie County, USDA has designated prime agricultural lands. Dinwiddie County in

particular has a large percentage of prime agricultural soils and is an agriculturally based county. Approximately, 26 percent (89,260 acres) of Dinwiddie County was still in agricultural production in 1997. Prince George County defines approximately 37% of the county as prime agricultural soils.

The National Park Service maintains an agricultural leasing program through its Historic Property Leasing Program.

Currently in lease are approximately 97 acres of grass fields at Five Forks and 29 acres of grass fields at Confederate Fort Gregg both for cutting hay. Available but not currently in lease are 18 acres of grass field around Fort Morton and 18 acres around the Crater in the Eastern Front. Portions of acquired lands could be placed under agricultural leasing in the future.

The distribution of Prime Agricultural lands in the parcels proposed for inclusion in the park boundaries is summarized in Table 1.

Water Resources and Quality

Surface Waters

Petersburg NB is located within two drainage basins; the Chesapeake Bay (Prince George County lands) and Nottoway River (Dinwiddie County lands). The confluence of the Appomattox and James Rivers occurs near City Point. The James River ultimately drains into the Chesapeake Bay and because of its connection to the Bay, Prince George County, the Cities of Hopewell and Petersburg are included in the Virginia Coastal Zone. The Virginia Coastal Resources Management Program was established by executive order in 1986 to protect and manage Virginia's Coastal Zone. Some of the areas of particular concern to the Virginia Coastal Resources Management Program are wetlands, erosion, floodplains, significant wildlife habitat areas, waterfront development areas and significant public recreation areas.

Five streams drain the Eastern Front and are within the Chesapeake Bay drainage basin. Poor and Harrison Creeks are the largest. Taylor's Creek is a small tributary of Poor Creek, and the other two streams, one named Branch Creek and the other unnamed, are tributaries of Harrison Creek. Poor Creek flows through the park east of the Crater. Harrison Creek enters the park near the park headquarters and exits at the northern boundary. Branch Creek, a tributary to Harrison Creek, originates from storm drains in the Fort Lee Military Reservation.

The northern portion, approximately 16 percent, of Dinwiddie County lies primarily within the Appomattox River drainage basin; the southern portion, approximately 83 percent, drains into the Nottoway River drainage basin. The Appomattox River drains into the James River; the Nottoway River drains into the Chowan River, ultimately reaching the Atlantic Ocean.

In Dinwiddie County, Rohoic Creek, Hatcher's Run, and Chamberlain's Bed Creek drain park sites in the Western Front and Five Forks. Rohoic Creek, a tributary of the Appomattox River is a well-defined channel with three-foot stream banks. In high water seasons, surface water can appear in the trenches in the adjacent forts, but it quickly drains into the creek. Hatcher's Run and Chamberlain's Bed Creek are part of the Nottoway River watershed. Beaver activity at Hatcher's Run has created a wetland area along the stream. Rohoic

Creek, Hatcher's Run and Chamberlain's Bed Creek have not experienced development upstream.

Biological macroinvertebrate assessment is conducted quarterly on the three creeks within the Eastern Front (Branch, Harrison and Poor). Most species found are either "pollution sensitive" or "somewhat tolerant" species including Caddisflies, Mayflies, Stoneflies, and Dragonflies. The occurrence and abundance of these species in all three Eastern Front creeks indicate fair to good water quality.

Chemical water analyses are conducted as needed on Harrison and Poor Creeks, within the Eastern Front, and Hatcher's Run in the Five Forks Unit. The analyses include the testing of pH, conductivity, temperature, dissolved oxygen and fecal coliform. With the exception of an occasional high level of fecal coliform as a result of overflows of the City of Petersburg sewage pump stations on Harrison and Poor Creeks, the chemical parameters on all three creeks generally indicate good water quality.

Potentially serious threats to water resources include degradation of aquatic ecosystems and stream channelization. High runoff due to upstream manipulation of the Poor Creek watershed has altered the natural configuration of the streambed. The lower part of Poor Creek has had extensive lateral and vertical channel erosion. It now runs through a steep-walled gully 15 feet deep and 30 feet wide. Similar, but less severe, channel erosion has occurred in Harrison Creek. While the Poor Creek channel has been scoured of most major sediment deposits, Harrison Creek has extensive sediment deposits and appears to be much more stable than Poor Creek.

Groundwater

Groundwater is the primary source of water supplied through either the Appomattox River Water Authority (ARWA), Virginia American Water Company (City of Hopewell) or through private individual wells. The Appomattox River Water Authority and the Virginia American Water Company both own and operate water treatment facilities. ARWA provides drinking water to the City of Petersburg and regionally to Dinwiddie and Prince George Counties. Rural residents and industries in the Counties of Prince George and Dinwiddie may also obtain potable water from groundwater wells. Generally water found at shallow depths is of good chemical quality; water from wells that penetrate the bedrock may be hard, corrosive, and have a high iron content.

Floodplains

The 100-year floodplain is the area that is inundated by a 100-year flood, or the annual peak flow that has a 1% chance of being equaled or exceeded in any given year. Flood hazard zone maps for Petersburg NB components show only a portion of City Point lies in Zone A - the 100 year flood plain. At City Point the lower portions of the slopes along both the Appomattox and James rivers are within 100-year flood areas. Additional lands are in either Zone C or Zone D. Zone C corresponds to areas outside the 100-year flood plain or areas with minimal potential flood hazard based on geography, area, and protective measures such as levees; Zone D are lands where no flood hazard analysis has been conducted. As federally owned lands, the Eastern Front is designated as Zone D in flood hazard mapping. FEMA maps do not map flood areas within park boundaries because

parklands are typically outside development zones.

The 100-year flood plain associated with the Arthur Swamp in the Western Front passes through the earthworks between Fort Conahey and Fort Fisher, and the 100-year flood area associated with Rohoic Creek passes along portions of the eastern boundary of the Confederate Fort Gregg site. Second Swamp 100-year flood plain passes through the Globe Tavern lands. A portion of the Globe Tavern proposed land acquisition encompasses a drainage system for Second Swamp and is within 100-year flood plain for Second Swamp.

Five Forks flood plains are associated with the Appomattox River along Dinwiddie County's northern border and Hatcher's Run. Portions of lands proposed for acquisition at Five Forks and Hatcher's Run are within the 100-year flood plain for Hatcher's Run.

Wetlands

Wetlands are transitional areas between land and water bodies, where water periodically floods the land or saturates the soil.

The term wetlands includes wet environments such as marshes, swamps, and bogs. They may be covered in shallow water most of the year, or be wet only seasonally. Plants and animals found in wetlands are uniquely adapted to these wet conditions. Wetlands can be found in virtually every county of every state in the nation, from arctic tundra wetlands in Alaska, to peat bogs in the Appalachians, to riparian wetlands in the arid West.

In the past, wetlands were often regarded as wastelands-sources of mosquitoes, flies and

TABLE 1APPROXIMATION OF FOREST AND UNIQUE/CRITICAL ENVIRONMENTAL AREAS ON PROPOSED BOUNDARY EXPANSION LANDS

Unit/Battlefield	Acres	Prime Ag. Soils	Floodplains	Wetlands	Forest
Grant's HQ at City Point	3	0	James River	0	0
Eastern Front					
Petersburg Assault	95	35%*		1%	0
Crater	15	5%		5%	80%
Fort Stedman/	879	85%		10%	25%
Picket Line Attack					
Western Front					
Globe Tavern	611	85%	Second Swamp	30%	20%
Peebles Farm	88	75%		5%	40%
Petersburg Breakthrough	33	60%		1%	40%
Boydton Plank Road	99	10%	Hatcher's Run	5%	20%
Hatcher's Run	1710	85%		10%	35%
Ream's Station	506	95%		5%	40%
White Oak Road	1925	45%		20%	60%
Jerusalem Plank Road	222	80%		1%	10%
Five Forks	1047	70%	Hatcher's Run	5%	45%

unpleasant odors. Most people felt that wetlands were places to be avoided, or better yet, eliminated. It was accepted practice to drain or fill wetlands for other uses, or to use them as dumping grounds. As a result, more than half of America's original wetlands have vanished.

Today, wetlands are known to serve a variety of important functions. They provide critical habitats for fish and wildlife, purify polluted waters, and check the destructive power of floods and storms. Wetlands also provide recreational opportunities such as fishing, hunting, photography, and wildlife observation they are fast becoming recognized as productive and valuable public resources.

The Petersburg NB's wetland inventory was derived from the wetlands map database at the US Fish and Wildlife Service web-site and applied to United Stated Geological Survey quadrangle maps. The boundaries, conditions

and classifications of the wetlands provide baseline data and general information on the wetlands on existing Petersburg NB lands. Wetlands on the lands proposed for acquisition under the boundary expansion alternatives are also identified through the same process and mapping. When wetlands are identified on parcels scheduled for construction activity and/or rehabilitation, delineations, assessment, permits and mitigation of wetlands may be required.

The National Wetlands Inventory (NWI) maps indicate that there are no wetlands in Grant's Headquarters at City Point.

For most of its passage through the Eastern Front, the Harrison Creek Corridor is never wider than 50' across, with relatively steep sides and a creek bed with an average width of five feet. At the southern edge of the Eastern Front, the creek broadens into a short section of open water. On the NWI

maps, the Harrison Creek corridor is designated a persistent palustrine emergent wetland subject to seasonal flooding.

The existing elevation of the Poor Creek streambed is substantially lower than it was in the 1860s. At the time of the Civil War, the portion of the Poor Creek corridor was a shallow wetland caused by the partial removal of an earthen dam near Gracie's Salient. On the NWI maps, Poor Creek is designated as a persistent palustrine forested (deciduous) wetland subject to temporary flooding. The stream corridor, which averages 15 feet across, has almost vertical stream banks due to active cutting from storm surges that have increased in volume; speed and frequency as upstream areas have been paved. Channel incision appears to have eliminated most of the palustrine wetland habitat that may have bordered the channel in the past. The flow of water in the main stream fluctuates seasonally, with a 50 percent reduction in volume occurring in the summer due to redirection upstream outside the park.

Taylor Creek, which joins Poor Creek below Gracie's Salient, is identified as an intermittent stream. It dries up in the summer months, carrying water only periodically during the other seasons. Neither the riparian corridor, which averages 25 feet wide, nor the stream channel, which averages three feet wide, is identified as a wetland on the wetland inventory maps.

In the Western Front, the branch of Arthur Swamp is quite small, no more than 25 feet wide as it passes through the park. A drainage culvert channels it under the road. Rohoic Creek is much wider, except at the northeast corner where a narrow channel carries it under I-85. Neither

location is designated a wetland on the NWI maps. A series of palustrine wetlands are associated with Hatcher's Run and its smaller tributaries in Five Forks. The wetlands extend along the western and northern boundaries of the unit and smaller branches reach into Five Forks. Most of the NWI designations for Five Forks identify the wetlands as persistent palustrine wetlands that are either forested or shrub/scrub. Several have been created by beaver (*Castor canadensis*) activity in the area. A portion of the proposed northern boundary expansion at Five Forks incorporates additional wetlands associated with Hatcher's Run.

Chesapeake Bay Preservation Act

Adopted by the Commonwealth of Virginia in 1988 to improve the water quality of the Chesapeake Bay, the Act requires each local government to designate preservation areas. Preservation areas are locations where if improper development were to occur the result could negatively impact the water quality of the Chesapeake Bay and its tributaries. The cities of Hopewell and Petersburg as well as Prince George County are considered Tidewater communities and therefore subject to the requirements of the Chesapeake Bay Act. Dinwiddie County is not included in the Tidewater area as are the other jurisdictions and is not under the requirements of the Chesapeake Bay preservation regulations. The Cities of Hopewell and Petersburg and Prince George County have designated preservation areas consistent with Phase I of the requirements; all three have completed comprehensive plans that address the protection of water quality in compliance with Phase II.

Wild and Scenic Rivers

There are no designated National Wild and Scenic Rivers in the Commonwealth of Virginia. However, Virginia enacted the Virginia Scenic Rivers System Law in 1970. The legislation emphasizes the scenic, recreational, historical and aesthetic values of rivers or sections of rivers. Under the legislation, a segment of the Appomattox River from below the Lake Chesdin Dam to the Rte. 36 bridge in the City of Petersburg was designated a State Scenic River. A regional trail is proposed along the Appomattox River that would link natural, cultural, heritage and other open spaces between Lake Chesdin and the confluence of the Appomattox River with the James River at City Point. The Petersburg waterfront contained within the Home Front Unit would be a critical component of the 22-mile trail.

The Crater Planning District currently recommends an evaluation of the James River between Hopewell and the Surry County/Prince George County line for consideration as a Virginia Scenic River. The area of James River under consideration is adjacent to the City Point Unit.

ECOLOGICAL RESOURCES

Under the guidance of the NPS Natural Resource and Monitoring Program, the park has begun a major undertaking to develop baseline data for fish, reptiles and amphibians, birds, mammals and vascular plants. The inventory and monitoring of natural resources will be integrated into park planning, maintenance and operation, visitor protection and interpretation. The following sections discuss the ecological resources based on past inventories, studies and descriptions followed by an outline of the current and proposed inventories of existing

lands owned by Petersburg NB. Lands proposed for acquisition will be surveyed prior to any disturbance or construction activities after acquisition is complete.

Vegetation

Based on past information, maps and data, Petersburg National Battlefield consists of a variety of habitat types including: upland coastal plain and piedmont forest, old field, managed field, marsh and riverine vegetation. With the exception of City Point, the park's units are more wooded than they were in 1865 and in 1932 when the park was established. Trees covered less than half of the park in 1865; almost ninety percent of the land is now forested. Information on vegetation is contained in the 1995 Forest Management Plan for Five Forks and the Eastern Front, which describes forest health, composition, distribution and hazard fuel loading. The data on forested conditions in 1865 is from the Historic Maps (Michler Maps) of the Petersburg Area in 1865. A botanical inventory of the Eastern Front was conducted in the summer of 1990.

In general, park forests are healthy. Southern pine bark beetle has infested small portions of some of the pine stands, but the damage has been minimal. Forests and open fields have been disturbed periodically throughout the park, providing opportunities for the invasion of nonnative (exotic) plant species such as Tree-of-Heaven (*Ailanthus*) and Japanese honeysuckle (*Lonicera japonica*). Kudzu vine, an extremely invasive plant, has been identified close to the park, but not yet within its boundaries. The Petersburg NB natural resources management program includes a strategic plan to actively manage invasive species.

At times, extreme weather conditions have resulted in damage to the park's earthen structures. High winds and ice throughout the unit have periodically uprooted isolated trees on earthworks or at the edge of the forests. Battery XIII, Forts Fisher and Conahey have been particularly affected. On the sides of large earthen forts where the slopes are steep, uprooting can occur more easily and the damage is more extensive because of the way the root mass extends into the earthwork. To address the protection, sustainability, and interpretation of earthworks and determine the best approach for future management, the park initiated an environmental assessment process. The approved document, Environmental Assessment and Assessment of Effect For the Preservation of Civil War Earthen Fortifications (August, 2001) contains seven management objectives to provide for a holistic earthwork preservation and management plan. Through this guidance, all woody vegetation would be removed from Forts Conahey, Fisher, Wheaton, Welch, and Battery 27 - all presently in forest cover; removes trees from Fort Friend and Haskell as well as Colquitt's Salient; removes all trees greater than 12 inches dbh (diameter breast height) from Elliot's Salient; and removes hazard trees only from Fort Urmston and Fort Gregg. In addition, observation platforms (Fort Fisher) and trails (Colquitt's Salient, Fort Haskell, Elliot's Salient, Fort Wheaton, Fort Conahey, and Fort Fisher) would be constructed to enhance interpretation and guide visitor access to and through fortifications. To promote growth of grass cover after tree removal non-native grass seed is used to quickly establish cover and serve as a nursery for harder to establish native grass species; once established native grasses infiltrate the grass habitat.

Grant's Headquarters at City Point consists of approximately 21 acres that include managed park-like grounds and wild growth riverbanks. Eppes Manor House grounds were planted by the Eppes family over the last 300 years. Some specimens date back to the original European imports. In 1983, a tornado ripped through the area destroying some of the trees. Some have been replaced by the NPS. The 1990 botanical inventory found that herbs, vines, and shrubs dominated the flora cover on the banks leading to the river. Dominant taxa included: Japanese Honeysuckle (Lonicera japonica), Vicia (Vicia angustifolia), and Asiatic Dayflower (Commelina communis), Tree-of-Heaven (Ailanthus altissima), American Elm (Ulmus americana), River Birch (Betula nigra), Hackberry shrub (Celtis occidentalis), and Paper Mulberry (Broussonetia papyrifera). A specimen of Water Hickory is probably an inland limit for this species.

The Eastern Front currently comprises 1443 acres and is dominated by two plant communities: second and third growth, mid-successional stage forests; old field/cut fields. Old field and cut fields surround most of the tour route through the park. Loblolly Pine plantations have been used as forested buffer in some areas along the park boundary. Four "pest species" have been identified: Poison Ivy (*Rhus radicans*), Poison Sumac (*Rhus toxicodendron*), Japanese Honeysuckle (*Lonicera japonica*), and Poison Oak (*Rhus vernix*). Poison Ivy and Japanese honeysuckle dominate the vegetation in some areas.

Areas used for interpretation including roadsides, and walking areas near tour-stops have been planted with grasses and are actively maintained by mowing. Earthworks, forts and earthen remnants of the Petersburg battle are maintained in tall grass to deter trespass on the fragile structures. Forested areas range from pine to mixed pine and hardwood in composition. The forested areas are 75 years old and dominant species include Tulip Tree (*Liriodendron tulipfera*), Sweet Gum (*Liquidambar styraciflua*), White Oak (*Quercus alba*), Blackgum (*Nyssa sylvatica*) and Loblolly Pine (*Pinus taeda*).

Fifty-nine percent of the Western Front is forested. Dense natural reforestation and undergrowth cover most of the Long Flank, Fishhook and Fort Wheaton sites.

Confederate Fort Gregg and Fort Wadsworth are treeless; the earthworks are covered by turf and periodically mowed. The Confederate Fort Gregg fields are maintained under the agricultural leasing program. Poplar Grove National Cemetery is maintained with turf and ornamental plantings. The plantings reflect the pattern of the original design.

The uprooting of isolated trees has disturbed some graves.

Approximately ninety-two percent of Five Fork's 1,100 acres is in forest and eight percent is in agricultural fields .A historic vegetation study of Five Forks ascertained that substantial change in the location and configuration of fields and in the composition of the forests had occurred since the Civil War. In 1865, 188 acres were managed as fields, while 100 acres were managed as fields in 1998. There is some overlap in the field configurations, but most of the current fields were forested during the war. The open acreage at Five Forks is generally included in the agricultural leasing program as pasture or for field crops. The botanical inventory found the composition of the woods and fields at Five Forks resembled similar communities of the

Eastern Front. Most of the woods are young second growth pine. Logging roads have been cleared through the wooded areas, and many of the cleared fields are the result of recent timbering. The unit contains a 12year-old, dense, evenly spaced loblolly pine plantation. A marshy habitat in the northeastern portion of Five Forks, a result of the active beaver population, contains a diversity of wetland plants. Areas along the edge of the marsh consisted of young trees, shrubs, and herbs. Dominant trees include: Sweetgum (Liquidambar styraciflua), Tulip Tree (Liriodendron tulipfera), and Shining Sumac (Rhus copalina). Shrubs inventoried include the dominant species Blueberry (Vaccinium corymbosum), Tall Alder (Alnus rugosa), Button Bush (Cephalanthus occidentalis), and Lizard's Tail (Saururus cernuus). Dominant herbaceous vegetation include: St. John's Wort (Hypericum mutilum), Arrow Arum (Peltandra virginica), Marsh Fern (Thelypteris palustris), Sweet Goldenrod (Solidago odorata) and Broom Sedge (Andropogon virginicus). Plants in the marsh were dominated by Water Lily (Nymphea odorata), Spatterdock (Nuphar luteum), Pickerelweed (Pontederia cordata), Yellow-eyed Grass (Xyris platylepis), and Bladderwort (Utricularia fibrosa).

Vegetation Mapping Project

In co-operation with the Virginia
Department of Conservation and Recreation
and North Carolina State University, the
National Park Service is creating vegetation
maps of seven parks including Petersburg
National Battlefield. Sample plots of areas
of natural vegetation in these parks will be
intensively studied to identify vegetation
type and the extent of cover for each species
within the plots. This data will be correlated
with aerial photos, topographic maps, and

soil surveys to determine and classify plant communities according to National Vegetation Classification System descriptions. The end product will be a complete map of the vegetation classes for Petersburg NB. To date 5 percent of the fieldwork has been completed. The fieldwork is expected to be completed in fall, 2004.



NPS staff inventorying potential trails.

Unique Communities

An occurrence of a Granitic Flatrock natural community has been documented on existing park lands in Five Forks. This community is classified as Woolly Ragwort (Packera tomentosa) - Willdenow's Croton (Croton willdenowii) - Little Bluestem (Schizachyrium scoparium) - Rock Spikemoss (Selaginella rupestris) Herbaceous Vegetation (Granite Flatrock Complex, Perennial Zone, CEGL004298) in the U.S. National Vegetation Classification where it has a G₃ conservation rank. A G3 conservation rank is defined by the Natural Heritage Program as being either very rare and local throughout its range or found locally in a restricted range; or vulnerable to extinction due to other factors. Usually fewer than I oo occurrences are documented.

Wildlife and Aquatic Life

The combination of mixed hardwood/pine forests and open fields at Petersburg NB provide habitat for a variety of wildlife. Typically encountered species include white-tailed deer (Odocoileus virginianus), Eastern cottontail rabbit (Sylvilagus floridanus), groundhog (Marmota monax), opossum (Didelphis virginiana), skunk (Mephitis mephitis) and raccoon (Procyon lotor). Avian species utilize the wooded and open field habitats at Petersburg NB during migration, as year-round resident species or winter residents. Common species to be expected at various times of the year at Petersburg NB are Northern cardinal (Cardinalis cardinalis), Northern mockingbird (Mimus polyglottos), Carolina chickadee (Poecile carolinensis), Red-tailed Hawk (Buteo jamaicensis), Eastern towhee (Piplio erythrothalmus), Yellow-rumped warbler (Dendroica coronata), Pine Warbler (Dendroica pinus), and Dark-eyed Junco (Junco hyemalis). Bald eagles are known to nest along the James River and may be observed at times in the vicinity of City Point. Ospreys have been observed along the Appomattox and James Rivers.

Fish

A survey is being conducted by park staff in cooperation with Shenandoah National Park. The Eastern Front survey conducted on November 19, 2002 resulted in the collection of 7 species from Harrison Creek/Branch Creek and 2 species of fish from Poor Creek. A survey was completed for Hatcher's Run in the Five Forks Unit in the spring of 2003.

Reptiles and Amphibians

The Department of Biology-University of Richmond is conducting an inventory of reptiles and amphibians. The survey will carry out a habitat-based inventory of amphibians and reptiles that will obtain a list of the species that occur-including any RTE or Natural Heritage listed species-and associate each species with specific habitat types, and provide quantitative estimates of relative abundance of selected species. To date, 20 species of amphibians and 27 species of reptiles have been documented. Begun in September 2002, the project is scheduled to be complete by Fall 2004.



Surveying for fish in Hatcher's Run.

Birds

The Center for Conservation Biology at the College of William and Mary is coordinating and conducting all aspects of an avian inventory on selected parks listed within the mid-Atlantic Network, including Petersburg NB. Standardized survey techniques will be used to identify bird species in the various habitats within Petersburg NB including specific surveys for nocturnal bird species, wading bird colonies, and nesting bald eagles. There are three interrelated objectives of the bird inventory and monitoring program: 1. Document through existing data or targeted fieldwork, at least 90% of the predicted species of birds currently estimated to occur on park lands; 2. Describe the distribution and relative abundance of species of special concern,

such as Threatened and Endangered species, exotic and other species of special management interest occurring within park boundaries; and 3. Provide the baseline information needed to develop a general strategy and design for monitoring avian species at Petersburg NB that can be implemented once inventories have been completed. To date, 142 species have been documented park-wide. The scheduled completion date for the bird inventory is November 2004.



Park Biologist showing snake to school group.

Small Mammals

Although still in the planning process, an assessment of the status of mammals on Petersburg NB lands will be conducted by the Department of Biology of Virginia Commonwealth University. The assessment will consist of a review of published literature, existing databases and historical records stored in the park to develop a database of mammal species (excluding bats) that possibly occur. Field surveys will supplement the data gathering and provide information on the presence, distribution, and relative abundance (for species of concern) of mammal species in forests, grasslands, agricultural fields, riparian areas, marshes, rock outcrops, etc. on the existing lands at Petersburg NB. The completion of the project is scheduled for January 2005.

Rare, Threatened and Endangered Species

The Federal Endangered Species Act of 1973, as amended, requires all federal agencies to consult with the United States Fish and Wildlife Service (USFWS) before taking any actions that could jeopardize the existence of any listed or proposed species, or result in the destruction or adverse modification of critical or proposed critical habitat. Critical habitat, as defined in the Act, is an area that has been designated by USFWS as essential

The Division of Natural Heritage of the Virginia Department of Conservation and Recreation conducted an inventory of Rare, Threatened and Endangered (RTE) species in the park. Data collection began in the winter of 1988 with a review of the Department of Natural Heritage database. Fieldwork began in April 1990 and continued through May 1991. Habitat of potential rare species within the park was surveyed during the appropriate season for the target rare animal and plant species. Data were also collected



Harrison Creek winds through the Eastern Front.

to the conservation of an endangered species. The first step in the consultation process is to obtain a list of protected species from the USFWS which was sent in a letter dated August 13, 2002.

When a park has an endangered species, the staff will monitor the location of what areas they inhabit, and whether special management is required to maintain or increase the population. Park managers also consider the species that formerly occurred in the park and whether they can be reestablished. In some cases, management consists largely of recording the locations of endangered species, monitoring their wellbeing, and protecting their habitat. Some endangered plants are treated this way.

on rare species found near park boundaries to determine whether they might be also found in the park, or whether they are deterred by current management practices.

Animals

No rare, endangered or threatened animals were found during the Natural Heritage surveys conducted in 1990-1991 at Petersburg NB. When complete, the current inventory projects may provide more up to date documentation on the possible presence of RTE species on existing Petersburg NB lands. The existence of RTE animal species on lands proposed for acquisition is unknown. Records derived from the database created by the Natural Heritage Program of the Virginia Department of Conservation and Recreation lists animals

ranked as rare, threatened, endangered or of concern for Prince George, Dinwiddie Counties and the City of Petersburg. The records are comprised of I damselfly, 7 mollusks, I crayfish, 2 amphibians, 3 fish, and 3 bird species and provide a broad geographical indication of RTE species in n the Petersburg region.

Plants

The only unique vegetation community documented on lands within the current park boundary is the Granitic Flatrock Community that occurs at Five Forks.

A search of the Virginia Department of Conservation and Recreation Division of Natural Heritage web-site produced a list of 51 vascular plants, 2 non-vascular plants of special concern or endangered for Prince George, Dinwiddie Counties and the City of Petersburg. Of these, eight species were recorded near Petersburg NB: Cuthbert's Turtlehead (Chelone cuthbertii), Spreading Pogonia (Cleistes divarcata), Toothache Grass (Ctenium aromaticum), Ten-angled Pipewort (Eriocaulon decangulare), New Jersey Rush (Juncus caesarensis), White-fringed Orchis (Plantanthera belpharaglottis), Yellow Trumpets (Sarracenia flava) and Northern Pitcher plant (Sarracenia purpurea). All of these species occur in low-nutrient groundwater seepage areas and are most commonly encountered where there is an open canopy. The habitat was formerly abundant in the Petersburg area and small remnants of habitat are still known in the park vicinity and may be present on lands proposed for acquisition. Thorough assessment and inventory of habitats on expansion lands for RTE species would be completed prior to any scheduled construction or rehabilitation projects.

SOCIAL AND ECONOMIC ENVIRONMENT

Region of Influence

Petersburg National Battlefield is comprised of multiple units encompassing the cities of Petersburg and Hopewell and counties of Prince George and Dinwiddie. Grant's Headquarters at City Point is within the city limits of Hopewell. The Home Front and portions of the Eastern Front are within the city limits of Petersburg; the remainder of the Eastern Front is located in Prince George County. The Western Front and Five Forks are located in Dinwiddie County. These four jurisdictions are considered to be the region of influence for potential socioeconomic impacts and are described below as the affected environment.

City of Petersburg

Petersburg occupies a land area of approximately 23 square miles with the Appomattox River defining its northern boundary. Petersburg is the center of the Appomattox Basin regional economy which includes the counties of Chesterfield, Dinwiddie and Prince George and the cities of Hopewell and Colonial Heights. Like other independent cities in Virginia, Petersburg employs the "council-manager" form of government. An elected city council is the governing body and an appointed city manager is responsible for the city's administration.

City of Hopewell

Hopewell occupies a land area of II square miles at the confluence of the James and Appomattox Rivers. Prince George County borders Hopewell on the south and west, the James River forms the eastern boundary and the Appomattox River the northern

boundary. Hopewell is an independent city utilizing the "council-manager" form of government. City Point is an extension of land at the confluence of the James and Appomattox Rivers and is the location of Grant's Headquarters.

Prince George County

Prince George County is 276 square miles and is primarily a developing suburban county, bordered on the north by the James River and the City of Hopewell and on the west by the Appomattox River and the City of Petersburg. The county seat is Prince George, Virginia. Prince George County is governed by an elected five-member Board of Supervisors, with an appointed County Administrator serving as the Chief Administrative Officer.



Monument at Old Dinwiddie Courthouse listing county battlefields.

Dinwiddie County

Dinwiddie County is 501 square miles, bordered by the Counties of Chesterfield on the north, Amelia and Nottoway on the west, Brunswick, Greensville and Sussex on the south and Prince George on the east. The County's southwestern boundary is formed by the Nottoway River and its northern border by the Namozine Creek and Appomattox River. The unincorporated community of Dinwiddie serves as the County seat. An elected Board of Supervisors and a county administrator who serves as the chief administrative officer govern Dinwiddie County.

DEMOGRAPHIC AND ECONOMIC PROFILE

Population

The demographic profile for the four jurisdictions in which the Petersburg National Battlefield lands are located is presented in Appendix B and based on information from United States 2000 census data and employment information. Prince George County's population of 33,047 increased by 21% from 1990 and Dinwiddie County's population of 24,533 increased by 17% from 1990. In comparison, the population of the Commonwealth of Virginia in 2000 was 7,078,515, a 1.5% increase from 1990. The cities of Petersburg and Hopewell both exhibited a decrease in population; Petersburg's population of 33,740 is 12% less than the 1990 population. The City of Hopewell population of 22,354 decreased 3% from 1990.

Future Population Growth

Population projections by the Virginia Employment Commission continue to forecast trends in growth to suburban areas of Prince George and Dinwiddie Counties and a continued loss of population to the Cities of Petersburg and Hopewell.

The Dinwiddie County population is projected to grow approximately 10% from 24,533 to 26,800 by 2010 and another 10% to 28,600 by 2020. The Dinwiddie Comprehensive plan states that continued growth in the county will be highly dependent on future economic growth. Residential development and the availability of public water and sewage facilities in the northeastern portion of the county may increase growth beyond government predictions. Prince George

County's population is predicted to increase 4.2% to approximately 34,504 by 2010, based on Virginia Employment Commission figures. City of Petersburg population projections to 2010 indicate continued loss in population of 6.7% to 31,520. The current projected 2010 population for Hopewell is 21,801, a decrease of approximately 2.5%.

Racial Demographics

Prince George County's racial demographics based on the 2000 Census data are 61% White, 32% Black, 2% Asian and 5% Hispanic. The racial composition of Dinwiddie County is similar to Prince George County. Dinwiddie County is comprised of 64% White, 34% Black, 1% Asian and 1%, Hispanic. By comparison, the Commonwealth of Virginia's population is 72% White, 20% Black,3% Asian and 5% Hispanic. The City of Hopewell's racial composition resembles the county with 62% White, 34% Black, 1% Asian and 3% Hispanic. The City of Petersburg is 19% White, 79% Black, 1% Asian and 1% Hispanic.

Educational Attainment

Commonwealth of Virginia residents who have attained at least a high school degree is approximately 81% of the total population. The Prince George County population has the highest educational attainment with approximately 82% of residents in the region of influence having at least a high school diploma, consistent with Virginia. The percentage of residents attaining at least a high school degree for the remaining three jurisdictions, City of Hopewell, Dinwiddie County, and the City of Petersburg, are approximately 70%.

College degree attainment figures are 19% for Prince George County, 11% for Dinwiddie

County, 15% City of Petersburg and 10% for City of Hopewell. These figures are markedly lower than the Virginia figure of 30% for attainment of a college degree.

Economy

Labor Force and Income

The employment rate for the Counties of Prince George and Dinwiddie are 49% and 60%, respectively, lower than the Commonwealth of Virginia employment rate of 62%. The cities of Petersburg and Hopewell have employment rates of 50% and 56%, respectively. The unemployment rates are 2% for Prince George County, 2% for Dinwiddie County, 5% for Petersburg, 4% for Hopewell as compared to the Commonwealth of Virginia rate of 3%.

The median household income is \$49,877 for Prince George County, \$41,582 for Dinwiddie County, \$33,196 for the City of Hopewell, and \$28,851 for the City of Petersburg as compared to \$46,677 for the Commonwealth of Virginia.

Employment

Non-manufacturing industries account for a larger share of the economy of Prince George County than manufacturing. The US Army Combined Arms Support Command and Fort Lee, adjacent to the Eastern Front of the Petersburg NB, is the largest employer in Prince George County. Fort Lee has a total population of 13,474 and employs an additional 2,507 civilians with a net annual payroll of over \$94 million. Other major employers include the Federal Correctional Institute, Brenco, Inc., Food Lion Distribution Center, Tarmac Lonestar, Inc. and Standard Motors.

Agriculture is a major contributor to the economy of Dinwiddie County. In addition

to livestock and poultry, Dinwiddie County produces a variety of crops including cotton, corn, wheat, hay, alfalfa and soybeans. Dinwiddie County is home to a limited number of industrial operations including Chapparral Steel, Vulcan, Tindall, Wal-Mart Distribution Center, Nippon Wiper Blades and Phillip Morris.

In Prince George and Dinwiddie Counties the number of people who live and work in the same county has decreased over the last decade. The majority of commuters in Prince George County commute to Richmond and Chesterfield County.

The majority of commuters in Dinwiddie County commute outside the county as well. A joint effort between Dinwiddie County, Prince George County, Petersburg and Hopewell is exploring the potential for a regional industrial park to be located in northeastern or eastern Dinwiddie County.

The City of Petersburg has seen a decline in the number of industries operating within the City and is working to diversify its economy and provide jobs for residents. Industries still prominent in Petersburg include medical services, optical lenses and equipment as well as government services. Primarily a residential development, Hopewell's major industries include Hercules, John Randolph Hospital, Allied Signal and Stone Container Corporation.

Environmental Justice

On February II, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." Under the executive order, federal agencies are required to consider the environmental and human health effects

of their policies, procedures, and projects on minority and low-income populations.

The percentage of families living below the poverty level in the Commonwealth of Virginia was 7% in 2000, only slightly higher than Prince George County and Dinwiddie County at 6.5% and 6.6%, respectively. Seventeen percent of residents in Petersburg and 13% of residents in Hopewell live below the poverty level.

A factor that influences unemployment and poverty levels in a population is the education level attained. Educational attainment figures for the region show that 18% of Prince George County, 30% of Dinwiddie County, 28% of the City of Hopewell, and 31% of the City of Petersburg residents have not received a high school diploma.

Land Use

Petersburg National Battlefield is currently comprised of 2,659 acres of protected, historically significant resources. Only a small portion of the park acreage is developed. The visitor center, auto tour route, administrative and maintenance buildings in the Eastern Front; the visitor contact stations and historic buildings at Grant's Headquarters at City Point; and Poplar Grove Cemetery comprise the developed areas of the park. The remaining areas are protected as open space in a mixture of forested and open habitats. There are two areas where the park has granted agricultural leases: 96.7 acres in Five Forks and 36 acres in the Eastern Front. The 7,238 acres being proposed for acquisition are currently open space and either in agricultural use or forested.

Land use in the Petersburg NB area, particularly in northeastern Dinwiddie County is currently undergoing change from a more rural agricultural character to more suburban and industrial development. Growth in these areas is primarily a result of increase in development along the major highways and the expansion of Petersburg suburbs into northeastern Dinwiddie County. Table 2 presents a summary of the acreage, land use, and potential future land use for the lands proposed for acquisition. Community Planning Areas and Urban Planning Areas in Dinwiddie County's Comprehensive Plan will be encouraged to absorb 75% of future residential and 85% of future commercial/ industrial development. Most of the lands proposed for acquisition in the Western Front and Five Forks are located in these Community and Urban Planning Areas.

County of Prince George

According to the Comprehensive Plan for Prince George County (1998) 17% of the county is in agricultural use, 69% is in forest land either for commercial use or as woodland for farms, and the remaining 14% is in residential, commercial, industrial, or public use. Major growth areas are south of the City of Hopewell and south and east of the City of Petersburg.

Prince George County has identified the southeast area of the county as the area of major growth and development based on historical and current population data and physical development trends. Constraints placed on development in Prince George County include critical environmental areas, Chesapeake Bay Preservation areas, floodplains, erodible soils, wetlands and

TABLE 2
LAND PROPOSED FOR ACQUISITION, LAND USE AND POTENTIAL DEVELOPMENT

Unit/Battlefield A	creage	Present Land Use	Potential Development
City Point	3	Undeveloped Residential	Residential
Eastern Front			
Petersburg Assault	95	Agricultural	Industrial
Crater	15	Undeveloped Urban	Cemetery Expansion
Fort Stedman/Picket Line Attack	879	Undeveloped Urban	Cemetery Expansion
		& Rural/Agriculture	
Western Front			
Globe Tavern	611	Rural/Agriculture	Urban and Community Planning Area
			Dinwiddie County
Jerusalem Plank Road	222	Rural/Agriculture	Urban and Community Planning Area
			Dinwiddie County
Peebles Farm	88	Rural/Agriculture	Urban and Community Planning Area
			Dinwiddie County
Petersburg Breakthrough	33	Undeveloped Residential	Urban Planning Area Dinwiddie County
Boydton Plank Road	99	Rural/Agriculture	Urban Planning Area
Hatcher's Run	1710	Rural/Agriculture	Quarry Development Proposed
Ream's Station	506	Rural/Agriculture	None • Rural Conservation Area
White Oak Road	1925	Rural/Agriculture	None • Rural Conservation Area
Five Forks	1047	Rural/Agriculture	Community Planning Area • Dinwiddie Count

prime agricultural lands. No lands are proposed for acquisition in Prince George County.

Critical environmental areas in Prince George County are the Appomattox River area, the James River area, and the Blackwater River and Bottomlands area. These areas have been delineated as Chesapeake Bay Preservation areas; the James River watershed has also been designated a Chesapeake Bay preservation area. Designated prime agricultural land comprises 37 percent of the County. To preserve agricultural activity and critically important environmental areas within the County, limitations have been placed on these lands for development in the residential, commercial and industrial categories.

Dinwiddie County

Approximately 75 percent of Dinwiddie County is designated as commercial forestland, owned by three timber companies. Residential development has been concentrated in the northeastern section of the county, mostly as a result of the expansion of the City of Petersburg. Much of the commercial and industrial development has followed the residential pattern and is located in the northeastern section of the county. An industrial park has been created at the site of the Petersburg-Dinwiddie Regional Airport. Portions of the county have also experienced sprawl, with development in rural areas of non-farm homes along major and rural highways. Existing park lands are subject to development pressures as development of suburban housing continues. Forest industry facilities are located mainly in the western half of the county however, forestry practices occur throughout the county. Total acreage dedicated to public

or private recreational use is less than one percent. In 1964, there were almost 1,000 farms in Dinwiddie County occupying an estimated 137,734 acres. By 1992, the number of farms had decreased to 344, occupying approximately 85,954 acres. Farm mechanization and urban expansion contributed to the decline. By 1997, the trend of decline had changed with 351 farms occupying 89,260 acres.

In Dinwiddie County two areas have been identified as critical environmental areas: Appomattox River area and the Nottoway River and Bottomlands area.

City of Petersburg

The City of Petersburg has two distinct patterns of residential development, an older, historic area lies north of I-85 and newer residential areas lie south of I-85. The City of Petersburg adopted a Historic Zoning Ordinance in 1973 to protect the architectural and cultural heritage of the city and has an Architectural Review Board that administers the ordinance. A number of non-profit and municipal groups provide guidance on preservation efforts in Petersburg. Commercial development within the city limits is concentrated along major roads emanating from the central business district and new development along Route 301 and Route 460. Industrial development occurs along the Appomattox River and in the southeast and southwest sections of Petersburg. Reclassification of 195 acres of industrially zoned land to commercial, railroad, or public use has been offset by new industrial development in or around Route 460 and on smaller parcels in the Downtown/Riverfront area. A total of 5,095 acres of undeveloped land is within the city limits with, 3,586 of those acres classified as being unsuitable for future developments.

The remainder is comprised of environmentally sensitive lands, including those regulated by the Chesapeake Bay Preservation Act of 1989, hundred-year floodplain areas, highly erodible soils and wetlands.

City of Hopewell

In its land use plan, the City of Hopewell identifies 17% of the existing city as available for potential development. Classification of developed land is as follows: 56% residential, 15% public, 5% commercial and 24% industrial. Three acres proposed for acquisition by the park at City Point are currently undeveloped and lie within a residential neighborhood adjacent to the current NPS unit at City Point. Much of the vacant land in the City of Hopewell has limitations on development due to environmentally sensitive conditions such as highly erodible soils, hundred-year floodplain areas and areas within the Chesapeake Bay Resource Management Area (RMA).

Planning Agencies and Comprehensive Plans

Dinwiddie County

In Dinwiddie County, a planning director and seven-member planning commission provide oversight on all planning, zoning, and land development activities. The County Board of Zoning Appeals reviews all zoning matters including variances and exceptions to zoning ordinances. The Planning Commission also undertook a complete revision of the 1996 comprehensive plan that resulted in the Dinwiddie Comprehensive Plan Update, 2002.

Prince George County

Similarly, Prince George County has a planning director and a seven-member planning commission as well as a County Board of Zoning Appeals. The Prince George County Comprehensive Plan was first adopted in 1978 and most recently updated in 1998.

City of Hopewell

The City of Hopewell Planning Commission prepared a comprehensive land use plan adopted by the City Council in December 2001. The Comprehensive Land Use Plan contains a Water Quality Protection Plan within the Land Use Plan as required of local governments within their jurisdiction by the Chesapeake Bay Local Assistance Board.

City of Petersburg

Petersburg first adopted a comprehensive plan in 1968; the most current plan was adopted by the City Council in December 2000. The current comprehensive plan was prepared under the direction of the City's Planning Department which consists of a Planning Commission and City Planner.

Appomattox Basin Industrial Development Corporation/Virginia Gateway Region Governed by a Board of Directors, the Appomattox Basin Industrial Development Corporation-a private, non-profit organization-provides assistance to corporate clients to find locations for their businesses in the Virginia Gateway Region which is comprised of five counties, Prince George, Dinwiddie, Chesterfield, Sussex, and Surry; and three cities, Hopewell, Petersburg, and Colonial Heights.

Crater Planning District

The Crater Planning District Commission is comprised of 10 local governments in southcentral Virginia. These are the cities of Colonial Heights, Emporia, Hopewell, and Petersburg, and the counties of Chesterfield, Dinwiddie, Greensville, Prince George, Surry and Sussex. The major focus of the Crater Planning District Commission is economic, industrial and small business development reflecting the priorities established by the member localities. Additional involvement of the Crater Planning District in environmental issues occurs in response to local needs and includes the Chesapeake Bay Preservation Act, air quality standards and solid waste management. The Commission also addresses regional transportation issues and assists localities in their transportation planning efforts.

Land Use and the Chesapeake Bay Preservation Act of Virginia

The Chesapeake Preservation Act of 1988 was adopted by the legislature of Virginia to improve the quality of water entering the Chesapeake Bay from drainages in Virginia. The Act requires each local government in Tidewater Virginia to designate preservation areas: areas that if developed would impact the water quality of the Bay and/or its tributaries. Chesapeake Resource Management Areas may also be designated by local governments for limited development in concert with Chesapeake Bay Act regulations. Prince George County and the Cities of Hopewell and Petersburg have lands designated under the Act. Dinwiddie County is not a jurisdiction in the Tidewater, however, the Dinwiddie County Comprehensive Plan recommends the identification of environmentally sensitive areas and the use of management practices and techniques to protect those areas.

Regional Open Space and Recreation Resources

The Crater Planning District-including the four jurisdictions of Prince George and Dinwiddie County and the Cities of Petersburg and Hopewell-currently provides 85% of the local and regional park acreage and facilities needed to meet the existing demand for outdoor recreational activities. Recommendations of the 2002 Virginia Outdoor Plan include providing additional opportunities for water-based recreation and close-to-home recreation such as ball fields and playgrounds. The plan also encouraged Petersburg NB and surrounding localities to develop additional opportunities for trails and linkages to other Civil War sites. Federal recreational facilities in the region include the James River National Wildlife Refuge in Prince George County which contains approximately 4,300 acres on the James River available for nature observation, environmental education and limited hunting.

Few state parks are established within the Petersburg region of influence. The Virginia Outdoor Plan 2002 recommends the evaluation of waterfront property as it becomes available along major tidal rivers or tributaries for potential acquisition and development as regional or state park land.

Dinwiddie County and Prince George County have regional park lands along portions of the Appomattox River. In Prince George County, near I-295, a small piece of property is being developed for fishing, picnicking and trails at the historic location of embarkation for federal troops during the siege of Petersburg. In Dinwiddie County, below Lake Chesdin is Appomattox Riverside Park, developed by the City of Petersburg. The Virginia Outdoor Plan recommends the expansion of recreation opportunities and a connection with the City of Petersburg waterfront via a trail system.

Appomattox River Corridor Plan

The Crater Planning District prepared an Appomattox River Corridor study through its Coastal Resources Management Task Force, the Appomattox River Corridor Working Group and the general public. The two-part study addresses existing conditions and recommends an action plan. The National Park Service's Rivers, Trails, and Conservation Assistance Program provided technical assistance support. In addition to the formation of the Friends of the Appomattox River non-profit group, ten recommendations were agreed upon, including the development of a regional trail system, the development of a brochure and self-guided tour map to illustrate river features and locations, and the development of a rail and river boat tour loop. These recommendations would increase the potential for tourism and recreation in the Home Front and City Point.

Lower Appomattox River Corridor Greenway Plan

As recommended by the Appomattox River Corridor Plan, the Community Design and Assistance Center of Virginia Technical College in Blacksburg, Virginia has created a conceptual greenway study of Appomattox River for the Friends of the Appomattox River organization. The study area consists of approximately 23 miles of the Appomattox River from Lake Chesdin to the confluence with the James River. The proposed trail may consist of bicycle and multi-purpose trails linking natural, cultural, heritage, and other linear open spaces between Lake Chesdin and City Point. A critical component of the

system is the Virginia Electric Power Company (VEPCO) Canal and the Petersburg waterfront where historic buildings and museums are located pertaining to the Civil War. The greenway would provide an additional attraction to the Home Front and City Point areas of Petersburg.

The Crater Planning District Commission has prepared a bikeway plan to assist the Tri-Cities area—Petersburg, Colonial Heights, Hopewell and portions of Chesterfield, Dinwiddie and Prince George Counties—with guidelines for bikeway planning. A bikeway system is proposed for northeastern Dinwiddie County with plans for a trail that will link the county's Civil War battlefield and historic sites with recreation areas.

Lee's Retreat Driving tours, including Wilson-Kautz Raid, Lee vs. Grant and the James River Plantations are within the Crater Planning District. A Birding and Wildlife Trail is currently under development by Virginia's Department of Conservation and Recreation and will link bird watching areas in the state. Richard Bland College which straddles Prince George and Dinwiddie Counties near the Globe Tavern battlefield and the Appomattox River canoe launch located in Dinwiddie County are the nominated birding trail locations in the region of influence. In Hopewell, the Cabin Creek Trail network will connect several recreational facilities and parks and could eventually connect to the Appomattox River Corridor Trail.

Infrastructure

Electricity

Dominion Virginia Power, a subsidiary of Dominion Power, supplies electric power to all four jurisdictions. Prince George County receives power from its generating facilities in Chesterfield and the Surry nuclear station on the James River. Prince George Electric Cooperative distributes electrical power to their customers in Prince George County. In Dinwiddie County and the City of Petersburg, Southside Electric Cooperative supplies electric power. Southside Electric Cooperative services the rural areas not supplied by Virginia Power and purchases electric power from both Virginia Power and Appalachian Electric Power.

Natural Gas

Natural Gas is available to all four jurisdictions through Columbia Gas of Virginia, a Columbia Energy Group distribution company. Two interstate transmission lines owned and operated by Columbia Gas traverse the western and central areas of Prince George County.

Water Supply

The Appomattox River Water Authority (ARWA) maintains Lake Chesdin, a 17-mile long impoundment on the Appomattox River and supplies water to Prince George and Dinwiddie Counties and the City of Petersburg. The ARWA treatment facility has a current capacity of 46 million gallons per day (mgd) with plans to expand in 2010 to supply up to 70 mgd.

Prince George County water customers also receive water from the Virginia American Water Company. The Virginia American Water Company supplies the Route 156 and Jefferson Park areas. The more rural areas of Prince George County obtain potable water from several county-operated systems.

The Dinwiddie County Water Authority furnishes water facilities in the northern portion of the County. Water is purchased from Dinwiddie County through the ARWA. As in Prince George County, many rural areas obtain their water supply from the local groundwater supply.

Petersburg maintains six water storage tanks that are located throughout Petersburg. Hopewell obtains its drinking water from the Appomattox River from a pumping station at the confluence of the James and Appomattox Rivers. Virginia American Water Company supplies water to Hopewell and suburban areas of Prince George County.

Wastewater Treatment

The collection of wastewater generated in Prince George County is under the jurisdiction of the Prince George County Utility Department. According to the Prince George County Comprehensive Plan Update (1998), nearly all of the densely populated areas of the County are connected to central sewage treatment facilities. As a member of the South Central Secondary Wastewater Authority, the wastewater is treated at facilities in Petersburg and Hopewell. These facilities can process 70 million gallons of effluent per day. The City of Hopewell Regional Wastewater Treatment Facility is a 50-mgd secondary treatment plant that also treats wastewater from Fort Lee. It was specifically designed to treat industrial waste. Dinwiddie County is also a member of the south Central Wastewater Authority located in Petersburg. Approximately one million gallons of effluent per day are treated from the northern portion of Dinwiddie County through this system. The Courthouse area of Dinwiddie County is also serviced by a 50,000 gallon per day sewage treatment plant constructed in 1993.

Solid Waste Collection and Disposal

Prince George County provides on site or door-to-door collection of solid waste for all residential, commercial, and industrial locations in the County. The service is contracted to private firms. The City of Petersburg operated a landfill for solid waste disposal until 1994 when it was turned into a drop-off facility receiving waste from Prince George County and the City of Petersburg. Dinwiddie County operates a transfer station and container sites for residential refuse and recyclables in multiple locations throughout the County. The transfer station is located near Five Forks. Both counties ceased landfill operations in 1994. All of the waste collected at the transfer stations is delivered to Atlantic Waste in Sussex County for disposal. The City of Hopewell contracts with a private waste hauler to pick-up and dispose of solid waste in the City; the waste is shipped to a landfill in Henrico County.

Hazardous Waste

There are no identified hazardous waste sites, superfund sites or archived sites in Petersburg NB or the proposed expansion lands. Most of the lands of interest are either agricultural/rural or forested. Prior to any land acquisition, a more specific and thorough assessment of potential hazardous waste sites will have to be conducted.

Transportation

The Petersburg area has a multi-modal transportation network. Air, rail, and water transportation is available in addition to the primary and secondary road network. According to the Draft Petersburg Comprehensive Plan (2000) traffic on these roads has a significant impact on local traffic patterns and the health of the local economy. Much of the area's congestion is due to peak demand commuter traffic. Prince George

and Dinwiddie Counties are projected to grow more than the cities. There is currently a movement from urban to suburban living that increases commuter traffic and highlights the need for public transportation.

Tri-Cities Transportation Area

The Tri-Cities Transportation Study Area is comprised of the cities of Petersburg, Colonial Heights and Hopewell, and portions of Chesterfield County, Prince George County and Dinwiddie County. Representatives from each locality, along with representatives from the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, Federal Highway Administration and Federal Transit Administration comprise the Metropolitan Planning Organization (MPO) for the Tri-Cities area.

The MPO is responsible for conducting the continuing, cooperative and comprehensive transportation planning process as required by the Transportation Equity Act for the 21st Century (TEA-21). The MPO consists of a Technical Committee comprised of staff representatives from governmental agencies and a Policy Committee comprised of local elected officials and appointed agency representatives. The Technical Committee advises the Policy Committee on the development of metropolitan transportation plans and programs for the Tri-Cities area. The Tri-Cities transportation study area is located in southeastern Virginia within the I-85. I-95 and I-295 travel corridors. Major arterial routes servicing the area are Virginia Route 10, Virginia Route 36, US 301, US 1, US 460, Virginia Route 156 and Virginia Route 144. The MPO encourages a multi-modal transportation system with highway, transit, rail, pedestrian and bicycle transportation that is accessible to its entire population.

Localities within the study area also have access to the international water ports and airports located in Richmond and Norfolk.

At the request of the Tri-Cities MPO and the Governor of Virginia, Tri-Cities was designated a Transportation Management Area (TMA) in 1994. This designation helps to assure consistency in development of transportation and transportation-related air quality plans and programs.

The transportation plan for Prince George County proposes improvements to the County transportation system in order to provide long-range planning in concert with the Tri-Cities MPO 2023 Transportation Plan (2000). Included are plans for a county arterial, Route 460 and the Route 156 widening to Hopewell city limits. Route 460 corridor improvements are the top regional transportation priority among local government leaders. Additional information is provided in Appendix B.

Public Transportation

Public transportation in the City of Petersburg is available through Petersburg Area Transit (PAT). PAT has a service area of approximately 6.7 square miles, with a service population of 30,000. Eight routes are operated out of a central transfer point in central downtown Petersburg. Hopewell has identified a need for mass transit within its limits. Currently there is no bus service within the city; a total of four taxi companies operate within the City of Hopewell. Trailways, Inc. provides inter-city bus service between Dinwiddie County and Petersburg. Dinwiddie County does not currently have an identified need for public transportation.

Air Service

Full commercial air service is provided at Richmond International Airport, approximately 30 minutes from Prince George County.

Rail Service

Amtrak supplies passenger rail service to the Petersburg area. The rail station is located in Ettrick on the north bank of Appomattox River. Norfolk Southern Railway and the Chesapeake Seaboard System Railroad (CSX) provide freight service. Norfolk Southern Railway is a major connector serving the East Coast from New York to Florida. CSX connects the Midwest with all major East Coast markets.

The United States Department of Transportation (USDOT) designated five high-speed rail corridors nationwide in 1992— including the Southeast Corridor from Washington, D.C. to Richmond, Raleigh and Charlotte. In response to the proposal for a southeast high-speed rail corridor, Virginia, North Carolina, South Carolina and Georgia created a four-state coalition to plan, develop and implement the Southeast High Speed Rail Corridor. The high-speed rail line is planned to ease the increasing highway and airport congestion in the southeast. Two alternatives were proposed: the "A-line" (preferred) which would parallel Interstate 95 and the "S- line" which would utilize an abandoned rail line from North Carolina, northeast to Petersburg and Richmond through Dinwiddie County. To minimize impacts to the environment, and reduce construction costs, the states plan to use primarily existing tracks and rail corridors. Modern highspeed trains will be used in the corridor to reduce travel time. A recommendation

report was completed in early 2002, indicating that Alternate A would have the best potential for high-speed rail service while having the fewest environmental impacts. The Final Environmental Impact Statement (EIS) was completed in June. The Federal Highway Administration and Federal Railway Administration issued a formal Record of Decision in October 2002. This federal document confirms and approves the corridor along the "A-line" route as recommended by the Tier I EIS.

Waterways

The Appomattox and James Rivers provide navigable waters along the coastline of Prince George County linking the county to Virginia's port facilities at Hampton Roads and Richmond.

Highways and Roads

Transportation to and from Petersburg NB encompasses the jurisdictions of Prince George and Dinwiddie Counties and the Cities of Hopewell and Petersburg. Four major north-south interstates, I-95, I-85, I-295 and US Route 460, bring travelers within a few miles of the Petersburg NB. I-95 is the principal north-south highway. I-85 originates in Petersburg and angles southwest through Dinwiddie County providing access to the Five Forks area of Petersburg NB and ultimately crosses into North Carolina. I-295 bypasses Petersburg and provides a connection for interstate highways and arterials. I-64 traverses the area east-west connecting to Norfolk-Hampton Roads in the east. US Route 460 crosses Dinwiddie County, passes through Petersburg and is a major business route for east-west traffic.

Secondary roads comprise the tour route from the Eastern Front to Grant's Headquarters at City Point. The tour route to the Five Forks Unit via the Siege Line Tour in the Western Front incorporates approximately 25 miles of secondary roads and streets. A third driving route, the Defense Line Tour, utilizes Simpson Road from Route 1 to Route 301. The Petersburg Comprehensive Plan states that US Routes 1, 301, 460 and VA Route 36 are all in good condition. Recent upgrades have been made to several area roadways including signalization in the mid-1990s.



Interpretive trails provide an opportunity to experience battlefield landscapes.

Future Planning

Several localities in the Tri-Cities area have been awarded Transportation Enhancement (TE) funds:

- Appomattox River Heritage Trail and Phase II
- Route of Lee's Retreat Consortium and Driving Tour
- Central Virginia Civil War Consortium— 51 historical sites—project intends to improve and interpret between Fredericksburg and Petersburg accessible from North and South
- Blandford Cemetery Wall restoration and Crater Road Corridor Plan—rebuilding and restoring the historic cemetery walls that line Crater Road and Rochelle Lane—western boundary of the cemetery.
- City Point's Rails and Waterways project
 to design pedestrian wayside exhibit
 system and landscaping, paths and to
 relocate utilities underground. Also
 envisioned is a continuous pedestrian trail
 extending along the streets of the City
 Point National Historic District in
 Hopewell to improve pedestrian
 circulation and deter vehicular traffic.
- White Oak Battlefield Site interpretation establish interpretation and landscape management program including land and viewshed protection measures, site maintenance, visitor safety measures and trail construction.
- Reams' Station and Hatcher's Run site interpretation by Civil War Preservation Trust.

TRAVEL AND TOURISM

Travel and tourism in the region centers on the heritage of the area. Tourists coming to the area can view Civil War sites including Petersburg National Battlefield, historical districts and museums. According to the Virginia Outdoor Plan 2002, Petersburg National Battlefield is the primary regional historic attraction. Pamplin Park, a privately owned 422-acre Civil War Park with museum, exhibits, plantation homes and historic battlefields in Dinwiddie County, provides additional opportunities to experience Civil War history.

Other tourism opportunities include historic plantations along the James River, historic walking tours developed for the City of Petersburg and in Hopewell, the Crescent Hills driving tour, and the African-American Heritage tour. In addition, two museums are available to the public at Fort Lee, the US Army Women's Museum and the US Quartermaster Museum. The region also lies between Williamsburg, Appomattox, and Richmond, three nearby areas of historic interest to regional visitors. Table 3 presents the economic impacts of travel and tourism in the Petersburg region for 1998 and 1999.

Role of the Park

Staff from the NPS Statistical Unit at the Denver Service Center used the Money Generation Model (MGM) and data collected in 2000 from the Eastern Front Visitor Center and Grants Headquarters at City Point to estimate the impact of park visitation on the local and regional economy. Using a visitor count of 50,783 in the MGM, total spending by visitors was estimated. Non-local day users represented 88% and the largest component of visitors to the park, having the greatest economic impact and

TABLE 3
TRAVEL ECONOMIC IMPACTS IN THE PETERSBURG REGION 1998 AND 1999

F	rince George Co.	Dinwiddie County	City of Petersburg	City of Hopewell				
Traveler Spending`1998	\$35,136,036	\$4,856,000	\$26,329,000	\$12,999,000				
Traveler Spending`1999	\$36,422,384*	\$5,535,000	\$27,866,000	\$13,033,000				
Change from previous year	r +3.7%	+14.0%	+5.8%	+0.3%				
Travel Payroll	\$7,866,448	\$1,266,000	\$6,354,	\$2,941,000				
Travel Employment	522	72	442	218				
*Figures for 1999 Prince George County are preliminary. Source: Virginia Tourism Corporation web-site.								

totaling over \$1.6 million across all spending categories. Expenditures for 'restaurants and bars' and 'souvenirs and other expenses' accounted for more than 50% of non-local day users' spending, totaling \$428,000 and \$425,000 each, respectively.

Altogether, it is estimated that visitors to the park account for close to \$2 million per year in spending in the local area and represent 2% of regional travel-related income. An approximate \$96,000 is also paid in local and state sales taxes by park visitors each year. Park-related tourism is responsible for 40 jobs in the region, or about 3% of travel-related employment.

Visitor Experience, Use & Facilities

The visitation data in this section was developed from two sources: Visitor Evaluation for Petersburg NB report cards (1996-1998) and the 1991 Visitor Services Project.

Attendance

Between 1993 and 1997, the average yearly attendance was 204,586 people. However, annual visitation declined at an average rate of 8.3 percent in that period, with a 1993

attendance of 254,617 and a 1997 attendance of 177,325. During this same period, the Eastern Front experienced a decline of 4.96 percent, City Point an increase of 1.33 percent and Five Forks an increase of 25.54 percent. The increases at City Point and Five Forks are not significant, as City Point represents approximately ten percent of total visitation and Five Forks one percent.

Visitor Characteristics

More than half of all park visitors come individually or in groups of two. A third of all visitors are in three and four person groups. The relatively high numbers of single people (15 percent) and couples (40 percent) reflect special interests in the Civil War or history in general. The highest attendance numbers are during the summer, when family groups are most common. About 68 percent of all groups are families.

Residents of Virginia represent 26 percent of all visitors. Approximately 15 percent come from neighboring states. The remainder of park visitors primarily come from states in the eastern part of the country. Ten to fifteen percent of park visitors are identified as residents of the region.

TABLE 4TOTAL SPENDING BY VISITORS TO PETERSBURG NATIONAL BATTLEFIELD, 2000

Expense Type L	ocal Day User	Non-local Day User	VFR C	Vernight Visitor	Total
Motel,hotel, cabin or B&B	0	0		\$134,000	\$134,000
Restaurants & bars	\$15,000	\$428,000	\$8,000	\$38,000	\$489,000
Groceries, take-out food/drinks	\$4,000	\$121,000	\$8,000	\$10,000	\$143,000
Gas, oil, and other vehicle cost	s \$6,000	\$260,000	\$6,000	\$17,000	\$289,000
Local Transportation	\$1,000	\$30,000	0	\$8,000	\$39,000
Admissions & Fees	\$5,000	\$207,000	\$2,000	\$12,000	\$226,000
Clothing	\$3,000	\$137,000	\$2,000	\$10,000	\$151,000
Sporting Goods	0	\$10,000	\$1,000	0	\$12,000
Souvenirs and other expenses	\$9,000	\$425,000	\$7,000	\$16,000	\$457,000
Total	\$42,000	\$1,618,000	\$36,000	\$245,000	\$1,940,000

Visitor Center and Contact Stations

Most people reach Petersburg NB on VA Route 36, following it from I-95 or I-295 to the Eastern Front. Visitors must stop at the entrance to the Eastern Front and pay an admission fee of \$3.00 per person or \$5.00 per car. Visitor contact stations are located in Appomattox Manor in City Point and at Five Forks in the converted gas station building on the battlefield.

The primary visitor center, located in the Eastern Front and built in 1967, is a polygonal brick building that echoes the shape of Fort Wheaton. A parking lot to the east serves both the visitor center and Battery 5.

The ground floor of the visitor center includes an information desk, bookstore, static exhibits and a map program. The basement contains a research library, archives, offices and is the focus of interpretive activity in the park. An overview of the geography of the region, a chronological description of the military actions associated with the Petersburg Campaign, and an introduction to the commanders and units engaged in these

military actions are provided through printed materials and the map program, as well as through presentations by park rangers.

The building is inadequate for some of its functions. It is not able to accommodate the park's current space requirements for large numbers of visitors and student groups or the storage of merchandise and exhibits. The exhibit area lacks the flexibility needed to accommodate new media and changing exhibits. The number of restrooms are inadequate for large groups.

The facility stands in the middle of the Petersburg-Assault battlefield, on ground better sited for interpretation. It is on a bluff site that commanded a view of the city at the site of major Union artillery positions and adjacent to the site of the Jordan house, used by Union and Confederate commanders during the campaign.

In Grant's Headquarters at City Point, the visitor contact station in Appomattox Manor provides park orientation and programs that focus on the Union logistics operation and

on the Eppes family. A video on the logistics operation is available. Two rooms of furnishings that have associations with the manor and the Eppes family are open to the public. Eastern National Association operates a small sales outlet. Restrooms are located to the west side of the house, though again inadequate to handle large groups.

In Five Forks, this visitor contact station is staffed year-round and provides visitor orientation and services using interpretive panels and maps. A few exhibits are located in this small building. Only a portable restroom located outside the building is provided.

Interpretive Themes and Media

Petersburg NB provides the visitor an orientation to the Petersburg Campaign and the opportunity to visit some of the associated battlefields and fortifications. Interpretive themes focus almost exclusively on the military events of the Petersburg Campaign and the commanders and units engaged in the actions. Education programs cover causes of the Civil War at Grant's Headquarters at City Point.

The Statement for Management identifies the interpretive goals for the park:

- Maintain the continuity of major resources and visitor experiences along the entire siege line in a way that allows visitors to understand the siege and defense of Petersburg.
- Create an atmosphere through which visitors can understand the hardships of the Civil War events at Petersburg.
- Using what remains of the field of battle, commemorate and interpret the campaign, siege and defense of Petersburg (1864-65) in the greater context of the Civil War.

The goals are achieved through a broad range of interpretive devices and programs including orientation programs at Appomattox Manor with a video presentation, a map show at the Eastern Front, park brochures and site bulletins, exhibits of artifacts and cannon tubes, wayside panels and other interpretive signs, informal and scheduled ranger-led programs.

Park Tour Routes

The fifteen sites on the two park tour routespresented in the tour brochure-include the visitor center at the Eastern Front and interpretive sites located on the four-mile Battlefield Tour within the Eastern Front and the 16-mile Siege Line Tour that connects sites to the Western Front and Five Forks. The sites represent nine of the 24 principal battles of the Petersburg Campaign.

Battlefield Tour

Visitors usually leave the visitor center to walk the short trail to Battery 5 along portions of the Dimmock Line, the original Confederate line for the defense of Petersburg. More adventurous visitors continue on to the site of a replica of the Dictator—an authentic Union sea-coast mortar that rained shells on the Confederate line. Visitors then return to their cars and travel through the Eastern Front on the oneway road, where segments of the Dimmock Line, Confederate and Union earthen forts and trench lines on the cores of the Initial Assault, Fort Stedman and Crater battlefields are interpreted. There are seven stops beyond the visitor center, most located at major earthen constructions. An introductory panel and other individual site markers provide information about the military events and historic sites at each stop. Memorials and other commemorative markers have been placed in some locations

to identify battle positions or specific battle participants.

This section of the tour ends when the visitor exits on to Crater Road about one mile south of VA Route 36, across from an entrance to interstate highways I-85 and I-95.

Siege Line Tour and Five Forks

This seven-stop drive takes the visitor westward from Crater Road along the Union siege line toward the series of forts southwest of the city, and ultimately to Five Forks. The route follows the ever-expanding Union line in a chronological tour of the campaign.

Poplar Grove National Cemetery, located along the Western Front is staffed in the summer months and restrooms are available.

An alternate stop along the driving tour is Grant's Headquarters at City Point.

The Petersburg brochure identifies the location of City Point, and offers a short paragraph on this site. Because City Point is approximately eight miles from the Eastern Front visitor center, many visitors are not encouraged to travel this distance, so instead they drive through the Eastern Front and then leave the area.



Education Specialist describing the Campaign by using living map.

Each interpretive stop on the Siege Line Tour is oriented to a major fortification and includes an introductory wayside and smaller interpretive signs. The sites along the route are small and surrounded by development. Most are forested and few provide visitor services, although Fort Wadsworth, Fort Conahey and Confederate Fort Gregg have been cleared and are visible to the passing visitor. Five Forks is the final stop on this tour.

Special Programs

A curriculum-based education program was established in 1998, operated by an education specialist, in an effort to provide classroom and field trip programs to local school systems. Student participation in field trip and outreach programs has dramatically increased from 1998 to 2002, with nearly 10,000 students participating in field trip and classroom programs. More local schools

requested programs than could be served. The potential audience may be between 40,000 and 60,000 students, given the level of interest and number of requests. The education specialist position has not always been filled, and even when it is filled, the level of staffing is not adequate to meet demand and size of the student groups. In addition, staff is needed to assist with a summer camp program that has provided over 250 young visitors annually, an opportunity to experience life as a Civil War soldier.

Ranger-led battlefield bus tours have been sponsored periodically by the park and local historic and tourism organizations. The tours are usually held during the summer or on spring and fall weekends and are always filled. Spaces on the three special bus tours held in 1998 were reserved well before the program date. The experience suggests that there is a substantial audience for parkrun or park-assisted tour programs.

Appomattox Manor tours consist of two rooms of the manor and are furnished with Eppes family items. The manor draws visitors interested in historic houses and plantations. This is an area of interpretation and visitor interest that could be developed further.

Visitor Use

The typical visit to the park begins with an orientation at the Eastern Front visitor center and includes a tour of Battery Five and visits to Fort Stedman and the Crater. Often this visit takes several hours, after which visitors leave the park. Some visitors continue on to other sites, although there is a sharp drop-off in numbers at other sites. Civil War enthusiasts are the most likely to pursue the tour through all of the interpretive stops.

Most visitors stay at the park for two to four hours. There is a general perception that the Eastern Front is the whole Petersburg NB with less than a quarter of these visitors going on to the other units. Several factors reinforce visiting the Eastern Front solely:

- Visitors do not allow enough time for an extended visit, and need to 'continue on' after visiting the Eastern Front;
- Visitors receive little or no information about the other NPS and community sites;
- Visitors get lost along the tour route because of inadequate signage, confusion



Living History at the Eppes Plantation, City Point

due to too many types of historic signs, and/or inherent difficulty in navigating a 36-mile tour route on local roads; and

 Visitors may have a limited interest in the Civil War.

Recreational Facilities

Horseback riding is increasing in the park. Word-of-mouth promotions among riders have brought visitors from as far away as Maryland. One of the most frequent comments is "I come here because there is no other big place closer to home."

Riding is primarily restricted to the Eastern Front and to those trails that do not go through Fort Stedman and the Crater. Horses are restricted on the park tour road. Horse-trailer parking is accommodated in a parking lot at the Eastern Front.

In addition to horseback riding, joggers, hikers, and bikers enjoy using the paved and wooded recreational trails through the battlefield. These trails attract many locals who use them on a daily and weekly basis.



A picnic area has been created between Stops 3 and 4 on the tour route. The site comprises a parking lot and a dozen picnic tables. Visitors informally picnic at many different spots in the Eastern Front and at Grant's Headquarters at City Point.

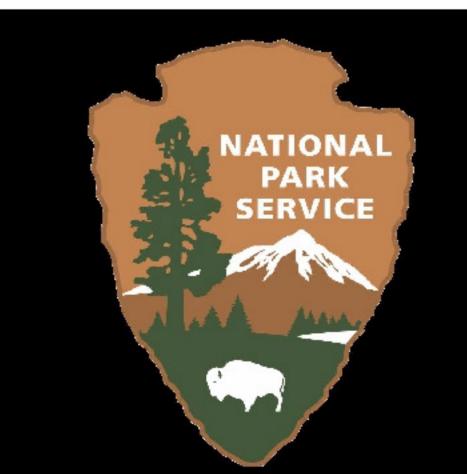
Limited access for fishing along the James River is provided at Grant's Headquarters at City Point.

Fort Lee Cooperation

Fort Lee Military Base and Petersburg National Battlefield have enjoyed a cooperative relationship for many years. The base and the park have formed many partnership agreements to facilitate a variety of activities from sports and recreation to resource management. Cooperative agreements include the following:

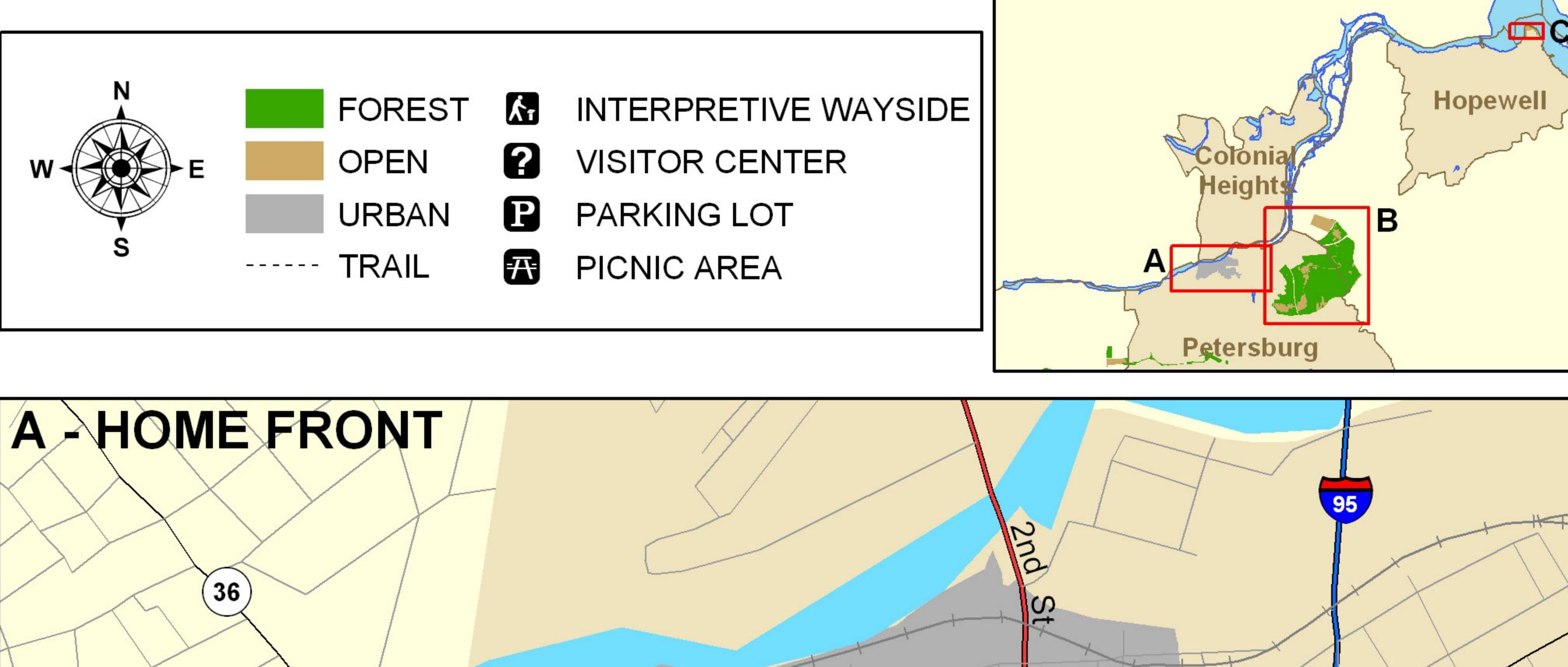
- A Memorandum of Understanding (MOU) to provide Fire and EMS support to the Eastern Front.
- Fort Lee allows the park to use their downlink station for Technology Enhanced Learning courses.
- Mutual assistance between Fort Lee's Environmental Staff and the park's Resource Management Division and the base's Information Technology Division and Resource Management.
- Fort Lee Intramural Sports provides sport facilities for park events and activities while the park assists them with an annual Armed Forces Day Run held in the park.
- Fort Lee Safety Office assists the park with expertise, publications and video use.
- An agreement is in place to allow military personnel to use the park during the early morning hours for physical training.
- One of the base's water storage facilities lies on park grounds while the park's visitor center/maintenance facilities water feeds off of Fort Lee's water lines.
 Agreements and permits are in place to cover these various uses.
- The park is currently working on an agreement to rent part of the base's curatorial storage facility to house park collections.

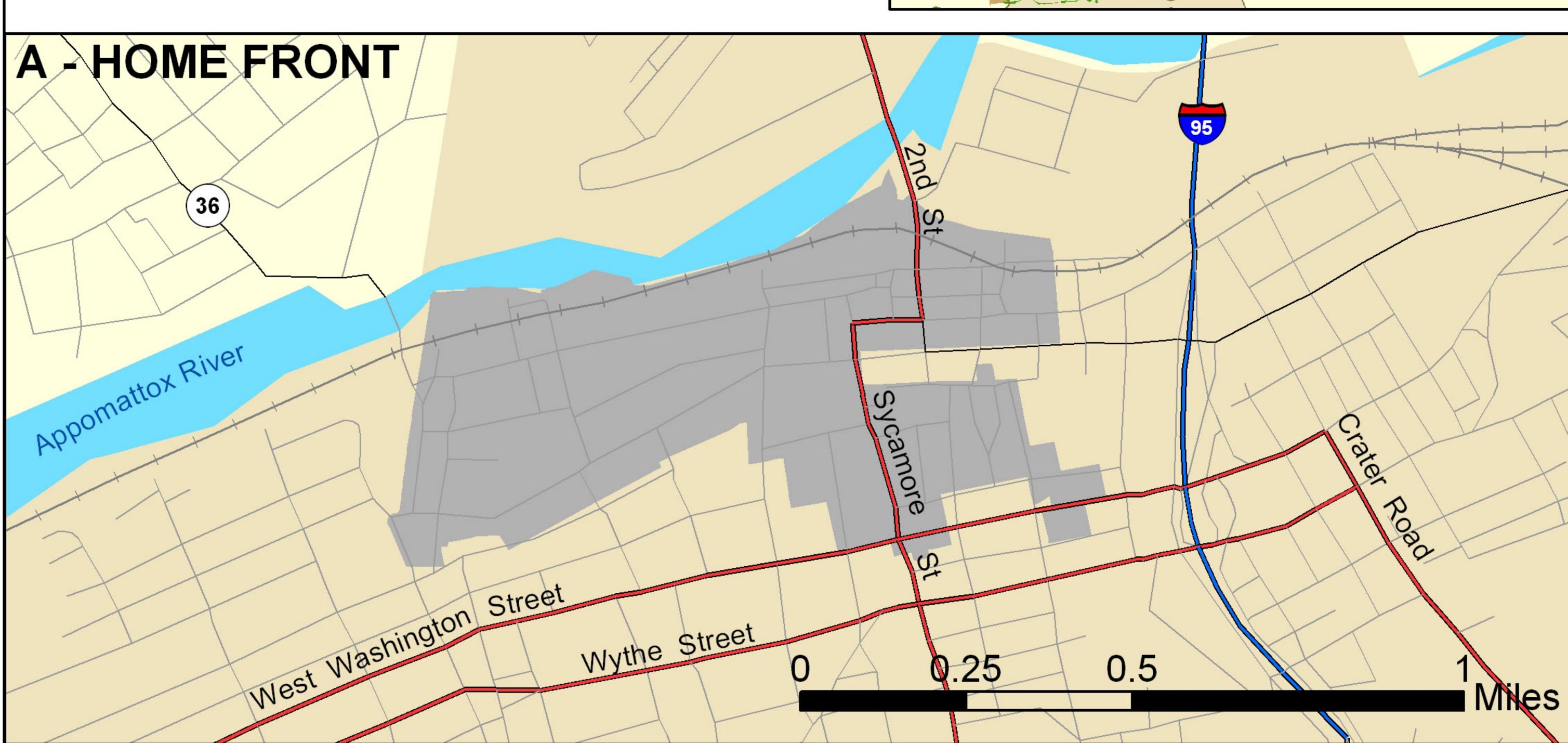
Petersburg National Battlefield

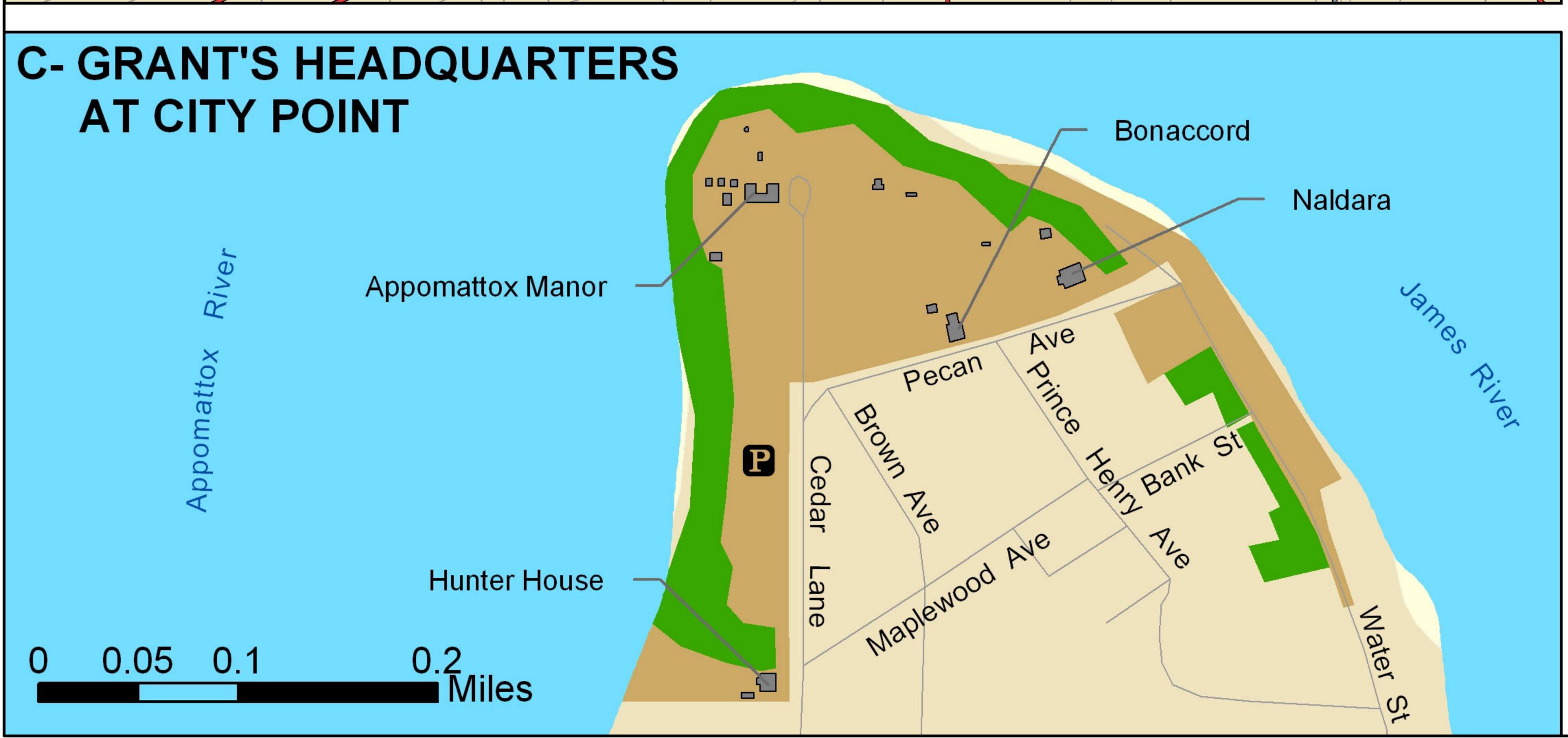


Existing Land Cover

Home Front, Eastern Front & Grant's Headquarters at City Point

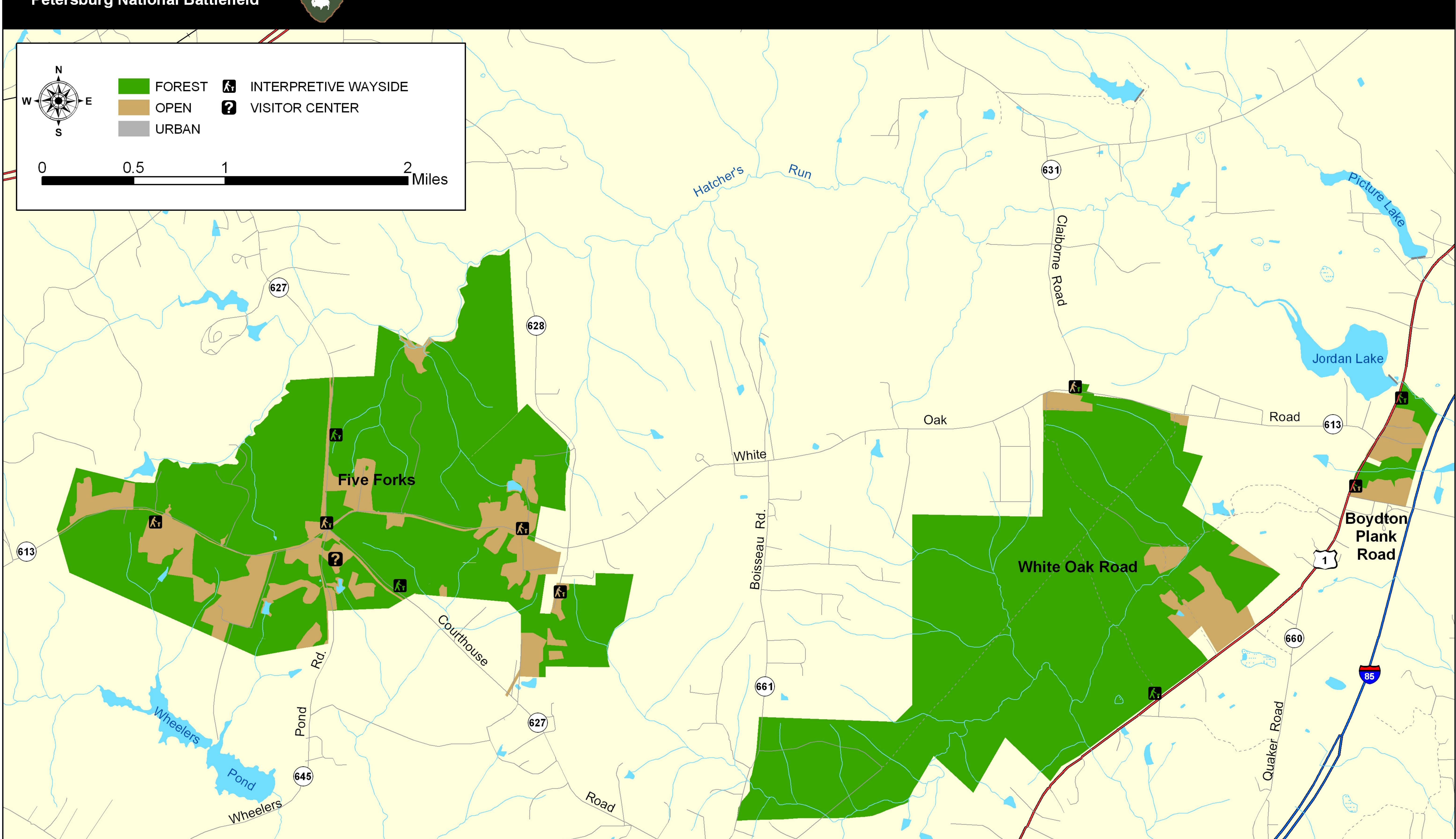








Existing Land Cover Five Forks





Environmental Consequences

Environmental Consequences of Alternatives

The discussion of environmental consequences, or impacts, is intended to provide an analysis of the effects reasonably expected from the adoption of each alternative. This chapter describes the potential impacts of the General Management Plan alternatives on the affected environment of the park, including lands proposed for boundary expansion, and describes proposed mitigation measures associated with the alternatives.

Impacts were evaluated in this document at a level that would permit decisions about the overall management objectives of each alternative plan. Environmental consequences were evaluated as specifically as possible using Council on Environmental Quality (CEQ) regulations including type, context, duration and intensity. The CEQ implements the National Environmental Policy Act of 1969 (NEPA). Specific actions would require further site-specific environmental assessment in compliance with NEPA and other applicable laws and policies.

STATUTORY REQUIREMENTS

Four primary laws, or statutory requirements guided the development of this EIS:

Antiquities Act of 1906, as amended (16 USC 431-433)

Authorizes the President to declare national monuments, historic landmarks, historic and prehistoric structures and other object of historic or scientific interest.

National Park Service Organic Act of 1916 (16 USC 1-4, et seq.)

To promote and regulate the use of national parks, monuments and reservations, by such means and measures as to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the land in such manner as will leave them unimpaired for the enjoyment of future generations.

The National Historic Preservation Act of 1966, as amended (16 USC 470)

To protect and preserve historic districts, sites and structures and archeological, architectural and cultural resources. Section 106 and Section 110 require consultation with the State Historic Preservation Office and that NPS nominate all eligible resources under its jurisdiction to the National Register of Historic Places.

The National Environmental Policy Act of 1969

Public Law 91-190 established a broad national policy to improve the relationship between humans and their environment, and sets out policies and goals to ensure that environmental considerations are given careful attention and appropriate weight in all decisions of the Federal Government. This is the legislation which requires and guides the preparation of this Environmental Impact Statement.

A listing of additional relevant laws, regulations and policies that guide NPS management of the park is also provided in Chapter 5.

Methodology

Impacts are predicted according to six major categories: cultural resources, natural resources, interpretation and the visitor experience, the socioeconomic environment and infrastructure including transportation and park operations. Cumulative effects, where they have been identified, are then discussed. The finding of each category is summarized in a conclusion. Proposed mitigation measures are presented for impacts on cultural and natural resources in alternatives B, C and D.

For each category of resource, impact descriptions are presented in the following format:

- Definitions of Intensity Levels.
 This describes the intensity of effects on resources: negligible, minor, moderate or major.
- Impacts from Alternative A, the No Action alternative. This provides the baseline for comparison of the impacts from the action alternatives B, C and D.

- Impacts from management prescriptions Common to all Action Alternatives
- Impacts from Alternative B
- Impacts from Alternative C
- Impacts from Alternative D
- Cumulative Impacts
- Conclusion
- Mitigation

Intensity definitions used for natural resources, socio-economic environment and visitor use and experience are:

Unknown: impacts can not be predicted

Negligible: *impacts may occur but their effects are not measurable on the*

resource

Minor: *impacts occur and are*

detectable but would not have any long-term effects on the resource; small short-term

impacts are likely

Moderate: *impacts are detectable and*

may cause short-term repairable disruptions to the resource

Major: *impacts are detectable and may*

have permanent effects to the resource; impacts may be short-term or long-term in

duration.

Intensity definitions used for cultural resources differ according to resource type and will be introduced before each resource topic.

Impairment

The potential for impairment is also considered for each resource, but its definition remains constant: a major, adverse impact to a resource or value whose conservation is:

(I) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of

- Petersburg National Battlefield; or
- (2) key to the natural or cultural integrity of the park; or
- (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Cumulative Effects

The Council on Environmental Quality (CEQ) regulations, which implements the National Environmental Policy Act of 1969

Historic District and Petersburg National Battlefield; the National Historic Landmarks form for Five Forks; the Background Information of Petersburg National Battlefield General Management Plan (1998), Major Battles Associated with the Petersburg Campaign (1998), 75 percent draft Petersburg National Battlefield National Register Nomination (1998), List of Classified Structures (1997), Preliminary Assessment of Five Forks (1999), Battlefield Landscape Resource Documentation (1999),



Camp group learning about local resources soldiers might depend on during the war.

(42 USC 4321 et seq.), requires assessment of cumulative impacts in the decision making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for both the no-action and action alternatives.

Cultural Resources

Inventories, maps and evaluations from other sources were used for the resource descriptions and used as a base for the assessments including the National Register forms for Appomattox Manor, City Point Archeological Assessment (1996), Background Information (1998), 50 percent draft Cultural Landscape Report for Crater Battlefield (2000), 50 percent draft Cultural Landscape Report for Federal Left Flank and Fishhook Siege Lines (2000); and the park facilities lists.

The park has an exhaustive library on the Petersburg Campaign and this report used park brochures and program notes whenever possible to summarize the information. The Administrative History of Petersburg National Battlefield (1983) and the Master Plan for Petersburg National Battlefield (1965) have been used to describe management decisions and facility development from the post-Civil War era through the War Department period and to the current NPS management.

Impacts to cultural resources were assessed using §106 of the National Historic Preservation Act and NEPA. Resources were identified and evaluated by:

- I. determining the area of potential effects;
- identifying cultural resources present in the area of potential effects that are listed in or eligible to be listed in the National Register of Historic Places;
- applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the National Register; and
- 4. considering ways to avoid, minimize or mitigate adverse effects.

The Advisory Council for Historic Preservation's regulations requires a determination of either adverse effect or no adverse effect for National Register-eligible cultural resources. An adverse effect occurs whenever an impact alters-directly or indirectly-any characteristic of a cultural resource that qualify it for inclusion in the National Register, including diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling or association. Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance or be cumulative. A determination of no adverse effect means there is an effect but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register.

Natural Resources

The most current natural resource information available was gathered from available documents, inventory databases and web-site searches. Current resource

information from state and/or federal mapping projects for floodplains wetlands, agricultural soils, etc., was applied by the park's Geographic Information System (GIS) database to park and regional maps.

For each alternative, several topics related to the impact analysis are addressed: environmental justice, energy, and the sustainability and long-term management of the park. The topic of sustainability includes the relationship between short-term uses of the environment and enhancement of long-term productivity; irreversible or irretrievable commitments of resources should the alternative be implemented; and adverse impacts that cannot be avoided should the alternative be implemented.

Because site-specific designs for most actions have not been developed, affected acreage for land-use and vegetation changes and soil disturbance are estimates.

Social and Economic Environment

Local governments and regional planning agencies—Crater Planning District Commission and Tri-Cities Area Metropolitan Planning Organization supplied information about the community structure, transportation and infrastructure, as well as comprehensive planning documents. Additional information on demographics, economic development and the park's contribution to its economy and quality of life were based on web-site, data bases and local planning information. Interviews with local officials, community leaders and other historic site managers yielded anecdotal information on experiences with the park, the park's current contribution to local economies and potential impacts of the alternatives.

IMPACTS TO CULTURAL RESOURCES

Historic & Designed Landscapes

Definitions of Intensity Levels

Negligible: Impact is at the lowest levels of detection — barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor:

Adverse impact—impact would not affect the character defining features of a National Register of Historic Places eligible or listed cultural landscape.

Beneficial impact—preservation of character defining features in accordance with the Secretary of the Interior's standards, to maintain existing integrity of the cultural landscape. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate: Adverse impact—impact would

alter a character defining feature(s) of the cultural landscape but would not diminish the integrity of the landscape to the extent that its National Register eligibility is jeopardized.

Beneficial impact—

rehabilitation of a landscape or its features in accordance with the Secretary of the Interior's standards, to make possible a compatible use of the landscape while preserving its character defining features. For purposes of Section 106, the determination of effect would be no adverse effect.

Major:

Adverse impact—impact would alter a character defining feature(s) of the cultural landscape, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed in the National Register. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact—restoration in accordance with the Secretary of the Interior's standards, to accurately depict the features and character of a landscape as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be no adverse effect.

Alternative A: No-Action

Existing interpretive vistas and the pattern of forested to open fields would be maintained inside the park's boundaries. Vistas and viewsheds which incorporate lands outside the park's boundary would likely eventually be lost as development encroached having a moderate adverse impact.

Impacts Common to All Action Alternatives

The action alternatives would have a moderate beneficial impact on historic and designed landscapes. Expanding the park's boundary to include more of the landscapes associated with the Petersburg Campaign or buffering existing resources will ensure that the park's goal of educating the American people about the Campaign, its causes and impacts is better met.

Alternative B

Moderate beneficial impacts to the park's historic and designed landscapes will result from the proposed boundary expansion. The inclusion of additional battlefield resources will protect not just those resources, but the park's existing resources, and help to enhance the expanded interpretive program proposed under the action alternatives.

Alternative C

While the boundary expansion is not as extensive as in Alternatives B and D, impacts to historic and designed landscapes will be moderately beneficial as the park boundary increases to protect existing resources.

Alternative D

As in Alternative B, Alternative D will have moderate beneficial impacts on historic and designed landscapes.

The inclusion of additional battlefield resources associated with the Petersburg Campaign will enhance existing park resources as well as the interpretive program.

Selected battlefields will be rehabilitated to reflect the 1864/1865 landscape-the patterns of fields to forests will be managed to maintain the historic character-to facilitate visitors' understanding of the events for which this park has been established.

Conclusion

Although the No-Action alternative will have a moderate adverse impact on the park's cultural landscapes of the park, none of the alternatives will have actions that will cause an adverse effect or be considered impairment under Section 106 guidelines.

Historic Structures

This analysis includes earthworks, commemorative resources and monuments, roads and road traces and railroads.

Definitions of Intensity Levels

In order for a structure or building to be listed in the National Register of Historic Places, it must be associated with an important historic context, i.e. possess significance - the meaning or value ascribed to the structure or building, and have integrity of those features necessary to convey its significance, i.e. location, design, setting, workmanship, materials, feeling, and association (see National Register Bulletin #15, How to Apply the National Register Criteria

for Evaluation). For purposes of analyzing potential impacts to historic structures/ buildings, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: *Impacts is at the lowest levels*

of detection—barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor:

Adverse impact—impact would not affect the character defining features of a National Register of Historic Places eligible or listed structure or building.

Beneficial impact—

stabilization/preservation of character defining features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, to maintain existing integrity of a structure or building. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate: Adverse impact—impact would alter a character defining feature(s) of the structure or building but would not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized.

Beneficial impact—

rehabilitation of a structure or building in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, to make possible a compatible use of the property while preserving its character defining features. For purposes of Section 106, the determination of effect would be no adverse effect.

Major:

Adverse impact—impact would alter a character defining feature(s) of the structure or

building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed in the National Register. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact —restoration in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, to accurately depict the form, features, and character of a structure or building as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be no adverse effect.

Alternative A: No-Action

All buildings and structures would be maintained in their current conditions using current management practices.

At City Point, taking no further actions except maintaining the current conditions of Appomattox Manor and its Kitchen/ Washhouse, Dairy, Old Smokehouse as well as Grant's Cabin, Bonaccord and Hunter House would have minor adverse impacts on these resources.

There would be negligible impacts to the CCC -era Operations Building in the Eastern Front.

Poplar Grove's Lodge and Stable would have moderate adverse impacts under this no-action alternative as these buildings continue to be uninhabited. This no action alternative will also have moderate adverse impacts on the Utility Building, Bandstand and Cemetery Wall at Poplar Grove National Cemetery. These structures are deteriorated and would require immediate action to be stabilized or preserved.

Taking no action will have moderate adverse impacts on the New Smokehouse, Carriage

House, Gazebo, Bonaccord and Hunter House Garages and Naldara—all at Grant's Headquarters at City Point.

Impacts Common to All Action Alternatives

Under the action alternatives, historic buildings and structures that need attention beyond routine maintenance and stabilization will receive it. Some structures, such as Appomattox Manor and Bonaccord will be rehabilitated to a greater extent in Alternatives C and D to implement plans for a historic house-museum and new visitor contact station, respectively having moderate beneficial impacts both in terms of the physical integrity of the structures and the interpretive program.

Alternative B

With most of the park's staffing and financial resources geared towards preserving battlefield resources inside and outside the park, most historic buildings and structures will be stabilized and preserved. This will not have adverse impacts in regards to the actual resources, but may be seen as having negative impacts for the interpretive program. For example, Appomattox Manor would continue to accommodate both administrative and visitor contact functions.

Alternative C

This alternative proposes to use the park's resources to a much greater extent to animate and bring to life the expanded interpretive themes. Appomattox Manor in City Point would be rehabilitated into a historic house-museum, moving administrative and visitor contact uses to Bonaccord. The rehabilitation would also include the manor out-buildings. All the rehabilitation activities described would have major beneficial impacts to the buildings, structures and the interpretive program.

Bonaccord would be rehabilitated to accommodate visitor services, park administrative needs and potentially a retail sales area. Major beneficial impacts are anticipated to Bonaccord under this alternative.

Rehabilitating the historic CCC-era Operations building in the Eastern Front will have major beneficial impacts on this structure as well as help to fulfill the park's need for additional education and training space.

Alternative D

Same as Alternative C.

Conclusion

There will be no impairments or adverse effects to historic buildings or structures under any of the alternatives.

Earthworks

Alternative A: No-Action

Earthworks that remain under forest cover could experience moderate adverse impacts as a result of storm events that cause trees to uproot. Impacts to earthworks that have been cleared of trees will experience moderate beneficial impacts as current management practices continue to ensure resource protection by preventing erosion.

Impacts Common to All Action Alternatives

The action alternatives stabilize, preserve and maintain earthworks based on slightly different objectives than the No Action Alternative. Some actions call for certain vistas to be cleared or to remain cleared, and others to stay under light forest cover. Other actions seek to return the landscape to its 1864/1865 pattern of forested to open land to foster a better understanding of the battle actions that took place.

The action alternatives seek to use the best

available methods for preserving earthworks, including the best seed mix to prevent erosion, selected tree removal and other routine maintenance activities. The action alternatives will have moderate beneficial impacts on the park's earthworks.

Alternative B

With the emphasis of this alternative on the preservation and protection of additional battlefield resources, earthworks will be maintained using current management practices, including maintaining the existing pattern of field to forest and removing trees that threaten integrity. As in the No Action Alternative, these management practices can have moderate beneficial impacts to earthworks that have been cleared of tree and moderate beneficial impacts to earthworks the continue to be under tree cover.

Alternative C

Same as "Common to All."

Alternative D

Rehabilitating selected resources to reflect the 1864/1865 character will help to preserve and protect earthworks as trees are removed from the resource and appropriate planting ensures minimal erosion. There will be moderate beneficial impacts to both the resources and the interpretive program as a result of this rehabilitation.

Conclusion

There will be no impairments or adverse effects to earthwork resources under any of the alternatives.

Roads and Road Traces

Alternative A: No-Action

Existing roads, historic roads and road traces within park boundaries would remain in their current conditions, having minor beneficial impacts. Historic roads outside the park would continue to be threatened by development, essentially deteriorating any historic character traits, potentially having major adverse impacts with adverse effects.

Impacts Common to All Action **Alternatives**

Expansion of the park's boundary will have minor beneficial impacts on historic roads and road traces.

The park would continue to have little control over those roads and road traces outside of park boundaries.

Alternative B

Same as "Common to All."

Alternative C

Same as "Common to All."

Alternative D

Same as "Common to All."

Railroads

Alternative A: No-Action

Minor beneficial impacts are anticipated to rail line resources within the park's boundary as a result of this alternative.

Impacts Common to All Action **Alternatives**

Minor beneficial impacts are anticipated to rail line resources within existing park boundaries as a result of the action alternatives.

Alternative B

Same as "Common to All."

Alternative C

Same as "Common to All."

Alternative D

Same as "Common to All."

Archeological Resources

Definitions of Intensity Levels

Certain important research questions about human history can only be answered by the actual physical material of cultural resources. Archeological resources have the potential to answer, in whole or in part, such research questions. An archeological site(s) can be eligible to be listed in the National Register of Historic Places if the site(s) has yielded, or may be likely to yield, information important in prehistory or history. An archeological site(s) can be nominated to the National Register in one of three historic contexts or levels of significance: local, state, or national (see National Register Bulletin #15, How to Apply the National Register Criteria for Evaluation). For purposes of analyzing impacts to archeological resources, thresholds of change for the intensity of an impact are based upon the potential of the site(s) to yield information important in prehistory or history, as well as the probable historic context of the affected site(s):

Negligible: *Impact is at the lowest levels of* detection, barely measurable with no perceptible consequences, either adverse or beneficial, to archeological resources. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor:

Adverse Impact—impact affects an archeological site(s) with the potential to yield information important in prehistory or history. The historic context of the affected site(s) would be local. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact —preservation of a site(s) in its natural state. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate: Adverse Impact—impact affects an archeological site(s) with the potential to yield information important in prehistory or history. The historic context of the affected site(s) would be state. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact —stabilization of the site(s). For purposes of Section 106, the determination of effect would be no adverse effect.

Major:

Adverse Impact—impact affects an archeological site(s) with the potential to yield important information about human history or prehistory. The historic context of the affected site(s) would be national. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact —active intervention to preserve the site. For purposes of Section 106, the determination of effect would be no adverse effect.

Alternative A: No-Action

Park archeological resources including sites and ruins would be maintained in their current conditions and would continue to be managed using current management practices. Actions to archeological resources under this alternative would have moderate beneficial impacts and no adverse effects.

Impacts Common to All Action Alternatives

Archeological resources will be stabilized and preserved in good condition, preventing loss or damage to these resources.

Ethnographic research will be encouraged

under the action alternatives. Minor beneficial impacts will result from the action alternatives.

Alternative B

Same as "Common to All."

Alternative C

Same as "Common to All."

Alternative D

Same as "Common to All."

Ethnographic Resources Definitions of Intensity Levels

Certain important questions about human culture and history can only be answered by gathering information about the cultural content and context of cultural resources. Questions about contemporary peoples or groups, their identity, and heritage have the potential to be addressed through ethnographic resources. As defined in the National Park Service, an ethnographic resource is a site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. Some such specific places of traditional cultural use may be eligible for inclusion in the National Register of Historic Places if they meet national register criteria for traditional cultural properties (TCPs). For purposes of analyzing potential impacts to ethnographic resources, the thresholds of change for the intensity of an impact are defined below.

Negligible: Impact(s) would be barely perceptible and would neither alter resource conditions, such as traditional access or site preservation, nor the relationship between the resource and the affiliated group's body of beliefs and practices. There would be no change to a group's body of beliefs and practices. For purposes of Section 106, the determination of effect on TCPs would be no adverse effect.

Minor:

Adverse impact—impact(s) would be slight but noticeable and would neither appreciably alter resource conditions, such as traditional access or site preservation, nor the relationship between the resource and the affiliated group's body of beliefs and practices. For purposes of Section 106, the determination of effect on TCPs would be no adverse effect.

Beneficial impact—would allow traditional access and/or accommodate a group's traditional practices or beliefs. For purposes of Section 106, the determination of effect on TCPs would be no adverse effect.

Moderate: Adverse impact— *impact(s)*

would be apparent and would alter resource conditions. Something would interfere with traditional access, site preservation, or the relationship between the resource and the affiliated group's beliefs and practices, even though the group's beliefs and practices would survive. For purposes of Section 106, the determination of effect on TCPs would be adverse effect.

Beneficial impact—would facilitate a group's beliefs and practices. For purposes of Section 106, the determination of effect on TCPs would be no adverse effect.

Major:

Adverse impact— impact(s) would alter resource conditions. Something would block or greatly affect traditional access, site preservation, or the relationship between the resource and the affiliated group's body of beliefs and practices, to the extent that the survival of a group's beliefs and/or practices would be jeopardized. For purposes of Section 106, the determination of effect on TCPs would be adverse effect.

Beneficial impact—would encourage a group's beliefs or practices. For purposes of Section 106, the determination of effect on TCPs would be no adverse effect.

Alternative A: No-Action

Existing ethnographic resources would remain in their current conditions. Ethnographic information on the people and events associated with the Petersburg Campaign, including Appomattox Manor, would not be further researched and new information would not be incorporated into the interpretive program. Important information that would bring to light and animate this period in history-civilian life, plantation life, social, economic and political realities of the time and the area-would be untold or lost. Taking no further or additional actions to research or expand on ethnographic resources under this alternative can have moderate adverse impacts potentially leading to an adverse effect under current management conditions.

Impacts Common to All Action Alternatives

Ethnographic resources will be stabilized and preserved in good condition, preventing loss or damage to these resources. Ethnographic research will be encouraged under the action alternatives. Minor beneficial impacts will result from the action alternatives.

Alternative B

Same as "Common to All."

Alternative C

Same as "Common to All."

Alternative D

Same as "Common to All."

Monuments & Commemorative Resources

Alternative A: No-Action

There would be minor adverse impacts to existing monuments within park boundaries under this alternative. Current maintenance and management practices would continue.

Poplar Grove National Cemetery would continue to be managed in its current condition. Maintaining the headstones in their current horizontal positions would provide a less than ideal visitor experience and detract from the effect the original design was meant to evoke. Also, not taking action on the cemetery wall would result in further deterioration. Taking no action in Poplar Grove NC would have moderate adverse impacts to the resources and the visitor experience.

Impacts Common to All Action Alternatives

The Eastern Front monuments will not be negatively impacted as a result of any of the action alternatives. The park will continue to enforce NPS policy of not adding new monuments to the park, as this would have a diminishing effect on existing monuments and the landscape.

Poplar Grove National Cemetery will be positively impacted as a result of improvements such as the replacement of cut headstones. The improvements will not just benefit the resources themselves, but will contribute to the overall visitor experience.

Alternative B

Commemorative resources and monuments will continue to be maintained in their current conditions, using current management practices, except for significant features at

Poplar Grove National Cemetery such as the headstones, which will be repaired and replaced. Actions to monuments under this alternative will have minor beneficial impacts. Actions to Poplar Grove National Cemetery under this alternative will have moderate beneficial impacts.

Alternative C

Replacing the headstones at Poplar Grove and rehabilitating other design features such as the wall will have moderate beneficial impacts on this National Cemetery. The visitor experience will be positively impacted as a result of this alternative. Actions to monuments will be the same as Alternative B.

Alternative D

Poplar Grove National Cemetery will be rehabilitated to so that not just individual design features are repaired or replaced such



as the headstones and wall as in Alternative C, but the cultural landscape setting in its entirety will be addressed. Examples of this rehabilitation might include using appropriate vegetation to shield development, assessing existing vegetation and conducting a management plan. This alternative will have major beneficial impacts on Poplar Grove. Actions to monuments will be the same as Alternative B.

Conclusion

No adverse effects would occur to commemorative resources and monuments as a result of any of the alternatives.

Library, Collections & Archives

Definitions of Intensity Levels

Park library, collections (historic artifacts, natural specimens, and archival and manuscript material) may be threatened by fire, theft, vandalism, natural disasters, and careless acts. The preservation of museum collections is an ongoing process of preventative conservation, supplemented by conservation treatment when necessary. The primary goal is preservation of artifacts in as stable condition as possible to prevent damage and minimize deterioration. For purposes of analyzing potential impacts, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: *Impact is at the lowest levels of* detection, barely measurable with no perceptible consequences, either adverse or beneficial, to museum collections.

Minor:

Adverse impact—would affect the integrity of few items in the museum collection but would not degrade the usefulness of the collection for future research and interpretation.

Beneficial impact —would stabilize the current condition of the collection or its constituent components to minimize degradation.

Moderate: Adverse impact—would affect the integrity of many items in the museum collection and diminish the usefulness of the collection for future research and interpretation.

> **Beneficial impact** — would improve the condition of the collection or its constituent parts from the threat of degradation.

Major:

Adverse impact—would affect the integrity of most items in the museum collection and destroy the usefulness of the collection for future research and interpretation. Beneficial impact—would secure the condition of the collection as a whole or its constituent components from the threat of further degradation.

Alternative A: No-Action

The park's library, collections and archival resources would continue to be maintained in their current locations and in their current conditions. The resources not being maintained to conservation—and archivallevel standards will continue to deteriorate,



Interior view of parlor, Appomattox Manor.

and diminish opportunities for education, research and preservation of Petersburg Campaign history. The no-action alternative would have moderate adverse impacts on the park's collections and archives.

Impacts Common to All Action Alternatives

Under all the action alternatives, the park's library, collections and archives will be housed in a modern facility and preserved using contemporary conservation practices. A modern facility will prevent those collections that are currently deteriorating from deteriorating further and will also allow greater access for research and exhibition. The action alternatives will have major

beneficial impacts on the park's collections and archives.

Alternative B

Same as "Common to All."

Alternative C

Same as "Common to All."

Alternative D

Same as "Common to All."

Conclusion

The no-action alternative will have moderate adverse impacts to the park's collections and archives, whereas the action alternatives will have major beneficial impacts.

Cumulative Effects on Cultural Resources

Alternative A: No-Action

Alternative A would not take any actions to improve the existing conditions of cultural resources in the park. Actions would be limited to maintaining existing conditions. Resources such as viewsheds and historic road and railroad traces outside of park boundaries would likely be lost to development over time.

The park's boundary and acreage would remain the same, protecting resources within the park, but lacking the ability to protect additional resources outside the park pertaining to the Petersburg Campaignincluding lands and vistas that contribute to viewsheds. Earthworks that remain under forest cover would continue to be threatened by uprooted trees from storm events. The conditions of historic buildings, structures and sites would remain the same, with no improvements planned. Commemorative resources, including Poplar Grove National Cemetery would also remain in their current conditions. Poplar Grove elements such as headstones would not be replaced to evoke

the original design. The park's collections and archives that are housed under poor conditions would continue to deteriorate and be inaccessible to the public.

Impacts Common to All Action Alternatives

The action alternatives will have minor to major beneficial impacts on the park's cultural resources. Expanding the park's boundary will help to preserve additional resources pertaining to the siege of Petersburg.



Fort Urmston obscured by trees and vegatation.

Historic and designed landscapes, including vistas and viewsheds will be better preserved by expanding the park's boundaries. Selected earthworks, historic buildings and structures will be preserved and/or rehabilitated, having moderate to major beneficial impacts on those resources as well as the interpretive program.

The action alternatives seek to go beyond stabilizing and maintaining resources to actively preserve and rehabilitate selected resources, better fulfilling the park's mission.

Alternative B

With the emphasis of this alternative on the protection and preservation of additional Petersburg battlefield lands, most resources will continue to be preserved, maintained and stabilized in their current conditions

using current management practices. The addition of battlefield resources will not only ensure their protection, but will also enhance the interpretation and education program. The proposed boundary expansion will have moderate beneficial impacts on the park's existing historic and designed landscapes. The new resources will enhance the interpretive program by protecting additional battlefield resources associated with the Petersburg Campaign. Most of the park's resources-earthworks, historic buildings and

resources in Alternative C will have moderate to major beneficial impacts both on the resources and the interpretation and education program.

Alternative D

Rehabilitated cultural resources will be the means by which visitors understand the complex stories of the Petersburg Campaign. Unlike Alternative C which selects various specific resources to rehabilitate, Alternative D seeks to rehabilitate whole cultural



Rehabilitated earthworks at Confederate Battery Five.

commemorative resources—will be stabilized and preserved. Headstones and other significant features at Poplar Grove National Cemetery will be repaired and replaced, having a moderate beneficial impact on the resources, interpretation and education.

Alternative C

With the emphasis on the park's interpretation and education program, the rehabilitation, repair and replacement of selected cultural resources will enhance the expanded themes and the overall visitor experience. As a historic house-museum, Appomattox Manor will bring to life another aspect of Civil War history. Rehabilitation, replacement and repair of selected cultural

landscapes for the purposes of having the visitor experience that landscape in its entirety. Both Alternatives C and D have strong interpretive programs, but each addresses the expanded themes differently.

With the emphasis of Alternative D on the cultural landscape and bringing the visitor out to experience the park's resources, actions such the rehabilitation of selected battlefields to reflect the 1864/1865 patterns of fields to forests and rehabilitation of Poplar Grove National Cemetery will have moderate to major beneficial impacts on the resources, the interpretive program and the visitor experience.

IMPACTS TO NATURAL RESOURCES

Methodology and definitions of intensity are described on page 137.

Air Quality

Alternative A—No Action

This alternative would not have a negative impact on air quality.

Impacts Common to All Action Alternatives

Impacts to air quality are expected to be minor. Any construction activity will temporarily increase airborne pollutants. Over the long-term, the action alternatives, which incorporate alternative modes of transportation and improvements to circulation reducing congestion, would have a positive effect in air quality by reducing vehicle emissions. The incorporation of alternative fuel vehicles into park operations and maintenance will also aid in reducing vehicle emissions.

Alternative B

This alternative would not have any additional impact on air quality beyond those discussed as common to all action alternatives.

Alternative C

This alternative would not have any additional impact on air quality beyond those discussed as common to all action alternatives.

Alternative D

This alternative would not have any additional impact on air quality beyond those discussed as common to all action alternatives. Alternative D includes development of a multi-use trail system within the Eastern Front to connect key interpretive sites. Use of alternative means

of travel and an improved circulation system within the site could potentially result in a reduction in vehicle emissions with an associated positive impact on air quality.

Cumulative Impacts

Cumulative impacts are not expected for air quality under any alternative.

Conclusion

Minor impacts to air emissions are expected to be related to any construction activity and would be of a short-term duration. Increased traffic could have an impact on air quality however, use of alternative means of travel, multi-use trail system development and improved circulation among park units could potentially reduce emissions and improve air quality.

Noise and Soundscapes Alternative A - No Action

Under the No Action Alternative, increased traffic noise and noise from encroaching development adjacent to existing parklands would continue. Impacts from noise on the visitor experience would be minor to moderate depending upon the nature of adjacent land use. Potential land development adjacent to the park in areas of Dinwiddie and Prince George counties proposed as growth areas could represent negative impacts to the quality of the visitor experience from noise.

No additional noise impact to the community would be generated by the park.

Impacts Common to All Action Alternatives

Measurable long-term noise impacts due to increased or changed traffic patterns are unknown at this time. It is not likely that the park's fleet use will change dramatically over time. Additional traffic generated by regional growth may occur on the roads within the

area, which would increase traffic-generated noise.

The inclusion of additional battlefield lands near and around park units would preclude the rate of development encroaching on the park units and the associated traffic and other man-made sounds produced by residential, commercial, and industrial development. Sufficient adjacent acreage around current park boundaries act as a buffer from surrounding incompatible uses and is provided for in each of the action alternatives.

Noise impacts from any construction activity would be minor and short-term in duration. There may be minor shifts in traffic patterns or minor increases in new vehicle trips into the area.

Alternative B

Same as Common to All.

Alternative C

Same as Common to All.

Alternative D

Same as Common to All.

Cumulative Impacts

Since the management prescriptions of the GMP alternatives will not generate additional noise beyond some short term construction impacts, no cumulative impacts are predicted.

Conclusion

Proposed boundary expansions will provide buffers from noise and sound intrusions on the visitor experience. Noise from construction, rehabilitation and restoration work will generally be localized, short-term and of a minor to moderate impact.

Mitigation

Any construction near sensitive land uses such as City Point, or Poplar Grove should be conducted during normal weekday working hours to minimize adverse affects.

Geology, Soils, and Topography Alternative A - No Action

The bluff overlooking the confluence of the Appomattox and James Rivers at City Point would continue to erode naturally and to collapse. The riprap installed in 1990 to slow erosion would continue to be undercut, resulting in continued slumping of the bank and reshaping of the peninsula. The continued erosion of the bluff at City Point would produce a permanent major impact on the integrity of property and increase the sedimentation rate into the James River affecting the Chesapeake Bay Program agreements regarding sediment loading into the Chesapeake Bay.

Impacts Common to All Action Alternatives

Impacts associated with geology and soils would be derived from short-term minor impacts associated with soil disturbance from routine maintenance, construction, earthwork preservation, and control of erosion. Stabilization of 2,000 feet of the riverbank at City Point would, over the long-term, benefit from the elimination of wave-induced erosion of the point. Controlling erosion would reduce the sediment loading into the James River and would act in accordance with the Virginia Coastal Resources Management Program and the Chesapeake Bay Program.

Continued rehabilitation and management projects on earthworks could be expected to produce short-term soil disturbance resulting in minor impacts to localized areas.

The stabilization of earthworks in the Eastern Front, Western Front, and Five Forks would eliminate soil loss from unofficial trails across the earthworks. Development of a sustainable vegetative cover on the remaining earthworks would eliminate soil loss from periodic tree blow-downs and general erosion from surface run-off. Short-term soil disturbance would result from the initial stabilization process and the relocation of trails at the earthworks, however, long-term beneficial impacts would be expected from controlling erosion and visitor access.

Removal of the old Five Forks visitor contact station and construction of a new facility and trails will cause short-term minor to moderate impacts through soil disturbance.

Alternative B

At City Point the preservation of the landscape and historic gardens of Appomattox Manor, Hunter House, Bonaccord and Naldara would result in short-term impacts through soil disturbance.

Alternative B includes the proposal to protect a total of 7,238 acres (3 acres at City Point, 192 in the Eastern Front, 5,996 in the Western Front and 1,047 at the Five Forks Unit). Protection of additional lands would place nationally significant battlefield resources under protection, preventing adverse impacts to resources that could accompany other types of future development. Management of some vistas as light forest cover and others as open fields, replacement of headstones at the Poplar Grove National Cemetery, and continued preservation management of earthworks would result in short-term soil disturbance on new and existing lands. These activities would result in soil disturbance impacts as outlined in the Impacts Common to All Action Alternatives section of this document.

Alternative C

Alternative C includes rehabilitation of historic vegetation and landscapes at City Point to demonstrate a continuum of uses through time. The expansion of the park boundary by 2,030 acres would protect the park from incompatible land uses adjacent to the existing park units and retain the land as open space.

Alternative C includes the proposal to rehabilitate selected cultural resources such as earthworks and viewsheds. Activities could include rehabilitation of historic road beds at Five Forks, access trail construction, construction activities at Five Forks for a new visitor center and the rehabilitation of the superintendent's lodge at Poplar Grove National Cemetery into a visitor's contact station would create permanent moderate impacts by grading of the local topography.

Tie-in with a proposed Dinwiddie County multi-use trail system would require construction of additional trails and access points resulting in soil disturbance and local topographical changes resulting in shortterm minor to moderate impacts to the soils.

At Poplar Grove National Cemetery, rehabilitation could require short-term soil disturbance and movement resulting in minor to moderate impacts to soils.

Alternative D

Impacts to soils under Alternative D are due to soil disturbance from construction and rehabilitation activities and additional actions on new lands within the units. Additional actions include the construction of comfort facilities at Hatcher's Run and Ream's Station, rehabilitation of the 1864-1865 pattern of the landscape, bluff stabilization efforts at City Point, and relocation of NPS facilities away from the main interpretive

arenas. Tie-in with a proposed Dinwiddie County multi-use trail system would require construction of additional trails and access points resulting in soil disturbance and short-term minor-to moderate impacts.

Beneficial impacts through the expansion of the park boundary by a total of 7,238 acres distributed among the park units described for Alternative D would protect park boundaries from incompatible land uses adjacent to the existing park units and retain the land as open space.

Cumulative Impacts

Soil disturbance from activities associated with restoration, rehabilitation and construction would not create cumulative impacts.

Conclusion

Routine maintenance, construction at Five Forks and erosion control would cause periodic short-term minor to moderate impacts to localized areas mainly by soil disturbance.

Mitigation

Mitigation for impacts to geology and soils would include implementation of best management practices (BMPs). BMPs would minimize short-term soil loss and erosion potential along streams and creeks in the activity areas. Soil loss would be mitigated through implementation of appropriate erosion and sediment control measures. The use of BMPs is necessary to prevent additional sedimentation and/or erosion during stabilization activities at City Point.

Prime and Unique Agricultural Lands

Alternative A - No Action

The alternative would have no impact on prime farmlands. Approximately 4,000 acres of prime agricultural lands would be subject to development as commercial/industrial or residential properties in accordance with the land use master plans of the region. The park would continue to provide agricultural leases on about 130 acres of land within the current park boundary.

Impacts Common to All Action Alternatives

NPS boundary expansion of approximately 1,000 acres of prime agricultural land would allow the lands to be kept as open space and in some locations actively farmed through the NPS agricultural leasing program. Field crop mixtures may be changed to reflect the historical pattern of agriculture. The impacts to prime and unique soils under all action alternatives would be of permanent benefit to the area.

Alternative B

In Alternative B, in addition to the 1,000 acres common to all alternatives, 3,000 more acres of prime agricultural lands would be protected as part of the boundary expansion program. Another 1,000 acres of prime agricultural lands would be obtained by the park but these lands are designated as rural conservation zones under the Dinwiddie County Plan and would not be subject to development in any case. The park would gain a total of 5,000 acres of prime agricultural lands under this alternative with a positive impact of increasing protection over 4,000 acres.

Alternative C

Actions to prime farmland under Alternative C would not have any additional impacts than those outlined as common to all action alternatives.

Alternative D

As described under Alternative B, the park would encompass an additional 5,000 acres of prime agricultural lands with a positive impact of increasing protection over 4,000 acres.

In Alternative D, a more aggressive management of prime farmlands could occur as the landscape is restored and maintained in the historic 1864-1865 pattern. The pattern and acreage of land under agricultural production could change as managed under the NPS agricultural leasing program. This will result in permanent beneficial impacts as open space vistas and the agricultural heritage of the region is preserved.

Cumulative Impacts

No cumulative impacts to prime farmlands are expected under the alternatives.

Conclusion

The existing pattern of prime farmland would change to varying degrees among the alternatives. Acreage leased under the agricultural leasing program of the NPS at Petersburg would potentially increase, having a moderate to major beneficial impact on the agricultural heritage of the region. The landscape pattern of forested and open field may change over the long-term, however, the preservation of lands through NPS protection would prevent an additional 1,000 to 4,000 acres of prime lands from being lost to development.

Surface Water Quality Alternative A - No Action

The present landscape and management practices on park-owned lands would remain the same. The level of impact of sedimentation and erosion is unknown and would occur in very localized areas, to varying degrees and duration based on activity (routine maintenance, construction, road repairs, etc.), lack of action (continued erosion of the City Point bluff), seasonal and meteorological conditions. Water quality of creeks and streams in the park units would



Beaver Pond at Five Forks Battlefield.

continue at their current quality level or possibly experience increased sedimentation rates.

Impacts Common to All Action Alternatives

All action alternatives incorporate the commitment to manage natural systems to maintain a healthy ecosystem. This commitment is expected to include provisions to prevent erosion of trails along streams thus eliminating an impact to water quality. Maintenance of the present landscape and management practices at City Point should result in no change in water quality in rivers and flow entering the Chesapeake Bay.

Short-term moderate impacts to water quality on adjacent streams and creeks are possible from sedimentation during maintenance or construction activities. Clearing or thinning trees for landscape restoration on earthworks will not result in runoff and subsequent degradation of water quality due to deep ditches around forts. The delivery of sediment into a stream from construction activities would be likely until herbaceous vegetative cover is completely established on exposed soils. Permanent loss of shade from tree removal along stream banks may result in increased water temperatures, which would produce longterm or short-term major impacts to aquatic organisms in the water body. Any agricultural leasing activities should incorporate provision for best management practices to prevent impacts to adjacent streams and creeks.

The use of herbicides to eliminate the spread of exotic plant species that could colonize newly disturbed soils may result in water quality degradation and negative impacts to aquatic organisms in and downstream of the rehabilitated areas.

Alternative B

Impacts to water resources under Alternative B are not expected to occur except as outlined in impacts common to all action alternatives.

Alternative C

Impacts to water resources under Alternative C are not expected to occur except as outlined under impacts common to all action alternatives. The broader scope of rehabilitation work under Alternative C could increase the potential and magnitude of impacts to surface water quality.

Alternative D

Impacts to water resources under Alternative D are not expected to occur except as outlined under impacts common to all action alternatives. The broader scope of rehabilitation work under Alternative D could increase the potential and magnitude of impacts to surface water quality.

Cumulative Impacts:

No cumulative impacts to surface water quality are expected from the action alternatives.

Conclusion

Negligible surface water quality impacts could originate primarily from sedimentation and secondarily from vehicular pollutant run-off and clearing along stream banks. Streams and creeks adjacent to parking areas, waysides, construction sites and those in areas under rehabilitation could be negatively impacted. Long-term beneficial impacts to water quality will occur through preservation of vegetated open space, erosion control and vegetation strategies.

Mitigation

Mitigation for impacts to surface waters should not be necessary, provided best management practices are integrated into all activities adjacent to streams and creeks. Mechanisms for replacing vegetative cover after construction or rehabilitation activities should occur as soon as activities end. Any agricultural leasing activities and rehabilitation of agricultural fields to their 1864/1865 patterns should incorporate provision for best management practices to prevent impacts. Smaller trees and shrubs should be allowed to remain along streams to maintain the riparian forest buffer if it were determined that shorter trees would still provide the landscape necessary for interpretation.

Wetlands

Alternative A - No Action

There would not be any impact to wetlands under the No Action Alternative.

Impacts Common to All Action Alternatives

Wetlands are protected from alteration by the Clean Water Act and the Virginia State Water Law. Any management prescription that leads to impacts on wetlands would require a permit and appropriate mitigation before implementation. Long-term impacts of changes to vegetation along stream corridors and in wetlands during rehabilitation of the landscape, particularly when the landscape is returned to the 1864-65 pattern, could result in a decrease in wetland acreage that would have to be mitigated. Alternately, wetlands that existed during the battles of 1864-1865 could be re-created and act as mitigation for wetland loss during other park activities.

Alternative B

The properties proposed for boundary expansion under Alternative B include about 540 acres of wetlands. Of these about 80 acres are at Ream's Station and White Oak Road, designated as Rural Conservation in the Dinwiddie County comprehensive plan. The remaining 460 acres are located on parcels that would be subject to industrial/commercial or residential development. Though any development plan would be required to avoid impacts to wetlands, inclusion within larger preserved lands with the associated benefit of undeveloped buffers is a positive impact to these wetland resources.

Alternative C

In Alternative C, about 100 acres of wetlands would be contained under the protection of the park's boundary expansion with the associated positive impact on this resource.

Alternative D

As described in Alternative B, approximately 460 acres of wetlands would be afforded a greater level of protection when included in the boundary of the park.

Cumulative Impacts

There is no potential for cumulative impacts to wetlands associated with any of the alternatives.

Conclusion

The action alternatives have a potential to provide a positive impact to wetland resources by protecting them within larger undeveloped buffer areas. About 460 acres would be protected under Alternatives B and D. One hundred acres would be protected under Alternative C. Proposals for landscape manipulation should be evaluated to minimize site specific impacts to wetlands. Wetlands in and/or adjacent to areas planned for rehabilitation to the 1864-1865 landscape, rehabilitation of earthworks or construction activities would have to be inventoried and delineated prior to any activities.

Mitigation

Any actions that were to impact wetlands would require a permit from the US Army Corps of Engineers and the Commonwealth of Virginia. Permits would include requirements for specific mitigation in accordance with the no net loss of wetlands policy. Such mitigation could include wetland creation, restoration or enhancement.

Vegetation

Alternative 1 - No Action

Impacts to vegetation under the No Action Alternative would occur with the die-off of existing historical trees and plants in the historical gardens and landscapes at City Point. Negative impacts would continue over the long-term resulting in moderate to major adverse impacts to the historical integrity of the vegetation.

No alterations would be made to park landscapes and vegetation maintenance programs would continue unchanged. Removal of hazard trees and maintenance of existing open fields would also continue unchanged. Current proportions of forested to open lands would remain the same resulting in no adverse impacts to the existing vegetation.

Unauthorized use of trails and creation of social trails would continue resulting in long-term moderate to major adverse impacts to localized vegetation by trampling and erosion.

Agricultural activity and control of exotic species would continue under current management guidelines without any adverse impacts.

Impacts Common to all Action Alternatives

Impacts to vegetation from routine maintenance as well as preservation actions and erosion control could have positive permanent impacts. The preservation of earthworks and forts where gradual removal of trees growing on earthworks and the subsequent management of the earthworks in a younger successional stage would be a major long-term impact to the vegetative community at the site(s).

Changes in vegetation on the earthworks would follow the recommendations outlined in the Review Environmental Assessment and Assessment of Effect for Preservation of Civil War Earthen Fortifications at Petersburg National Battlefield (2001). The establishment of vegetation strategies to eradicate invasive species should be considered a long-term and permanent major positive impact to the areas under management. Soil disturbance could cause colonization or proliferation of exotic species and would be a short-term minor impact assuming management would pursue immediately aggressive eradication programs. These changes would ultimately increase biological productivity of these sites and would therefore be beneficial to biological resources within the park.

Changes in the mix of field crops grown within the Agricultural Leasing Program would be reflective of a desired landscape pattern locally and as such could be defined as a long-term, major impact.

Under the action alternatives, there is a proposal for the expansion of agricultural leasing activities to enhance the natural setting and restore the historic landscape. The resulting agricultural leasing activity would have a beneficial long-term impact to the landscape and in particular would keep the agricultural heritage of Dinwiddie County intact.

The addition of three acres in Grant's Headquarters at City Point would increase the flexibility of site management, generally improving opportunities for landscape integrity. Specimen trees and other plants in the landscaped area at City Point would be maintained in accordance with the goal of stabilizing and preserving the resource, including the gardens at Appomattox Manor.

Alternative B

Alternative B emphasizes preservation of the park's battlefields by expanding the boundary to include important battlefield resources and lands for buffer from potential development. This includes about 1,700 acres of forested land that would otherwise be subject to development under regional growth plans. Under Alternative B, natural succession would continue in 77 percent of the existing park maintained as forest. Pasture, long grass field and mowed lawn would be maintained in the remaining 23 percent of the park. Lands proposed for boundary expansion would primarily protect the resource. Minimal rehabilitation of the landscape is anticipated, except in relation to earthwork management where light forest cover or open field vistas would be maintained. Impacts could occur from soil disturbance during tree removal and would be short-term and minor in effect.

Alternative C

This alternative provides for expanding the current park boundary to include lands to buffer current park battlefields and includes about 500 acres of forested land and 1,500 acres of agricultural or open space.

The clearing of lands surrounding the key elements of the battlefield actions and siege line during rehabilitation and for interpretive access in Alternative C would result in a more open landscape. Vegetation management could consist of tree removal or thinning and invasive species control through removal and/or herbicide applications. Consequently, some forested habitat would be altered to herbaceous vegetation community. Changes to vegetation under Alternative C would not have any additional impacts than those outlined as common to all action alternatives.

Alternative D

As in Alternative B, about 1,700 acres of unprotected forest land would be included in the acquisition lands; however, Alternative D has potential for impacts associated with management of the landscape and the proposed rehabilitation of the 1864/1865 landscape to have a much large scope. Rehabilitation of the landscape to its 1864/1865 pattern by recreating the pattern



Union Fort Sedgwick, 1865.

of forested to open fields would result in a change of the overall vegetation pattern. Portions of lands that are currently open would gradually return to forested habitat; other portions would become open habitat after most recently being forested. Open habitats such as pasture, long grass field and mowed lawn would be maintained in the remaining portion of the park; the agricultural leasing program could be expanded to new lands. Impacts from the large-scale changes to the landscape would be permanent and major. The changes would provide for a more diverse vegetative community over the long-term resulting in a beneficial impact.

New access trail construction would result in the loss of a swath of herbaceous species and trees; impacts would be permanent and moderate in effect. Changes in vegetation would occur at Poplar Grove National Cemetery during rehabilitation to its original design and could also be permanent and of moderate beneficial impact. Rehabilitation of the historic landscape at City Point could include provisions to replace unhealthy or unrepresentative vegetation resulting in a



Treating invasive and exotic vegetation to protect park resources.

long-term beneficial impact to vegetation resources at City Point. The addition of three acres would increase the flexibility of site management, generally improving opportunities for landscape integrity.

Conclusion

The impact of changes to the vegetative communities through the management and preservation of earthworks and the landscape, the eradication of exotic species, and erosion control will have long-term beneficial impacts to the biological productivity of existing and future park lands; diversity of species should increase with landscape and habitat management. Agricultural leasing activities would continue to preserve the rural agricultural heritage of

Dinwiddie County. Alternative B incorporates about 2,300 acres of naturally vegetated land, 1,700 acres of which is otherwise subject to development. Alternative D also includes obtaining these lands but has the potential to increase agricultural use and reduce natural communities in the short term. Alternative C provides for protection of only 500 acres of natural vegetation communities.

Wildlife and Aquatic Life

Alternative A - No Action

No alterations in the landscape would maintain conditions that would continue to favor wildlife species adapted to habitats in urban and suburban settings (e.g. deer, squirrel, sparrows, etc.)

Impacts Common to All Action Alternatives

The proposed boundary expansion of the park to preserve battlefields and key elements would retain acreage as open space, which would be a permanent positive impact on wildlife in general.

The development of conservation partnerships with local, state, and federal agencies will provide management strategies to maximize species and habitat diversity on existing and future park lands. Ecological inventory projects, current and future, will increase knowledge and awareness of the species and habitat diversity on park lands which will in turn aid in the monitoring and protection of park resources. Maximizing species and habitat diversity will cause a major long-term but beneficial impact to park resources.

Construction and rehabilitation activities may cause short-term temporary impacts to water quality in adjacent streams and creeks.

Sedimentation through soil disturbance or erosion would cause minor to moderate impacts to aquatic life in streams, creeks and other adjacent water bodies.

Lands proposed for agricultural leasing would not be significant wildlife habitat but would attract deer, fox, rodents and animals less affected by human activities. An increase in grasslands may increase available habitat for grassland species of birds; succession to forest could increase breeding habitat for other avian species; a long-term beneficial impact to grassland species.

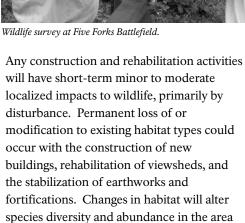
Ultimately, it is expected that species and habitat diversity would increase as existing and future management strategies and partnerships are activated. Increased diversity of wildlife and aquatic life would become a permanent beneficial impact.

Alternative B

This alternative provides less landscape management and change and as a result the impact on wildlife is minor and short-term primarily related to disturbance during construction and/or rehabilitation activities.







that could become major long-term impacts.



Whitetail deer roam the Eastern Front.

Alternative C

Alternative C impacts to wildlife follow the predicted impacts common to all action alternatives, however, the extent of the impacts would be based on the amount of landscape altered for rehabilitation or placed into agricultural leasing. Ultimately, it is expected that species and habitat diversity would increase as existing and future management strategies and partnerships are activated.

Alternative D

Alternative D provides the potential for the largest change in habitat by the rehabilitation of the final battlefield lands to the 1864-1865 landscape patterns in the Western Front and Five Forks. It is difficult to predict the impact of the proposed vegetation management on particular wildlife species without baseline inventories of the mammals, birds, reptiles, and amphibians in the park. Shifts in animal species composition would be expected to occur with the shifting habitat patterns.

Conclusion

Alternative B places an additional 7,238 acres in permanent protection as open space. Except for current management practices and a limited amount of land management for rehabilitation, habitat for wildlife would continue as it currently exists. Habitats will gradually proceed through succession stages where management is not practiced. Alternative D proposes the same acreage for boundary expansion of the park as C to preserve battlefields and key elements and would keep that acreage as open space, which would be a permanent positive impact on wildlife. In Alternative D more acres of land would undergo management and rehabilitation. The lands proposed for boundary expansion under Alternative C would provide protected wildlife habitat but to a lesser extent than Alternatives B and D.

IMPACTS TO SOCIAL AND ECONOMIC ENVIRONMENT

Definitions of Intensity Levels

Negligible: *Effects to socioeconomic conditions*

would be below or at the level of detection. There would be no noticeable change in any defined socioeconomic indicators.

Minor: *Effects to socioeconomic*

conditions would be slight but detectable. If mitigation is necessary to offset potential adverse effects, it would be simple

and successful.

Moderate: *Effects to socioeconomic*

conditions would be readily apparent and result in changes to socioeconomic conditions on a local scale. If mitigation is necessary to offset potential adverse effects, it could be expensive but would likely be

successful.

Major: *Effects to socioeconomic*

conditions would be readily apparent, resulting in demonstrable changes to socioeconomic conditions in the region. Mitigation measures to offset potential adverse effects would be expensive and their success could not be guaranteed.

Environmental Justice

section later in this chapter.

An assessment as to whether any minority or low-income communities in the park's region of influence may suffer "disproportionately high and adverse human health or environmental effects", revealed that none of the alternatives will negatively impact surrounding communities. Potential positive economic impacts will be discussed in the "Regional and Local Economy"

Visitor Use & Facilities

Includes Eastern Front Visitor Center and Park Contact Stations

Definitions of Intensity Levels

Negligible: *Visitors would likely be unaware* of any effects associated with implementation of the alternative. There would be no noticeable change in visitor use and experience or in any defined indicators of visitor satisfaction or behavior.

Minor:

Changes in visitor use and/or experience would be slight but detectable, but would not appreciably limit or enhance critical characteristics of the visitor experience. Visitor satisfaction would remain stable.

Moderate: Few critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be altered. The visitor would be aware of the effects associated with implementation of the alternative and would likely be able to express an opinion about the changes. Visitor satisfaction would begin to either decline or increase as a direct result of the effect.

Major:

Multiple critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an a activity would be greatly reduced or increased. The visitor would be aware of the effects associated with implementation of the alternative and would likely express a strong opinion about the change. Visitor satisfaction would markedly decline or increase.

Visitor Center

Alternative A: No-Action

There would be no improvements made to the Eastern Front visitor center and it would continue to be perceived as the only visitor center and the Eastern Front as the only unit of the park. The visitor center's lack of adequate meeting and administrative space would continue to under-serve the public and the staff. Moderate adverse impacts would result as a result of this alternative.

Impacts Common to All Action Alternatives

The action alternatives will have minor to major beneficial impacts on the Eastern Front visitor center. Alternative C will expand, improve and enhance the visitor center as part of the enhanced interpretation program. The other action alternatives will make minor improvements to the center.

Alternative B

The Eastern Front visitor center will continue to be the first initial point of contact for visitors. Visitors will be directed to begin their park experience here, with full orientation and interpretation services. The visitor center will continue to be maintained in its current condition, having a minor beneficial impact as brochures and ranger services better orient the visitor to existing park resources.

Alternative C

The improved visitor center will enable a more dynamic interpretive program to be implemented using enhanced media, and a better and bigger presentation space to accommodate larger groups. Major beneficial impacts are anticipated as a result of physical design and interpretive program improvements are made. The improvements will enable a greater number and longer

duration of visits and will also better accommodate the park's administrative and retail needs.

Alternative D

Same as Alternative B.

Contact Stations

Alternative A: No Action

The contact stations at City Point and Five Forks would continue to lack meeting space and adequate comfort facilities. The contact stations at the Western Front and Poplar Grove National Cemetery would continue to be seasonal and lack comfort stations. Minor to moderate adverse impacts would result in this alternative.

Impacts Common to All Action Alternatives

The degree and type of improvements will vary by alternative. Beneficial impacts will range from minor to major.

Alternative B

Appomattox Manor will continue to serve as a visitor contact station for City Point.

Improvements such as more data to support broader interpretive themes will have minor beneficial impacts to visitors.

A new visitor contact station at Five Forks and new comfort facilities at the Poplar Grove superintendent's lodge will be provided. Potential moderate to major beneficial impacts will include a greater number as well as longer duration of visits.

Alternative C

In City Point, the Bonaccord rehabilitation will better accommodate visitor services, including orientation and interpretation. Minor to moderate beneficial impacts are anticipated under this alternative.

The City of Petersburg (Home Front) and its

partners will provide visitor services and facilities. Here, visitors will be oriented to the city, have the option of going on guided tours and receive more information on local and regional attractions. This alternative has the potential to have major beneficial impacts for the visitor, the city and the park as interpretation and education programs are expanded.

The new visitor contact stations at Poplar Grove and Five Forks will have moderate to major beneficial impacts on the visitor experience, enabling longer more enjoyable visits.

Alternative D

Same as Alternative C.

Cumulative Impacts

Alternative A: No-Action

The visitor center and contact stations will continue to under-serve park visitors and staff. Lack of adequate space for large meetings, school groups and presentations will continue to compromise the park's interpretive program. An opportunity to upgrade the CCC-era building for presentation, meeting and training space will be lost.

Inadequate visitor facilities will continue to shorten visitors' stays, decreasing the overall number of visitors and their support.

Impacts Common to All Action Alternatives

The greatest improvements to the Eastern Front visitor center will be under Alternative C, however all the action alternatives will have beneficial impacts on visitor use and facilities, including contact stations.

Alternative B

Visitor facility improvements or additions will occur in Five Forks and Poplar Grove National Cemetery.

Visitor use-the quality of visitors' experience and the duration of their visits-will increase as improvements and additions are made to selected contact and comfort stations.

Moderate to major beneficial impacts will translate into better and longer visitor stays which will benefit the park, and the local and regional economies.



Site now administered by Civil War Preservation Trust

Alternative C

Improvements, rehabilitations and additions to visitor contact stations will positively impact visitors and their experience of the park. Visitors will be able to stay longer and visit more units than they currently do, as well as have a better understanding of the resources that are being preserved and protected by the park. Rehabilitated historic resources and improved visitor amenities will ensure an enjoyable, educational and memorable visitor experience.

Alternative D

Same as Alternative C.

Park Operations

Definitions of Intensity Levels

Negligible: An action would have a no measurable impact to park operations.

Minor: Actions with minor impacts would affect park operations in a way that would prove extremely difficult to measure. To the normal observer, such impacts would not be apparent. This would involve levels of increase in the park's budget and current staffing of less than 10%.

Moderate: Actions with moderate impacts would measurably affect park operations. This would involve levels of increase in the park's budget between 10-30 % and an increase in personnel of 10-30%. Impacts would include providing additional visitor services, protection and emergency response services, facility maintenance, administrative support, and curatorial services.

Major: Actions would significantly affect park operations. This would involve levels of increase in the park's budget of greater than 30% and an increase in personnel of greater than 30%. Impacts would be providing additional visitor services, protection and emergency response services, facility maintenance, administrative support, and curatorial services.

Alternative A: No Action

Current management practices founded on a centralized management approach continue. The law enforcement rangers continue to be centrally dispatched from the current Ranger Office location on Hickory Hill Road. From this location they cover all 2,659 acres of the park. They generally patrol all the lands on a daily basis scattered between the two most distant units, (City Point to Five Forks) and rely on each other for back up and dispatch functions.

Maintenance functions from its centralized location on the Eastern Front. Currently, for continuity, a staff person is dedicated exclusively to the City Point operation, while all others have assignments as tasks and needs dictate. The interpretation division staffs are located in three primary park visitor contact stations year-round and at a fourth (Poplar Grove) in the summer months. Interpretation is located in the Eastern Front Visitor Center, while staff



Repairing the roof at Appomattox Manor.

covers Five Forks and City Point, as reportto duty locations. Programs are offered
primarily at the four visitor contact points.
Resources Management operates from
offices in the park at the Hickory Hill
location. From there, staff ranges
throughout the park to address resource
needs. Administration and management
activities emanate from the Hickory Hill
address. Most staff meetings, administrative
operations, Information Technology
activities and management processes are
handled here.

Alternative B

Law enforcement activities would increase to meet the expanded demand imposed by

adding 7,238 acres of new battlefields and other properties to the existing 2,659 acres. A larger ranger force will be required and "district" ranger offices will be established. A centralized dispatch operation will be created to service the needs of all field personnel. The maintenance division would also expand its footprint by adding a satellite operation at Five Forks to allow greater responsiveness to the Western Front and Five Forks units. The interpretation operation will expand slightly in this alternative. Additional staff would be hired to staff the expanded Five Forks Battlefield unit. Resource Management operations would expand to meet the needs imposed by the addition of 7,238 new acres of park land. The division will be responsible for RT&E surveys, I&M activities and resource stabilization actions. Administration and management operations will remain unchanged.

Alternative C

The staffing for the law enforcement operation would be greater under Alternative A, but less than that identified under Alternative B. There will be fewer lands to protect under this alternative than in B or D but greater staff and infrastructure assets than in Alternatives A & B. A centralized dispatch operation will operate for 12+ hours daily. The maintenance division will grow even beyond that articulated in Alternative B. The expanded contact station and the new facility at Five Forks would require janitorial services and maintenance staff to meet the operational needs of the park. The interpretative operation will also grow, primarily to staff the new visitor contact facilities. The resources management operation will be reduced from levels envisioned in Alternative B, but still greater than in Alternative A. The administration and management functions will be increased slightly to meet the needs of the expanded park operations and battlefield preservation partnership activities.

Alternative D

The law enforcement operation would expand to meet the resource protection needs inherent in protecting an additional 7,238 acres of park land spread over a large geographical area and the addition of expanded visitor contact facilities. Furthermore, a 24-hour per day centralized dispatch operation may prove necessary to insure visitor and resource safety. The maintenance operation would also expand to correspond to the maintenance and upkeep needs the additional lands and infrastructure assets will require. A satellite maintenance facility will be required at the Five Forks unit to service all of the Western Front and Five Forks needs. An additional small, mobile janitorial operation would service the visitor contact stations at Poplar Grove National Cemetery, Grant's Headquarters at City Point, and potentially in Old Town Petersburg. The interpretation operation expands to staff and manage visitor contact facilities, provide interpretative programs on the battlefields and host expanded community education programs. The resource management program expands to manage the greater land area, rehabilitate selected landscapes, perform RT&E surveys and continue the I&M program. Administration and management functions also expand to meet the increased needs imposed by more staff and more infrastructure. An assistant superintendent position would be authorized in order to better manage expanded park operations.

Land Use

Alternative A - No Action

The No Action alternative provides for minimal boundary expansion to fill critical buffer requirements. Remaining park perimeters, particularly in areas of dynamic growth, will be subject to visual encroachment of non-compatible land uses. Cultural resource areas will not be protected and will be vulnerable to destruction by land development. Agricultural leasing activities already in place would retain the agricultural character of Dinwiddie County and assist the county in managing land use in keeping with their Comprehensive Plans.

Impacts Common to All Action Alternatives

Boundary expansion varies by alternative. However, the actual impacts to the lands gained are essentially the same across the three action alternatives.

Each of these alternatives provides for preservation or protection of sufficient lands to buffer the park units from the potential visual encroachment of incompatible land use.

All three action alternatives propose the same boundary expansion to buffer park resources in City Point and the Eastern Front. These properties represent 322 acres of land lost to commercial, industrial or residential development.

Alternatives B and D

The protection of approximately 7,000 acres under Alternatives B and D would also protect the most significant cultural resources from impact by future land development. If these lands are not obtained and protected by the park, it is reasonable to assume that a moderate portion of them will eventually be developed. The impacts to

TABLE 5POTENTIAL FUTURE LAND USE OF BATTLEFIELD BOUNDARY EXPANSION IN DINWIDDIE COUNTY

Unit/Battlefield	Ac	res by Alte	rnative	Proposed Development Area	
	В	С	D		
Globe Tavern	611	136	611	Urban	
Peebles Farm	88	69	88	Urban	
Petersburg-Breakthrough	33	0	33	Urban	
Boydton Plank Road	99	0	99	Urban	
Fort Stedman/Picket Line Attack	799	615	799	Urban	
Total Urban	1630	820	1630		
Five Forks	1047	908	1047	Community Planning Area • Dinwiddie County	
Jerusalem Plank Road	222	97	222	Community Planning Area • Dinwiddie County	
Total Community Planning Are	a 1269	1005	1269		
Hatcher's Run	1710	0	1710	Quarry	
Reams' Station	506	0	506	None-Rural Conservation Area	
White Oak Road	1925	0	1925	None-Rural Conservation Area	
Total Rural Conservation	2431	0	2431		

future land use are focused in Dinwiddie County. As shown above, 1,630 acres would be lost to potential urban development; this is less than five per cent of the land in the urban development area. 1,269 acres would be lost to development in the community planning area. This is less than three per cent of the community planning area.

These alternatives would also protect 2,431 acres that the county has designated as rural conservation area. While a small percentage of lands would be lost from the developable pool, these alternatives foster the county's goals of retaining its rural character and supporting the preservation of cultural resources.

Alternative C

Alternative C provides the same type of protection for approximately 2,030 acres. It does not include preservation or protection of the 2,431 acres planned as conservation area.

Under this alternative only 840 acres would be lost from the urban development area and 1,005 from the community planning area. This is less than 5% of the pool of land designated as development area.

Cumulative Impacts

Continued development in the region will lead to increasing change in land use from rural and agricultural to commercial, industrial and residential. As noted, of the 7,238 acres being considered for protection

and boundary expansion, all but 2,431 are zoned for some type of development. If these lands adjacent to the current boundary of the park are developed, it could have a major adverse impact on the character of the park.

Fort Lee is expected to be considered for closing when the next round of Base Realignment and Closure (BRAC) reviews begin. If Fort Lee is closed and converted for development following BRAC, it could have significant impacts on the character of the park where it adjoins Fort Lee. Under the No Action Alternative, it is possible that actions by others outside the park could cause major adverse impacts to the aesthetics and character of the park. Alternatives B, C, and D provide some level of protection against these potential impacts, with Alternatives B and D providing the most protection.

Conclusions

The preservation of 2,030 acres (Alternative C) to 7,238 acres (Alternatives B and D) will help retain the current aesthetics of the park by providing a buffer to future development outside the park. Furthermore, they will help retain the rural character of the area. This will help achieve a stated goal of the Dinwiddie County Comprehensive Plan to "preserve a significant portion of the county's productive agricultural and timber lands." The No-Action will leave the park vulnerable to the future actions of others outside the park, potentially resulting in major adverse impacts. Exclusion of these lands from development in the future development areas will have a negligible effect on the ability of the localities to accommodate desired growth.

Mitigation

No mitigation is needed.

Agriculture

Alternative A: No-Action

Under this alternative, no additional agricultural lands would be protected by the park from future development. Agricultural lands around the park would likely be converted for residential and commercial development in the future. This would have a moderate impact on agriculture in the area, potentially resulting in the loss of 6,800 acres of agricultural land. Most of the land proposed for protection and boundary expansion under the action alternatives is rural/agricultural now, yet only 1,600 acres is zoned as rural conservation.

The remaining lands are zoned for development.

Impacts Common to All Action Alternatives

Between 2,030 and 6,800 acres—Alternative C and Alternatives B or D, respectively— of rural agricultural lands would be protected from development. While the amount of land protected varies, the impacts would be similar resulting in retention of the rural character of the land. In addition to the lands preserved by the park, the park would work with the community to promote conservation of lands not currently protected. Crops grown on lands protected by the park may change to comply with NPS policies.

Alternative B

Under Alternative B, approximately 6,800 acres of rural/agricultural lands would be preserved and maintained in the current conditions. That is, agricultural lands would continue as such and there would be no adverse impacts. Minimal changes for interpretation would occur.

Alternative C

Approximately 2,030 acres of rural/agricultural lands would be preserved under this alternative. Only minor changes to land use would occur for interpretive reasons.

Alternative D

Under this alternative nearly 7,238 acres would be acquired or protected. While much of the agricultural land would remain in agriculture, some may be converted to the 1864/1865 landscape. If the park does not protect or acquire these lands, approximately



Living history artillery demonstration.

5,400 are zoned for development and will likely be converted from agriculture to non-agricultural uses in the future. Agricultural lands that are reflective of 1864/1865 may have limitations on the types of crops grown.

Cumulative Impacts

Ongoing development in the region will lead to the loss of some agricultural lands.

Conclusions

All three action alternatives provide some level of protection to agricultural resources. Alternative B provides the most protection, followed by Alternative D, and then C. The No Action Alternative provides no additional protection to agricultural lands. Agricultural lands within the park would continue to be managed as they are now.

Mitigation

No mitigation is needed.

Regional and Local Economy

Alternative A: No-Action

Under the No Action Alternative, no changes would be made to enhance visitor experience or encourage increased visitation. Impacts to the local and regional economy could potentially come from job creation and expenditures by non-local visitors at local businesses (restaurants, hotels, gas, etc). Expenditures by local visitors to the park would likely occur regardless of park visitation.

If visitation were to decline, this could have a negligible to minor adverse impact on the local economy. Visitors to the park spend approximately \$36/party/visit for non-local day users and \$96/party/visit for overnight visitors. It is estimated that visitors to the park contribute approximately \$2 million a year to the local economy. This number could potentially decrease under the No Action Alternative.

Impacts Common to All Alternatives

Each of the action alternatives includes provisions to enhance the park and improve the visitor experience. Improved visitor experience could result in an increase in the length of stay with associated increase in expenditures by visitors (Table 6). If the length of visit were to increase, the number of overnight visitors may increase. Overnight visitors spend nearly 3 times as much as non-local visitors. An increase in the number of overnight visitors could result in a moderate increase in expenditures. Increasing the amount of time non-local day users spend at the park could also increase the average amount spent per party per visit.

TABLE 6POTENTIAL FUTURE VISITOR EXPENDITURES FOR ALTERNATIVES A, B, C, AND D

Visitor Expenditure	Alternative A No Action	Alternative B	Alternative C	Alternative D
Lodgings	No change	increase	increase	increase
Food	No change	increase	increase	increase
Transportation and Other	No change	increase	increase	increase
Retail	No change	increase	increase	increase
Total	No change	increase	increase	increase

As an indicator of the potential for increased visitation, annual visitation at nearby Civil War parks in Virginia can be compared with Petersburg. Theoretically, visitors to Appomattox Court House and Richmond Battlefield have interests similar to those for visitors to Petersburg. Improvements to Petersburg National Battlefield may entice visitors to the Appomattox Court House and the Richmond National Battlefield to also visit Petersburg. In 2002, there were 255,000 visitors to Richmond National Battlefield and 177,000 visitors to Appomattox Court House. While Petersburg experienced higher visitation, 551,000 in 2002, than the other parks, many visitors to Petersburg are local day users. Visitors from Appomattox Court House and Richmond National Battlefield could include non-local day users and overnight guests that would also appreciate an improvement to the Petersburg experience. These visitors are not local and thus would have the potential to have positive impacts to the local economy.

Implementing the enhancements and improvements under the action alternatives may require additional staff and could have a negligible positive impact on the local economy by providing new jobs.

Alternative B

Under this alternative a new visitor contact station would be developed at the Five Forks Unit. This new visitor contact station will increase visitation to the park, and could cause visitors to extend their length of their stay. Moderate beneficial impacts to local businesses near the new visitor station may occur as a result of increased visitation to these areas. Additions to staff for the new visitor contact station could have a negligible positive impact on the local economy by providing new jobs.

Assuming a value of \$2,500 per acre and a tax rate of \$1.11 per hundred dollars of assessed value (Dinwiddie County), there is a potential loss of approximately \$200,000 to the local tax base.

Alternative C

Under this alternative a new visitor contact station would be developed for the Home Front with the City of Petersburg, for Grant's Headquarters at City Point, and for Five Forks. These new visitor contact stations will increase visitation to the parks, and could cause visitors to extend their length of their stay. Moderate beneficial impacts to local businesses near the new visitor stations

may occur as a result of increased visitation to these areas. Additions to staff for the new visitor contact stations could have a negligible positive impact on the local economy by providing new jobs. Assuming a value of \$2,500 per acre and a tax rate of \$1.11 per hundred dollars of assessed value (Dinwiddie County), there is a potential loss of approximately \$60,000 to the local tax base.

Alternative D

In addition to the benefits of the other action alternatives, there will be increased interaction between the park and the City of Petersburg for the Home Front. Park staff will also work with Dinwiddie County for recreation and trail planning. New facilities resulting from this planning effort could cause minor positive impacts to the local economy near the new facilities. Additional proposed recreation facilities at Grant's Headquarters at City Point could cause increased visitation to this unit also, thereby causing a minor positive impact to the local economy from visitor expenditures. Alternative D includes the most enhancements for visitor facilities and therefore would have the largest positive impact on the local and regional economy.

Assuming a value of \$2,500 per acre and a tax rate of \$1.11 per hundred dollars of assessed value (Dinwiddie County), there is a potential loss of approximately \$200,000 to the local tax base.

Cumulative Impacts

Some of the programs the park is proposing include partnerships with other local entities, including the City of Petersburg and Dinwiddie County. Efforts by local entities to improve the character of the area for historic visits could further increase visitation to the park and to local attractions, such as the Home Front in Petersburg or new proposed recreation facilities in Dinwiddie County.

Conclusions

Under the No Action Alternative, there would be no positive impacts to the local economy and there is potential for negligible to minor adverse impacts if visitation to the park continues to decline. Each of the action alternatives would have minor to moderate positive impacts to the local and regional economy. Alternative D includes the most enhancements, as well as partnerships with local entities that could further increase visitation to the park and the community. Alternative D will have the most potential for beneficial impacts to the local and regional economy. The potential loss to the tax base is minor compared to the positive economic impact to the travel economy.

Mitigation

Loss of tax revenue can be mitigated by acquisition arrangements that allow the properties to remain on the tax rolls or by payment of in lieu fees. The park intends to allow agricultural easements that would continue property tax payments.

Regional Open Space and Recreational Resources

Alternative A - No Action

Under the No Action Alternative, there would be no changes to open space or recreational resources. No improvements to existing recreational resources would be made.

Impacts Common to All Action Alternatives

Each of the action alternatives includes conservation of open space. This would have a moderate beneficial impact to surrounding communities. Enhancements to interpretive and educational resources would enhance the recreational opportunities offered by the park. The extent of these enhancements vary by alternative, but all would offer some level of enhancement to recreational opportunities. There are no adverse impacts to recreation or open space as a result of the action alternatives.

Alternative B

Alternative B would conserve approximately 7,238 acres of land that is currently rural or agricultural and maintain most of it in the same condition. Enhancements to interpretive and educational resources would cause minor positive impacts to recreational opportunities in the park.

Alternative C

Alternative C would conserve approximately 2,030 acres as open space. Enhancements to interpretive and educational resources would cause minor positive impacts to recreational opportunities in the park.

Alternative D

Alternative D would conserve approximately 7,238 acres of land that is currently rural or agricultural and maintain most of it in the same condition. Additional visitor contact stations and other enhancements represent

major improvements to the recreational resources of the park. Additional improvements proposed by partners of the park to the Home Front and trails in Dinwiddie County provide additional positive impacts to recreational resources in those localities.

Cumulative Impacts

Improvements proposed by partners of the park to the Home Front and trails in Dinwiddie County provide additional



Mounted soldiers at Five Forks Battlefield event.

positive impacts to recreational resources in those localities. Ongoing development in the region will likely decrease the amount of open space, causing adverse impacts to the availability of open space.

Conclusions

The No Action Alternative does not have positive or negative impacts to recreation or open space. The action alternatives each have positive impacts to both open space availability and recreational resources. Alternatives B and D have the same positive impact to open space. Alternative D has the largest positive impact to recreation

Mitigation

No mitigation is needed.

Utilities

Alternative A- No Action

The use and level of service of all utilities would continue as they currently exist.

Alternatives B, C, D

Use of utilities and level of service would increase where new visitor centers or visitor

system of the tour road would continue to contribute to visitors' ending their visit rather than continuing on after a break.

The entries to the Eastern Front would continue to be perceived by most visitors as unsafe.



Hiking trails enhance the visitor experience.

contact stations are created. Mechanisms are in place in all jurisdictional areas for electricity, water supply, natural gas, telecommunications, and solid waste disposal.

Septic systems or wastewater treatment pipelines may have to be constructed wherever visitor centers or contact centers are constructed. Planning should include implementation of adequate systems for expected visitation.

Transportation Alternative A - No Action

Visitors would continue to use a tour route that is not clearly marked causing confusion about the location of the next battlefield site.

The level and type of use of the park and public roads would remain relatively unchanged. The alignment of the Eastern Front exit onto Crater Road, the complicated traffic patterns between that point and the Eastern Front entrance, and the one-way

Alternatives B, C, D

Transportation impacts, described below, would be common among all the action alternatives.

Tour Route

The potential for the implementation of a regional trail system and regional alternative transportation systems would increase due to developing more extensive partnerships, joint ventures and increasing benefits to individual partners. Both of these actions would provide a new tour experience for the park visitor, one that would be substantially different from the one available to the car-touring public.

Visitors would continue to use the existing complex of public roads, but fewer visitors would get lost due to better orientation at the primary and secondary visitor contact points, and the coordination of signage.

Roads Inside Park Units

The existing access points to the park units would remain unchanged.

Cumulative Impacts

The public infrastructure projects that are planned for the study area largely focus on improved transportation networks including trail systems, roadway improvements and high speed rail. These improvements will work to enhance access to and circulation among Petersburg National Battlefield Fronts. The GMP alternatives for the park recognize these proposals and will benefit from them. The land protection provisions of the GMP alternatives are consistent with community master plans and will further goals of resource protection and agriculture land preservation. The cumulative effects for the region of the action alternatives represent positive impacts.

Unavoidable Adverse Impacts

Unavoidable adverse impacts from implementing any of the alternatives may include short and long-term disturbance and some vegetation loss from construction activities related to new trails, wayside exhibits, car-pull off, roadway improvements and parking areas particularly in regards to Alternatives B and D with expansion of the park's boundary and inclusion of new resources. Implementation of appropriate erosion control and revegetation best practices will be implemented during construction.

Archeological resources may be adversely impacted by development activities. At this time, no known significant archeological resources would be impacted by the improvement or development of amenities related to Alternatives B and D as described

above. If significant archeological resources were found before or during construction activities, the facilities would be relocated or the archeological resources could be excavated to salvage artifacts. Again, best-practices methods would be implemented in regards to any archeological resources found.

Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity of the Action Alternatives

NPS is required to describe actions in terms of the NEPA objective to maintain and enhance the long-term productivity of the environment. The action alternatives include numerous elements that would enhance the long-term productivity of the environment.

Locating trails, wayside exhibits, pull-offs and parking areas away from sensitive areas will help protect earthwork and archeological resources as well as natural resources such as rare, threatened and endangered species habitats. Clearing of vegetation for improvements and new construction may allow the opportunity to remove exotic plants and minimize further invasion. Directing visitor use along trails to access special resources such as earthworks and battlefields will minimize degradation of resources and reduce soil erosion and compaction.

The final GMP will provide a guideline for long term management of park resources in concert with the natural and socio-economic environment. Short term impacts to some forested areas where Civil War-era landscapes are to be restored will be offset by long-term preservation of land- some of which will develop into forested lands on balance.

Irreversible and Irretrievable Commitments of Resources of Action Alternatives

An irreversible commitment of resources is one that cannot be changed once it occurs; an irretrievable commitment means that the resource cannot be recovered or reused.



The action alternatives do not entail significant commitment of resources irreversibly. The acquisition and preservation of historically significant lands is consistent with the land use planning goals of local communities. Growth in these communities has been planned considering the value of protecting Petersburg National Battlefield as a resource.

Limited amounts of non-renewable resources would be used for construction projects, including energy and materials. These resources are irretrievable once they are committed.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative selected according to its ability to promote the national environmental policy as expressed in the National Environmental Policy Act (NEPA), sections 101 and 102. A high score received by an alternative during analysis usually means that the alternative would cause the least harm to the biological and physical environment and would best protect, preserve, and enhance historic, cultural, and natural resources. Conversely, a low score for an alternative determines that alternative to have less significance in preserving and protecting cultural and environmental resources.

The mission of Petersburg National Battlefield Park is "to preserve the nationally significant resources associated with the campaign, siege and defense of Petersburg and Poplar Grove National Cemetery, and to provide an understanding of the events and their causes, impacts and legacy to individuals, the community, and the nation in the full context of American History." The draft general management plan for Petersburg National Battlefield outlines four possible alternatives for managing the park's resources. Alternative A, the No Action Alternative, received the lowest score of the four alternatives, based on this alternative's actions and ability to fulfill the NEPA requirements. No Action would continue to maintain but not enhance the park's resources.

Alternative B provides expansion of the park by nearly 7,238 additional acres of battlefield lands containing important historic and cultural resources. Keeping the land as open

TABLE 7
ENVIRONMENTALLY PREFERRED ALTERNATIVE ANALYSIS

NEPA Section 101 & 102 Criteria	Alternatives			
	Α	В	С	D
Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	0	2	1	2
Ensure safe, healthful, productive, and esthetically and culturally pleasing surroundings for all Americans.	1	2	1	2
Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. Urban	0	1	1	2
Preserve important historic, cultural, and natural aspects of our heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices. Urban	1	2	1	2
Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.	1	1	1	1
Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.	0	1	1	1
Total	3	9	6	10

Points: 0: Does not mean criteria; 1: Somewhat meets criteria; 2: Fully meets criteria

space under the park's protection provides for the protection of natural resources as well as historic and cultural resources, but does not provide full enhancement of the interpretation and visitor experience, nor does it provide for the restoration and rehabilitation of the new resource lands.

Alternative C allows for the expansion of park boundaries by 2,030 acres to protect the existing resources in the park. In this alternative, interpretation and visitor experience are enhanced and expanded. Key resources are rehabilitated and repaired, however, the alternative does not fully ensure the widest range of beneficial uses of the park's resources. Alternative C also does

not provide for preservation of the currently unprotected major historic battlefield lands.

Alternative D, the environmentally preferred alternative, also provides for the protection of nearly 7,238 acres of battlefield lands and their natural, historic and cultural resources. The preferred alternative includes the rehabilitation and repair of resources and the expansion and enhancement of interpretation and the visitors' experience by using these resources to tell a fuller range of Petersburg stories. In so doing, Alternative D most closely achieves the requirements of sections 101 and 102 of NEPA by best protecting, preserving, and enhancing the historic, cultural and natural resources associated with the Petersburg Campaign.

CARRYING CAPACITY

One of the issues a General Management Plan must address is carrying capacity or visitor capacity. In a report published by the National Recreation and Park Association, carrying capacity is defined as "the supply or prescribed number of appropriate visitor opportunities that will be accommodated in an area". NPS also defines it as "the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in the park."

Identifying management zones will help park staff to monitor and address unacceptable impacts to park resources and visitor experiences. The staff will utilize the final GMP to facilitate the decision-making process to achieve desired resource conditions while balancing for visitors' educational and interpretive experiences. The park will use the best available natural and social science to identify indicators and standards to formulate policy in regards to carrying capacity. The greater the potential for significant impacts or consequences to park resources and values, the greater the level of study and analysis needed to support the decisions.

In Petersburg National Battlefield, carrying capacity has different thresholds and tolerances depending on what unit or park resource is analyzed. Due to the fragile nature of earthworks, access (i.e. walking on them) is prohibited. Therefore carrying capacity will not be analyzed for this resource. In general it is anticipated that except for the Eastern Front visitor center, the park will not exceed carrying capacity for the time covered by this plan.

In action alternatives B and D, carrying capacity will not be an issue for the park for an even longer duration of time as visitors will have significantly more battlefield resources to visit.

The Eastern Front visitor center has already exceeded its carrying capacity. The visitor center is not currently able to accommodate large groups of students for presentations and other educational programs. This issue has been addressed in Alternatives C and D with the redesign of the visitor center in C and a rehabilitation of the CCC-era operations building in both C and D.

Access to earthworks is very controlled and limited. Earthworks are currently being managed to reduce erosion as much as practicable by utilizing proper vegetative cover. To identify the most appropriate vegetative strategy that would meet both resource management and interpretive goals, the NPS is undertaking a comprehensive monitoring program to determine the rates of erosion and the varying benefits of vegetative covers for erosion control, slope stability and interpretation over time. In addition, Petersburg NB has initiated a series of cultural landscape reports to determine the existing conditions and location of the earthworks. The combination of these monitoring efforts and the studies will provide the NPS with the base information to identify the long-term impacts on earthworks in each of the park areas. In addition, the NPS completed an environmental assessment, Preserve Earthen Fortifications, for the earthworks construction project at the Eastern and Western Fronts. The assessment identified management options and impacts for specific sections of the earthworks, and provides long-term guidance for the park.



Consultation & Coordination

History of Community Participation

There are many different public agencies, local governments, non-profit organizations and individual citizens who have an interest in this plan. Reaching out to the community for their ideas and expertise and listening to their concerns is an important step in the GMP planning effort. A combination of formal public forums as well as phone conversations, individual meetings, electronic mail, and letters have all contributed important input into the development of this draft GMP/EIS.

FORMER GMP PROCESS

A Notice of Intent to prepare an EIS was published in the Federal Register on April 1, 1997. From 1997-2000, the park and the Northeast Regional Office were engaged in the first GMP planning process. An internal draft document was produced that focused on minor boundary adjustments to protect existing park resources, expanding the interpretive themes, and developing new facilities. This document was never officially released to the public. As part of the NPS internal review process, it was determined that the park should pursue a boundary expansion in order to protect nationally significant battlefields associated with the Petersburg Campaign. The GMP planning process was redirected and new efforts resulted in scoping and conceptual alternative meetings with the public, consultations with the state and federal agencies and elected officials and the development of this draft GMP/EIS.

LANDOWNER MEETINGS

Two open house meetings were held in Dinwiddie County in May 2001 to inform landowners about the GMP process and potential boundary expansion. The park sent 200 letters to landowners whose properties were located on or adjacent to the nationally significant battlefields considered for boundary expansion. During the meetings, residents were first presented with information about the historic events of the Petersburg Campaign and the need for conservation and interpretation. Landowners were invited to sit down with the park's historian to review the location of their property and discuss if they were interested in battlefield conservation on their land and if they would like assistance. Additionally, residents were provided with information about all those who are involved in conservation and interpretation in Dinwiddie County. Finally, landowners were given information about the GMP process, Dinwiddie County's Comprehensive Planning process and the proposed County Battlefield Trails planning effort. Twelve landowners attended and participated in the meetings.

Scoping: Public Workshops

Four scoping workshops were held in May 2001 in Dinwiddie County, Fort Lee (Prince George County) Hopewell, and Petersburg. The park sent over 700 letters to residents and agencies and distributed press releases to Petersburg and Richmond area papers. At the workshops, community members heard a brief presentation on the continuation of the park's GMP process. Participants were then involved in a variety of small and large group exercises to gather ideas and issues on visitor use, interpretation, resource protection and partnerships. Comment sheets were also distributed to participants who wanted to capture more extensive thoughts. More than 140 community members and agency staff participated at the workshops.

A summary of the comments received at the workshops was posted on the park's website in June 2001. The summary reflected the thoughts of many participants and was not edited, appearing as they were originally recorded. Following the workshops, the park superintendent and other staff met with locality representatives from cities of Hopewell and Petersburg and Dinwiddie County to discuss their ideas, concerns and potential partnerships. The results of these meetings helped the planning team to determine the key issues for the GMP and develop different options for future park management.

Conceptual Alternatives Public Workshops

In March 2002, the park sent over 800 letters to residents and agencies and distributed press releases to Petersburg and Richmond area papers in April 2002 inviting the community to participate in conceptual alternatives workshops for the GMP. Recommendations from the draft lands

assessment plus an explanation of the philosophy for each of the four alternatives was presented at four meetings in Dinwiddie County, Fort Lee, Hopewell and Petersburg in May 2002. A newsletter detailing the key issues, alternatives and planning process was distributed at the meeting, by mail to 800 residents and posted on the park's website. Participants at the meetings were asked for comments on what they liked or disliked about each of the four alternatives. Comment sheets were provided again for more in-depth thoughts. Over 50 residents and agency staff attended the four workshops.

The workshop participants' comments were posted on park's website in July 2002. The GMP planning team collected hundreds of ideas and concerns that were taken into consideration in the development of this draft GMP/EIS.

Briefings to Elected Officials

Throughout this GMP planning effort, the park superintendent and other staff in conjunction with local elected officials, have met with Congressman Randy Forbes, Senator George Allen and Senator John Warner. During these visits, information about the proposed boundary expansion, community support, conceptual alternatives and future park development was presented and discussed. These members of Congress and their staff provided ideas, suggestions and support for the continuation of the GMP process.

A detailed list of the recipients begins on page 189. In addition, this document is available on the park's website at www.nps.gov/pete and in all public libraries of municipalities adjacent to the park.

Compliance With Specific Laws & Regulations

In developing Petersburg NB General Management Plan and Environmental Impact Statement, the NPS will follow all applicable regulations, laws, policies and executive orders. A list of those relevant to this planning effort follows.

Federal Laws and Regulations National Environmental Policy Act of 1969 and Council of Environmental Quality Regulations as amended

This planning document includes an environmental impact statement to evaluate the impact of NPS actions on the quality of the environment. Important benefits are expected to accrue within Petersburg NB, but minor short-term impacts would be expected in specific areas where vegetation would change or new construction would cause disturbance. A number of issues will require further inventory and analysis when more information becomes available or ongoing studies are completed. In these cases, further compliance would be required when specific actions, not identified or evaluated in this document, are considered for implementation.

Federal Water Pollution Act as amended, Clean Water Act as amended, and Interagency Chesapeake Bay Agreement as amended

Any NPS action with the potential to affect water quality must comply with these laws and applicable agreements and regulations. Careful siting of ground disturbing activity would minimize the impact, and plans would include all appropriate erosion and sedimentation control measures to maintain mandated water quality. Recommendations

from the ongoing earthworks project would be followed, along with guidelines in the Earthworks Management Manual, and experience of other national parks.

Endangered Species Act of 1973 as amended, Endangered Species Act as amended, and Fish and Wildlife Coordination Act as amended

This planning process included consultation with the Virginia Natural Heritage Program and U.S. Fish and Wildlife Service to ensure that NPS actions do not jeopardize the continued existence of listed species or critical habitat. These consultations and inventories by Petersburg NB staff have not identified any critical species or habitat within the park; however, several are located in the immediate vicinity. The actions identified in this document will increase the amount of habitat favored by these species.

Clean Air Act, as amended

Petersburg NB is classified as a Class II clean air area. Maximum allowable increases of sulfur dioxide, particulate matter and nitrogen oxides beyond baseline concentrations established for Class II areas can not and will not be exceeded through NPS actions resulting from this document. Antiquities Act as amended, Historic Sites, Buildings and Antiquities Act as amended, National Historic Preservation Act as

amended, Archeological Resources Protection Act as amended, Archeological and Historic Preservation Act as amended, Museum Properties Act as amended, and Executive Order 11593, "Protection and Enhancement of the Cultural Environment" The protection and preservation of cultural resources by NPS are mandated by these authorities. Consultation with the State Historic Preservation Officer and the Advisory Council is required for all activities that identify, preserve, impact or otherwise affect cultural resources. The proposals for the Five Forks Unit in Alternative C would require inventory, submission of Determinations of Eligibility and review by both the state and federal compliance agencies before these actions could be implemented. All mitigation appropriate to ongoing maintenance activities, new construction or changes in management practice, or emergencies would be completed in consultation with these state and federal partners.

Architectural Barriers Act of 1968, Rehabilitation Act of 1973, and Americans with Disabilities Act of 1990

In keeping with the intent of these laws, all NPS structures would be accessible to all Americans to the greatest degree possible.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"

More than 76 percent of the Petersburg, Virginia population could be identified as low-income or minority. Federal agencies are required to evaluate the effects of their actions on minority or low-income populations. The proposals in each of these alternatives could affect these populations. The specific impacts are identified above, in this chapter's sections on each alternative. Potential overlay zones targeting economic development funding and other actions by local and state partners could attract significant investment into the Petersburg region. This would have a positive impact on the economy and the quality-of-life for all residents.

Executive Order 11988, "Floodplain Management" and Executive Order 11990, "Protection of Wetlands"

The protection of floodplain and wetland values is mandated by these orders.

Development of new buildings and roads would not be located in critical areas. The historical trail system would be extended and a bridge constructed within the 100-year flood plain in Alternatives B and C. These trails would be no more than five feet wide and would not have hard surfaces. Grading would be kept to a minimum, and erosion would be controlled through siting, water bars and other erosion control techniques. Construction of the bridge will require a statement of finding and a separated environmental compliance document.

Executive Order 13112, "Invasive Species"

Federal agencies are required to restrict introduction of invasive species into natural ecosystems on lands and in waters they administer and to encourage states, local governments and others to prevent their introduction into the country's natural ecosystems. Resource management strategies, including vegetative conservation strategies on earthworks, would be designed to comply with this order. This supersedes Executive Order 11987 "Exotic Organisms".

Director's Order #77-1, "Wetland Protection", and Procedural manual #77-1

Wetlands have been identified in all the park units. Alternatives B and C create unavoidable impacts to wetlands. As per the NPS no-net-loss policy, mitigation has been proposed in the form of compensation-in Alternative B this would occur in the Hatcher's Run watershed in Five Forks and in Alternative C it would occur in the same watershed on Poor Creek. In both cases, the mitigation would exceed a 1:1 ratio.

Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay-July 14, 1994, Chesapeake Bay Riparian Buffer Plan, and Clean Water Action Plan

Restoring and Protecting America's Waters: This plan considered the recommendations and NPS commitments contained in these documents. Alternatives B and D would create an impact on the riparian corridors along tributaries of the Chesapeake Bay. The decisions to impact these corridors are made in compliance with the guidelines for evaluation identified on page 8 of the Chesapeake Bay Riparian Buffer Plan and again in Appendix C: Riparian Buffering Options of the same document.

Commonwealth of Virginia Statutes and Regulations Title 10.1-1188 (b) "State Environmental Review Process"

This statute identifies the state role in the environmental review process.

Title 10.1 "Virginia Water Quality Improvement Act of 1997" and Title 10.1 "Virginia Erosion and Sediment Control Law" as amended

These statutes establish the regulations concerning water quality, point and non-point pollution programs, and control of soil erosion, sediment deposition and runoff impacts on surface water and other natural resources.

Title 10.1-1308 "Virginia Air Quality Regulations"

This statute establishes the regulations for air quality.

Section 29.1-564-568 "Virginia Endangered Species Act" as amended and Section 3.1-1020-1030 "Virginia Endangered Plant and Insect Act"

These statutes identify the regulations that protect threatened or endangered plants, animals and insects.

Title 10.1-2200 "Virginia Cultural Resources", Title 10.1 "Virginia Antiquities Act", and Title 15.2-2306 "Preservation of Virginia Historic Resources"

These statutes identify local ordinances and state regulations that protect cultural, historic and archeological resources.

TABLE 8 RELEVANT STATUTES AND REGULATIONS

Federal Statutes

Clean Air Act, as amended (Public Law 88-206)

Farmland Protection Policy Act

Endangered Species Act of 1973, as amended (Public Law 93-205)

Fish and Wildlife Coordination Act, as amended (16 United States code 661, et seq.)

National Historic Preservation Act of 1969 (Public Law 89-665)

Noise Control Act of 1972, as amended

Resource Conservation and Recovery Act (Public Law 94-580)

Safe Drinking Water Act, as amended (Public Law 93-523)

Watershed Protection and Flood Prevention Act of 1954 (16 USC 1101, et seg.)

Wetlands Conservation Act (Public Law 101-233)

Wild and Scenic Rivers Act

Clean Water Act, as amended (Public Law 95-217)

Coastal Zone Management Act

Native American Grave Protection and Repatriation Act of 1990

Executive Orders (E.O.)

			,
Ε.	.0. 1	1296	Flood Hazard Evaluation Guidelines
Ε.	.0. 1	1514	Protection and Enhancement of Environmental Quality
Ε.	.0. 1	1593	Protection and Enhancement of Cultural Environment
Ε.	.0. 1	1988	Protection of Floodplains
Ε.	.0. 1	1990	Protection of Wetlands
Ε.	.0. 1	2898	Environmental Justice in Minority Populations and Low Income Populations
Ε.	.0. 1.	3007	Sacred Indian Trust
Ε.	.0. 1.	3112	Invasive Species
Ε.	.0. 1.	3123	Greening the Government Through Efficient Energy, Management Energy Conservation and Production Act

Commonwealth of Virginia Statutes

Chesapeake Preservation Act of 1988

Chesapeake Bay Preservation Area Designation and Management

Virginia Coastal Resources Management Program

Erosion and Sediment Control Law and Regulations (VESCL 10 1-5467)

Stormwater Management Law and Regulations (VSWM 10 1-60315)

Regulations for Control and Abatement of Air Pollution

Asbestos Removal and Disposal ((VAC 20-80-640)

National Park Service Director's Orders

D.O.	2	Park Planning
D.O.	12	Environmental Impact Analysis
D.O.	17	Tourism
D.O.	25	Land Protection
D.O.	28	Cultural Resources Management
D.O.	47	Sound Preservation and Noise Management
D.O.	61	National Cemetery Operations
D.O.	77	Natural Resource Protection
DΩ	87B	Alternative Transportation Systems

Agency Consultation

Cultural Resources

Potential impacts on the park's cultural resources will be addressed under the provisions for assessing effects outlined in 36 CFR Part 800, regulations issued by the Advisory Council on Historic Preservation (ACHP) implementing section 106 of the National Historic Preservation Act of 1966, as amended (NHPA; 16 USC 470 et seq.) Under the "Criteria of Effect" (36 CFR Part 800.9(a), federal undertakings are considered to have an effect when they alter the character, integrity, use of cultural resource, or the qualities that qualify a property for listing in the National Register of Historic Places.

The NPS will consult with the Virginia State Historic Preservation Officers (SHPO) and the ACHP to ensure that NPS operations, management and administration provide for the site's cultural resources in accordance with the intent of NPS policies and with sections 106, 110, and 111 of the NHPA, as stated in the 1995 programmatic agreement (PA) among the NPS, the ACHP and the National Conference of State Historic Preservation Officers. Under section V.A. of the programmatic agreement, all undertakings that are not considered programmatic exclusions would be reviewed in accordance with 36 CFR Part 800.

Internally, the NPS will complete an "Assessment of Actions Having an Effect on Cultural Resources" (XXX form) prior to implementation of any proposed action. The form would document any projected effects and outline actions proposed to mitigate any effects. All implementing actions for cultural resources will be reviewed using the XXX form and reviewed by the park's team of cultural resource advisors as specified in the 1995 PA, as amended.

Before any ground-disturbing action by the NPS, the park's archeologist will determine the need for archeological inventory or testing. Any such studies will be carried out and evaluated for effect before construction, in consultation with the state historic preservation officer, and the ACHP.

Staff from the Virginia Department of Historic Resources participated in the May 2001 scoping meetings and the May 2002 conceptual alternatives workshops.

The park superintendent and staff briefed the State Historic Preservation Officer in June 2002 about the GMP process, expansion of interpretive themes and the likely impact of potential future development on historic resources. The SHPO provided favorable comments on the conceptual alternatives in a letter dated June 24, 2002.

Natural Resources

The NPS has worked through informal consultation with the U.S. Fish and Wildlife Service (USFWS) and the Virginia Department Game and Inland Fisheries (VDGIF) concerning endangered and threatened species and critical habitat. No action under the currently proposed alternatives will cause significant adverse effects on endangered or threatened species. VDGIF is a consulting agency under the U.S.

permits from the states or other federal agencies will be obtained prior to action.

In summer 2002, the park requested that the USFWS review the conceptual alternatives and other development actions proposed in the GMP. In a letter dated August 15, 2002 the USFWS stated that they believed that the selection of any of the conceptual alternatives is not likely to adversely affect federally listed species.



Bonaccord House at City Point.

Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C.661 et seq.), providing environmental analysis of projects or permit applications coordinated with the Virginia Department of Environmental Quality and other state and federal agencies.

During the NEPA compliance process, consultation with the appropriate agencies will ensure compliance with all state air and water quality standards. Any actions in floodplains or wetlands in the park will comply with Executive Orders 11988 and 11990 (floodplain management and wetlands protection). Any necessary approvals or

As individual projects are implemented from the GMP, and where environmental assessments are necessary, a determination will be made concerning the environmental consequences of the proposed action. If no significant adverse affects are identified, a finding of no significant impact will be prepared and appended to the GMP. This finding will conclude the compliance process for the National Environmental Policy Act for the involved actions.

Table 8 contains a partial listing of laws, regulations and policies that pertain to the planning process.

List of Preparers

National Park Service

Northeast Regional Office

Marie Rust, Regional Director

Robert W. McIntosh, Associate Regional Director for Planning and Partnerships

Terrence D. Moore, Chief of Park Planning and Special Studies

Helen Mahan, Community Planner and Project Leader

Christine Gobrial, Community Planner

Peter Iris-William, Park Planner

Deirdre Gibson, Park Planning Program Manager (former)

Petersburg National Battlefield

Bob Kirby, Superintendent

Chris Calkins, Chief of Interpretation & Visitor Services

Jerry Helton, Chief of Maintenance

Ike Kelley, Chief Ranger

Dave Shockley, Chief of Resources Management

James Blankenship, Historian

Tim Blumenschine, Natural Resource Management Specialist

Tracy Chernault, Interpretive Specialist

Richard Easterbrook, GIS Specialist

Robin Fuller, Education Specialist

Grant Gates, Interpretive Specialist

Harper's Ferry Center

Tom Tankersley, Interpretive Planner

Consultants

EA Engineering, Science, and Technology, Inc.

Christine Papageorgis, PhD, Project Manager

Mary Alice Koeneke, Natural Resources

Suzanne Boltz, Social & Economic Resources

Dan Raley, Air Quality and Energy

List of Recipients

State and Federal Elected Officials

Senator John W. Warner (VA)

Senator George Allen (VA)

Congressman Randy Forbes (4th District)

State Representative Riley E. Ingram (62nd District)

State Representative Fenton L. Bland, Jr. (63rd District)

State Representative J. Paul Councill, Jr. (75th District)

Non-Governmental Organizations

Chesapeake Bay Foundation, Inc.

Civil War Preservation Trust

Civil War Round Table Associates

Eastern National

George Wright Society

The Izaak Walton League

Historic Petersburg Foundation, Inc.

Land Trust Alliance, Inc.

National Park and Conservation Association

National Park Foundation

National Trust for Historic Preservation

Pamplin Historical Park, Inc.

Richmond Civil War Round Table

Rincon Institute

Siege Museum

Sons of Confederate Veterans

The Conservation Fund

Virginia Council On Indians

Weston Manor, Inc.

Local Elected Officials

City of Colonial Heights Board of Supervisors

City of Hopewell City Council

City of Hopewell Mayor and Vice-Mayor

City of Petersburg City Council

City of Petersburg Mayor

Dinwiddie County Board of Supervisors

Prince George County Board of Supervisors

Local Governments

Chesterfield County Planning Department

City of Colonial Heights Office of the City Administrator

City of Colonial Heights Historical Society

City of Hopewell Chamber of Commerce

City of Hopewell Office of the City Manager

City of Petersburg Chamber of Commerce

City of Petersburg Office of the City Manager

City of Petersburg Planning Department

Crater Planning District Commission

Dinwiddie County Office of the County Administrator

Dinwiddie County Planning Department

Dinwiddie County Recreation Department

Prince George County Office of the County Administrator

State Agencies

Office of the Governor, Commonwealth of Virginia

Virginia Department of Conservation and Recreation

Virginia Department of Economic Development

Virginia Department of Game and Inland Fisheries

Virginia Department of Historic Resources

Virginia Department of Transportation

Office of the Provost, Virginia Military Institute

Office of the Provost, Virginia State University

Federal Agencies

Advisory Council on Historic Preservation

American Battlefield Protection Program

Appomattox Court House National Historical Park

Chesapeake Bay Partnership

Fredericksburg and Spotsylvania National Military Park

Gettysburg National Military Park

Quartermaster Museum- Fort Lee

Richmond National Battlefield Park

U.S. Army Combined Support Command and Fort Lee

U.S. Department of Agriculture, Extension Service

U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service



Appendices

Enabling Legislation

An Act To provide for the inspection of the battle fields of the siege of Petersburg Virginia approved February 11 1925 (43 Stat. 866).

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That a commission is hereby created, to be composed of the following members, who shall be appointed by the Secretary of War:

- (i) A commissioned officer of the Corps of Engineers, United States Army;
- (2) A veteran of the Civil War, who served honorably in the military forces of the United States: and
- (3) A veteran of the Civil War, who served honorably in the military forces of the Confederate States of America.

SEC. 2. In appointing the members of the commission created by Section 1 of this Act the Secretary of War shall, as far as practicable, select persons familiar with the terrain of the battle fields of the siege of Petersburg, Virginia and the historical events associated therewith.

SEC. 3. It shall be the duty of the commission, acting under the direction of the Secretary of War to inspect the battlefields of the siege of Petersburg, Virginia in order to ascertain the feasibility of preserving and marking for historical and professional military study such

fields. The commission shall submit a report of its findings to the Secretary of War not later than December 1, 1925.

SEC. 4 There is authorized to be appropriated, out of any money in the Treasure not otherwise appropriated, expenses, in the sum of \$3,000 in order to carry out the provisions of this Act. An Act To establish a national military park at the battle fields of the siege of Petersburg, Virginia approved July 3, 1926 (44 Stat. 822).

Be it enacted by the Senate and House of Representatives of the United Sates of America in Congress assembled, That in order to commemorate the campaign and siege and defense of Petersburg, Virginia, in 1864 and 1865 and to preserve for historical purposes the breastworks, earthworks, walls, or other defenses or shelters used by the armies therein, the battle fields at Petersburg, in the State of Virginia, are hereby declared a national military park whenever the title to the same shall have been acquired by the United States by donation and the usual jurisdiction over the lands and roads of the same shall have been granted to the United States by the State Of Virginia that is to say, one hundred and eighty five acres or so much thereof as the Secretary of War may deem necessary in and about the city of Petersburg. State of Virginia. (16 U.S.C. 432).

SEC. 2. That the Secretary of War is hereby authorized to accept, on behalf of the United States, donations of lands, interests therein,

or rights pertaining, thereto required for the Petersburg National Military Park. (16 U.S.C. 423a)

SEC. 3. The affairs of the Petersburg National Military Park shall, subject to the supervision and direction of the Secretary of War, be in charge of three commissioners, consisting of Army officers, civilians, or both, to be appointed by the Secretary of War, one of whom shall be designated as chairman and another as secretary of the commission. (16 U.S.C. 423b)

SEC. 4. It shall be the duties of the commissioners, under the direction of the Secretary of War, to superintend the opening or repair of such roads as may be necessary to the purposes of the park, and to ascertain and mark with historical tablets or otherwise, as the Secretary of War may determine, all breastworks, earthworks, walls, or other defenses or shelters, lines of battle, location of troops, buildings, and other historical points of interest within the park or in its vicinity, and the said commission in establishing the park shill have authority, under the direction of the Secretary of War, to employ such labor and service at rates to be fixed by the Secretary of War, and to obtain such supplies and materials as may be necessary to carry out the provisions of this Act. (16 U.S.C. 423c.)

SEC. 5. The commission, acting through the Secretary of War, is authorized to receive gifts and contributions from States, Territories, societies, organizations, and individuals for the Petersburg National Military Park: Provided, That all contributions of money received shall be deposited in the Treasury of the United States and credited to a fund to be designated "Petersburg National Military Park Fund," such fund shall be applied to and expended under the direction of the Secretary of War, for

carrying out the provisions of this Act. (16 U.S.C. 423d)

SEC. 6. It shall be lawful for the authorities of any State having had troops engaged at Petersburg, to enter upon the lands and approaches of the Petersburg National Military Park for the purpose of ascertaining and marking the lines of battle of troops engaged therein: Provided, That before any such lines are permanently designated, the position of the lines and the proposed marking them by monuments, tablets, or other wise, including the design and inscription for the same, shall be submitted to the Secretary of War and shall first receive written approval of the Secretary, which approval shall be based upon formal written reports to be made to him in each case by the commissioners of the park: Provided, That no discrimination shall be made against any State as to the manner of designating lines, but any grant made to any State by the Secretary of War may be used by any other State. (16 U.S.C. 423e)

SEC. 7. If any person shall, except by permission of the Secretary of War, destroy, mutilate, deface, injure, or remove any monument, column, statues, memorial structures, or work of art that shall be erected or placed upon the grounds of the park by lawful authority, or shall destroy or remove any fence, railing, enclosure, or other work for the protection or ornament of said park or any portion thereof, or shall destroy, cut, hack, bark, break down, or otherwise injure any tree, bush, or shrubbery that may be growing upon said park, or shall cut down or fell or remove any timber, battle relic, tree or trees growing or being upon said park, or hunt within the limits of the park, or shall remove or destroy any breastworks, earthworks, walls, or other defenses or shelter or any part thereof constructed by the armies formerly

engaged in the battles on the lands or approaches to the park, any person so offending and found guilty thereof, before any United States commissioner or court, justice of the peace of the county in which the offense may be committed, or any other court of competent jurisdiction, shall for each and every such offense forfeit and pay a fine, in the discretion of the said United States commissioner or court, justice of the peace or other court, according to the aggravation of the offense, of not less than \$5 nor more than \$500, one half for the use of the park and the other half to the informant, to be enforced and recovered before such United States commissioner or court justice of the peace or other court, in like manner as debts of like nature are now by law recoverable in the several counties where the offense may be committed. (16 U.S.C. 423f)

SEC. 8. The Secretary of War, subject to the approval of the President, shall have the power to make and shall make all needful rules and regulations for the care of the park, and for the establishment and marking of lines of battle and other historical features of the park (16 U.S.C. 423g)

SEC. 9. Upon completion of the acquisition of the land and the work of the commission, the Secretary of War shall render a report thereon to Congress, and thereafter the park shall be placed in charge of a superintendent at a salary to be fixed y the Secretary of War and paid out of the appropriation available for the maintenance of the park. (16 U.S.C. 423h)

SEC. 10. To enable the Secretary of War to begin to carry out the provisions of this act, there is hereby authorized to be appropriated not more than the sum of \$15,000, out of any moneys in the Treasury not otherwise

appropriated to be available until expended, after the United States has acquired title, and disbursements under this Act shall be annually reported by the Secretary of War to Congress. (See 16 U.S.C. 423i)

Excerpt from "An Act To authorize appropriations for construction at military posts, and for other purposes," approved February 25, 1929 (45 Stat 1301,1305): SEC. 4. That the Secretary of War be, and he is hereby, authorized to transfer to the Petersburg National Military Park such portion of the Camp Lee Military Reservation, Virginia, as in his discretion may be required in connection with the establishment of the Petersburg National Military Park, as authorized in the Act of Congress approved July 3, 1929.

An Act To add certain surplus land to Petersburg National Military Park, Virginia, to define the boundaries thereof, and for other purposes, approved September 7, 1949 (63 Stat 691).

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the Department of the Army is hereby authorized and directed to transfer to the Department of the Interior, without reimbursement, two tracts of land, comprising two hundred six acres, more or less, situated on either side of Siege Road adjacent to Petersburg National Military Park, Virginia. Upon completion of such transfer all lands, interest in lands, and other property in Federal ownership and under the administration of the National Park Service as part of or in conjunction with

Petersburg National Military Park, in and about the city of Petersburg, Virginia, and comprising one thousand five hundred thirty-one acres, more or less, upon publication of the description thereof in the Federal Register by the Secretary of the Interior shall constitute the Petersburg National Military Park. (16 U.S.C. 423a-1)

SEC. 2. The Secretary of the Interior is further authorized to adjust the boundary of the Petersburg National Military Park through purchase, exchange, or transfer: Provided. That in doing so the total area of the park will not be increased and that such changes become effective upon publication of the description thereof in the Federal Register by the Secretary of the Interior. (16 U.S.C. 423a-2).

An Act To change the name of the Petersburg National Military Park, to provide for acquisition of a portion of the Five Forks Battlefield. and for other purposes, approved August 24, 1962 (76 Stat 403). Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the Petersburg National Military Park, established under authority of the Act of July 3, 1906 (44 Stat. 423a-1, 423b-423h), and enlarged pursuant to the Act of September 7, 1949 (63 Stat. 691; 16 U.S.C. 423a-1, 423a-2), is predesignated the Petersburg National Battlefield.

SEC. 2. The Secretary of the Interior, in furtherance of the purposes of the Acts referred to in section I of this Act, may acquire by purchase with donated or appropriated funds, exchange, transfer, or by such other means as he deems to be in the public interest, not to exceed twelve hundred acres of land or interests in land at the site of the Battle of Five Forks for addition to the

Petersburg National Battlefield. Lands and interests in lands acquired by the Secretary pursuant to this section shall, upon publication of a description thereof in the Federal Register, become a part of the Petersburg National Battlefield, and thereafter shall be administered by the Secretary of the Interior in accordance with the provisions of the Act entitled "An Act to establish a National Park Service, and for other purposes,î approved August 95, 1916 (39 Stat. 535; 16 U.S.C. I, 2, 3), as amended and supplemented.

SEC. 3. There are hereby authorized to be appropriated such sums, but not more than \$90,000, as are necessary to acquire land pursuant to section 2 of this Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, TITLE III-ADDITION OF EPPES MANOR TO PETERSBURG NATIONAL BATTLEFIELD SEC. 313.

- (a) The Secretary is authorized to acquire the historic Eppes Manor, and such other lands adjacent thereto, not to exceed twenty-one acres, for addition to the Petersburg National Battlefield, as generally depicted on the map entitled "Petersburg National Battlefield, Virginia, numbered APMA 80,001, and dated May, 1978.
- (b) There are hereby authorized to be appropriated not to exceed \$2,200,000 to carry out the purposes of this section. Approved November 10, 1978.

Chapter Three Tables

TABLE 9
DEMOGRAPHIC PROFILE—PETERSBURG NATIONAL BATTLEFIELD AREA

POPULATION	Prince George County	Dinwiddie County	City of Petersburg	City of Hopewell
Total Population	33,047	24,533	33,740	22,354
Male _	17,821	12,193	15,426	10,447
Female	15,226	12,340	18,314	11,907
Race	20.425	45.027	6.240	442.024
White	20,135	15,837	6,249	113,924
Black	10,753	8,257	26,643	7,484
Hispanic	1,625	237	463	651
Asian	573	76	236	180
Other	564	226	267	384
Projected Population 2010	34,504	26,804	31,502	21,801
Total Households	10,726	9,107	13,799	9,055
Total Occupied Housing Units	10,159	9,107	15,955	9,749
Source: United States Census Data, 2000 web-site				
EDUCATION				
HS Graduate or higher (%)	81.6	70.0	68.6	71.8
College Graduate or Higher (%)	19.4	11.0	14.8	10.2
Source: United States Census Data, 2000 web-site				
EMPLOYMENT PROFILE				
Civilian Labor Force	13,024	11,899	14,463	10,048
Employment	12,490	11,452	13,170	9,377
Unemployment Rate	2.1%	2.3%	4.9%	4.0%
Median Household Income	\$49,877	\$41,582	\$28,851	\$33,196
Prince George County Median Household Income	from US Census model-based 19	97 projections. Source: United S	States Census Data, 2000 web-si	te
EMPLOYMENT DISTRIBUTION BY PE				
Agriculture	0.4	0.9	0.3	0.3
Mining	0.0	1.3	0.0	0.0
Construction	5.0	6.0	4.3	11.0
Manufacturing	7.0	15.6	12.5	26.2
Transportation	1.0	2.2	2.2	3.2
Trade	17.5	23.3	24.3	16.4
Services	22.2	5.4	21.7	26.0
Government	46.0	43.8	31.6	14.5
Finance, Insurance, & Real Estate	0.9	1.4	3.1	2.4
Source:Virginia Economic Development Web-site				
POVERTY STATUS IN 1999				
Families Below Poverty Level	F24 / 6 F2/	440.75.507	4 424 / 46 70/	756 / 40 50
Number/Percent	534 / 6.5%	449 / 6.6%	1,421 / 16.7%	756 / 12.5%

TABLE 10
UTILITY PROVIDERS FOR THE PETERSBURG NATIONAL BATTLEFIELD AREA

	Prince George County	Dinwiddie County	City of Petersburg	City of Hopewell
Electric	Dominion Virginia Power	Dominion Virginia Power	Dominion Virginia Power	Dominion Virginia Power
	Prince George Electric Cooperative	Southside Electric Cooperative	Southside Electric Cooperative	
Natural gas	Columbia Gas of Virginia	Columbia Gas of Virginia	Columbia Gas of Virginia	Columbia Gas of Virginia
Telecommunications	Verizon Communications	Verizon Communications	Verizon Communications	Verizon Communications
Water	Virginia-American Water Company	Town of McKenney	City of Petersburg	Virginia-American Water Company
Wastewater Treatment	Petersburg Regional Plant	Town of McKenney	City of Petersburg	City of Hopewell Regional Plant
Solid Waste	Prince George County	Dinwiddie County Town of McKenney	City of Petersburg Landfills	Private Waste Haulers and Landfills

Source: Virginia Economic Development Web-site, Prince George County Comprehensive Plan Update 1998, Dinwiddie County Comprehensive Plan 2001, City of Petersburg, and City of Hopewell.

Chapter Three Tables

TABLE 11
PROPOSED AND RECOMMENDED HIGHWAY AND ROADWORK PROJECTS IN THE VICINITY OF PETERSBURG NATIONAL BATTLEFIELD LANDS AND TOUR ROUTES

LOCATION	FROM-TO	DISTANCE	TYPE OF PROJECT
CITY OF PETERSBURG			
Rte. 142 Boydton Plank Road	Dupuy road to Defense Road	0.64 miles	Constrained fund project
	Western City limits (WCL) to Dupuy Road	0.15 miles	Constrained fund project
	Youngs Road to Halifax Road	0.27 miles	Constrained fund project
	Defense Road to Youngs Road	0.53 miles	Constrained fund project
Total Length: 1.59 miles of Boydto	on Plank Road projected for construction based o	n funds allocated	
Halifax Road	Vaughn Road to Wells Road	0.3 miles	Relocation of Halifax Road
	North Flank Boad to Vaugha Boad	1.02 miles	under construction VDOT
	North Flank Road to Vaughn Road		Constrained fund project
	South Flank Road to North Flank Road South City Limits (SCL) to South Flank Road	0.08 miles 0.01 miles	Constrained fund project Constrained fund project
Total Longth: 1.41 miles of Halifax	Road projected for construction/relocation bases		
——————————————————————————————————————	R Nodu projecteu for construction/relocation based	u on fullus alloca	nieu
Defense Road	Boydton Plank Road to Squirrel Level Road	0.47miles	
	Squirrel Level Road to Halifax Road	0.38 miles	
	Halifax Road to Baylors Lane	0.78 miles	
	Baylors Lane to Johnson Road	0.63 miles	
Total Length: 2.26 miles of Defens	se Road projected for reconstruction based on fu	nds allocated	
Graham Road	Southern Jefferson Street	0.78 miles	Constrained plan project
	South Crater Road		Widening
Squirrel Level Road	WCL to Wells Road	0.83 miles	Constrained plan project
County Drive (Rte. 460)	Hickory Hill Road Rye. 632 to Wagner Road	2.16 miles	Reconstruction
	Thereoff the fload tife 652 to tragite fload	2.1063	Constrained fund project
E. Washington Street (Rte. 36)	Puddiedock Road to Eastern City Limits (ECL)	0.5 miles	Vision Plan
	E. Bank Street to Puddiedock Road	0.76 miles	Vision Plan
	Amelia Street to E. Bank Street	0.2 miles	Vision Plan
Total Length: 1.46 miles E. Washir	ngton Street projected as a Vision Plan project	0.2 1111103	VISION Flair
CITY OF HOPEWELL			
Terminal/Station/Ramsey	Randolph Road to Pecan Ave.	1.3 miles	Vision Plan Widening
Oaklawn Blvd.	I-295 to West Corporate Limits (WCL)	0.8 miles	Vision Plan Widening
County of Prince George Rte. 3		2.84 miles	Vision Plan Widening
County of Finice deolige Rte. 5	6 F293 to ECE	2.04 1111163	Vision Flair Widefiling
CITY OF DINWIDDIE	0.20 miles south of Dts 1.225 to Dts 225	0.2 miles	Constrained plant made at wild and
Rte. 1/Boydton Plank Road	0.30 miles south of Rte. I-226 to Rte.226	0.3 miles	Constrained plan project widening
D. 440	Rte. 603 Sterling Road to Rte. 1 & Rte. 460	1.52 miles	Constrained plan project widening
Rte.142	from WCL Petersburg to Rye. 1	1.36 miles	Reconstruction/Constrained plan
Rte. 613 Squirrel Level Road	Rte. 673 Smith Grove to Rte. 676 Flank Road	1.45 miles	Reconstruction/Constrained plan

Total visits are the sum of recreational and non-recreational visits to the parks based on data from the NPS website: www2.nature.nps.gov/stats; the year experiencing the highest visitation is shown in bold.

A review of total visits to Petersburg National Battlefield compared to visits at Richmond NBP and Appomattox NHP two other Civil War related national parks in the vicinity indicates that Petersburg receives the highest visitation of the three parks. Petersburg NB is a popular recreational site for personnel from the Fort Lee US Army base adjacent to the park which may explain in part the difference in visitor use.

TABLE 12
A COMPARISON OF THE TOTAL VISITS* FOR PETERSBURG, RICHMOND AND APPOMATTOX NATIONAL PARKS

YEAR	PETERSBURG NBP	RICHMOND NBP	APPOMATTOX NBP
1979	577,283	331,893	208,411
1980	545,765	314,336	218,724
1981	536,003	343,677	244,968
1982	550,783	358,778	240,405
1983	739,167	371,886	246,277
1984	729,437	363,587	318,027
1985	705,197	364,767	277,613
1986	679,751	376,059	323,784
1987	666,690	403,942	336,075
1988	721,934	419,030	312,693
1989	503,433	443,936	377,440
1990	353,758	505,755	402,947
1991	459,086	552,874	321,668
1992	478,458	550,184	311,921
1993	448,988	245,504	211,557
1994	408,021	233,392	273,768
1995	424,516	223,519	223,288
1996	433,281	225,240	205,938
1997	449,285	227,596	204,862
1998	503,867	232,402	201,874
1999	516,766	237,762	198,665
2000	541,279	239,273	196,363
2001	540,983	254,035	190,422
2002	550,905	255,260	177,219
AVERAGE	544,360	336,445	259,371

Appendix C: Cost Estimates

This GMP is programmatic: that is, it gives guidance in the form of management prescriptions for future decision making regarding resource protection, interpretation, public use and development. Therefore, the costs provided in this appendix are indicative of the capital and operational costs of implementing the alternatives. They are provided so that reviewers can compare the general costs and benefits of the GMP alternatives. Specific costs for construction and operation would be determined for individual actions after detailed designs are produced.

The capital costs estimated for implementing Alternative B, C and D were calculated using NPS Class C costs. A Class C estimate is a conceptual cost estimate based on square foot and unit costs of similar construction or identifiable unit costs of similar construction items. These estimates were prepared without detailed designs or a fully defined scope of work, since those are not available at this stage of the planning process.

In order to calculate potential acquisition costs for the boundary expansion, the Northeast Region Lands Division prepared a Legislative Cost Estimate for Alternatives B, C and D. A Legislative Cost Estimate is an estimate that outlines the costs associated with acquiring any interest in real property for new park units, proposed park boundary expansions, remainder of tracts to complete existing units, and or changes in estates within existing units. Costs reported in a Legislative Cost Estimate include:

- Estimated real property acquisition and relocation costs on a tract-by-tract basis
- Tax data for Payment in Lieu of Taxes (PILOT) program consideration
- Appraisal contracts
- Mapping contracts
- Title contracts
- Surveying contracts
- Environmental Site Assessment contracts
- Other contract work

These costs assume 100% fee acquisition by the NPS. Petersburg NB supports partnership efforts through easements and donations that will contribute to lower acquisition costs. The estimated time period for acquisition of these nationally significant lands is 10-15 years.

APPENDIX C

Cost Estimates for Action Alternatives

COSTS: ALTERNATIVE B	
Annual Operations & Management	
Current Staff	2,236,000
Additional Staff	1,278,000
TOTAL	\$3,514,000
Research, Interpretation, Planning & Construction	
Plan, Design & Build-Improvements for existing resources	6,149,000
Interpretation & Special Resources	611,000
Boundary Expansion-Related Costs (Haz-Mat, RTE, Historic and Cultural Landscape Reports)	1,206,000
TOTAL	\$7,966,000
Land Acquisition Total	\$25,629,000
COSTS: ALTERNATIVE C	
Annual Operations & Management	
Current Staff	2,236,000
Additional Staff	2,242,000
TOTAL	\$4,478,000
Research, Interpretation, Planning & Construction	
Plan, Design & Build-Improvements for existing resources	9,371,000
Interpretation & Special Resources	4,947,000
Boundary Expansion-Related Costs (Haz-Mat, RTE, Historic and Cultural Landscape Reports)	303,000
TOTAL	\$14,621,000
Land Acquisition Total	10,165,000
COSTS: ALTERNATIVE D	
Annual Operations & Management	
Current Staff	2,236,000
Additional Staff	2,442,000
TOTAL	\$4,678,000
Research, Interpretation, Planning & Construction	
Plan, Design & Build-Improvements for existing resources	6,811,000
Interpretation & Special Resources	7,001,000
Boundary Expansion-Related Costs (Haz-Mat, RTE, Historic and Cultural Landscape Reports)	1,206,000
TOTAL	\$15,018,000
Land Acquisition Total	25,629,000

APPENDIX D References

Andropogon Associates, Ltd., Earthworks Landscape Management Manual. Prepared for the National Park Service. 1987.

Andropogon Associates, Ltd., Earthworks Landscape Management Action Plan for the Petersburg National Battlefield. Prepared for the National Park Service. 1998.

American Battlefield Protection Program. "Maps of Principal Land Battles of the Petersburg Campaign." Draft 1998.

American Battlefield Protection Program. "Historic Maps of Petersburg Area in 1865." Draft 1998.

American Rivers • http://www.americanrivers.org/wildandscenictoolkit/sumva.html.

Appomattox Basin Industrial Development Corporation • http://www.abdico.com/data

Appomattox River Corridor Plan • http://craterpdc.state.va.us/appomattoxriverstudy.htm

Appomattox Manor—City Point, A History. Prepared by Dr. Harry Butowsky, National Park Service, Mid-Atlantic Region, 1978.

"Assessment of the Principal Earthworks Federal Fish Hook Line, Petersburg, Virginia," NPS, Washington DC, 1998.

Aquatic Macro-Invertebrate Inventory on Poor and Harrison Creeks. 1987.

Background Information for Petersburg General Management Plan. 1998.

Blades, Brooke S., An Archaeological Assessment of Petersburg National Battlefield, Virginia. Prepared for Petersburg National Battlefield. 1996.

Blumenschine, Timothy. 2002. Personal Communication with M.A.Koeneke, 07 August 2002.

Board of Architectural Review, Hopewell, City Point Historic District Architectural Review and Resource Handbook, 1983.

Board of Supervisors, Dinwiddie County, Dinwiddie County Planning Commission, Dinwiddie County Comprehensive Plan, 1996.

Board of Supervisors, Prince George County, Prince George County Planning Commission, Comprehensive Plan 1986.

Boonin, Katherine, What Price Glory? A Common Sense Approach to Preserving Civil War Battlefields. Draft. The Conservation Fund, 1991.

Calkins, Chris M, The Appomattox Campaign, March 29 - April 9, 1865. Combined Books, 1997. Chesapeake Bay Preservation Act • http://www.cblad.state.va.us/theact.cfm

City of Hopewell. "General Management Plan: National Park Service City Point Unit—Recommendations Submitted by the City of Hopewell." 1997.

City Of Petersburg • http://www.peterburg-va.org

City of Petersburg, Comprehensive Community Development Plan, prepared by the Department of Planning and Community Development and Harland Bartholomew and Associates, Inc., 1983.

City of Petersburg, Recommendations for the General Management Plan of the Petersburg National Battlefield. Submitted by the city of Petersburg, December 1997.

City Point: An Amendment to the Development Concept Plan. Mid-Atlantic Office Division of Park and Resource Planning for Petersburg National Battlefield, June 1992.

Civil War Sites Advisory Commission, Report on the Nation's Civil War Battlefields, Technical Volume I: Appendices and Technical Volume II: Battle Summaries. 1993.

College of William and Mary • ttp://www.wm.edu/geology/virginia/phys_regions.html

Columbia Gas • http://www.columbiagas.com

Commonwealth of Virginia, 1992 Virginia Outdoors Survey: A survey of Virginians' use of and attitudes about the Commonwealth's natural and outdoor recreational resources. Department of Conservation and Recreation, Division of Planning and Recreation Resources, 1992.

Commonwealth of Virginia, Virginia Outdoors Plan 1996. Department of Conservation and Recreation, Division of Planning and Recreation Resources, 1996.

Comprehensive Interpretive Planning, NPS, Interpretation and Education Guideline.

Crater Planning District Commission, The Appomattox River Corridor Project: A Conceptual Management Plan. With assistance from the Appomattox River Corridor Plan Working Group. Draft Report, October 1997.

Crater Planning District Commission. Tri-Cities Area Year 2023 Long-Range Transportation Plan, January 2001.

Cullen, Joseph P., The Siege of Petersburg. Eastern Acorn Press, PA, 1981. Cultural Landscape Report for Appomattox Manor: Petersburg National Battlefield, City Point Unit. Draft 2000.

Cultural Landscape Report for Crater Battlefield: Petersburg National Battlefield, Main Unit. Draft 2000.

Cultural Landscape Report Federal Left Flank and Fishhook Siege Works: Petersburg National Battlefield. Draft 2000.

Dinwiddie County, Dinwiddie County Comprehensive Plan Draft Revision, 1996. Director's Order 2. Park Planning, 1998.

Dyer, Frederick H., A Compendium of the War of the Rebellion. No date available.

Easterbrook, Richard. 2002. Personal Communication with M.A.Koeneke, o7 August, 2002.

Economics Research Associates, Task 1: Socioeconomic Environment. Draft Report, March 19, 1998. Economics Research Associates, Task 2: Economics of Visitation. Draft Report, April 17, 1998.

Economics Research Associates, Task 3: Economic Analysis of Alternatives, July 27, 1998.

Endangered Species in The National Parks • http://www.nature.nps.gov/wv/esprog.htm

Farrar, Dr. Hayward, Black Freedmen at City Point, 1864-1866, 1991.

Federal Emergency Management Assistance • http://www.fema.org.

Federal Highway Administration, Eastern Federal Lands Highway Division, Petersburg National Battlefield, Virginia Engineering Study. Prepared for the National Park Service, Northeast Region, November 1997.

Final Interim Development Concept Plan/Interpretive Perspectives for Five Forks Battlefield, a component of Petersburg National Battlefield. 1990.

Federal Lands Alternative Transportation Systems Study, Congressional Report, Appendix C: Field Reports. Prepared For Federal Highway Administration And Federal Transit Administration.

Floyd, Myron Fran, Visitor Images and Use of A National Battlefield Park: The Petersburg Example. Thesis presented to Clemson University, December 1986.

Forest Management Plan for Five Forks and the Main Unit. 1990.

"General Management Plan/Environmental Impact Statement for Petersburg National Battlefield, Petersburg, Virginia." Project Agreement for the Plan for Petersburg National Battlefield, October 1996.

"General Management Plan/Land Protection Plan/Environmental Document, Petersburg Battlefield." Prepared by Whit Watkins, Team Captain, Denver Service Center, February 1991.

Guide to Sustainable Earthworks Management. 90 per cent Draft. Prepared by the National Park Service in association with the Georgia Trust for Historic Preservation, 1998.

Gray and Pape, Inc, Draft National Register Nomination Report for Petersburg National Battlefield, August 12, 1996.

Hazardous Waste. http://www.epa.gov/superfund/sites/arcsites/vaacnty.htm#dinwiddie http://www.epa.gov/superfund/sites/cursites/index.htm

"Historical Base Maps, Appomattox Manor—City Point, Petersburg National Battlefield," 1982.

Historic Houses of City Point, a unit of Petersburg National Battlefield located in Hopewell, Virginia, A Request for Proposals. 1997.

Historic Petersburg Organization. http://www.historicpetersburg.org

Historic Structure Report, Appomattox Manor, City Point Unit of Petersburg National Battlefield. 1982.

"Historic Vegetation Base Maps for Five Forks and Main Unit."1998.

Interim Development Concept Plan for Five Forks. 1990.

Interpretation in the National Park Service: A Historical Perspective. Barry Mackintosh. http://www.cr.nps.gov/history/online_books/mackintosh2/branching_challenges.htm

Johnson, Daniel G., and Jay Sullivan, Economic Impacts of Civil War Battlefield Preservation: An Ex-Ante Evaluation. Journal of Travel Research, no date available.

Johnson, Dr. James G., Managing Earthworks under Forest Cover. Virginia Polytechnic Institute and State University in association with National Park Service (Philadelphia Support Office), National Park Service (Southeast Support Office) and Georgia Trust for Historic Preservation, January 1998.

K.W. Poore and Associates, Inc., City of Colonial Heights, Virginia, 1994 Comprehensive Plan Update. Draft, 1995.

Land Protection Plan, Petersburg National Battlefield. Draft, 1983.

Landmark Design Group. 2001. Dinwiddie, Virginia Comprehensive Plan Update 2001.

Lower Appomattox River Corridor Greenway Plan, Virginia Technical University-Architectural College. http://cdac.arch.vt.edu.

Ludwig, J. Christopher, Christopher A. Pague, A Natural Heritage Inventory of Mid-Atlantic National Parks in Virginia, Petersburg National Battlefield. Natural Heritage Technical Report #93-11. Virginia Department of Conservation and Recreation, Division of Natural Heritage. Final Report. Prepared for the National Park Service, February 1993.

Madison, Dwight L., Visitor Services Project, Petersburg National Battlefield. Report 33, 1991.

Major, Beth. Virginia Department of Transportation Personal Communication with Dan Raley, 03 December, 2001.

Major Battles Associated with the Petersburg Campaign. Draft 1998. Management Policies. 1998.

Murphy, Paula, Preservation Plan for City Point, 1985.

National Park Service. 2001. Management Policies 4.9 Sound Management.

National Park Service and Civic Engagement. The Report of a Workshop Held December 6-8, 2001 in New York City.

National Park Service Inventory and Monitoring Base Program. http://wwwi.nature.nps.gov/facts/fi&mbase.htm

National Park Service Geologic Resources Division. Guidance on Geologic Monitoring for Vital Indicators. July 30, 2000 Draft. http://www2.nature.nps.gov/grd/geology/monitoring/geomonitoring_guidance.pdf

National Park Service Natural Resource Information Division – Soil Inventory And Mapping Program (Fact Sheet) By Pete Biggam, Soil Scientist http://wwwi.nature.nps.gov/facts/fsoil.htm

National Park Service - Petersburg National Battlefield, 2001. Review Environmental Assessment And Assessment Of Effect For The Preservation Of Civil War Earthen Fortifications At Petersburg National Battlefield, August 2, 2001.

National Park Serivce - Petersburg National Battlefield. Water Quality Electronic File - Stored Data Provided by Petersburg National Battlefield.

National Park Service. Redesigning The National Park Service (NPS) Gaseous Pollutant Monitoring Network to Meet Servicewide Needs. December 11, 1991. http://den2s11.den.nps.gov/ard/gas/trenddoc.htm
National Register Bulletin 30, Guidelines for Evaluating and Documenting Rural Historic Landscapes. No date available.

"National Register of Historic Places Multiple Property Documentation Form: The Civil War in Virginia, 1861-1865: Historic and Archeological Resources". 2000.

"National Register of Historic Places Multiple Property Documentation Form: Civil War Era National Cemeteries'".1994.

National Wetlands Research Center. "Outline for Study of Wetlands in Petersburg National Battlefield. no date.

National Wild and Scenic Rivers System. http://www.nps.gov/rivers/wildriverslist.html.

Newcomb, Lawrence. 1977. Newcomb's Wildflower Guide. Little Brown and Co.

Oculus, Inc. Battlefield Landscape Resource Documentation 90% Draft Submittal, Charlottesville, VA. February 1999.

Oculus, Inc. Ream's Station: Cultural Landscape Study. 1999.

Oculus, Inc. Battlefield Summaries. 1998.

Petersburg Comprehensive Plan 2000 Draft, July 28 2000.

Petersburg Master Plan. 1965.

Petersburg National Battlefield GPRA Strategic Plan: Fiscal Year 1998. 1998.

PMA Consulting Services, Comprehensive Plan, City of Hopewell, Virginia, 1991.

PMA Planners and Architects. Comprehensive Plan City of Hopewell, Virginia October 2001.

Preservation Alliance of Virginia, Virginia's Economy and Historic Preservation: The Impact of Preservation on Jobs, Business, and Community, 1996.

"Preserve Earthen Fortifications: Environmental Assessment". Draft 2000.

Prince George County • http://www.princegeorgeva.org/abouttrans.htm.

Prince George County Comprehensive Plan Update, Draft Copy, August 1998.

Rainey, Reuben M., Hallowed Ground and Rituals of Remembrance: Union Regimental Monuments at Gettysburg, no date given.

Rainey, Reuben M., The Memory of War: Reflection on Battlefield Preservation, The Yearbook of Landscape Architecture: Historic Preservation, edited by Richard L. Austin et.al., Van Nostrand Reinhold Company, 1983, pp. 69-89.

Rantis, Polly-Anne, James E. Johnson, Forest Management and the Restoration of Historic Scenes. Petersburg National Battlefield Park, Virginia. Technical Report NPS/MARPETE/NRTR-96/070. Prepared for the National Park Service, January 1996.

"Report on Five Forks". 1999.

Resource Management Plan, Petersburg National Battlefield. 1993.

Richmond Regional Planning District. http://www.richmondregional.org.

Rosenzweig, Michael and Duncan Porter. 1990. Flora of Petersburg Battlefield Prepared By, Massey Herbarium, Dept. Of Biology, VA Polytechnic Institute and State University, Blacksburg, VA 24061, October 1990

Shockley, Dave. 2000. Earthwork Management at Petersburg National Battlefield, Petersburg National Battlefield, Petersburg, Virginia

Shockley Dave. 2002. Personal Communication with M.A. Koeneke 07 August 2002.

Southeast High Speed Rail Corridor • http://www.sehsr.org

Statement for Management. 1994.

"Summary of Visitor Report Cards" 1998.

Terwiliger, Karen.1991. Virginia's Endangered Species; Proceedings Of A Symposium, Mcdonald And Woodward Publishing Company, Blacksburg, Virginia 1991.

Thomson, Ron. "Summary of Interpretation Workshop". 1997.

Tri-Cities Metropolitan Planning Organization. http://www.craterpdc.state.va.us/mpomain.htm

Trudeau, Noah Andre, The Siege of Petersburg, Civil War Series. Eastern National, 1995.

U.S. Census Data • http://censtats.census.gov/data/va

US Corps of Engineers. Shoreline Erosion Control Project, Phase II, City Point, Hopewell, Virginia, Concept Design. No date.

U.S. Department of the Interior, National Park Service. Administrative Guidelines for Assisting Landowners and Local Government Jurisdictions in Evaluating Civil War Battlefield Sites. Prepared with National Lands Trust, Inc, September 1996.

U.S. Environmental Protection Agency. http://www.epa.gov/epahome/commsearch.html.

Virginia Coastal Resources Management Program - Coastal Zone Management Act http://www.deq.state.va.us/coastal/goals.htm

Virginia Department of Conservation and Recreation - Natural Heritage Program. http://www.dcr.state.va.us/dnh/

Virginia Department of Conservation and Recreation. 2002. Virginia Outdoors Plan 2002: Our Common Wealth. Commonwealth of Virginia Department Of Conservation and Recreation, April, 2002.

Virginia Economic Development Partnership • http://virginiascan.yesvirginia.org/interactive_map.asp

Virginia Employment Commission. http://www.vec.state.va.us/index_velma.cfm

Virginia Tourism Corporation • http://www.vafc.org/research/files.

Visitor Capacity on Public Lands and Waterways: Making Better Decision. Report To: The Assistant Secretary For Fish And Wildlife And Parks, US Department Of The Interior. Prepared by: The Federal Interagency Task Force on Visitor Capacity on Public Lands. Published by: The National Recreation and Park Association.

Visitor Services Project: Petersburg National Battlefield. 1991.

Visitor Statistics - Money Generation Model • http://www2.nature.nps.gov/stats/

Wastewater • http://www.gatewayregion.com/data/utilities/waterwastewater.htm.

A Dedication

During his tenure with the National Park Service, John Thomas (Tom) Tankersley set a high standard for those who knew him. As a friend, coworker, and supervisor, he was a leader, inspiring those around him to always take the high road in life. For his guidance and creative vision in a document that provides the same, the Petersburg National Battlefield General Management Plan is lovingly dedicated to his memory. Tom's passion for history and music, his love for life, and most of all his friendship were a gift to all who knew him.