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Morristown National Historical Park

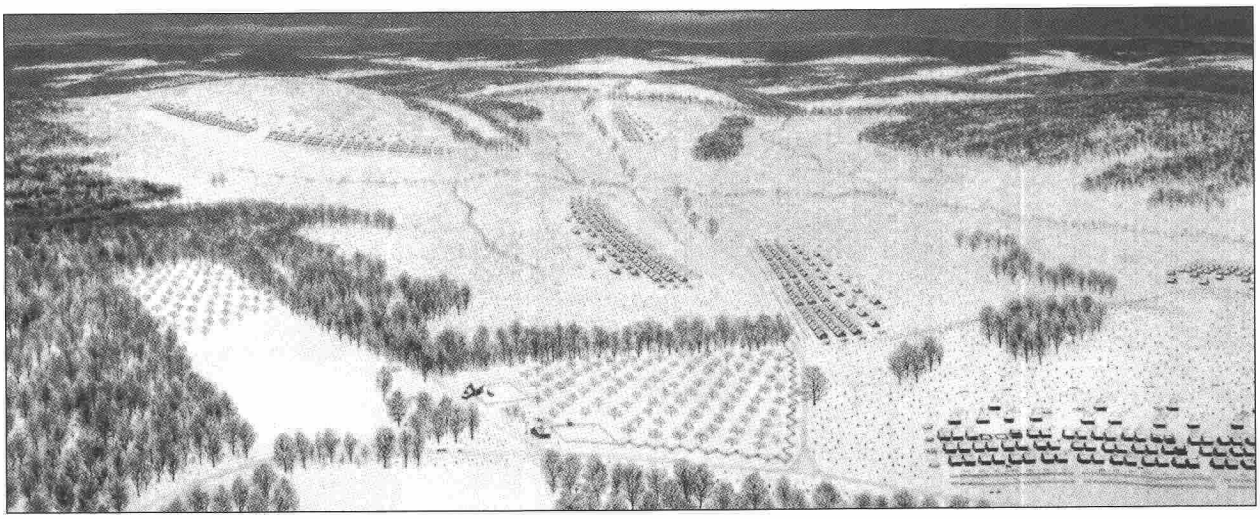
General Management Plan and Environmental Impact Statement
2003



MORRISTOWN NATIONAL HISTORICAL PARK

FINAL GENERAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

National Park Service, Northeast Region
Boston Support Office
Park Planning and Special Studies
15 State Street, 10th Floor
Boston, Massachusetts 02109-3572



Muralist Jay H. Matternes' modern conception of the Continental Army camped across Jockey Hollow during the winter of 1779–1780. Some 12,000 soldiers organized in ten infantry brigades patiently endured exceptionally harsh weather and inconsistent supply in this city of log huts. The view is toward Morristown in the northeast where General Washington and the artillery wintered.

Cover photograph © Eastern National Parks

National Park Service
U.S. Department of the Interior

MORRISTOWN NATIONAL HISTORICAL PARK

FINAL GENERAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Produced by the Boston Support Office, Planning and Legislation
with the Morristown National Historical Park, Morristown, New Jersey.
National Park Service, Northeast Region
U.S. Department of the Interior

New Jersey, 2003

This Final General Management Plan and Environmental Impact Statement (GMP/EIS) describes the resource conditions and visitor experiences that should exist at Morristown National Historical Park over the next 15 to 20 years. It presents a proposed action (Alternative C) and two alternatives for the long-term management of the park that are consistent with the park's mission, National Park Service policy, and other laws and regulations. The alternatives incorporate various management prescriptions and zones to ensure that the park's resources are preserved, and that the public can enjoy the park. The GMP/EIS assesses the consequences that can be anticipated from implementing the various alternatives. Impact topics include the park's cultural and natural resources, visitor experience, park operations, the socioeconomic environment, impairment of resources, and sustainability.

The Draft GMP/EIS was available for public review from March 7, 2003 to May 9, 2003. Copies of the comment letters received during that period, and the National Park Service's responses to those comments are included in the final document. Draft text and graphics were refined and clarified where necessary, and respond to the substantive public comments.

The Final GMP/EIS will be available to the public for 30 days. Following this, a Record of Decision (ROD) will be signed indicating which alternative has been selected as the proposed plan, and authorizing the National Park Service to implement the plan.

For additional information contact:

Morristown National Historical Park
30 Washington Place
Morristown, New Jersey 07960
or
National Park Service
Park Planning and Special Studies
15 State Street, 10th Floor
Boston, Massachusetts 02109

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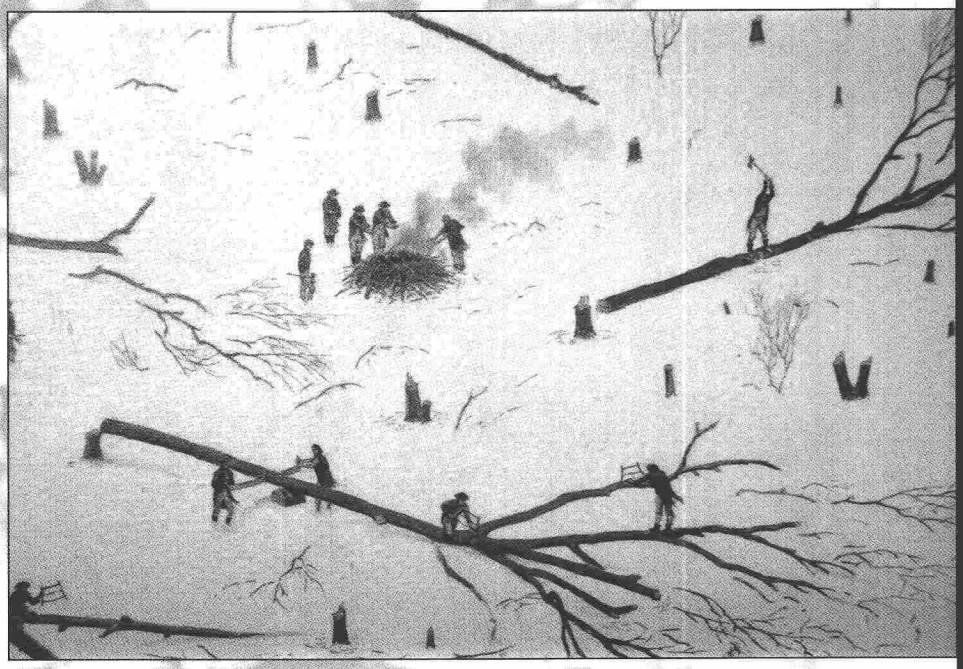
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"On the 14th we reached this wilderness, about three miles from Morristown, where we are to build log huts for winter quarters... The ground is marked out, and the soldiers have commenced cutting down the timber of oak and walnut, of which we have a great abundance."

Dr. James Thatcher, Stark's Brigade

SUMMARY

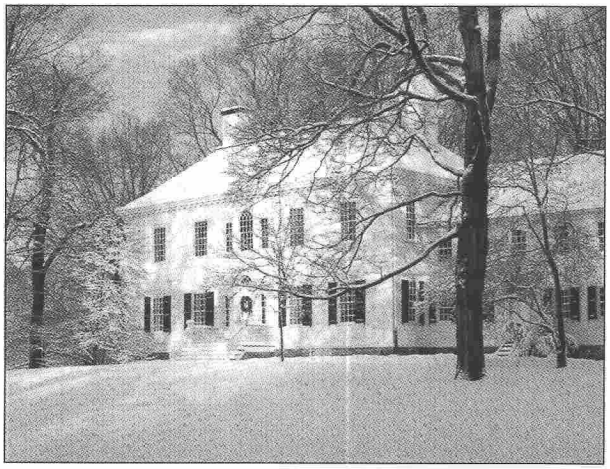
PURPOSE OF AND NEED FOR THE PLAN

This Final General Management Plan/ Environmental Impact Statement for Morristown National Historical Park proposes a long-term approach to managing the park, consistent with the park's mission and NPS policy and other laws and regulations, over the next 15 to 20 years. Morristown National Historical Park, the first national historical park in the national park system, was established in 1933 to preserve the lands and resources associated with the winter encampments of the Continental Army during the War for Independence. At Morristown, General George Washington demonstrated his superb leadership by holding the army together despite seemingly overwhelming difficulties; and his officers and men demonstrated their fortitude and dedication.

The park is comprised of 1,697.55 acres situated in north central New Jersey, approximately 30 miles west of New York City. The park contains four separate units, each of which is associated with the Revolutionary War winter encampments of the Continental Army.

The current master plan for the park was completed in 1976. Although it continues to be used as a general guide for operations, it is no longer adequate to address the policy and operational issues facing park managers. Since the completion of the 1976 plan, there have been a number of significant changes in the park's resources, visitors, and setting, in addition to changes in NPS policy—most of which were not anticipated in 1976. Among the major issues identified during the GMP process are the need to:

- Improve the protection and use of the park's museum and collections.
- Plan for the sustainable management of park forests as a dynamic ecological resource.
- Direct the management of the park's cultural landscapes (a type of resource barely recognized in 1976).



The Ford Mansion served as General George Washington's military headquarters during the winter of 1779–80. Photo by Jim Holcomb.

- Protect the historic setting and scenic beauty of park lands from adjacent development.
- Direct the management of lands added to the park since the previous plan.
- Protect park lands from sound and air pollution, especially that generated by Interstate-287.
- Support enhanced interpretation of the winter encampments and other important historic values.
- Interpret the historical aspects of the park to visitors primarily interested in its scenic and recreational qualities.
- Evaluate the potential for a park–town shuttle transportation system.
- Examine the park's role in historical, recreational, and conservation initiatives in the region.

ALTERNATIVES AND THEIR ENVIRONMENTAL CONSEQUENCES

After completing extensive research and consulting with the public and with park partners, the planning team developed three management alternatives for the park. Each alternative provides a cohesive rationale that shapes a vision for the park's resources and visitors. Although the philosophies are different, each alternative is consistent with the park's legisla-

tion, supports the park's mission, and is feasible. The alternatives share many proposals, but take different approaches to addressing some of the main issues and would thus have differing physical consequences.

Alternative A presents the so-called "no action" alternative required by law. This alternative represents a comparative baseline. Current practices would continue with current plans remaining in force. All projects under approved plans could be carried out; however, it might be difficult to respond to conditions that have changed since the 1976 master plan. Actions that might likely result from adopting this alternative include:

- Modest improvements are made to the museum for collections storage and exhibits.
- Forest management continues to be limited.
- Interpretation remains centered on the encampments.
- An interpretive shuttle is developed in Jockey Hollow.
- Land acquisition is limited to existing acreage ceiling; up to 8.56 acres.
- Participation in regional initiatives is minor.

Estimated costs: $2.35–$2.8 million for annual operations (the 2002 budget was $2.13 million); $2.8–$3.35 million for planning and construction; and $1.5–$2.0 million for land acquisition.

Implementation of Alternative A would likely have major, adverse, long-term impacts on historic landscapes (due to unmanaged change in the historic forest, and loss of potentially significant commemorative features), and on the collections, because storage conditions would remain inadequate. There would likely be major, adverse, long-term impacts to park vegetation due to unmanaged change in the historic forest. Inadequate facilities, confusing circulation, and a narrow interpretive focus would have an adverse long-term impact on visitor experience. Major, beneficial, long-term impacts could result from implementing an interpretive shuttle in Jockey Hollow. Inefficient administrative space and a restrictive scope for partnerships would produce an adverse but minor impact on park operations. Inadequate collections storage facilities, the changing forest character, and harmful development on adjacent land under this alternative would threaten the sustainability of park resources and values.

Alternative B would suggest, to the fullest extent possible, the character of the park during the encampment period of 1777–82. It recognizes that a completely faithful restoration of those conditions is unattainable and, in some ways, undesirable. This alternative attempts to create a meaningful visitor experience through direct contact with the physical landscape conditions encountered during the encampments. Paradoxically, although it seeks to evoke a less complex time, this alternative could entail the most extensive alteration of existing conditions. Actions that might likely result from adopting this alternative include:

- The museum is rehabilitated and a 5,000–10,000-square-foot addition is constructed to improve collections storage and exhibits. The proposed locations for the addition are either at the rear of the museum or along either side, set back from its south façade.
- A cultural landscape treatment plan integrates cultural and natural resource management objectives to protect cultural resources, historic character, and sustain the park's mixed hardwood forest.
- Interpretation centers exclusively on the encampments (similar to Alternative A). Landscape vignettes are created along historic road corridors in Jockey Hollow to suggest aspects of the encampments.
- A park–town shuttle is developed with partners to serve multiple units.
- The acreage ceiling is increased to permit acquisition of up to 500 acres on a willing-seller basis to protect park resources and values.
- The park is a leader in regional initiatives.

Estimated costs: $2.75–$3.25 million for annual operations; $11.0–$13.25 million for planning and construction ($3.5–$5.0 million potentially donated); and up to $20 million for land acquisition (half potentially donated).

Implementation of Alternative B would have a cumulative major beneficial impact on cultural resources, resulting from landscape and museum rehabilitation, increased acreage ceiling, integrated management of the forest, and increased stabilization of archeological resources. Removal of potentially significant commemorative resources, such as the Caretaker's Cottage, would have long-term impacts of undetermined type and intensity. There would likely be major, beneficial, long-term impacts to park vegetation due to integrated management of the forest. Landscape and museum rehabilitation, improved forest management, improved orientation, new landscape vignettes, treatment of ecological themes, and implementation of a park–town shuttle would be expected to have a major, long-term, beneficial impact on visitor experience. Park operations impacts would be beneficial, minor–moderate, and long-term resulting from increased staff, improved administrative space, and greater scope for partnerships. Increased visitation, staff, and new projects under this alternative would likely have a beneficial, long-term impact on the socioeconomic environment. Proper collections storage facilities, increased stabilization of archeological resources, sustaining the historic character of the forest, and increased land protection would have a beneficial overall effect on sustainability.

Alternative C would emphasize the encampment period; however, it would also recognize the efforts of successive generations (1873–1942) to protect, interpret, and commemorate that period. It would rely more on interpretive methods to present a scene evocative of the encampment period. This alternative would also preserve selected 19th- and 20th-century conditions and features added to the historic scene, and might draw on them to illustrate the history of the park resources. Alternative C has been identified as the proposed action. Actions that might likely result from adopting this alternative include:

- The museum is rehabilitated and a 5,000–10,000-square-foot addition is constructed to improve collections storage and exhibits (same as Alternative B). The proposed locations for the addition are along either side of the museum (as in Alternative B) and may extend south of its south façade.
- A cultural landscape treatment plan integrates cultural and natural resource management objectives to protect cultural resources, historic character, and sustain the park's mixed hardwood forest. (Same as Alternative B; however, landscape vignettes are not created in Jockey Hollow.)
- Interpretation remains centered on the encampments, but treats other themes, including commemoration and historic preservation.
- A park–town shuttle is developed with partners to serve multiple units (same as Alternative B).
- The acreage ceiling is increased to permit acquisition of up to 500 acres on a willing-seller basis to protect park resources and values (same as Alternative B).
- The park is a leader in regional initiatives (same as Alternative B).

Estimated costs: $2.75–$3.25 million for annual operations; $10.0–$12.0 million for planning and construction ($3.5–$5.0 potentially donated); and up to $20 million for land acquisition (half potentially donated).

Impacts on cultural resources would be the same as Alternative B; however, potentially significant commemorative resources would not be removed. On natural resources, impacts would be the same as Alternative B; however, landscape vignettes would not be developed. Impacts on all other aspects of the park from this alternative would be the same as Alternative B. As the environmentally preferred alternative, Alternative C will cause the least damage to the biological and physical environment and will best protect, preserve, and enhance historic, cultural, and natural resources.

AFFECTED ENVIRONMENT

The park is comprised of 1,697.55 acres situated in north central New Jersey, approximately 30 miles west of New York City. It falls in two congressional districts: the 11th and 12th, now represented by Rodney Frelinghuysen (R) and Rush Holt (D). The park contains four geographically separate units, each of which are associated with the Revolutionary War winter encampments of the Continental Army.

- *Washington's Headquarters* (approximately 10 acres), located in the town of Morristown, contains the Ford Mansion (1772), which served as General George Washington's headquarters during the winter of 1779–80. The house is furnished and open to the public. The adjacent museum, completed in 1937, houses the park's extensive collections of Revolutionary War materials, archives, and artifacts, serves as the park's administrative office, and functions as the main visitor contact station for the park.

- *Fort Nonsense* (approximately 35 acres) encompasses a prominent hill approximately 1 mile west of Washington's Headquarters overlooking the town of Morristown. Here the soldiers dug trenches and raised embankments in 1777 on the orders of General Washington, who wanted the strategic crest fortified. Visitors enjoy long views from the hilltop and see the footprint of the Upper Redoubt traced in small granite blocks.

- *Jockey Hollow* (approximately 1,330 acres), lying approximately 3 miles southwest of Fort Nonsense, is the site of the "log-house city" constructed by some 10,000 troops during the severe winter of 1779–80. The Grand Parade field, and the farmsteads of Henry Wick and Joshua Guerin, are also in the unit. The landscape consists of rolling hills covered with a mixed hardwood forest. Visitor services include the restored Wick House, recreations of several soldiers' huts, a visitor center, parking lots, numerous hiking trails, and a one-way loop road.

- *New Jersey Brigade* (approximately 321 acres) preserves the site of the encampment of 1,000 troops from the New Jersey Brigade in 1779–80. Principally rolling hills supporting a mixed hardwood forest, it is located about 1 mile southwest of the main encampment area at Jockey Hollow. The former Cross Estate is also part of the unit.

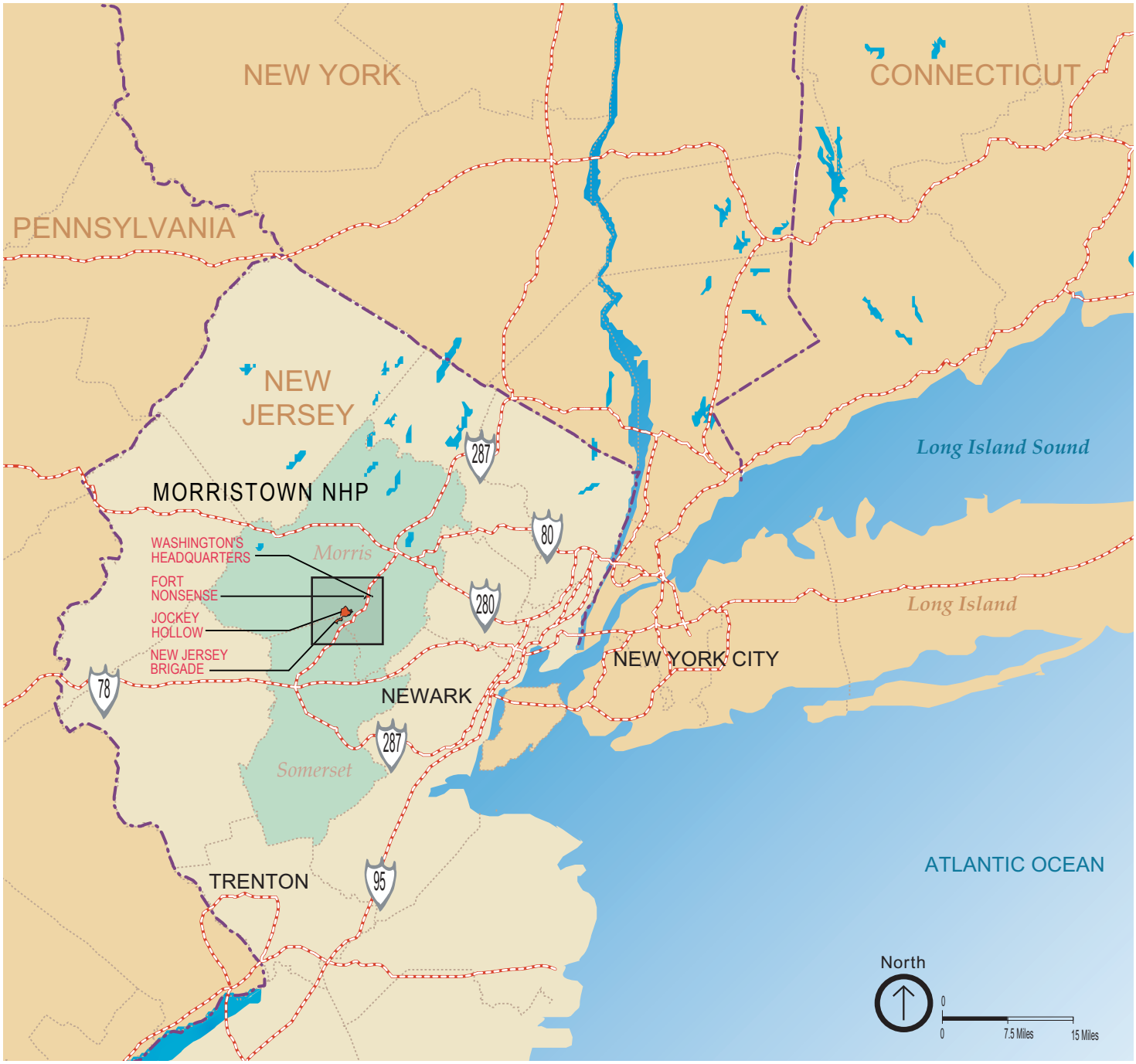
PUBLIC COMMENTS

The Draft GMP/EIS was available for public review from March 7, 2003 to May 9, 2003. The vast majority of public comments received express support for Alternative C (the proposed action). Other comments recommend further increasing the park's acreage ceiling; ask the park to propose specific actions regarding visitor circulation; ask the park to develop a specific deer management plan; and anticipate the need for further public review when implementation plans are developed. Copies of the comment letters and the National Park Service's responses to those comments are included in Appendix IV. Draft text and graphics were refined and clarified where necessary, and respond to the public comments.

The proposed action enjoys considerable support, assessed in formal public meetings, newsletters, special briefings, discussions with the U.S. Fish and Wildlife Service, public review of the draft plan, and the Superintendent's numerous consultations with state (including the State Historic Preservation Office) and local governments.

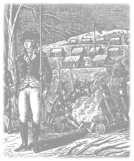
NEXT STEPS

The Final GMP/EIS will be available to the public for 30 days. If no comments requiring major document revision are received during this waiting period, a Record of Decision (ROD) will be signed indicating which alternative has been selected as the proposed plan, and authorizing the National Park Service to implement the plan.



REGIONAL CONTEXT

Figure 1

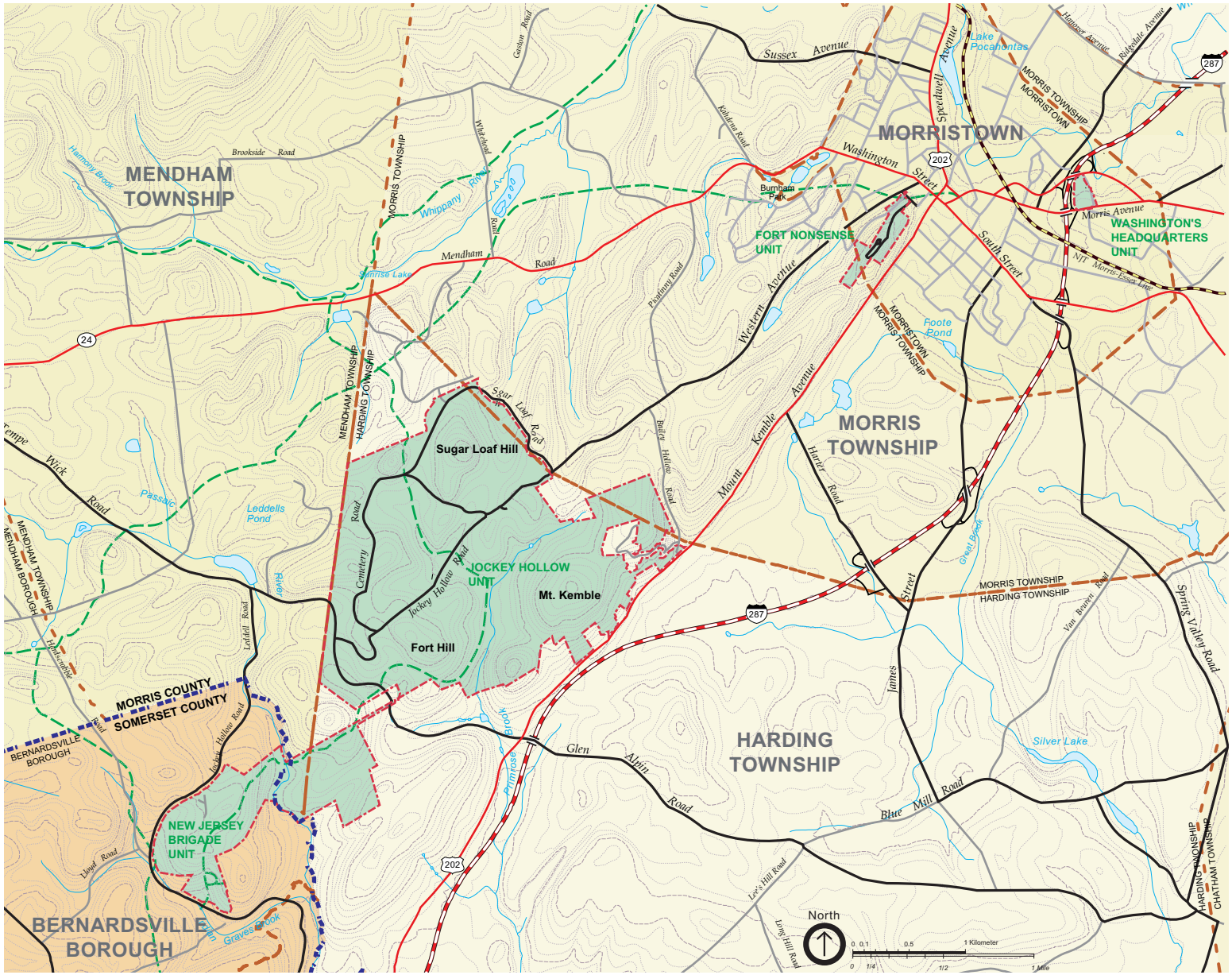


MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY

February 2003

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SHAPINS ASSOCIATES



PARK VICINITY

Figure 2



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
February 2003

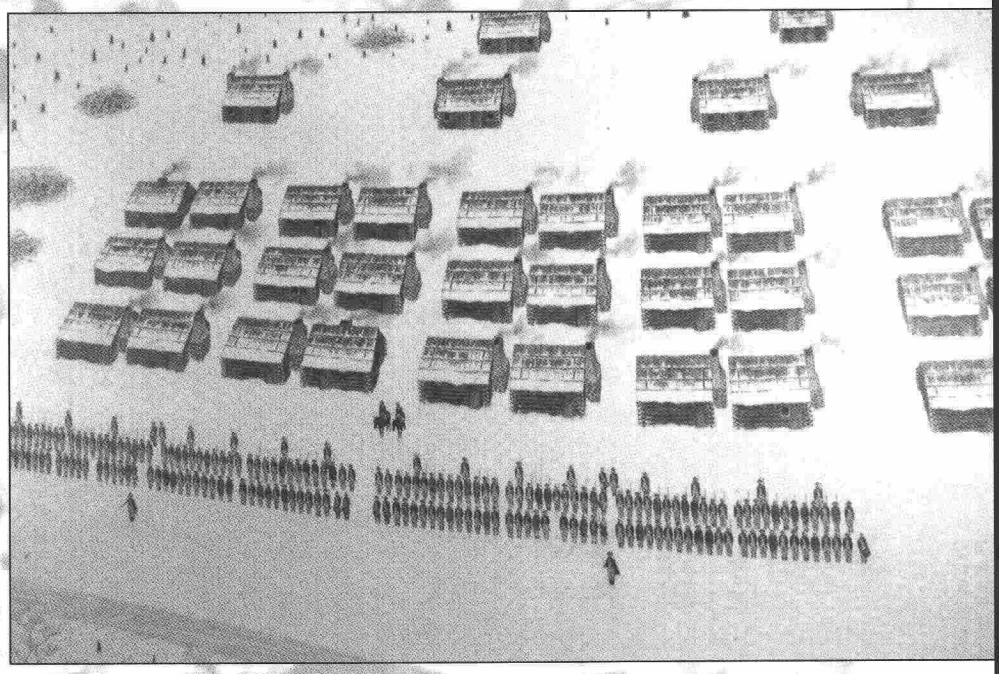
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SHAPINS ASSOCIATES

CHAPTER 1: PURPOSE OF AND NEED FOR A PLAN

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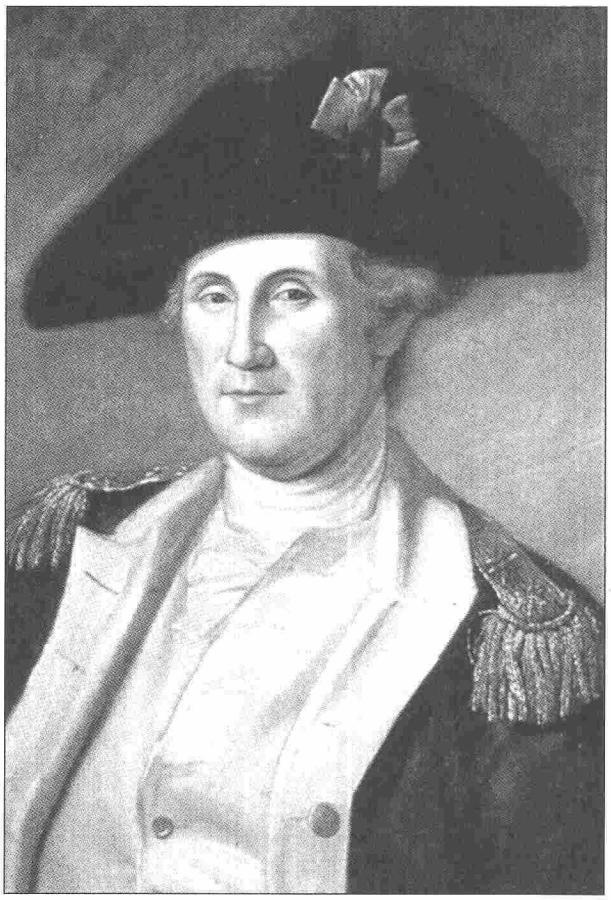


The methodical organization of the encampment reflected General Washington's emphasis on uniformity and regularity as part of his goal of building an army that could stand up to the professional armies of the time. Extending down to the brigade level, soldiers built every hut to exact specifications. Officers' huts sat above the soldiers' huts and the assembly area.

CHAPTER 1: PURPOSE OF AND NEED FOR THE PLAN

INTRODUCTION

The National Park Service has prepared this Final General Management Plan/Environmental Impact Statement (GMP/EIS) to propose a long-term approach to managing Morristown National Historical Park (the park). Chapter 1 describes the purpose and need for the plan, outlining the history of the park, the park's mission, and the planning issues addressed in this document. Chapter 2 presents three alternatives to guide the management of the park over the next 15 to 20 years. They incorporate various zoning and management prescriptions to ensure resource preservation and public enjoyment of the park, and are described in tables and maps. Alternative C is the preferred alternative. Chapter 3 describes the existing conditions within and surrounding the park. The environmental consequences, or impacts, that are anticipated from implementing the various alternatives are described in Chapter 4. Impact topics include natural and cultural resources, visitor experience, socioeconomic environment, and park operations/facilities. Chapter 5 discusses the process of preparing the plan, and Chapter 6 describes the consultation and the coordination of the plan with various organizations, governments, laws, and regulations.



Portrait of George Washington by Charles Wilson Peale, c. 1780. Courtesy West Chester University

Morristown National Historical Park, the first national historical park in the national park system, was established on March 2, 1933 for the purpose of preserving the lands and features associated with the grim winter encampments of the Continental Army during the War for Independence. General George Washington chose Morristown for the main quarters of his troops because the area offered several strategic advantages, among them its location between the Revolutionary capital at Philadelphia and the British army in New York City. At Morristown, Washington demonstrated his superb leadership by holding the Continental Army intact, keeping the American Revolution alive despite seemingly overwhelming difficulties associated with weather, logistics, and morale.

The park also provides an early example of this nation's historic preservation efforts. The Ford Mansion, where Washington made his headquarters, was preserved in the late 19th century by the Washington Association of New Jersey (WANJ) in an effort to protect historic documents, structures, and artifacts associated with General Washington and

the Continental Army's activities at Morristown. The creation of the park was important in the National Park Service's (NPS) development as an agency with equal responsibility in administering the nation's scenic and historic treasures.

The park is located in Morris and Somerset Counties, and in Morris, Bernards, Harding, and Mendham Townships. Nearby population centers include Morristown, Madison, New Vernon, Basking Ridge, Bernardsville, and Mendham. The park is located in New Jersey's 11th and 12th congressional districts. The park is comprised of four separate units totaling 1,697.55 acres. Each unit protects significant Revolutionary War resources and offers visitors unique experiences. The units are:

- ***Washington's Headquarters*** (approximately 10 acres), located in the town of Morristown, contains the Ford Mansion (1772), which served as General George Washington's headquarters during the winter of 1779–80. The house is furnished and open to the public. The adjacent museum, completed in 1937, houses the park's extensive collections of Revolutionary War materials, archives, and artifacts, serves as the park's administrative office, and functions as the main visitor contact station for the park.
- ***Fort Nonsense*** (approximately 35 acres) encompasses a prominent hill approximately 1 mile west of Washington's Headquarters overlooking the town of Morristown. Here soldiers dug trenches and raised embankments in 1777 on the orders of General Washington, who wanted the strategic crest fortified. Visitors enjoy long views from the hilltop and see the footprint of the Upper Redoubt traced in small granite stone blocks.
- ***Jockey Hollow*** (approximately 1,330 acres), lying approximately 3 miles southwest of Fort Nonsense, is the site of the "log-house city" constructed by some 10,000 troops during the severe winter of 1779–80. The Grand Parade field, and the farmsteads of Henry Wick and Joshua Guerin, are also in the unit. The landscape consists of rolling hills covered with a mixed hardwood forest. Visitor services include the restored Wick House, re-creations of several soldiers' huts, a visitor center, parking lots, numerous hiking trails, and a one-way loop road.
- ***New Jersey Brigade*** (approximately 321 acres) preserves the site of the encampment of 1,000 troops from the New Jersey Brigade in 1779–80. Principally rolling hills supporting a mixed hardwood forest, it is located about a mile southwest of the main encampment area at Jockey Hollow. The former Cross Estate is also part of the unit. Several buildings are used for park operations, and the formal garden is open to the public.

HISTORICAL SUMMARY

The Revolutionary War Period

During two critical winters of the Revolutionary War, 1777 and 1779–80, the rolling countryside in and around Morristown, New Jersey, sheltered the main encampments of the American Continental Army and served as the headquarters of its commander-in-chief, George Washington.

Washington first brought his exhausted army to Morristown in the first year of America's declared independence. For much of 1776, setbacks on the battlefield had threatened to make a travesty of the lofty pretensions expressed in the Declaration of Independence. The American army had been driven ingloriously out of New York City and hounded across New Jersey, melting away as it retreated. On more than one occasion, only the forbearance—or

inertia—of British General William Howe saved the rebel force from seemingly inevitable capture.

Then, in one of the most dramatic reversals in military history, Washington, with his army on the verge of disintegration, struck unexpectedly at the British outpost of Trenton. He then eluded entrapment by Lord Cornwallis and on January 3, 1777 gained another victory at Princeton. Washington would have liked to continue on to seize the British stores at New Brunswick, but his weary little army had reached its limit of endurance. He thus turned northward into the New Jersey hills and reached Morristown on the January 6.

Washington probably did not intend to spend the winter at Morristown, but as the opportunities for other action faded, he perceived the advantages the town offered. Geography had created a strong defensive position, protected by forests and swamps and with the rugged Watchung Mountains forming a barrier against British incursions from their New York base. Morristown was nearly equidistant from the British posts at Newark, Perth Amboy, and New Brunswick and guarded the vital inland communication line through the Hudson Highlands to New England. The surrounding agricultural country was rich, and the hills to the north contained iron ore and the forges and furnaces that could make it into armaments. At a secluded spot along the Whippany River, a small mill belonging to the Ford family made gunpowder for Washington's army. Another consideration was that the residents, mostly of New England stock, were freer of Toryism than those in other parts of New Jersey. The Morris County militia, led by men such as Jacob Ford, Jr., had already proved its value in resisting British thrusts.

Upon their arrival, the troops with Washington, numbering no more than 2,000, sought shelter where they could—in public buildings, private homes, stables, barns, and sheds. Those without benefit of such quarters tried to weather the winter blasts in their tents. According to a 19th century tradition, the soldiers built huts east of Morristown in the Loantaka (Lowantica) Valley, but this is not supported by documentary or archeological evidence; nor had the army yet adopted the practice of constructing standardized huts.

Washington himself established his headquarters at Jacob Arnold's tavern on the north side of the village green. At the time, the green was simply a large field used for grazing livestock, and the town itself was little more than a handful of buildings, two churches, a courthouse, and a jail with about 250 inhabitants.

Though outnumbered, Washington kept the British on the defensive. He ambushed their foraging parties, harassed them with forays, and in numerous skirmishes schooled and seasoned his troops. On one occasion, a British contingent trying to appropriate flour from a mill near New Brunswick was surprised and scattered, leaving behind 40 wagons, a hundred horses, and a considerable number of cattle. Near Princeton, another American attack netted 96 wagons laden with provisions and 150 British prisoners.

The result was, as Alexander Hamilton wrote, "the extraordinary spectacle of a powerful army straitened within narrow limits by the phantom of a military force and never permitted to transgress those limits with impunity." Phantom was the right word, as men deserted and enlistments expired. With only a few precious Continentals remaining, Washington accomplished miracles with New Jersey militia. Food and other supplies were chronically lacking. In addition, smallpox ravaged the encampment. Washington ordered the inoculation of both soldiers and civilians, and the town's two churches were transformed into hospitals. By winter's end, Washington had so few troops that officers didn't bother filing formal returns, whereas the British had 10,000 healthy troops within a day's march.

The American army of 1776, recruited for one year, was gone and had to be replaced with a new force. By their late successes and their fortitude,

Washington and the patriots of 1776 had kept the cause alive and inspired new recruits to fill the ranks. In the spring of 1777 a restored American army was formed, and Washington led it out of Morristown on May 28. Before departing, the commander had ordered the building of defensive works to guard the supplies remaining at Morristown. Later folklore bestowed the quaint name of Fort Nonsense on these works, in the mistaken belief that they were built mainly to keep the men busy.

Howe opened the 1777 campaign by moving into New Jersey, hoping to lure Washington into a battle under unfavorable conditions. The Americans, occupying a strong position at Middlebrook in the Watchungs, refused the bait. Howe, tiring of the game, pulled back to the coast. Washington was puzzled by this behavior, and his perplexity increased when on July 23 Howe loaded his army on ships for an unknown destination. Meanwhile another British army, commanded by General John Burgoyne, was moving down the historic Champlain invasion route, aiming to capture Albany.

Washington's confusion was understandable, since the British themselves were unclear as to how the two armies were supposed to coordinate. The immediate uncertainty was resolved when Howe appeared at the head of the Chesapeake, targeting the American capital of Philadelphia. Washington felt obligated to defend the capital, but Howe again was victorious in the field, entering Philadelphia and forcing the Americans into a winter encampment at nearby Valley Forge. Once again, Washington had lost battles but preserved an army. Farther north, the results were disastrous for the royal forces. After demoralizing the Americans with the easy capture of Fort Ticonderoga, Burgoyne was slowed, stopped, and finally defeated in battle at Saratoga. Surrounded by overwhelming forces, he surrendered on October 17. This stunning turnabout brought France into the war openly on the American side, converting a feeble rebellion into another international clash of great powers.

In 1778 a new British commander, Sir Henry Clinton, decided to evacuate Philadelphia and concentrate his forces in New York. Fighting at last on relatively equal terms, Washington nearly defeated the British at Monmouth, New Jersey. After that, the war in the north settled into deadlock: Washington lacked the strength to drive the British out of their base in New York City, but Clinton could do little to expand his area of control. At the end of the campaign, the core of Washington's army went into winter quarters at Middlebrook, where they constructed another orderly village of huts, like that of Valley Forge the previous winter.

Accepting the risk that Henry Clinton would remain inactive, Washington authorized an invasion of western New York in 1779 to punish the Iroquois, who had allied with the British in devastating the frontiers. Commanded by General John Sullivan, this was the largest offensive operation yet undertaken by the American army. When the regiments returned from this grueling campaign, Washington selected Morristown for their winter quarters. Once again, the secluded but strategic village, which Washington described as the nearest place "compatible with our security which could also supply water and wood for covering and fuel," became a military capital.

For his own quarters, Washington chose the mansion belonging to Jacob Ford's widow, by far the finest house in Morristown. In the meadow to the southeast, about 50 log huts were built for the commander's personal guard. Other senior officers found quarters in private homes. But the main body of the army, eight infantry brigades (the 1st and 2nd Connecticut, Hand's, 1st and 2nd Maryland, New York, and 1st and 2nd Pennsylvania [also known as the Pennsylvania Line]) totaling some 12,000 men, camped in the wooded hills of Jockey Hollow, south of Morristown. Eventually a city of huts arose, with a population 40 or 50 times larger than the permanent population of Morristown. Two brigades settled in beyond the limits of Jockey Hollow

proper: Stark's Brigade nearby on the slope of Mount Kemble, and the New Jersey Brigade about a mile away near the upper Passaic River. General Henry Knox set up his artillery encampment along the road heading west out of Morristown.

As each brigade arrived, it was assigned a campsite. The men lived in tents as they cut wood for their cabins. Eventually 600 acres of woods were converted into lines of huts, but before all the huts had been erected a three-day blizzard struck in mid-January, burying many men "like sheep," in their tents. Those with tents were fortunate, as Surgeon James Thacher recorded that many "are destitute of both tents and blankets, and some of them are actually barefooted and almost naked." One heavy snowstorm followed another—28 in that season—and on one occasion it snowed four days straight. As the temperature remained below freezing for weeks, the Passaic and Delaware Rivers and even the Hudson, a tidal estuary, froze solid.

Around the American encampment the snow lay six feet deep. Food was already in short supply, and the great depth of snow made it harder to bring in supplies. Washington confirmed that his soldiers were forced to eat "every kind of horse food but hay." One enlisted man recalled, "We were absolutely, literally starved. I did not put a single morsel into my mouth for several days, except for a little black birch bark which I gnawed off a stick of wood . . . . I saw several of the men roast their own shoes and eat them, and I was afterwards informed that some of the officers killed and ate a favorite little dog." The situation for clothing was little better, and an officer observed "many a good Lad with nothing to cover him from his hips to his toes save his Blanket."

Valley Forge has become proverbial for the suffering and sacrifice of the Continental Army; yet at Morristown, during the harshest winter in anyone's memory, comparatively few men perished. Washington and his officers, and to some extent Congress, had learned from the ordeal of Valley Forge. Everything from the supply system to discipline and even the details of hut construction had been improved. Still, the formal supply system largely broke down, and only a forced requisition on New Jersey civilians, which obviously fell hardest on those nearest the army, enabled Washington's forces to survive.

The 1777 army might have disintegrated during a winter like that at Morristown, but the army of 1779–80 came through in reasonably good order. Nevertheless, the hardships the army endured cannot be adequately described or appreciated. Miserably clad, chronically underfed, seldom paid, the men grumbled but somehow survived in their smoky, drafty huts. This was a different kind of courage than the momentary ardor that leads a man to stand up to enemy fire on the battlefield, and for us today a more subtle form of inspiration. The Morristown encampment displayed the steady, stubborn, grim kind of courage that drives people to endure endless adversity for some greater cause. "I cherish those dear, ragged Continentals," wrote young Colonel John Laurens, "whose patience will be the admiration of future ages."

Taking advantage of the frozen waterways and probably trying to keep his troops active, Washington launched a large raid on the British base on Staten Island in mid-January. Secrecy was lost and the attack largely failed, after which the British retaliated on nearby villages in New Jersey. Washington lived in constant fear of a larger assault by the British, who were still superior in numbers and equipment. The attack finally came, but not until June 1780. Twice the German General Wilhelm von Knyphausen, standing in for Sir Henry Clinton, who was leading a campaign against Charleston, South Carolina, crossed into New Jersey. Each time he met enough resistance from New Jersey militia and Continentals to persuade him to withdraw. During the second invasion, on June 23, Washington was already in the process of departing Morristown.

When the commander led most of the army toward the Hudson Highlands, the war was no

closer to victory than when he had come to Morristown. Possibly the opposite was true, for Continental finances had collapsed, leaving Congress' ability to carry on the war in doubt. Under Washington's leadership the army had hung on again, but it still lacked the strength to break the stalemate in the north. Indeed, the most active fighting had shifted to the south, and there the news was catastrophic. While still at Morristown on May 30, Washington learned that General Benjamin Lincoln had surrendered Charleston and his entire army, for the time being virtually ending organized resistance in that region. The only bright hope was the news brought by Marquis de Lafayette, who arrived in Morristown on May 10 and confirmed that a French naval and military expedition was on its way to North America.

The 1780 campaign in the north consisted largely of feints and maneuvers, accompanied by the treason of Benedict Arnold, which shocked Washington and further disheartened the army. When winter came, most of the troops remained in the Hudson Highlands, but the Pennsylvania Line returned to Jockey Hollow. Conditions among these soldiers, unpaid and seemingly forgotten, grew worse. Late in the previous encampment, Connecticut troops had been talked out of an abortive mutiny. On New Year's Day of 1781, a more serious disturbance arose among the Pennsylvania soldiers, which even the respected General Anthony Wayne could not suppress. Retaining discipline, the troops marched off to lay their grievances before Congress. Many of their demands were met, and a sizable proportion of the men remained in the army, but the mutiny was an ominous development.

Strategic blunders in the south by General Cornwallis and a rare French naval victory presented Washington with an unexpected opportunity in 1781. Seizing on this conjunction of events, he risked marching a combined French-American army southward and trapped Cornwallis at Yorktown. After this second surrender of an army, British opinion turned against the war, leading to a loss of support in Parliament. Peace negotiations soon began, although a treaty was not finalized until 1783. In the interim, the United States still had to maintain a credible military force. Morristown served as a military center one last time, when the New Jersey Brigade camped in the existing huts after Yorktown. Later recollections of this deployment probably led to the misconception that the New Jersey troops had occupied huts in Jockey Hollow proper during the larger encampment two years earlier.

Post–Revolutionary War Developments

Military use did not alter land ownership in Jockey Hollow, but the farmers who resumed peacetime pursuits after the troops departed found a vastly changed scene. Rows of log huts and other military support structures stood against a devastated landscape of stumps, brush, and discarded paraphernalia. Privy pits and dumps must have been prevalent, and the land was scarred by temporary roads.

The massive cutting of timber—far more extensive than any individual farmer would have attempted (or been capable of) in a short time—was a mixed blessing. Logs and stones that had been incorporated into huts could easily be converted to fences and firewood. For a few years, little woodcutting would have been necessary, but after that the lack of timber would have been a handicap, as would the fact that a large expanse of forest would mature at the same time. Structures that stood on good agricultural land presented an obstacle that had to be removed.

The few farmers in the area had little time or interest in recording their endless labors, nor did outside visitors document their impressions. We can only surmise how the farmers coped with the ravaged landscape the Continentals left behind. Agriculture remained the basis of life in Morris County through much of the 19th century, though by the end of the century it was in decline. Farming within what is now the park was probably typical of the region. In 1780 the mean farm size in Morris

County was 112 acres. Farms were dispersed throughout the countryside, never more than five miles from a settlement that could provide necessary services. Although the 18th-century settlement pattern persisted well into the next century, the practice of agriculture slowly became more efficient and market-oriented. A notable example, as farmers responded to the demand for cider and applejack, was a great expansion of orchards.

The major farms in Jockey Hollow remained in the hands of the families that had owned them in Washington's time well into the 19th century—the Wicks until 1871, the Kembles into the 1830s, and the Guerins until 1887. However, the Wick and Kemble properties were subdivided within the family, so that more homesteads were created. Furthermore, the Kemble Mansion that had been present in 1779 was relocated around 1840 to make way for a grander residence. Pursuing economic trends, owners of the present Wick Farm turned conspicuously to apple production, with an orchard of 900–1,000 bearing trees in 1815.

By the end of the 19th century, traditional family farming had become unrewarding in this section of Morris County, giving farmers a strong incentive to sell their lands. Wealthy outsiders, mostly from New York City, assembled vast swaths of land into country estates. Much of the Jockey Hollow land was absorbed into these estates, but the mansions themselves generally were located beyond present park boundaries (the former Kemble Estate and Luther Kountze's Delbarton). Due to subsequent land acquisitions, the park obtained two of the home complexes—the Bensel/Cross and the later Jenks/Warren properties. In addition, the Morris Aqueduct Co. purchased considerable property in the Jockey Hollow area as part of its water supply system for Morristown.

For several decades the Ford property followed much the same trajectory as the Jockey Hollow lands. Still on the periphery of Morristown, it continued to be agricultural and remained in Ford family ownership until 1873. After the war, the widow Theodosia Ford and her family resumed a more normal existence in the mansion. In 1805 Gabriel Ford (1765–1849), one of the boys who lived in the mansion while Washington made his headquarters there, purchased his siblings' interest in the property. He modernized the house by adding dormer windows, new furniture, and heating stoves. An enthusiastic horticulturist, he improved his land with plantings and a garden near his house. An 1804 map shows various outbuildings and utility buildings around the house and along the roads, and Gabriel Ford added others. (Most of these were located on land not now part of the park.)

Gabriel's son, Henry Augustus Ford (1793–1872), inherited the property and moved into the family home on his father's death. He was an attorney like his father, but, unlike Gabriel Ford, did not maintain an office in the Ford Mansion. By the time of his tenure, Morristown was changing rapidly. Accelerated by the arrival of the Morris & Essex Railroad in 1835, the town emerged as a premier exurban, then suburban, residential locale and developed into an important business center. As such, it diverged steadily from still-rural Jockey Hollow. Urban development spread until the Ford Mansion was no longer separated from the town center.

Henry Augustus Ford began the process of subdividing the family estate. He died on April 22, 1872, and as none of his seven children expressed interest in acquiring the old house, his will directed that the property be subdivided and sold. Aware of the historic value of the "Headquarters," he stipulated that it be set off on a three-acre lot and sold separately at public auction.

At Fort Nonsense the Revolutionary War era earthworks remained visible through the 19th century. Much of the site returned to forest, but urban residential encroachment occurred around the periphery. On the New Jersey Brigade site, a sawmill operated on part of the tract through much of the 19th century, but most of the area remained unoccupied. The area was more active at the beginning of the century than at its end.

Historic Preservation

Awareness of Morristown's historical importance had never been lost, but the concept of historic preservation was slow to develop. Except for isolated incidents and occasional laments for lost landmarks, there was no real historic preservation movement in the U.S. until the second half of the 19th century. Attempts to heal the rift of the Civil War, followed by the approach of the national centennial, fueled the movement, but even then the emphasis was often on erecting statues and memorials, rather than on preserving resources. Leaders in preservation typically came from wealthy, long-established families and gave priority to honoring the great men of the Revolutionary era.

Given the narrow focus of preservation concern and the immature state of the field, Morristown was in a fortunate position. The Ford Mansion came up for sale just as interest in the centennial was intensifying, and it claimed an unbeatable association with Washington. The two last Ford owners had turned the house into an informal museum, welcoming unscheduled visitors and offering impromptu tours, so the historic value of the site was widely appreciated.

In the absence of a formal historic preservation movement, heightened interest in the Ford Mansion did not automatically translate into a plan to save it. As the auction date of June 25, 1873 neared, there was reason for concern about the future of the property. At the auction, four prominent New Jersey men, one a former governor, came forward to purchase the property for $25,000.

After it became apparent that neither the State of New Jersey nor the New Jersey Historical Society was interested in taking over the building, the four owners formed the Washington Association of New Jersey on March 20, 1874. Historic preservation was then one of the few acceptable public outlets for upper-class women, and a predominantly male organization was unusual. Although the association structured itself so that the State of New Jersey would eventually gain a controlling interest in the Headquarters, it administered the site from 1874 to 1933. During that period it made substantial changes to the property. It acquired adjoining lots; erected two buildings: a caretaker's cottage and Lafayette Hall, used as meeting space; and performed extensive landscaping. Meanwhile, the surrounding area became steadily more suburban and residential. One exception was the 38-acre estate of Henry W. Ford, a son of Henry A. This property, with its mansion, survived until 1948.

The Washington Association began to assemble a collection of historical "relics," not necessarily associated with Washington or the Revolutionary War, and displayed them in the Headquarters. In the 1920s the association met with increased financial difficulties. After World War I, visitation at the Headquarters nearly tripled, while maintenance costs increased. Leaders of the organization concluded that the best solution to their problems would be to transfer the property to the Federal Government.

Active interest in documenting and preserving encampment remains dates to Rev. Joseph Tuttle, c.1871. Some efforts, including building a replica soldier's hut, took place in Jockey Hollow. On February 19, 1895 George W. Howell read a paper before the Morristown Association for Public Improvement, proposing the establishment of a 300-acre park to embrace Washington's Headquarters, the Morristown Green, the Morris Aqueduct land in Jockey Hollow, and Fort Nonsense. Howell's idea was not pursued at the time, but an expanded form of the concept re-emerged in the 1920s.

In its early years the Washington Association took an interest in Fort Nonsense, commissioning Major Joseph Farley to survey and plot the remains in 1886. Two years later, it erected a memorial boulder on the site. In 1914 Francis E. Woodruff bequeathed the property to the town, which developed it as a municipal park and opened a road to the summit.

In the late 1920s several trends converged to make federal ownership of Morristown's Revolution-

ary resources appear desirable. In 1929, responding to the threat that Jockey Hollow would be cut up into building sites, Morristown Mayor Clyde Potts appointed an historical commission to investigate the possibilities of saving 1,000 acres for the benefit of future generations. The chairman of this commission was Lloyd W. Smith, an active member of the Washington Association. Using $250,000 of his own money, Smith purchased the 1,000 acres in Jockey Hollow "for the sole purpose of preserving this land for future generations by the creation of a park which would have national importance." An additional 300 acres in Jockey Hollow was owned by Morristown and held for purposes of water supply.

Through the early 1930s Potts worked steadily for the creation of a national park. During a time of severe economic depression, he believed a national park would bring new jobs to Morristown. In 1932, the bicentennial of George Washington's birth, the National Park Service made two investigative surveys. The first was conducted by Verne E. Chatelain, chief historian of the Park Service. In November he was joined by Director Horace M. Albright. Reporting on his first visit, Chatelain advised Albright that Morristown "possessed every possible qualification for a first-class historical park." The Town of Morristown was willing to donate Fort Nonsense, and Lloyd Smith was willing to donate land in Jockey Hollow, but some question remained as to whether the Washington Association would transfer ownership of the Headquarters.

On March 2, 1933, as one of his final acts before leaving office, President Herbert Hoover approved a bill that established Morristown National Historical Park as the first national historical park in the nation. One clause provided that lands for the proposed park must be secured only by public and private donation. After a majority of the Washington Association stockholders approved the act, the Headquarters was formally added to the park. Charles McAlpin, owner of the former Kemble property, donated a 124-acre parcel, which contained the Connecticut Brigade camps.

National Park Service Administration

Morristown National Historical Park was officially dedicated on July 4, 1933. One of NPS Director Horace Albright's main objectives was to make his organization more active in owning and managing historical parks. Morristown, with its undisputed historical significance and strong local support, suited his purposes, and the fact that no land purchases were necessary facilitated the park's smooth addition to the national park system. In its first years, Morristown NHP was one of the places where the NPS developed techniques of research, planning, and preservation of historic resources.

Fortuitously, efforts to deal with the effects of the Great Depression resulted in the dramatic growth of the NPS, a development that was crucial at Morristown. In particular, the establishment of the Civilian Conservation Corps (CCC) and Public Works Administration (PWA) became pivotal to the growth of the NPS historical program. The CCC arrived in Morristown in the summer of 1933 and set up a camp in Jockey Hollow. CCC workers performed restoration and reconstruction, as well as road building and woodland maintenance. They also conducted the first archeological investigations of the park's Revolutionary-era sites. With NPS historian technicians, they began a systematic campaign to gather baseline historical data. During this period of unparalleled dynamism, highly motivated employees laid a foundation for future investigation and built an infrastructure that served the park for decades afterward. The burst of extraordinary achievement came to an abrupt end when the U.S. entered World War II and terminated Depression-era agencies such as the CCC. It was followed by a time of stagnation and retrenchment in the NPS from which the agency did not begin to emerge until the initiation of the Mission 66 program of the late 1950s.

Early development of Morristown NHP was guided by a general plan adopted in 1934. In this plan park managers grappled with issues and alternatives that in some cases have persisted to the present.

The plan also identified prime parcels of land that should be added to the park to preserve a fuller complement of related historical resources and present a more complete account of its history. The vital Stark Brigade site, comprising 281 acres, was added in 1937. Periodic land acquisitions have been approved since then to round out park boundaries or protect historic resources.

Park enabling legislation required the NPS to provide a library and museum. Designed in the Colonial Revival style by John Russell Pope, this building was constructed 1935–37 and dedicated February 22, 1937. Two flanking pavilions that were intended to complete the plan were deferred at the time, largely because the NPS was unable to obtain a key parcel of land. In 1956–57 a less visible library addition to the museum was constructed to house the Lloyd W. Smith collection of books and manuscripts, as specified in his bequest.

Moving the Washington Association collections out of the Ford Mansion allowed restoration of the structure to proceed. The intent was to restore it to the 1779–80 period, but the persistent problem of inadequate information became apparent. As a result, NPS architects took a relatively conservative approach to the restoration. Land acquisition was pursued until the entire block surrounding the Ford Mansion was added to the park. Lafayette Hall was demolished in 1935.

Although intense opposition to the construction of Interstate 287 (I–287) succeeded in altering the original plan slightly, the highway was still built along the western boundary of the Headquarters unit in the 1960s. An overwhelming illustration of automotive dominance, the highway had an enormous impact on the unit. Changes in traffic flow reversed the orientation of the visitor experience that had been in place since the construction of the museum, so that visitors now entered the rear of the building. The new arrangement also led to the gradual abandonment of the formal landscaping plan that had been intended to form a visual link between the museum and the mansion.

In Jockey Hollow, Park Service managers, guided by the 1934 plan, sought to restore encampment-era conditions but also wanted to preserve the forest serenity that Director Albright had observed. These objectives were reconciled in adopting the proposal by an NPS historian "to restore the area to that of the period when the cabins were just being completed and before too great a devastation had been effected on the woodland."

Defining the function of the Wick House and farm within the park program became a subject of considerable discussion. Eventually management adopted a policy of treating them as a representative farm to illustrate social life, rather than emphasizing the strictly military aspect. If inadequate data had been a problem at the Ford Mansion, it was more so at the Wick and Guerin houses and still more acute with respect to farm outbuildings and soldiers' huts, despite a sometimes fruitful collaboration between historians and archeologists. Both houses and some outbuildings were restored or reconstructed in the 1930s, but the lack of firm evidence in many cases forced a reliance on conjecture. Due to persistent uncertainties, some of the Wick outbuildings were not rebuilt after a fire in 1957.

Another compromise involved the reconstruction of huts. It was decided to construct a few representative huts at key locations, rather than attempt to build the full complement of huts and related structures that would be present even in one brigade. The CCC erected several huts and reconstructed a log hospital based on conjectural designs. The remaining huts were replaced in the 1960s, using more recent historical evidence, while the hospital was demolished after an NPS historian concluded that a building of this kind had not existed in Jockey Hollow.

Preparing for the national bicentennial, the Tempe Wick Road bypass, a loop road, and a new visitor

center were completed in the 1970s. Related alterations in traffic flow made Jockey Hollow Road less of a thoroughfare and restored some of the serenity that had been valued by the park founders. The discontinued portion of Tempe Wick Road was treated and interpreted as an historic trace.

CCC workers reconstructed the earthen parapets of Fort Nonsense and created a new entrance to the site. By the 1960s doubts about the authenticity of the fort had gained credence, and legislation was obtained to retrocede the site to the town. During this period the earthwork was "accidentally" leveled by a contractor hired to remove dilapidated structures. After a competent archeological investigation in 1989 discovered evidence of the 18th-century fort and finally laid to rest long-standing uncertainty, some rehabilitation of the Fort Nonsense site occurred.

Early plans had called for a parkway along the ridge to connect Fort Nonsense and Jockey Hollow. This was never built, and linkage among the three park units remained tenuous. The difficulties resulting from the separate units became more acute when the New Jersey Brigade encampment site was acquired in 1969. Private researchers had rediscovered and amplified the work of early park historians to disprove 19th century misconceptions and place this unit correctly at a location along the Passaic River somewhat detached from Jockey Hollow proper. Subsequently, the NPS acquired large tracts of land to link the New Jersey Brigade site with the related encampments in Jockey Hollow. One of these tracts, the Cross Estate, included a complex of buildings unrelated to park themes that has proved problematical to park management.

A problem relating to forest management in Jockey Hollow, largely unanticipated by park founders, has come to the fore in recent years. The initial assumption that natural succession would result in reforestation similar to that which followed the encampment has proved inaccurate. Few seedlings of native tree species are surviving, while invasive nonnative species are prevalent and the deer population has grown. Changes to the character of the historic landscape have compelled a reexamination of management policies and called into question the policy of passive forest management.

This realization has taken place against a background of profound change in the surrounding region. Especially since World War II, explosive suburban growth in Morris County has radically altered the rural and small-town environment that prevailed when the park was established. What was then a relatively routine landscape has become valued open space and a refuge from pervasive urbanization.

PURPOSE OF THE PLAN

The purpose of a general management plan/ environmental impact statement (GMP/EIS) is to set forth a basic management philosophy for a park and to provide a framework for future decision making. NPS Director's Order 2: Park Planning requires a GMP/EIS to clearly describe (1) the specific resource conditions and visitor experiences to be achieved, and (2) identify the kinds of use, management, and development that will be appropriate in achieving and maintaining those conditions.

By NPS policy, EISs are usually prepared with the GMP. This allows for compliance with the National Environmental Policy Act (NEPA) that requires that an EIS be prepared for all major federal actions with the potential to significantly affect the quality of the human environment. An EIS also provides a framework for public participation, the development of alternatives, and evaluation of their environmental consequences.

GMPs take a comprehensive approach to planning for how to carry out the mission of the NPS and each individual park. The NPS has a mandate in its 1916 Organic Act (39 STAT.535, as amended, 16 U.S.C.§1) and other legislation to preserve resources unimpaired for the enjoyment of future generations. Park planning helps define how to best achieve that mandate.

General management planning constitutes the first phase of tiered planning and decision making. It

focuses on why the park was established and what resource conditions and visitor experiences should be achieved and maintained over time. GMPs take the long view, which may be many years into the future. The plan considers the park holistically, in its full ecological and cultural contexts, as a unit of the national park system and as part of a surrounding region. It identifies the importance of partnerships with others in protecting park resources and providing appropriate visitor services.

Five-year strategic plans, annual performance plans, and project implementation plans comprise the other tiers of NPS planning. Decisions about site-specific actions discussed in the GMP are addressed in these other plans. More detailed, site-specific analyses of implementation plan alternatives will be conducted before any major action is undertaken.

GMPs address four general concerns: (1) preservation of the park resources, (2) the types and general intensities of development, (3) visitor carrying capacities, and (4) potential boundary modifications (P.L. 95–625). Planning is based on an adequate analysis of existing and potential resource conditions, visitor experiences, environmental impacts, and costs of alternative courses of action.

In reaching the decisions concerning future management of park resources, the planning teams seeks, to the extent possible, to reach agreement among the park staff, the NPS leadership, other agencies with jurisdiction by law or expertise, and the public.

NEED FOR THE PLAN

The current master plan for the park was completed in 1976; although the plan continues to be used as a general guide for operations, it is no longer adequate to address the policy and operational issues now facing the park's managers. This new Final General Management Plan/Environmental Impact Statement (GMP/EIS) presents and analyzes reasonable alternatives for resource preservation and public use and enjoyment at Morristown NHP that respond to the park's mission and goals.

The Environmental Impact Statement (EIS) has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended. NEPA procedures have been used to inform the public about possible undertakings with the potential to affect properties listed on or eligible for listing on the National Register of Historic Places. This was done in conjunction with the Advisory Council on Historic Preservation's regulatory provisions on coordination with Section 106 of the National Historic Preservation Act (1995 programmatic agreement with the NPS).

This GMP/EIS is a programmatic statement. The proposed action and alternatives consist of a basic management framework for decision making; therefore, site-specific details and recommendations are not always included. Consequently, the EIS presents an overview of potential impacts relating to the proposed program for each alternative. In the future, if NPS determines that specific actions called for by the approved plan require further consultation with the state historic preservation officer (SHPO) or additional analysis of impacts, more detailed Environmental Assessments (EAs) of impacts may be prepared. These documents would be tiered to this environmental impact statement.

I. SUPPORTING STUDIES

In the process of preparing this GMP/EIS, the NPS conducted new research and analysis on several topics. These included the following:

- Management Objectives Workshop, with park staff, Northeast Region representatives, academic advisors, the Washington Association, New Jersey State Historic Preservation Officer, and local citizens.
- Adjacent Lands Study to identify those parcels which, if built upon, have the potential to cause adverse impacts to park resources, or to adversely affect the visitor's experience, by the Boston Support Office and park staff.

- Conceptual plan for expanding the museum at Washington's Headquarters, by ICON Architects, Boston Support Office, and park staff.
- Initial phase of research on resources at Washington's Headquarters in advance of museum rehabilitation, including: a historic structure report, cultural landscape report and treatment plan, preliminary archeological assessment, and continued development of the park's long-range interpretive plan, by NPS Northeast Region staff and consultants.
- Collections Management Plan to document existing curatorial operations, analyze current collections management methods, review curatorial programs, and make suggestions for overall programmatic growth and improvement, by the NPS Northeast Museum Services Center.
- Visitor's Experience Workshop to reexamine interpretive themes and develop potential improvements to the public's enjoyment and satisfaction, facilitated by Ron Thompson.
- Integrated Cultural Resources Report, which includes an overview and assessment of archeology, an overview of the park's cultural resource research program, a cultural landscape report, cultural land use study, and narratives of the history of Morristown, coordinated by the University of Massachusetts.
- Feasibility study for a park-town alternative transportation system (shuttle), by the Volpe Center for Transportation Planning.
- Preliminary assessment of the utilization of the Cross Estate and its leasing potential, by the Boston Support Office.
- Cultural Landscape Inventories for the significant landscapes of the park, by the Olmsted Center for Landscape Preservation.
- Historic Orchard Management Plan for the orchard at the Wick Farm, by the Olmsted Center for Landscape Preservation.
- Historic furnishings assessment for the Ford Mansion and Wick House, in draft, by the NPS Northeast Museum Services Center.
- Ecological study of management options for the forests at Jockey Hollow, by Emily Russell, Ph.D., including an examination of tree seedling mortality.
- Water Resources Scoping Report describing resources and their condition, and discussing issues and concerns, by NPS Water Resources Division.
- Study of the feasibility of a fertility control program (immunocontraception) for white-tailed deer, by Brian Underwood, Ph.D. (study in progress).

Information developed in these studies is essential to understanding the issues facing the park, and helped the planning team to identify appropriate actions for the GMP alternatives.

II. PLANNING ISSUES

Since the completion of the 1976 master plan there have been a number of significant changes in the park's resources, visitors, and setting—in addition to changes in NPS policy. The GMP/EIS planning process identified immediate and long-term issues relating to these conditions. These issues are presented below in relationship to the park's four broad categories of goals: (I) resource preservation, (II) public enjoyment and satisfaction, (III) partnerships and outreach, and (IV) organizational effectiveness. The goals themselves are discussed later in this chapter, and more background on the issues is given in Chapter 3: Affected Environment.

Issues Related to Resource Preservation

Cultural Resources

Morristown NHP protects and preserves many unique and valuable resources. The cultural resources that date to the period of the encampments are outstanding. Structures such as the Ford Mansion and Wick House directly communicate key stories of the Continental Army at Morristown. Archeological resources, including remnants of log huts, are present in the Jockey Hollow and New Jersey Brigade units. The collections, an integral part of the park, as cited in the 1933 enabling legislation, are particularly valuable. The museum holds some 350,000 objects related to the encampments, George Washington, the Revolutionary War, and other themes.

The 1976 master plan does not adequately address:

- Improved protection and use of the park's collections. The collections are housed in substandard facilities, under conditions that represent a threat to their long-term preservation, offer little scope for the use of the collections in exhibits, and restrict public access. Recent studies indicate that an additional 2,120 square feet is needed for storage and approximately 5,000 square feet for display.
- Management of the park's cultural landscapes, particularly at the Wick Farm and Washington's Headquarters. These resources reflect the encampment period and later commemorative era, generally 1873–1942. Cultural landscapes were not recognized as distinct resources when the plan was completed, and no treatment plans have been developed for their management. This is particularly problematic for the important commemorative resources from post-encampment periods.
- Protection of the setting, character (solitude and tranquility), and scenic beauty of park lands. The previous plan did not consider the impact of the introduction of I-287 in the late 1970s—eight lanes of traffic running alongside the Washington's Headquarters unit—or the increase in airplane overflights from busier regional airfields (Newark and Morristown are the two busiest airports in New Jersey), or growing pressure to site wireless communication towers in the park.
- Management of lands added to the park since 1976. The Warren Property, North Tract, and Cross Estate, with several substantial structures and landscape features, have no management direction under the 1976 plan.
- Maintenance of the 27-mile network of trails throughout the Jockey Hollow and New Jersey Brigade units.

Natural Resources

The park also contains robust natural resources of considerable diversity. The Jockey Hollow and New Jersey Brigade units contain mature forest stands somewhat similar in appearance to the 18th-century forest encountered by the Continental Army. The Passaic River and Primrose Brook represent surface waters of remarkably high quality. Air quality is also good in these two units. Park inventory and monitoring programs record the presence of a variety of birds, mammals, amphibians, reptiles, and fish.

The 1976 master plan does not adequately address:

- Sustainable management of the forest as a dynamic resource. The concept of sustainability, along with evidence that the forest may not be regenerating itself, due to many factors, was not well understood at the time. The prospects for sustaining the mixed hardwood forest in the Jockey Hollow and New Jersey Brigade units are uncertain, given current passive management practices.
- Management of the park's natural resources in relation to the cultural landscape. Little guidance is provided on how to care for these highly integrated resources. The plan does not address the local or regional ecological importance of the park lands.
- Protection of park lands from sound and air pollution, especially that generated by traffic on I-287 at the Washington's Headquarters unit. The intensity of these impacts was severely underestimated in the previous plan; and the expectation of a cover being placed over the roadway has not been realized. In contrast, the highway has been widened and traffic has dramatically increased.
- Protection of special water resources. The plan does not provide guidance for protecting the headwaters of the Passaic River and Primrose Brook—designated as waters of statewide importance and ecologically linked to the Great Swamp National Wildlife Refuge—and other parts of the Upper Passaic River watershed. The plan does not recognize water resources as a significant factor in Washington's selection of the Jockey Hollow area for the encampments.
- NPS policy on environmental leadership. The recent systemwide emphasis on demonstrating environmental leadership extends to Morristown NHP and other parks whose national significance derives principally from their cultural resources.

Boundaries

When established in 1933 Jockey Hollow's context was largely rural in character, consisting of large estates and horse farms. By the post-World War II period, the estates and farms were already giving way to residential subdivision. The last decades have seen continued erosion of the rural character through dense residential development and the proliferation of corporate headquarters. Morristown NHP has become an island of green in a sea of development.

The continuation of these processes threatens the park's purpose and significance by undermining aspects basic to its character—its beauty, tranquility, historic integrity, and its ability to reveal this important time in American history.

The 1976 master plan does not adequately address:

- Protection of fundamental qualities, such as solitude, tranquility, scenic beauty, and ecological health, from the impacts of adjacent development. Large suburban developments are now proposed, and some have been undertaken, on properties adjacent to the park previously thought to be protected or undevelopable due to site constraints. Aquisition of land is restricted to 8.56 acres by the existing acreage ceiling. This may not be adequate to protect important resources and prevent development from encroaching upon the historic setting.
- Protection of resources related to park themes but not contained within the park. No provisions were made in the plan to facilitate preservation or interpretation of such properties as the Schuyler-Hamilton House, the Pluckemin site, or the location of the military hospital near Basking Ridge.

Issues Related to Public Enjoyment and Satisfaction

The existing master plan and the 1975 interpretive prospectus (or plan) guide interpretation and education. The park is well visited, and surveys suggest visitors are satisfied with the services and activities available. However, dramatic changes in regional demographics, the character of the surrounding landscape, and the increase of themes the park may interpret, show the existing plans to be inadequate. Further, a shuttle system planned in 1975 as a unifying interpretive device was never fully implemented. These issues are addressed to considerable depth in this GMP, and a comprehensive interpretive plan is underway to replace the interpretive prospectus.

The 1976 master plan and 1975 interpretive prospectus do not adequately address:

- Treatment of overlapping interpretive themes of the Revolutionary War encampments, the commemorative era (including the early historic preservation movement, park establishment, and the treatment of resources by the CCC/PWA), science-based resource management, and environmental leadership for an increasingly urban and culturally diverse population. The existing plans restrict interpretation to the encampment period.
- Interpretation of the historical aspects of the park to visitors principally interested in its scenic and recreational qualities. A growing segment of visitors routinely enjoys Jockey Hollow for walking, visits with pets, jogging, bicycling, and cross-country skiing. There was only limited acknowledgment of the growing recreational use in the 1976 plan.
- Providing improved public access to the collections for research and educational purposes. The plan made no provision for making the very diverse collections more available to the public.
- Expanding the role of the museum in visitor orientation and interpretation of the park and Morristown as a whole. The plan does not consider opportunities to provide a comprehensive overview of the park or inform visitors of other opportunities in the local area.
- Desirability of an alternative transportation system (shuttle bus) or other access improvements. Describing only a shuttle in the Jockey Hollow unit, the plan makes no provision for integrating transit with other sites in the local area, which could have benefits for visitor safety and enjoyment. Vehicular access is confusing at most units, but is particularly dangerous at the Washington's Headquarters unit. At this unit, the pedestrian circulation pattern provides little orientation to the important resources.

- Public use possibilities for the Cross Estate. The use of several structures for park operations, and the rehabilitation of the garden as an attraction, were not contemplated.
- Protecting visitors from impacts due to noise and air pollution and other conditions that detract from the historic character of the park and diminish the quality of the visitor experience.

Issues Related to Partnerships and Outreach

Opportunities exist for the park to participate in a number of new regional planning initiatives. Morristown NHP is central to the NPS Crossroads of the American Revolution Heritage Area Feasibility Study. This study evaluates central New Jersey for possible designation as a national heritage area. Bills pending in the legislature feature the park as an important anchor in the proposed heritage area. The NPS also has a servicewide initiative concerning the Revolutionary War theme and is commemorating the war's 225th anniversary. Morris County, with state support and assistance from the NPS Rivers and Trails Conservation Assistance program (RTCA), is undertaking a regional east–west pedestrian transect, "The Liberty–Water Gap Trail," that may utilize park paths. There is also opportunity to engage in regional transportation planning projects, such as a shuttle, particularly as the park may compete strongly for TEA–21 funds. Furthermore, the park is also working with neighboring conservation agencies, including the New Jersey Audubon Society, the Great Swamp National Wildlife Refuge, the Great Swamp Watershed Association, the Passaic River Coalition, and the Whippany River Watershed Association to preserve and interpret important natural systems and resources.

The 1976 master plan does not adequately address:

- The park's role in a potential alternative transportation system managed by federal, state, and local agencies.
- The park's role in historical, recreational, and conservation initiatives in the region.
- The park's potential to work cooperatively with the Morris Area Girls Scout Council to provide special opportunities to youth populations.

Issues Related to Operational Effectiveness

These issues are not typically part of the GMP process; however, staff reductions and increased management responsibilities have presented the park with difficulty in fulfilling its other goals.

The 1976 master plan does not adequately address:

- The need for additional staff, and filling vacancies in a region with a very high cost of living and tight housing market.
- Adequate funding through the NPS, and the possibility of local/national alternative funding sources.
- Participation in the program (Recreation Fee Demonstration) that provides limited authority for units of the NPS to retain portions of fees they collect and use them for deferred maintenance and other projects.

III. DECISION POINTS

Like the issues above, decision points are the major questions that must be answered in the GMP. These were distilled from previous studies, public input, and discussions with park staff, interest groups, and other agencies. They are intended to communicate the tension or competing choices the NPS faces in charting the park's future. The GMP also addresses other less contested issues not captured in the decision points.

Resource Preservation

Museum and Collections

How should the park preserve, protect, and take greater advantage of its strong museum and archival collections, principally located in the museum at Washington's Headquarters?

Forest Management

In what ways should park woodlands, significant for their cultural values, be managed to sustain their ecological values?

I-287

How should the park protect its important resources adjacent to Interstate 287 in Morristown from the effects of the road?

Boundary Expansion

Should the park expand its boundary to protect its existing park resources, and/or expand to include other related resources?

Cross Estate

Should the park continue to utilize the principal buildings of the Cross Estate for operations, or should it seek alternative uses that could reduce the park's maintenance costs associated with them?

Public Enjoyment and Satisfaction

Interpretation

Should park resources be interpreted and managed to focus exclusively on the period of the Revolutionary War winter encampments (1777–82), or should they be interpreted and managed to also represent changing attitudes toward that history as expressed in later commemorative actions?

What is the appropriate general level of interpretation at the park, and what are the appropriate locations for these services?

Access and Circulation

Should the park establish or participate in a public transportation system among and within park units, or should access be principally by private vehicles?

Recreation

To what extent should the park's resources be managed to accept increased recreational uses not directly related to its history?

Solitude

How should the park protect opportunities for visitors to enjoy solitude and tranquility?

Partnership and Outreach

Leadership

To what extent should the park take the lead in establishing active partnerships with thematically related organizations and sites?

Operational Efficiency

Staffing and Budget

How would the park's staff and budget be affected by additional resource management and visitor-related activities?

MISSION AND GOALS

I. MISSION

The park's mission statement explains its purpose and national significance. The mission grew out of the park's specific authorizing legislation and legislative history, as interpreted by park staff and scholars, and under the overall guidance of the National Park Service Organic Act of 1916. The Organic Act directs the NPS to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Morristown NHP's mission statement was defined by a focus group including park staff, NPS historians, and local experts in a January 1996 workshop. The GMP team reevaluated the statements in similar forums, and presented interim versions in newsletters and public meetings. The statement was refined to reflect more clearly the significance of the resources contained within the park, notably those relating to commemoration and historic preservation.

Purpose

Morristown NHP preserves, protects, and maintains the landscapes, structures, features, archeological resources, and collections of the Continental Army winter encampments, the headquarters of General George Washington, and related Revolutionary War sites at Morristown for the benefit and inspiration of the public. The park interprets the history and subsequent commemora-

tion of these encampments and the extraordinary fortitude of the officers and enlisted men under Washington's leadership.

Significance

Attracted by Morristown's strategic location, including defensible terrain, important communication routes, access to critical resources, and a supportive community, General Washington chose it as the site for the main Continental Army encampment during two winters of the War for Independence. Morristown NHP encompasses most of the ground occupied by the army during the vast 1779–80 encampment, as well as smaller encampments in subsequent years, and the site of the fortification from the 1777 encampment.

The winter of 1779–80, the most severe of the century, brought great suffering to the Continental Army at Morristown. Despite this and many other adversities, General Washington demonstrated his leadership by holding the army together as an effective fighting force. The Ford Mansion, where Washington made his headquarters, is an important feature of the park and recalls civilian contributions to the winning of independence.

Morristown's resources of the War for Independence were first preserved by the Washington Association of New Jersey, an important early success of the nation's historic preservation movement. Later public and private efforts, sustained by federal action following the designation of Morristown as the first national historical park, illustrate that the park served as a model for historical parks and represents a turning point for the National Park Service's expansion into public history, living history, and historic preservation.

II. GOALS

Mission goals are based on the National Park Service's servicewide goals and the park's authorizing legislation, as expressed in its mission, purpose, and significance statements. The goals are expressed in terms of desired resource conditions and appropriate visitor experiences. These resource conditions and visitor experiences are, in many cases, also prescribed by federal laws, regulations, and NPS policies. The mission goals update the 1976 master plan and interim 1996 management objectives for the park, and follow the current servicewide organizational format. The goals articulate in very broad terms the ideal conditions the National Park Service will strive to attain at the park. They correspond to the servicewide NPS Strategic Plan and are reflected in Morristown's current Strategic Plan and Annual Performance Plan.

The alternatives in this GMP investigate different ways that park managers may achieve these goals. These goals have been used to develop and organize the alternatives presented in this draft GMP.

The overriding goals for Morristown NHP are:

Resource Preservation

Goal A: The significant landscapes, structures, features, archeological resources, and collections of Morristown NHP are protected, preserved, and maintained in good condition. They are managed within their broad cultural and ecological contexts.

This goal encompasses the legislative mandate of the National Park Service and related legislation specific to Morristown National Park, established to commemorate Morristown's place in the American Revolution. It tells park managers to consider the broad context of historic events, the area's strategic location, regional landscape characteristics, and ecological values when protecting park resources. To respond to this mission goal park managers must understand park resources, the resource conditions that should be attained, and how they are related to conditions beyond park boundaries.

Management prescriptions related to Goal A provide more specific guidance regarding the conditions to be attained in order to protect historic landscapes, structures, features, archeological resources, and collections that are relevant to the purpose and significance of the park.

Goal B: Morristown NHP contributes to knowledge about cultural and natural resources and

associated values. Management decisions about park resources and visitor use are based on adequate scholarly information.

This goal underscores the importance of an ongoing research program for resource preservation and interpretation. Research is performed by NPS staff and park partners. The park is committed to building public understanding of its resources, including research findings, through its educational program and peer review publications. Examples of current research are listed in the sections Supporting Studies, and Relationship with Other Plans and Projects.

Public Enjoyment and Satisfaction

Goal A: Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and recreational opportunities compatible with the park's mission.

Park programs, facilities, and services affect the quality of the visitor experience. Convenient park facilities that do not harm or infringe upon significant park resources, and services and interpretive opportunities that are available when visitors need them, are important to the enjoyment of the park. It is also important to develop diverse facilities, programs, and services to provide a range of appropriate activities for park visitors. Park facilities and resources should be accessible and available to special populations. Recreational opportunities must be consistent with the park's mission and interpretive goals, and not harmful to resources or people.

Management prescriptions related to Goals A and B describe the visitor experience that should be attained and the types of facilities, level of visitor use, management, and development that are appropriate for achieving and maintaining the desired visitor experience.

Goal B: The public understands and appreciates the national significance of Morristown NHP, its regional context, and appreciates the preservation of park resources for this and future generations.

Information, orientation, interpretation, and education are activities that help visitors discover intellectual and emotional connections among park resources and the intangible values and meanings that the resources represent. Interpretive outcomes express what should be achieved for visitors as a result of their visit to the park. These were developed by an interdisciplinary team comprised of park staff, interpretive planners, historians, and other professionals familiar with the park and history of Morristown. Working from the 1976 interpretive prospectus and current scholarship, the team developed the following five interpretive themes:

The American Revolution: Visitors understand the importance of the encampments at Morristown to the success of the American Revolution. Visitors understand the broad context of the Revolution, including the precipitating events, geography, chronology, and the varied motivations of participants. The encampments at Morristown occurred at critical moments in the American Revolution. The survival of the army during these times ensured the possibility of achieving independence. During the Revolution, the Americans developed an army that reflected emerging political philosophies—it was committed to civilian control, despite habitual shortages and uneven support, and prepared to subjugate individual self-interest and local and regional loyalty to a larger national good. The histories of individuals who served with the army during the Morristown encampments shed light on the varied motivations of those who chose independence, while other local stories convey the contrary positions of those who did not.

The Encampments: Visitors understand why General George Washington twice chose Morristown for a winter encampment, underscoring the strategic value of its geographical location, populace, and diverse landscapes and resources. Visitors understand the critical interconnections among the different encampment areas of Jockey Hollow, Fort Nonsense, and Washington's Headquarters at the Ford Mansion. Morristown's encampments, and the effect that they had on both soldiers and civilians, illustrate the great

costs, personal hardships, and organizational obstacles associated with building and sustaining an army.

General George Washington: Visitors understand the critical role Washington played in the survival of the Continental Army—his character and leadership inspired his officers and helped to retain the loyalty of his troops even when faced with shortages and deprivation. Attempts to appreciate Washington's accomplishments and commemorate his legacy have inspired numerous efforts to preserve sites related to him, including Morristown.

Preservation: Visitors understand that the park's resources are layered in time: they represent various historical periods and have changed over time. Features that survive from the Revolutionary War period often bear the marks of later generations and may reflect changing societal attitudes about history, patriotism, and, more recently, open space and management of natural systems. Visitors understand the condition and significance of encampment period resources in light of the efforts by the Washington Association, the NPS, and others to commemorate the Revolutionary War at Morristown and preserve these very resources.

Regional Network: Visitors understand the vital interconnections among Morristown NHP and thematically related regional resources.

Partnerships and Outreach

Goal A: The park strengthens and expands its network of partners and works cooperatively to preserve and interpret resources related to Morristown NHP and the larger context of the park in relation to the American Revolution.

The park needs partners to achieve its long-term goals. Like other national parks, Morristown NHP struggles to find the human and fiscal resources to meet the increasing needs for preservation of its resources and to fulfill the expectations of its visitors. With a long history of cooperative relationships at Morristown, partnerships are a logical way to help find solutions to the dilemma of increasing demands and insufficient means. Partnerships and cooperative programs will continue to be a part of successful park management. The park currently has many important partners and will work to improve the effectiveness of these relationships and expand efforts to build new ones.

Management prescriptions that result from Goal A help define the partnership activities that are appropriate, necessary, and desirable in order for the park to attain the resource conditions and visitor experiences desired. The prescriptions also help define partnerships that aid in the preservation and interpretation of related resources in the community and across the region.

Note that Goals B and C are intended for the NPS as a whole, not Morristown NHP alone.

Goal B: Through partnerships with other federal, state, and local agencies and nonprofit organizations, a nationwide system of parks, open space, rivers, and trails provides educational, recreational, and conservation benefits for the American people.

Goal C: Assisted through federal funds and programs, the protection of recreational opportunities is achieved through formal mechanisms to ensure continued access for public recreational use.

Organizational Effectiveness

Goal A: Morristown NHP uses effective management practices, systems, and technologies to accomplish its mission.

Goal B: Morristown NHP increases its managerial resources through initiatives and support from other agencies, organizations, and individuals.

Goal C: Adequate staffing, housing, and related facilities needed to successfully operate and maintain the park are provided.

In order for the park to be managed successfully it must have an appropriate number of qualified staff, satisfactory working environments, well-functioning facilities, and available, affordable housing. This will help ensure quality park management, resource and visitor protection, education, and maintenance in a manner that ensures the health of the park and a quality visitor experience.

Management prescriptions that result from Goal C identify the necessary staff, housing, administrative needs, and the general scale and location of park maintenance and operation facilities.

RELATIONSHIP WITH OTHER PLANS AND PROJECTS

Several plans and projects now in progress help shape the context for the park's GMP. To varying degrees these have implications for the park and the GMP. The order in which these plans and projects are presented does not necessarily relate to the scope of implications or the importance placed upon them by the NPS.

Parks as Classrooms

The NPS Parks as Classrooms program provides learning opportunities for school-age children that take advantage of the unique resources of the national parks. Resources include: curriculum-based education programs, audiovisual materials, teacher training, workshops, traveling trunks and kits, and teacher and student resource guides. NPS personnel work with educators to provide learning materials and experiences that are consistent with and accentuate curriculum requirements. Morristown has recently developed a fourth grade curriculum for the Jockey Hollow unit and is in the process of developing a high school curriculum for Washington's Headquarters.

NPS Crossroads of the American Revolution

The park is hosting the congressionally authorized "Crossroads of the American Revolution" heritage area feasibility study. It explores strategies to preserve and interpret the historic and natural resources associated with the American Revolution in New Jersey, including possible designation as a national heritage area. The State of New Jersey's Green Acres Program and Parks and Forestry Department are active participants. Among their objectives are promoting tourism for Revolutionary War sites, land acquisition, and environmental protection. It is expected that the park would take a lead role in the heritage area, if designated.

Washington–Rochambeau Historic Trail Study

The NPS is conducting a study of the 600-mile route through Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Virginia, used by Generals Washington and Rochambeau during the Revolutionary War. The Continental and French forces marched along the route in 1781, leading to the successful and decisive siege of Yorktown, Virginia, and the surrender of British forces under General Cornwallis. The study's purpose is to identify the range of resources and themes associated with the route; identify alternatives for NPS involvement with the route's preservation and interpretation; and provide cost estimates for any acquisition, development, interpretation, operation, and maintenance associated with the alternatives. The historic route includes Morris Avenue passing the Ford Mansion, and portions of Mount Kemble Avenue/Route 202 as it passes through Morristown and runs adjacent to the Jockey Hollow unit.

Lighting Freedom's Flame: 225th Anniversary of the American Revolution

This NPS initiative is designed to heighten public awareness and understanding of the Revolutionary War. Begun in 2000 and extending to 2008, the NPS is developing a program of educational materials and special events that celebrate the American Revolution principally at NPS sites, such as Morristown NHP. No permanent facilities or other programs will be developed at the park; however, increases in visitation at special events, such as reenactments of encampments, are anticipated.

At the state level, the New Jersey Department of State 225th Anniversary of the American Revolution Commission, established by executive order, hosts efforts to promote celebration of the anniversary.

American Battlefield Protection Program: Revolutionary War and War of 1812 Study

Congress authorized the NPS study because many sites of the period are at risk from rapid urban or suburban development. The goals of the study are (1) to gather current information about the significance of, current condition, and threats to the sites, and (2) to present preservation and interpretation alternatives for the sites. Through research and public comment, the NPS has identified 2,742 sites of battle actions and historic places associated with both wars. These sites are in 31 states and the District of Columbia, and include Morristown NHP and several nearby sites. Data gathered during field surveys will help the NPS evaluate the current level of preservation at these sites and make recommendations for further protection and interpretation. Morristown NHP staff served as local data collectors.

Natural Resource Challenge

The NPS began the Natural Resource Challenge program in 1999, recognizing a lack of scientific information about the complex ecosystems and natural resources in parks. The service-wide program aims to apply good science to park management.

The Natural Resource Challenge seeks answers to the following key questions:

- What are we protecting and preserving in parks?
- What is the condition of park resources?
- How does the condition of our resources change over time?
- What is the condition of resources outside of park boundaries (air, water, nonnative and migratory species)? And, What impact do these resources have on park resources?
- What are the implications of these findings to parks and to the larger systems in which they reside?
- What actions need to be taken for preserving the species?
- How can this information be best communicated to the broader society?

Ten strategies have been identified to sustain the resources. They include protecting native and endangered species and their habitats; aggressively controlling nonnative species; enhancing the use of parks for scientific research; and enhancing environmental stewardship.

As part of the program, Morristown NHP is participating in "Vital Signs," a regional network of parks monitoring key environmental variables that indicate ecosystem health. Projects at the park include inventories of reptiles, amphibians, and fish, and mapping vegetation. The park is part of the Northern Temperate Forest network.

The Cultural Resource Challenge is a parallel program, recently proposed to address similar cultural resource issues.

U.S. Forest Service Study of the New Jersey Highlands

The Highlands Region encompasses over two million acres stretching from western Connecticut across the Lower Hudson River Valley and into east central Pennsylvania, including Morristown NHP. Congress directed the Forest Service to improve upon a 1992 study that collected and analyzed data on land, water, and people in the Highlands. The study includes assessing watershed conditions, forest fragmentation, and biological diversity. Jockey Hollow is within the area designated as the Highlands.

New Jersey State Development and Redevelopment Plan

The State of New Jersey adopted a new comprehensive development and redevelopment plan on March 1, 2001. The plan is intended to guide public and private sector investment in New Jersey's future. It is a policy document for state, regional, and local agencies. The plan advances the idea of sustainable development, identifying several

key planning concepts. Park units fall under two designations. Category 1: Metropolitan includes Washington's Headquarters and Fort Nonsense; and Category 5: Environmentally Sensitive includes Jockey Hollow and the New Jersey Brigade unit. Infrastructure to support development is discouraged in Category 5 areas.

Most of the park is also included in the Highlands region, New Jersey's first special resource area, possessing unique characteristics and resources of statewide importance. The plan reemphasizes the state's protection of "Critical Environmental Sites and Historic and Cultural Sites" such as the park, and focuses redevelopment in "Regional Centers" such as Morristown.

New Jersey Department of Environmental Protection Green Acres Program: Central New Jersey Land Acquisition

The Green Acres Program was created in 1961 to meet New Jersey's growing recreation and conservation needs. Since then, New Jersey's voters have overwhelmingly approved over $1.4 billion for land acquisition and park development. Green Acres is committed to preserving New Jersey's rich natural, historic, and cultural heritage. By 1998, over 390,000 acres of conservation and recreation land had been or were being preserved, and hundreds of public parks created.

Morris Township Master Plan Reexamination

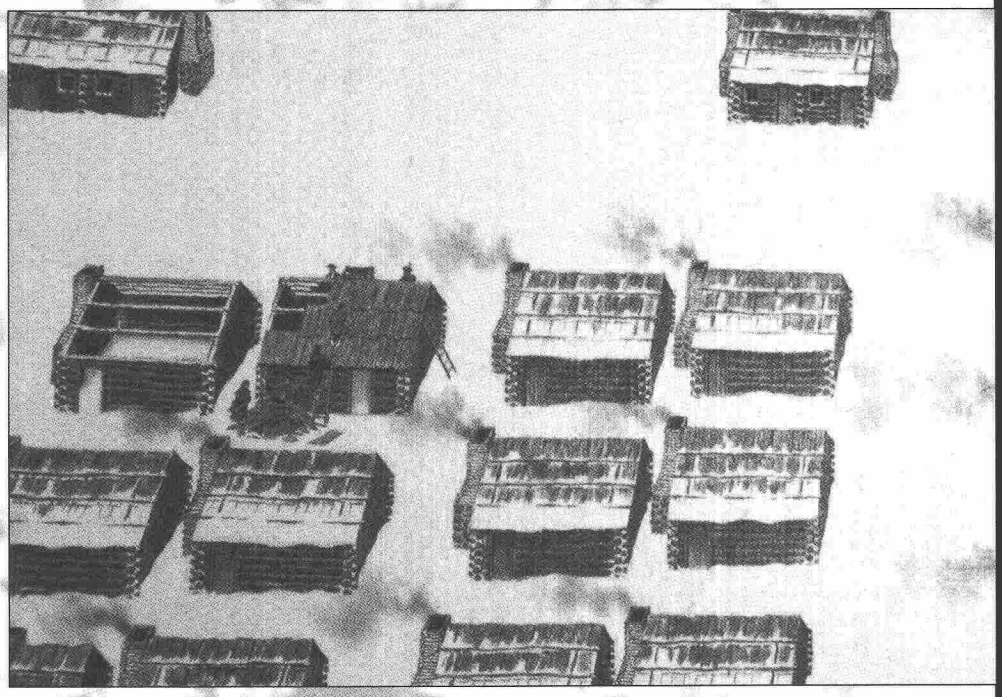
Morris Township, which includes portions of the Jockey Hollow and Fort Nonsense units, recently completed a five-year update of its comprehensive master plan. A proposed change in the land use designation and zoning of a parcel adjacent to Jockey Hollow (the Saint Mary's Abbey/Delbarton parcel) to permit construction of a large retirement facility (240 independent living units, 24 assisted-living units, and 48 skilled-nursing beds on 41 acres) is controversial. If constructed, the facility would likely have substantial adverse effects on park resources and visitor experiences. No other changes in the plan are likely to impact the park.

The reexamination was recommended by the Morris Township Planning Board and a subsequent ordinance was approved by the Township Committee in September 2002, changing the zoning for the Saint Mary's Abbey parcel from Open Space/Government Use (OS/GU) to Continuous Care Retirement Community (CCRC). The CCRC zone may include multi-story (50 ft.) multiple-habitation units and commercial uses. Site plans are under development at the same time that the Township's decision is facing legal challenge.

CHAPTER 2: ALTERNATIVES

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Major General John Kalb commented in February 1780, "Those who have only been in Valley Forge and Middlebrook during the last two winters, but have not tasted the cruelties of this one, know not what it is to suffer."

INTRODUCTION

This section describes the three alternatives—A, B, and C—considered to guide the park for the next 15–20 years. Each alternative provides a cohesive rationale or philosophy that directs or shapes a vision for the park's resources and its visitors. Although the organizing philosophies are different, each alternative is consistent with the park's authorizing legislation, supports the park's mission, and is feasible. In most cases the differences reflect different responses to the Decision Points described in the previous chapter.

In all alternatives, the NPS is required to protect the resources in its care under all applicable laws, regulations, and policies. NPS Management Policies (2001) express the following:

Cultural Resources

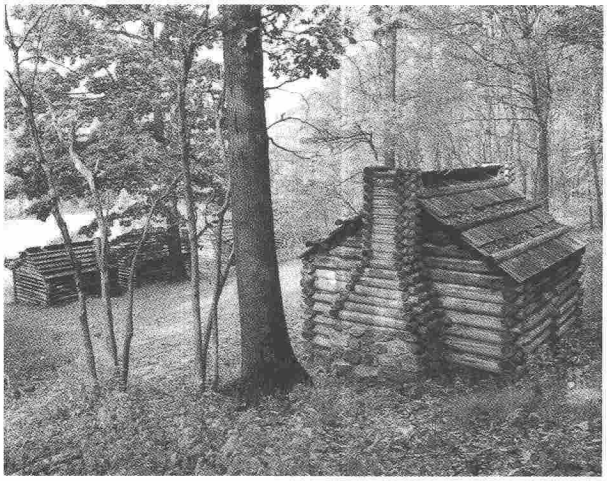
The NPS will preserve and foster appreciation of the cultural resources in its custody, and will demonstrate its respect for the peoples traditionally associated with those resources, through appropriate programs of research, planning, and stewardship.

Boundaries

As part of the planning process, the NPS will identify and evaluate boundary adjustments that may be necessary or desirable in order to carry out the purposes of the park. Boundary adjustments may be recommended to (1) protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes; (2) address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads; or (3) otherwise protect park resources that are critical to fulfilling park purposes.

Natural Resources

The NPS will preserve the natural resources, processes, systems, and values of units of the national park system in an unimpaired condition, to perpetuate their inherent integrity and to provide present and future generations with the opportunity to enjoy them.



During the winter of 1799–80, the Continental Army built over 1,000 huts in Jockey Hollow. Photo by Walt Schafer.

Visitor Activities and Services

National parks belong to all Americans, and all Americans should feel welcome to experience the parks. The NPS will promote and regulate appropriate use of the parks, and will provide the services necessary to meet the basic needs of park visitors and to achieve each park's mission goals.

Interpretation and Education

Through interpretive and educational programs, the NPS will instill in park visitors an understanding, appreciation, and enjoyment of the significance of parks and their resources. Interpretive and educational programs will encourage the development of a personal stewardship ethic, and broaden public support for preserving park resources.

It is important to note that each alternative assumes that adequate staffing and budget will be provided to park managers, and no distinction should be made among alternatives in this regard.

The three alternatives are explained in several ways. First a brief summary explains the organizing philosophy and broadly states the objectives for management of resources and visitors. Second, a table of management zones is paired with maps showing their application within the park. Management zoning divides land into areas depending on the (1) desired resource conditions, (2) desired visitor experience, (3) management activities, (4) kinds and levels of visitor use, and (5) kinds and levels of development. These zones guide implementation of the alternative. Each alternative proposes a unique description of zones in a distinct geographical pattern. The zones used in the alternatives are described below.

Third, tables describe the management prescriptions—the park's objectives. The tables are organized by the park's goals (described in the previous section) and units. (Because of the similarity of their resources, the Jockey Hollow and New Jersey Brigade units are treated together. The Cross Estate, part of the New Jersey Brigade unit, is treated separately because its resources are very different from the rest of the unit.) The tables provide examples of specific actions that could be taken to achieve the management prescriptions. Note that listing specific actions is intended to help explain the ways the park could be managed under the prescription, but does not obligate the park to undertake those actions, and does not include all possible actions that might be undertaken.

At the end of the tables, estimated costs for park operations; research, planning, and construction; and land acquisition are presented. These are conceptual-type (Class "C") estimates for long-range budgetary planning. They are presented for comparative purposes.

A note about funding: The National Park Service develops five-year deferred maintenance and capital improvement plans. These plans are developed by a systematic process of evaluating proposals from the field to determine which projects are of greatest need in priority order focusing on critical health and safety issues and critical resource protection requirements. Actions that add specific projects to the five-year plans inevitably result in other projects being displaced when budgets are limited.

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

Lastly, A summary table compares the three alternatives with the Decision Points described earlier.

Note that Alternative C is the ***proposed action*** and also the ***environmentally preferred alternative.***

This chapter ends with descriptions of alternatives that were initially considered but have been eliminated from further study. Reasons for elimination include: technical or economic infeasibility, severe environmental impact, duplication with other less environmentally damaging alternatives, and conflict with other plans or policies.

I. MANAGEMENT ZONES

Developed/Park Operations

This zone typically contains visitor parking areas, walkways, park maintenance/utility areas, and other visitor and park support facilities. Under all alternatives, resources would be maintained in good

condition to provide safe and convenient access to the park. Because these zones are intensively developed, the potential to introduce new facilities is very limited.

Historical

Comprised of the park's most important historical resources, such as the Ford Mansion, the hilltop at Fort Nonsense, and the Pennsylvania Line in Jockey Hollow, these zones receive heavy visitation. Under all alternatives, resources in this zone are preserved and are the focus of interpretation and education. The alternatives propose different treatments within this zone. However, each alternative seeks to preserve the historic character of these areas. In general, due to the integrity of these areas, the potential to introduce new facilities is limited.

Museum Development

Employed only at the Washington's Headquarters unit under Alternatives B and C, this zone encompasses the area necessary for development of a new addition to the museum and related landscape rehabilitation measures. Upon completion of the work, the area would be treated as part of the historical zone.

Forest

This zone is only used to describe forest management outside the developed and historic zones under Alternative A. Resources would be maintained in good conditions, and low levels of visitation would be supported. This zone does not differentiate among the diverse types of resources in the forest, or prescribe the range of management practices necessary to address the environmental changes in the forest. Appropriate facilities in the zone would include unsurfaced trails, orientation signs, and features to support research such as small deer exclosures.

Sustainable Forest

In contrast with the Forest zone under Alternative A, this zone prescribes the range of management practices necessary to address the environmental changes in the forest. Under Alternatives B and C, management would seek to sustain a mixed hardwood forest in this zone. Low levels of visitation, providing a reflective and tranquil experience, would be supported. Given the objective of sustaining the forest, the potential for introducing new development in this zone would be low. Appropriate facilities in the zone would include unsurfaced trails, orientation signs, and features to support research such as small deer exclosures.

Hut Area

Employed within the Sustainable Forest zone, this zone encompasses the archeological sites of each of the brigades in the forested areas of the Jockey Hollow and New Jersey Brigade units. Archeological resource protection would be very high, but in places lacking integrity, new interpretive exhibits and trails could be developed.

Water Quality Protection

Employed within the Sustainable Forest zone, this zone encompasses the surface water features in the Jockey Hollow and New Jersey Brigade units. Management would seek to protect the high level of water quality. New facilities to support visitation, such as bridges or stream access points, would be very limited.

ALTERNATIVE A

I. PHILOSOPHY

The National Environmental Policy Act (NEPA) requires consideration of a so-called ***"no action"*** alternative. This alternative represents a continuation of current practices with current plans remaining in force. All projects under approved plans could be carried out; however, it might be difficult to respond to conditions that have changed since the adoption of the Bicentennial-era master plan. This alternative should be considered the baseline for comparison with the ***action*** alternatives B and C.

Resource Preservation

As directed by its Mission Statement and legislative history, the park would continue to focus on protecting its primary resources relating to the Revolutionary War: the archeological resources,

landscapes, structures, and collections. Facilities would continue to be provided for the display, storage, and research access to the park's collections.

Under this alternative there would be little active management in the forested areas. Monitoring would be continued, as well as limited removal of invasive nonnative plants, but further action to ensure forest sustainability might be problematic, since that was not recognized as a concern when existing plans were formed. To the extent possible, park management would try to identify and prevent undesirable intrusions on lands surrounding the park.

Public Enjoyment and Satisfaction

Interpretation would continue to seek to integrate the different park units and to place Morristown within its larger contexts.

Partnership and Outreach

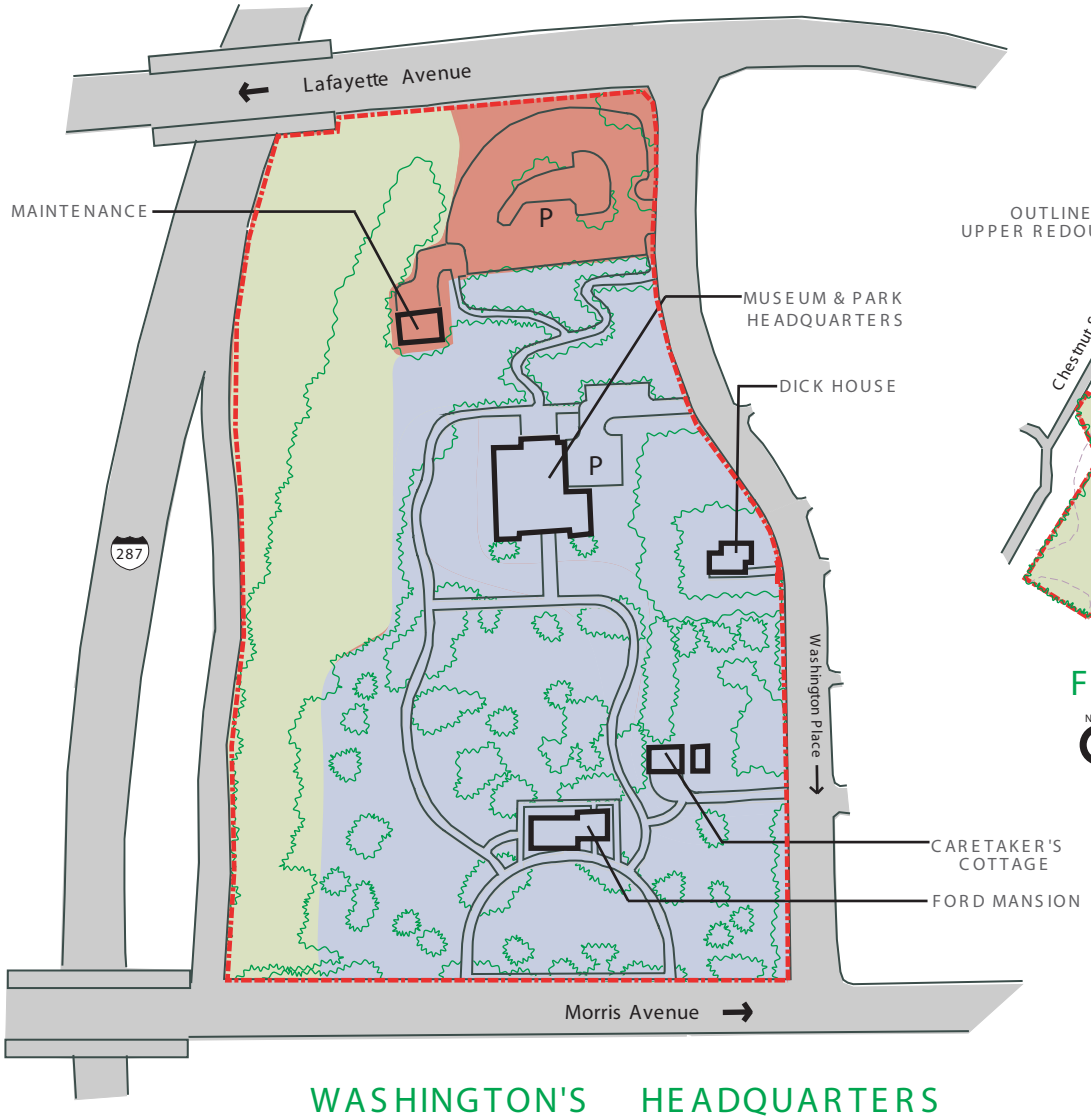
The park would seek to maintain and expand partnerships with other historical organizations, in particular the Washington Association. Shuttle service in Jockey Hollow, already authorized, might be provided, possibly with the assistance of partners, to improve the visitor's experience and offer an alternative to dependence on private automobiles.

Operational Effectiveness

Goals would remain as outlined in the park's 1996 management objectives report and in the Service-wide 2000–2005 NPS Strategic Plan. As with the other alternatives, the NPS is required to protect the resources in its care under all applicable laws and regulations. Each alternative assumes that adequate staffing and budget will be provided to park managers, and no distinction should be made among alternatives in this regard.

ALTERNATIVE A

Figure 3



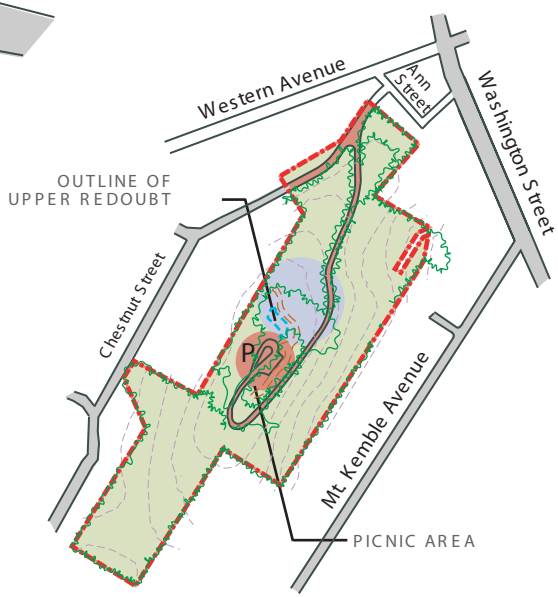
WASHINGTON'S HEADQUARTERS

North

0 50' 100' 200'

SCALE - 1" = 100'

* Property Line Is Approximate



FORT NONSENSE

North

0 1250' 2500' 5000 Feet

SCALE - 1" = 2500'

Management Zones

- Developed/ Park Operations
- Historical
- Forest
- Park Boundary
- Ex. Tree Canopy
- P Parking

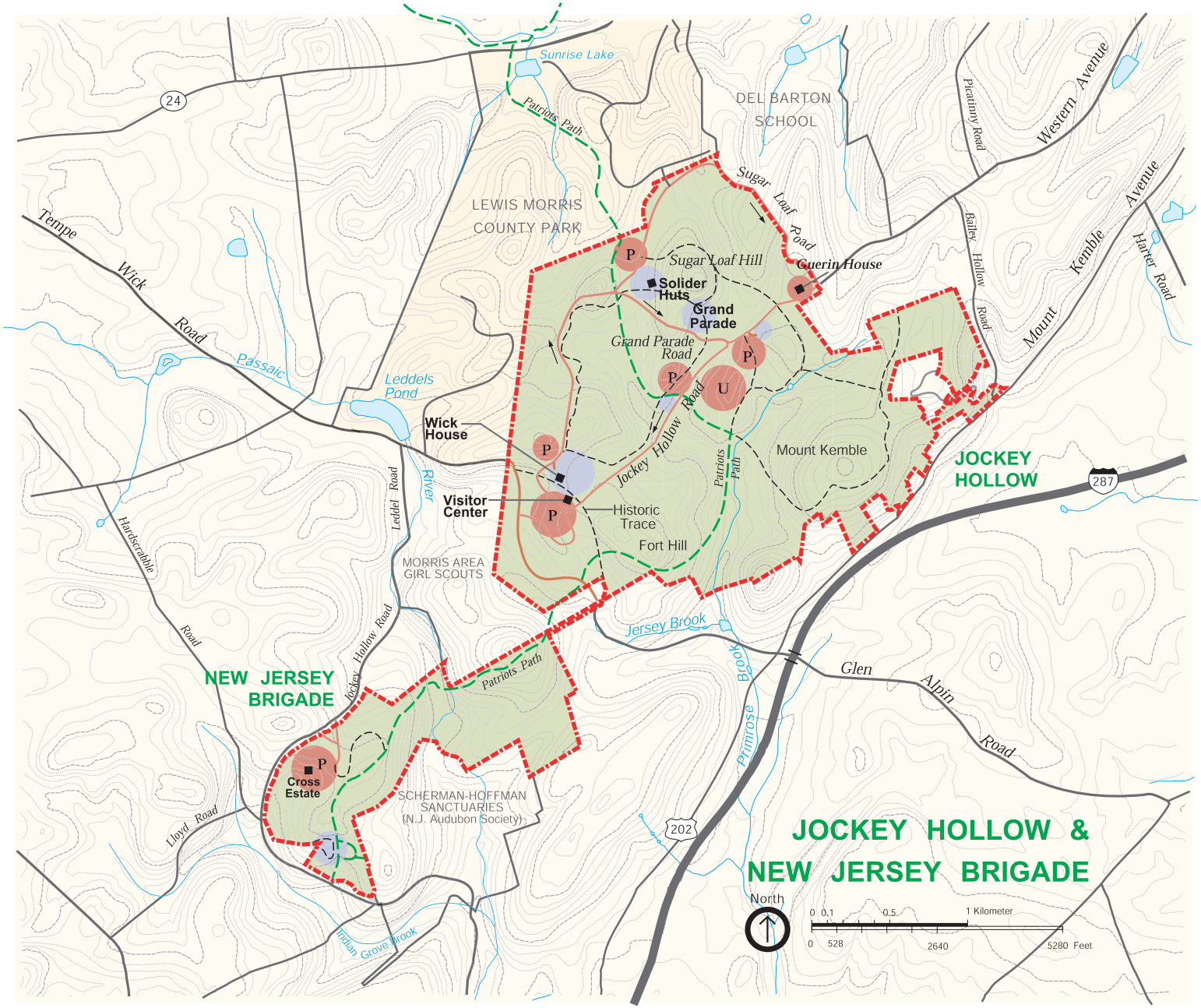
NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
August 2003

National Park Service Boston Support Office
U.S. Department of the Interior

SHAPINS ASSOCIATES



ALTERNATIVE A

Figure 4

Management Zones

- Developed/Park Operations
- Historical
- Forest
- Park Boundary
- Patriots Path
- Other Trails
- P Parking Area
- U Utility Area

NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
August 2003

National Park Service · Boston Support Office
U.S. Department of the Interior

SHAPINS ASSOCIATES

Management Zones: Alternative A (see accompanying maps)

Developed / Park Operations

Desired Resource Conditions: All resources are maintained in good condition: access roads, visitor parking areas, paths, utility areas, and other visitor and park staff support facilities

Desired Visitor Experience: Provides for safe and direct vehicular and pedestrian access and park support activities

Management Activities / Treatment: Moderate levels of resource and visitor management

Treatment is preservation

Kinds and Levels of Visitor Use: High levels of visitor and staff use

Kinds and Levels of New Development: Minimal

Historical

Desired Resource Conditions: Historical and cultural resources are preserved or restored to reflect historical conditions: visitor centers, museums, historic structures, interpretive exhibits, limited restorations, archeological digs, narrow historical roads, trails, and other visitor facilities

Desired Visitor Experience: Highly interpreted and educational

Management Activities / Treatment: Intensive management of resources and visitors

Treatment is preservation

Kinds and Levels of Visitor Use: High to moderate levels of sightseeing and hiking; low levels of scenic driving

Kinds and Levels of New Development: Minimal

Forest

Desired Resource Conditions: Forest resources are maintained in good condition: woodlands, water features, trails, interpretive exhibits, and scientific devices such as deer exclosures

Desired Visitor Experience: Reflective, tranquil; little interpretation

Management Activities / Treatment: Low level of forest management directed by NPS policy

Treatment is preservation

Kinds and Levels of Visitor Use: Low levels of hiking, horseback riding, and other non-motorized recreational uses as appropriate

Kinds and Levels of New Development: Minimal

Management Prescriptions: Resource Preservation

Alternative A — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes, Structures, Archeology, and Collections	1. Natural and cultural resources and associated values are protected, restored, and maintained in good condition, and managed within their broader ecosystem and cultural context.	Historic landscapes, structures, visitor facilities, grounds, and roadways contribute to the park's historical significance and are maintained in good condition. Existing and restored features are preserved. Representative portions of selected lost features are reconstructed. Archeological remains are stabilized for their protection and continued interpretive value. Security and protection would be provided for all physical features of the park. Known cultural features outside the Revolutionary War period could be preserved.
	2. Park resources enhance the visitor's appreciation of their association with the Revolutionary War and represent, to the greatest extent possible, a setting that is designed to give the visitor a strong feeling of a living, vibrant atmosphere.	See park units below for actions.
	3. The park contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.	Continue broad research programs to fulfill the purpose of the park, using available resources of the NPS, and when advantageous, competent outside professional personnel and institutions.
Boundaries	4. The local community and owners of lands adjoining the park cooperate with the NPS in perpetuating the historic character and the rural, non-commercial atmosphere, particularly with respect to lands in the vicinity of the Jockey Hollow and New Jersey Brigade units. The park's acreage ceiling limits acquisition to 8.56 acres.	Efforts are made to protect the park from adverse development of the large private land holdings in the Jockey Hollow and New Jersey Brigade areas. Complex boundaries, as along Route 202, are simplified, principally through acquisition.

Management Prescriptions: Resource Preservation

Alternative A — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Parkwide #1 and 2, above.	Remove the Dick House and re-landscape the grounds in harmony with the historic scene. Concur in the plan to "cover over" I-287 adjacent to the Ford Mansion.
Structures	See Parkwide #1 and 2, above.	Continue preservation of the Ford Mansion and museum. Museum continues to house park administration, collections, exhibits, and other visitor services.
Archeology	See Parkwide #1 and 2, above.	Archeological remains of encampment period outbuildings are protected.
Collections	1. The collections focus on the 1777 and 1779–80 encampments at Morristown, with substantial anomalies.	Continue programs to maintain the existing collections and museum exhibits. No acquisitions of materials outside the scope of collections are permitted. Some responsible de-accessioning may occur. Certain anomalies in the collections, such as Washingtoniana, are recognized and retained.

Management Prescriptions: Resource Preservation

Alternative A — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Parkwide #1 and 2, above.	Investigate the historical accuracy of the current pattern of field and forest. Remove features dating from outside the encampment period such as the black locust stand adjacent to the Wick orchard. Enhance and extend restoration of Tempe Wick Road as a historical trace.
Structures	See Parkwide #1 and 2, above.	Protect remnants of the Morristown aqueduct.
Archeology	See Parkwide #1 and 2, above.	Provide adequate security for archeological resources in cantonment areas.

Management Prescriptions: Resource Preservation

Alternative A — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Parkwide #1 and 2, above.	Clear and maintain selected vistas.
Archeology	See Parkwide #1 and 2, above.	Stabilize archeological resources related to the historic fort.

Management Prescriptions: Resource Preservation

Alternative A — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	See Parkwide #1, above.	The estate serves as an operational center. Its structures provide offices, meeting space, and accommodations for staff and interns. Repairs and modifications are made as needed. Gardens serve as horticultural exhibit largely maintained by a partner organization.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative A — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Park visitors and the general public understand and appreciate the preservation of its resources for this and future generations.	Retain and enhance visitor education and interpretive programs. Plan a living-history program at the Pennsylvania Line huts to create a more viable visitor experience during the summer season.
	2. The stories of Morristown NHP will be interpreted for visitors through four historical themes: a) Daily life, training, organization, supply, equipment, morale, housing, and discipline of the Continental Army during the winters of 1779–80 b) Role of George Washington as commander-in-chief during the winters of 1777–78 and 1779–80; the personal qualities that made him a great leader; his abilities in coping with a host of military, political, and diplomatic problems; his contribution to the cause of American independence c) Life in Morristown as a typical village caught up in the Revolution—its way of life, and its relationship to the army encamped at its doorstep; the total role of New Jersey as the "cockpit state" to the war; military outposts and related military events d) Pre-1777 and post-1780 stories of the Revolutionary War at Morristown.	Visitors are encouraged to visit multiple park units, with interpretation in each unit coordinated with and related to the complete park story.
	3. Visitor enjoyment is maximized by comprehension of the composite historic theme—the events that took place in the park, in the town, and in the surrounding region.	Continue to provide space for informational pamphlets from related regional sites. Develop exhibits that provide greater orientation to the region.
	4. Interpretation creates in the visitor's mind an awareness of the atmosphere and environment of Morristown in 1779–80.	Minimize the impact of intrusions surrounding the resource.
Visitor Activities and Services	5. Visitors safely enjoy and are satisfied with the availability, accessibility, diversity and quality of park facilities, services, and appropriate recreational facilities.	Maintain and enhance existing visitor services including visitor contact stations, circulation patterns, and parking facilities. Coordinate and operate transit systems to lessen the need for automobiles in the park. Bicycling is permitted only on park roads; not on trails. Informal picnicking is permitted in non-historic areas, such as the Jockey Hollow visitor center parking area. Continue resource management program to remove invasive vines that detract from the historic appearance of the park.

continued

Management Prescriptions: Public Enjoyment and Satisfaction, *continued*

Alternative A **Parkwide**

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Visitor Activities and Services	6. Provide visitor services in keeping with user trends and the day-use area concept.	Access to the park is controlled and visitor services are provided during scheduled hours only.
	7. Groups may be accommodated for special occasions on sites designated by the park superintendent, as long as they do not damage the historic resource or natural environment, or infringe upon the use and enjoyment of persons owning adjacent private property.	Reenactments of the encampment and Scouting overnights may be held on the Grand Parade grounds or Pennsylvania Line; large group picnics and competitive sports are not permitted.
	8. Some winter use may be permitted, dependent on snow cover and ice conditions, but no special developments for these activities should be developed. Sledding, coasting, cross-country skiing, hiking, and photography are the extent of permitted winter activities.	Limited winter activities are permitted. Snowmobiling, and other activities that would disturb the serenity of the area, are not permitted.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative A **Washington's Headquarters**

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Interpretation at Washington's Headquarters presents an overview of the park and emphasizes themes of the Continental Army, George Washington, and Life in Morristown.	Retain and enhance current exhibits in the museum, on the grounds, and in the Ford Mansion. Presentations are made by costumed interpreters.
	2. Interiors of Ford Mansion represent the 1779–80 encampment period as described in the 1976 historic furnishings plan.	Generally, continue interpretation of the Ford Mansion as currently performed.
Visitor Activities and Services	3. Visitors have the opportunity to take a guided tour of the Ford Mansion and see historical objects in the museum.	Retain the guided tour program. Retain existing exhibits, bookstore, and film in the museum. Improve, but do not expand, the existing museum.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative A — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Interpretation at Jockey Hollow emphasizes themes of the Continental Army and Life in Morristown.	Interpreters wear period military and civilian costumes. Retain exhibits, bookstore, and film in the visitor center. Construct and maintain examples of soldiers and officers huts in the Pennsylvania Line cantonment area to provide a compelling re-creation of the site. Remove the non-historic Wildflower Trail.
	2. Interiors of the Wick House represent the 1779–80 encampment period as described in the 1974 historic furnishings report.	Continue interpretation of Wick House furnished interiors as currently performed, with modifications by park staff.
	3. Interpretation treatment of the New Jersey Brigade unit is coordinated with the educational program of the adjacent Scherman-Hoffman Wildlife Sanctuary, so visitors may experience the total environment—animals, plants, history, and the memories and sensations of the soldiers.	Provide limited interpretive exhibits and waysides.
Visitor Activities and Services	See Parkwide #5, above.	Purchase vehicles or establish concession for operation of a park shuttle on the tour road. Limit automobile access to the tour road when the shuttle is in operation. Do not construct a parking area on Hardscrabble Road to support visitation of the New Jersey Brigade unit. Explore using the Scherman-Hoffman Wildlife Sanctuary parking lot.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative A — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Interpretation utilizes the hilltop unit as a key orientation point, locating and relating the separate units of the park and the Watchung Mountains. Emphasis is placed on 1777 aspects of the Continental Army and Life in Morristown themes.	Retain the wayside exhibits, stone commemorative marker, and stone outline of the Upper Redoubt to relate the history of the hilltop. Views to the surrounding area are maintained in narrow vistas.
Visitor Activities and Services	See Parkwide #5, above.	Trails are available for hiking. Informal picnicking is permitted on the hilltop. Maintain a paved access road from the town and a small parking lot on the hilltop.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative A — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	See Parkwide #1, above.	Maintain the interpretive wayside and trailhead kiosk.
Visitor Activities and Services	See Parkwide #5, above.	Maintain the small parking lot at the trail head to provide access to the New Jersey Brigade unit, the Jockey Hollow unit, and other area resources via the Patriots Path trail.

Management Prescriptions: Partnership and Outreach

Alternative A — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	1. The park strengthens and preserves natural and cultural resources, and enhances recreational opportunities managed by partners.	Continue to acknowledge the cooperating services of the board of trustees and executive committee of the WANJ as a board of advisors in maintenance of the park; keep them advised; and consult with them frequently on all aspects of park management and programming. Extend partnership with the DAR, SAR, and Morris County Historical Society. Seek donated funds to improve the accessibility of the original manuscript collections for public use. Continue to develop cooperative relationships with Lewis Morris County Park, the Scherman-Hoffman Wildlife Sanctuary, and the Morris Area Girls Scouts Council. Continue to involve the New Jersey Herb Society in the Wick Farm garden. Continue to work with the New Jersey Historic Garden Foundation on the Cross Estate Garden. Continue trail work with the Appalachian Trail, New York/New Jersey Trail Conference.
	2. Far-reaching, visionary planning, in cooperation with all entities bordering the park, will avoid incompatible land uses and adverse influences on the environment of the historical park.	Coordinate the Crossroads of the American Revolution special resource study linking Revolutionary War historic sites with land conservation to better understand the scope of the revolution in New Jersey. Collaborate with the Great Swamp Watershed Association on protection of the Upper Passaic and Primrose Brook areas.
	3. The park increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.	Continue and expand volunteer and internship programs. Continue and expand Adopt-A-Trail programs.

Management Prescriptions: Operational Effectiveness

Alternative A — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	1. The park uses effective management practices, systems, and technologies to accomplish its mission.	Administer the four units of the park as one entity, with each complementing the others. Overcome the flat budget and declining staffing levels to fill vacancies in several key professional positions. Improve the central utility area/maintenance facility. Collect fee revenues consistently. Ensure housing is adequate for park operations.

Costs: Alternative A

Estimated Costs	Amount
Operational costs, estimated annual	$2,350,000–$2,800,000
Research, planning, and construction costs, estimated	$2,800,000–$3,350,000
Land acquisition costs, estimated	$1,500,000–$2,000,000

ELEMENTS COMMON TO ALTERNATIVES B AND C: THE ACTION ALTERNATIVES

There is strong consensus among the planning team, park staff, NPS resource advisors, and the local community on the future direction of the park in several critical areas. The management prescriptions and examples of actions presented below address these areas of agreement. Alternatives B and C both propose new management prescriptions and actions to:

Resource Preservation

- Increase efforts to preserve all resources, with particular emphasis on forest resources
- Expand collections storage, exhibit space, and other public facilities at the Washington's Headquarters unit
- Adjust the park's acreage ceiling and develop a land protection plan that responds to current threats and opportunities

Public Enjoyment and Satisfaction

- Improve public enjoyment and satisfaction through new facilities and interpretive programs

Partnership and Outreach

- Collaborate with government and private parties on transportation alternatives for park visitors
- Expand partnerships with appropriate organizations in the region

While having this in common, Alternatives B and C differ in several ways. One of the most fundamental differences is the proposed treatment of the period of significance. Alternative B focuses preservation and interpretation on the encampment period (1777–82) alone, de-emphasizing the commemorative era. Alternative C proposes to preserve and interpret both. This, and other differences between Alternatives B and C, preclude the development of a common set of management zones or maps. Please refer to the sections on these alternatives for the specific management zone charts and maps.

The following management prescriptions, together with the management prescriptions described separately under Alternatives B and C, will guide park management.

Management Prescriptions: Resource Preservation

Common to B and C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes, Structures, Archeology, and Collections	1. The cultural and natural resources and associated values of the park are protected, restored, and maintained in good condition, and managed within their broad cultural and ecosystem contexts.	Continue NHPA and NEPA compliance activities to protect cultural and natural resources. Complete a revised National Register documentation for the whole park. Consider employing techniques such as increased surveillance and vegetation management to prevent archeological resource degradation through soil erosion, tree tilt-ups, and pot-hunting. Continue archeological inventory and site stabilization efforts. Provide adequate security and protection for all physical features of the park. Implement or revise the 2001 Collections Management Plan to meet the direction of the chosen alternative. Provide public access to the collections consistent with their protection. Responsibly deaccession materials that do not meet the scope of the collection, excepting anomalies, as defined in the chosen alternative.
	2. Management decisions about resources and visitors are based on adequate scholarly and scientific information.	Take an interdisciplinary approach to park management, involving ongoing consultation of staff, NPS support professionals, and partners. Complete Historic Structures Reports for all significant park structures. Complete study of carrying capacity for key resources such as the Ford Mansion, Wick House, Jockey Hollow loop road, and horse trails. Complete the Cultural Landscape Reports and Landscape Treatment Plans for all park units.
	3. Forests are important resources blending critical cultural and natural values. As such, the forests are actively managed to meet both cultural and natural resource protection objectives. Cultural resource objectives are derived from the park enabling legislation and mission that seeks to protect: archeological sites, the historic character of a mixed hardwood forest, scenic quality, and recreational values. Natural resource objectives would be based on broad scientific criteria for sustainability, such as diversity of species, density, structure, and water quality. Conflicts between objectives would be resolved on a case-by-case basis.	The Olmsted Center for Landscape Preservation and the NPS Northeast Region natural resource program collaborate to develop a cultural landscape treatment plan to sustain the forest cover and its associated values. The plan addresses factors such as protecting historic character, deer browse, soil chemistry, invasive vegetation, and invertebrate species. Integrate the treatment plan with those for other landscapes and programs for deer control, native plant restoration, control of invasive species, and a comprehensive, long-term vegetation inventory and monitoring program that provides management with sound information to document threats, evaluate trends, and make decisions. Establish special management procedures for the Upper Passaic Watershed (including Indian Grove Brook) and Primrose Brook corridors, such as limiting the construction of bridges and trails. Maintain fields to protect their habitat value for grassland bird species. Coordinate a program to control the spread of invasive nonnative plants with neighboring property owners.

continued

Management Prescriptions: Resource Preservation, *continued*

Common to B and C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Boundaries	4. Park resources and visitor experience are protected from negative intrusions on lands outside the park boundary.	Adjust the park's acreage ceiling to allow acquisition of up to 500 acres. Develop a land protection plan based on the 1999 Adjacent Lands Study: rank properties based on criteria for boundary adjustments, and establish guidelines for coordination with neighboring communities. Acquisitions would be on a willing-seller basis. Establish conservation easements or acquire properties adjacent to Washington's Headquarters, on a willing-seller basis, to avoid adverse effects on the Ford Mansion and to enhance its setting. Acquire the Schuyler-Hamilton House, significant to both the encampment period and commemorative era, through donation and explore the possibility of reorienting it to face Morris Street. Establish conservation easements or acquire properties adjacent to the Jockey Hollow and New Jersey Brigade units, including lands owned by the Girl Scouts, the Leddell's mill and forge sites, and the historically significant and most visible portions of the Saint Mary's Abbey/Delbarton property. Place particular emphasis on protecting the historic character and non-commercial atmosphere, and on better linking the two encampment units. Consider acquiring a property adjacent to the Jockey Hollow unit to provide a more central location for park administrative functions. Establish conservation easements or acquire properties along Route 202, including the historic Kemble site, to protect significant Revolutionary War resources, an important park gateway, and improve management of existing park resources adjacent to the route. Establish conservation easements or acquire properties adjacent to Fort Nonsense, possibly reestablishing a pedestrian connection between the Fort and Jockey Hollow.

Management Prescriptions: Resource Preservation

Common to B and C — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	No additional Management Prescriptions.	No additional Actions.
Structures	See Parkwide #1, above.	Rehabilitate and/or expand the museum to improve collections storage facilities, enhance exhibit space, provide better educational facilities and improved visitor circulation. Rehabilitation should also provide for improved administrative facilities, possibly in another facility or unit.
	See Parkwide #2, above.	Formally document the museum as a contributing resource of the park.
Archeology	No additional Management Prescriptions.	No additional Actions.
Collections	See Parkwide #1, above.	Rehabilitate the existing collections storage facilities in the museum or relocate the collections to a new addition. Pursue accreditation with the American Association of Museums.

Management Prescriptions: Resource Preservation

Common to B and C — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Parkwide #3, above.	Initiate an inventory and monitoring program to help determine present impacts to soils and predict future impacts. Protect water quality by limiting activities in stream corridors, and maintaining and upgrading drainage structures along roadways and trails crossing stream corridors.
Structures	No additional Management Prescriptions.	No additional Actions.
Archeology	No additional Management Prescriptions.	No additional Actions.
Collections	No additional Management Prescriptions.	No additional Actions.

Management Prescriptions: Resource Preservation

Common to B and C — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	1. Views illustrate the character-defining features and strategic nature of the site.	Open extensive vistas characteristic of the fortified hilltop to key historical features including vistas east toward New York City, Morristown Green, the Ford Mansion, and the protective Watchung Mountains; northwest toward the iron-producing region; and southwest along Mount Kemble toward Jockey Hollow and the historic roads (Route 202).
Structures	No additional Management Prescriptions.	No additional Actions.
Archeology	No additional Management Prescriptions.	No additional Actions.
Collections	No additional Management Prescriptions.	No additional Actions.

Management Prescriptions: Resource Preservation

Common to B and C — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	No additional Management Prescriptions.	No additional Actions.
Structures	See Parkwide #1, above.	The architectural significance of the main building is evaluated.
Archeology	No additional Management Prescriptions.	No additional Actions.
Collections	No additional Management Prescriptions.	No additional Actions.

Management Prescriptions: Public Enjoyment and Satisfaction

Common to B and C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Park visitors and the general public understand and appreciate the preservation of its cultural and natural resources for this and future generations.	Expand programs for school-aged children that integrate history and conservation; for example, communicating the use and conservation of trees, water, and wildlife in the encampments and in later times. Utilize archeological projects in the educational and interpretive program as appropriate.
	2. Visitors understand and appreciate the national significance of Morristown NHP: its place in the American Revolution, the series of Continental Army encampments, the role of General Washington, the history of its preservation, and the park's regional context.	Develop a Comprehensive Interpretive Plan to support visitor understanding, employing a broad range of treatments and media, including reconstruction, personal services, exhibits, film, waysides. Encourage visitors to visit all four park units, with interpretation in each unit coordinated and related, providing visitors with a holistic park story. Provide new orientation exhibits in each park unit to enable visitors to understand the connections among the park units and the related encampment period sites that exist beyond the park boundaries.
Visitor Activities and Services	3. Visitors of all ages and physical abilities safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and recreational opportunities compatible with the park's mission.	Develop a visitor shuttle system connecting park units, related historical sites, and other key locations in the Morristown region. Redesign the system of park signage to improve visitor orientation to all park units and recognition of their management by the NPS. Priority efforts may include additional directional signs to Washington's Headquarters, and replacing the 1976 signs at each unit that have distinct non-NPS logos. Traditional activities, such as dog walking, horseback riding, and cross-country skiing, do not infringe on the enjoyment of the park by other visitors, do not impact resources, and are consistent with the contemplative and commemorative nature of the park and with the mission of the park. Competitive group athletic events are generally inconsistent with the mission of the park and are not permitted. Winter activities, such as sledding, coasting, cross-country skiing, snow-shoeing, and photography, are encouraged where appropriate and as compatible with the mission of the park. Bicycling on paved park roads is allowed where compatible with the mission of the park. Informal picnicking is permitted where compatible with the mission of the park, such as in non-historic areas. Special events, such as reenactments or Scouting overnights, are permitted where compatible with the park mission.

continued

Management Prescriptions: Public Enjoyment and Satisfaction, *continued*

Common to B and C **Parkwide**

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Visitor Activities and Services	(3. *continued)*	Work with Morris County Parks to extend the Patriots Path trail from the New Jersey Brigade to Washington's Headquarters via Jockey Hollow and Fort Nonsense. Improve accessibility of all visitor facilities, including trails as appropriate. Locate park signs along all major highways at appropriate distances from the park in concert with NJDOT.
	4. Visitor activities, numbers, and vehicular traffic are controlled in the park to provide a tranquil and safe experience.	Visitors are encouraged to explore the park on foot along park trails, or by shuttle, car, and bicycle along park roads. Improve pedestrian safety at key locations, such as at crosswalks and sidewalks around Washington's Headquarters, at the Patriots Path crossing of Tempe Wick Road, and at the Mendham–Elizabethtown historic trace's crossing of Jockey Hollow Road. Western Avenue gate is closed during the day to prevent access by private motor vehicles. Access by pedestrians, bicyclists, equestrians, and other park users is unchanged. Coordinate park hours with operation of the visitor shuttle.
	5. Entrance fees and other visitor fees are collected in a logical and businesslike manner. Visitors are provided information about the use of fees at the park and in the national park system.	Consider constructing a fee collection booth at the Tempe Wick entrance to Jockey Hollow. Cease collecting fees in the Jockey Hollow visitor center.

Management Prescriptions: Public Enjoyment and Satisfaction

Common to B and C

Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the importance of George Washington's occupation of the Ford Mansion and its use as headquarters for the Continental Army from December 1779 through June 1780.	No Common Actions.
Visitor Activities and Services	See Parkwide #3, above.	Expand visitor facilities at Washington's Headquarters to improve visitor orientation to the unit, the region, the Revolutionary War, and the park as a whole; increase space for exhibits, educational programs, a bookstore, and research in the collections and archive. Improve vehicular and pedestrian circulation by developing a small parking and drop-off area off Washington Place, to enable visitors to enter the unit between the Ford Mansion and museum. Redesign paths from the lower parking area towards the front entry (south) of the museum. Extend Patriots Path from the Whippany River to the Ford Mansion.
	2. Visitor access is logical, direct, and safe.	No Common Actions.

Management Prescriptions: Public Enjoyment and Satisfaction

Common to B and C — Jockey Hollow & Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors appreciate the hardships experienced by the Continental Army and their motivations to endure them during the severe winter of 1779–80.	Develop exhibits (outline the encampment area and/or construct a hut) at Hand's Brigade to better serve school curricula and take advantage of accessibility to the visitor center. Develop interpretive exhibits at the Guerin House and consider opening it to visitors.
Visitor Activities and Services	2. Visitors experience a sense of reverence and tranquility in the forest, and are afforded occasion to reflect on the sacrifices of the Continental Army.	Maintain a network of park trails in forested areas; determine carrying capacity, and manage trail conditions and levels of visitor use. Establish the carrying capacity of the loop road, considering the experience and safety of pedestrians when mixed with bicycle and automobile traffic. Explore possible extension of Patriots Path trail south of the New Jersey Brigade unit.
	See Parkwide #3, above.	Rehabilitate or expand the Jockey Hollow visitor center to improve visitor services and interpretation, including support for educational programs.

Management Prescriptions: Public Enjoyment and Satisfaction

Common to B and C

Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the strategic importance of the hilltop, its role in protecting Morristown, and its spatial relationship to the other elements of the encampments.	No Common Actions.
Visitor Activities and Services	No additional Management Prescriptions.	No additional Actions.

Management Prescriptions: Public Enjoyment and Satisfaction

Common to B and C

Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	No additional Management Prescriptions.	No additional Actions.
Visitor Activities and Services	No additional Management Prescriptions.	No additional Actions.

Management Prescriptions: Partnership and Outreach

Common to B and C — Parkwide

Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
1. The parks will work with a broad network of partners and cooperators, including the Washington Association as specified in the establishing legislation, and other local and regional organizations to preserve and interpret important resources related to the park.	Collaborate with the Morris County Visitor Center and the Morristown Partnership to enhance local and regional heritage tourism programs that promote the park and town. Collaborate with partners and neighbors on the management of natural resources, especially forest, wildlife, soundscape, night-sky, and air and water quality. Examples include Morris County Parks Commission, Great Swamp Watershed Association, Morris Area Girl Scouts Council, and the Scherman-Hoffman Audubon Sanctuary. Collaborate with the town of Morristown to build safe, pleasant, and convenient sidewalks, crosswalks, and street furnishings for pedestrians walking between the town and the Washington's Headquarters unit along Morris Avenue and Morris Street. Improve pedestrian access to the Washington equestrian statue and interpretative marker about Washington's "Life Guard" encampment east of Morris Avenue. Collaborate with the WANJ on plans to improve interpretation of Fort Nonsense.
2. The park plays an active and integral role in regional initiatives.	If the heritage area is designated, collaborate with the Crossroads of the American Revolution Association to link Revolutionary War historic sites with land conservation and highlight the importance of New Jersey in the American Revolution. Provide technical and financial assistance to New Jersey sites associated with the American Revolution. Possible sites include: Pluckemin, Burnham Park, and Monmouth Battlefield State Park. Participate in the Joint Fire Science Project to study the effect of combined use of fire and mechanical treatment to reduce the competitiveness of Japanese barberry. Participate in the extension of Patriots Path, the Liberty-Gap Trail, and other initiatives with the "Skylands" state tourism program.
3. The park contributes to knowledge about natural and cultural resources and associated values.	Develop educational approaches to communicate the dynamics and importance of managing the park and regional ecosystems. Establish a long-term archeological research program or field school with a partner academic institution.
4. The park increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.	Continue and expand internship, volunteer, Adopt-A-Trail, and similar programs. Continue to pursue T-21 and T-3 amenity grants.

Management Prescriptions: Operational Effectiveness

Common to B and C

Parkwide

Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
1. Morristown NHP uses efficient management practices, systems, and technologies to accomplish its mission.	Administer the four units of the park as one entity, with each complementing the others. Increase the budget to expand resource preservation and interpretive programs. Positions to be added include historian, exhibit specialist, museum curator, archeologist, archeological technician, natural resources specialist, seasonal field crews, education specialist, and community planner. Modernize administrative and utility/maintenance facilities where not in conflict with resource preservation or interpretive programs. Consider relocating administrative functions from the museum to other units and facilities, or to existing residential properties located adjacent to the Jockey Hollow unit. Visitor fees are collected in a cost-effective manner. Expand sustainable practices in all park operations. Maintain housing adequate for park operational needs, especially protection/law enforcement.

Costs: Common to B and C

Estimated Costs	Amount
Operational costs, estimated annual	$2,600,000–$3,120,000
Research, planning, and construction costs, estimated	$9,300,000–$11,150,000
Land acquisition costs, estimated	$0–$35,000,000

ALTERNATIVE B

I. PHILOSOPHY

This alternative would suggest, to the fullest extent possible, the character of the park during the encampment period of 1777–82. The park would employ interpretive methods such as programs, exhibits, and other media, and extensive rehabilitation of the landscape to present to visitors a scene evocative of the period. Lost features could be replaced or reconstructed (subject to adequate documentation), and features introduced after the encampments could be selectively removed or de-emphasized to provide visitors the direct experience that is being sought. This alternative thus attempts to create a meaningful visitor experience through direct contact with the physical landscape conditions encountered during the military encampments.

However, it recognizes that a completely faithful restoration of those conditions is unattainable considering the limited documentation of specific historic conditions, and the intervening changes to the forest such as the demise of chestnut trees in the early 20th century. In some ways a full restoration is undesirable considering, for example, the environmental damage associated with the extensive clearcutting practiced during the encampments.

Paradoxically, although this alternative seeks to evoke a less complex time, it could entail the most extensive alteration of existing conditions.

Resource Preservation

Emphasis would be placed on the park's collections, and facilities would be improved and expanded through rehabilitation of the museum and construction of an addition to provide for exhibits, storage, and research access. This addition would be located to the rear (north) or sides of the museum, and be made as inconspicuous as possible to accomplish its functions, and in order not to detract from the primary importance of the Ford Mansion. This alternative provides the opportunity to remove later buildings (the Caretaker's Cottage, its garage, and Dick House), which would facilitate a landscape that is more representative of the Ford Mansion's 18th-century setting. A small parking and drop-off area could be constructed off Washington Place to enable visitors to enter the site closer to the Ford Mansion.

In corridors approximately 200 feet wide, encompassing historic roads and buildings in Jockey Hollow, the forest would be actively managed to create vignettes suggesting aspects of the encampments. Environmental change since the 18th century, concern for minimizing environmental impacts, and lack of knowledge about specific conditions during the encampment, prompt the park to limit the scope of landscape alteration to the road corridors and historic sites. The remainder of the land would be managed to sustain a mixed hardwood forest as a cultural and natural resource, with special protection for archeological resources. Management would employ expanded scientific inventory and monitoring to provide information on biological diversity, sustainability, and potentially adverse changes.

To the fullest extent possible, park management would try to identify and prevent undesirable intrusions on lands surrounding the park. This could be accomplished through a range of conservation methods and authorization to acquire up to 500 acres on a willing-seller basis.

Public Enjoyment and Satisfaction

Interpretation would focus almost exclusively on the encampment period. However, interpretation would treat all stages of the encampments in greater depth, and be thematically broad, placing the Morristown encampments within wider context of the American Revolution. Research would develop new knowledge of the encampment period.

Partnership and Outreach

Partnerships, especially with the Washington Association, would remain vital in attaining park

goals. A park–town shuttle service might be provided, possibly with the assistance of partners, to integrate the town and the different park units and to reduce the presence of automobiles in the historic scene.

Operational Effectiveness

As with the other alternatives, the NPS is required to protect the resources in its care under all applicable laws and regulations. However, this would be a new plan, and new park goals and a new strategic plan would be formulated to carry out its policies. Each alternative assumes that adequate staffing and budget will be provided to park managers, and no distinction should be made among alternatives in this regard.

Management Zones: Alternative B (see accompanying maps)

Developed / Park Operations

Desired Resource Conditions: All resources are maintained in good condition: access roads, visitor parking areas, paths, utility areas, and other visitor and park staff support facilities

Desired Visitor Experience: Provides for safe and direct vehicular and pedestrian access and park support activities

Management Activities / Treatment: Moderate levels of resource and visitor management

Treatment is preservation

Kinds and Levels of Visitor Use: High levels of visitor and staff use

Kinds and Levels of New Development: Minimal: orientation signs

Historical

Desired Resource Conditions: Resources reflect historical conditions: visitor centers, museums, historic structures, interpretive exhibits, limited restorations, archeological digs, narrow historical roads, trails, woodlots, fields, and other historic features and visitor facilities

Desired Visitor Experience: High to moderate levels of interpretation; experience is often tranquil, contemplative, and educational

Management Activities / Treatment: Intensive management of resources and visitors

Within 150–200 feet of historic roads, and adjacent to historic structures, forest resources are intensively rehabilitated to reflect historical character as directed by archeological and historical research

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Moderate to high levels of sightseeing and hiking; low levels of scenic driving; horseback riding and other recreational uses as appropriate

Kinds and Levels of New Development: Minimal: interpretive exhibits and park shuttle stops

Museum Development

Desired Resource Conditions: Resources reflect historical conditions: museum, interpretive exhibits, and other visitor facilities

Desired Visitor Experience: High to moderate levels of interpretation; experience is educational

Management Activities / Treatment: Intensive rehabilitation of structures and landscapes

Intensive management of visitors

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Moderate to high levels of sightseeing

Kinds and Levels of New Development: High to moderate: Rehabilitated and new museum facilities, interpretive exhibits, and other visitor facilities, consistent with the Secretary of the Interior's Standards for Historic Properties

Sustainable Forest

Desired Resource Conditions: Mixed hardwood forest is sustained, naturally regenerating, reflecting historic character, biodiversity, and natural processes: woodlands, buffer zones, fields, interpretive exhibits, trails, and scientific devices

Desired Visitor Experience: Reflective, tranquil, solace; little interpretation

Management Activities / Treatment: Predominantly moderate level of management, with limited areas of intensive management, directed by the results of ecological research

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Low levels of hiking, horseback riding, and other non-motorized recreational uses as appropriate

Kinds and Levels of New Development: Limited scientific devices and new small-scale interpretive wayside exhibits

continued

Management Zones: Alternative B, *continued* (see accompanying maps)

Hut Area

Desired Resource Conditions: Cultural resources are preserved: encampment period archeological features

Desired Visitor Experience: Varies from reflective and tranquil to highly interpreted in selected areas

Management Activities / Treatment: High level of protection and varied level of research

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Varies from high to low levels of sightseeing

Kinds and Levels of New Development: Varies from extensive interpretive exhibits where resources lack integrity, to minimal development where integrity is high

Water Quality Protection

Desired Resource Conditions: No degradation of water quality as measured by biota and chemical parameters

Desired Visitor Experience: Reflective, tranquil, very low interpretation

Management Activities / Treatment: Moderate levels of resource and visitor management, including water quality monitoring and maintenance of narrow trails, bridges, and limited stream access points

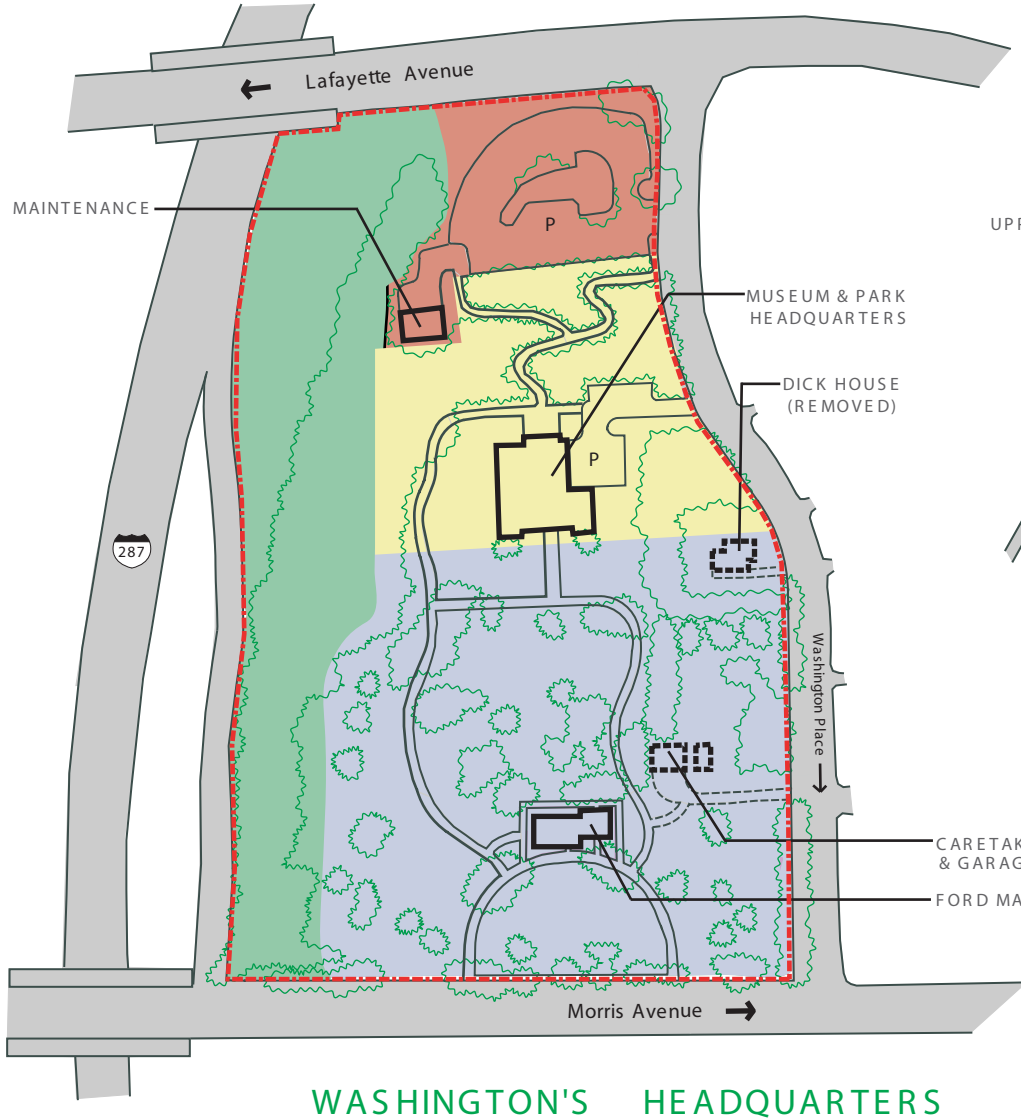
Treatment is rehabilitation

Kinds and Levels of Visitor Use: Low levels of hiking; fishing in accord with state regulations

Kinds and Levels of New Development: Minimal

ALTERNATIVE B

Figure 5



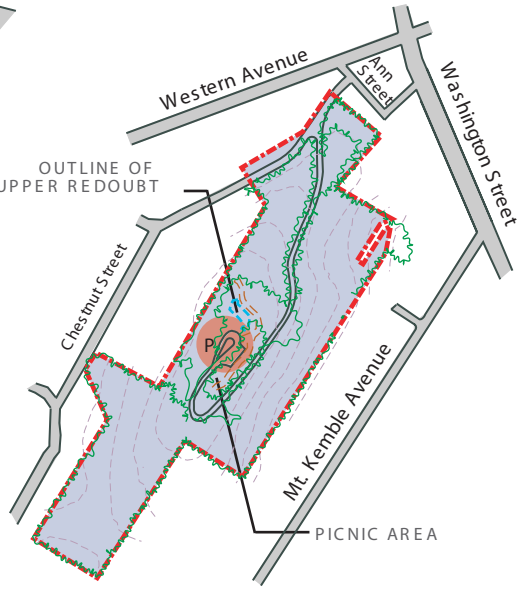
WASHINGTON'S HEADQUARTERS

North

0 50' 100' 200'

SCALE - 1" = 100'

* Property Line Is Approximate



FORT NONSENSE

North

0 1250' 2500' 5000 Feet

SCALE - 1" = 2500'

Management Zones

- Developed/ Park Operations
- Historical
- Museum Development
- Sustainable Forest
- Park Boundary
- Ex. Tree Canopy
- P Parking

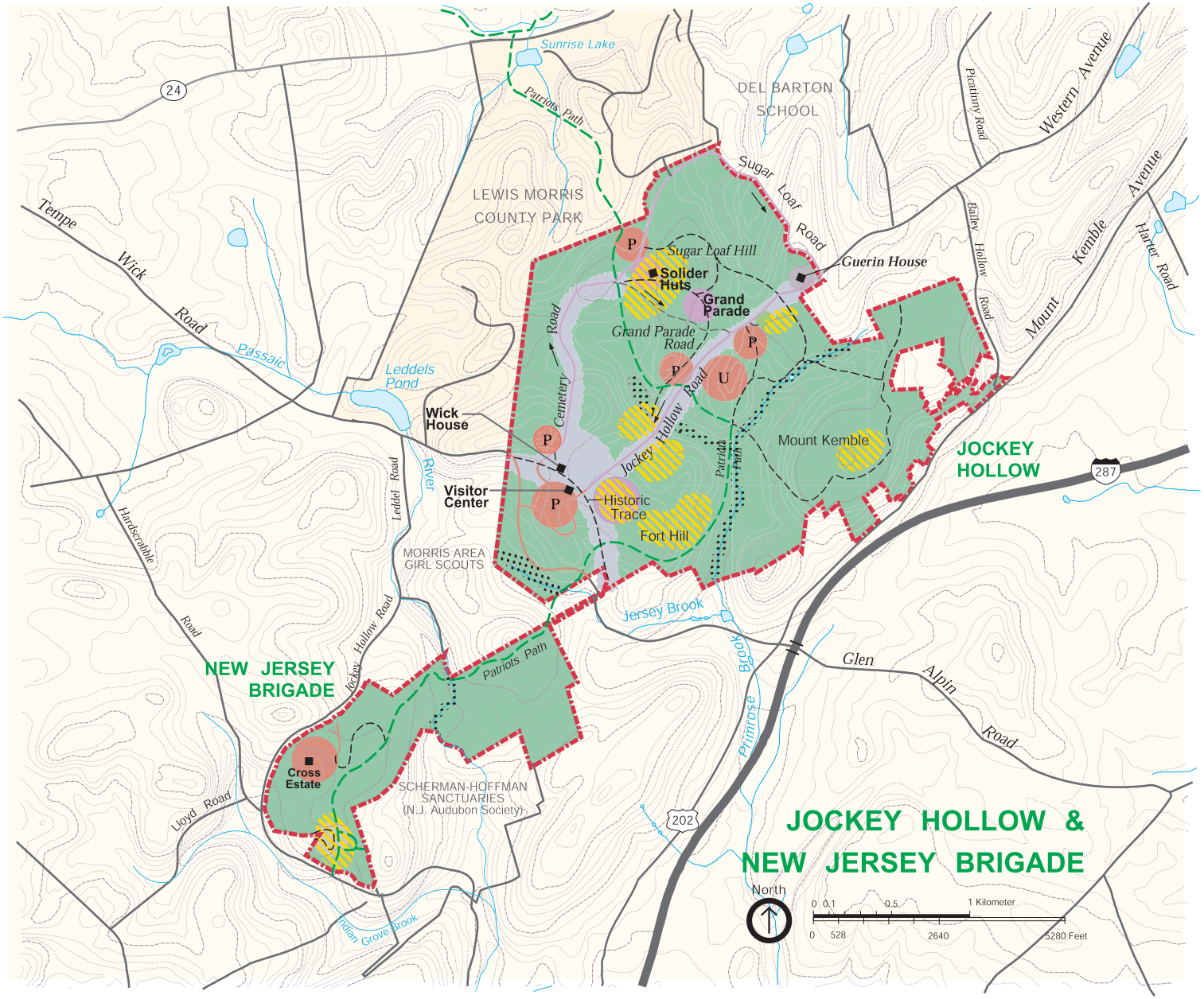
NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
February 2003

National Park Service · Boston Support Office
U.S. Department of the Interior

SHAPINS ASSOCIATES



ALTERNATIVE B

Figure 6

Management Zones

- Developed/Park Operations
- Historical Area and Roads
- Hut Area Overlay
- Sustainable Forest
- Water Quality Protection
- Park Boundary
- Patriots Path
- Other Trails
- P — Parking Area
- U — Utility Area

NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
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SHAPINS ASSOCIATES

The following Management Prescriptions are in addition to those identified in the section "ELEMENTS COMMON TO ALTERNATIVES B AND C."

Management Prescriptions: Resource Preservation

Alternative B

Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes, Structures, Archeology, and Collections	1. Overall treatment is rehabilitation: selected features are repaired, rehabilitated, restored, or reconstructed in a condition representative of the encampment period (1777–82). Park resources portray the encampment period. Post-encampment resources are treated as intrusions and are selectively removed or de-emphasized.	Features extant during the encampment period are preserved, restored, rehabilitated, or reconstructed. Archeological research is used to develop limited reconstructions or interpretive exhibits that avoid impacts to significant archeological resources. An intensive level of archeological research is performed at all units, related to specific questions focused on the encampment period.
Boundaries	2. Significant Revolutionary War period resources outside park boundaries are affiliated with the park.	Establish conservation easements, affiliations, and/or acquire portions of the historic Kemble Farm, the Pluckemin site, Leddell's Pond parcel, the Schuyler-Hamilton House, and the "Jockey Hollow Top 6" parcels.

Management Prescriptions: Resource Preservation

Alternative B — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	1. Character-defining features of the encampment period landscape that existed during General Washington's occupancy (1779–80) are highlighted and made more evident.	Selectively rehabilitate features of the Ford Mansion landscape, possibly removing the bricks in the semicircular walk and the asphalt paths. Consider screening the museum from the Ford Mansion. Remove the Caretaker's Cottage, its garage, and the Dick House. Rehabilitate the grounds to better reflect the Ford Mansion's 18th-century setting. Install sound-control measures adjacent to I-287, and continue to concur on plans to cover the highway. Acquire additional properties on Washington Place to enhance the setting of the Ford Mansion.
Structures	See Common Management Prescription #1, above.	To improve collections storage and other objectives at the museum, employ a combination of interior rehabilitation and construction of an addition toward the rear (north) or sides of the museum, in compliance with the Secretary of the Interior's Standards for Historic Sites.
	See Parkwide #1, above.	Continue to preserve the Ford Mansion to support visitation. Reevaluate physical modifications by owners, occupants, and custodians since 1780.
Archeology	See Parkwide #1, above.	Focus research so one can better understand where outbuildings, gardens, roads, barns, and other facilities were located during the encampment period. Develop research to understand the lifestyles of the Ford family and farm, Washington, and his staff.
Collections	2. The collections focus on the 1777 and 1779–80 encampments in the Morristown area.	No new acquisitions of material that are outside this specific scope. Substantial de-accessioning may be undertaken. Certain anomalies in the existing collections should be recognized and retained.

Management Prescriptions: Resource Preservation

Alternative B

Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	1. Landscape character portrays the encampment period (1779–82). Rehabilitation provides a sense of the patterns of field, forest, orchard, garden, road, trail, clearing, etc., consistent with a historic working landscape.	Manage 150–200-foot-wide corridors along historic roads and at key interpretive sites to portray forest and field conditions representative of the encampment period. This could include clearing to reintroduce field-forest patterns, reduction of vines and nonnative understory plants, and replanting, guided by archeological and historical research. Cut trees in selected areas for the purposes of demonstrating the hutting process. Appropriate areas may be the Pennsylvania Line, New York, and 2nd Maryland Brigade cantonment areas where archeological resources lack integrity due to post-encampment agricultural uses, and Hand's Brigade for its accessibility from the visitor center. Rehabilitate select features of the Wick Farm, including the apple orchard and kitchen garden, to reflect 18th-century conditions. Aggressively remove invasive plants in selected areas along corridors and in key areas, such as the black locust stand adjacent to the Wick orchard, leaving it as a woodlot or replacing it with representative native species, such as oak and hickory. Selectively screen or remove intrusive elements in the landscape, such as Quarters 35 and the adjacent parking area north of the Wick House. Investigate possible deer control measures to minimize impacts on historic vegetative resources.
	2. The historic military network of encampment land uses is visible.	Selectively clear forests so visitors can see the links between the encampment sites, the Grand Parade, the roads, fields, and other elements of the encampment landscape. Give priority to maintenance of historic trails and roads. Consider removing asphalt from historic roads such as Sugar Loaf and Jockey Hollow.

continued

Management Prescriptions: Resource Preservation, *continued*

Alternative B — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Structures	See Parkwide #1, above.	Emphasize features surviving from the encampment period at the Wick Farm (house, garden, orchard, and field). Retain accurate reconstructions like the well and privy. Remove major intrusive features like flagstone walk and patio. Enhance treatment of historic roads such as Mendham–Elizabethtown trace to better reflect historic conditions. Study the feasibility of buying, leasing, or using other preservation methods to preserve the historic Kemble Farm site at the intersection of Route 202 and Tempe Wick Road. Consider moving the house to its historic location and restoring it.
Archeology	See Parkwide #1, above.	Implement a high level of site stabilization, particularly at cantonment areas. Create an archeological management plan that defines where more sampling and research should be completed. Focus research so that researchers can more fully understand such concerns as the siting of encampments, comparing characteristics of sites and brigades (e.g., architecture, officers/enlisted men, lifestyles, artifacts, physical configuration of encampments, and support systems) through archeological evidence. Develop research questions to support a Landscape Treatment Plan, especially related to historical forest-field patterns.

Management Prescriptions: Resource Preservation

Alternative B — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Common Management Prescriptions #1, above.	See Common Actions, above.
Archeology	See Parkwide #1, above.	Research the 1777 Upper Redoubt extensively—preserving, to the greatest extent feasible, evidence of the fortification. Locate and preserve the suspected Lower Redoubt.

Management Prescriptions: Resource Preservation

Alternative B — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	1. Responsibility for the maintenance of the main building and garden is transferred from the NPS to an appropriate organization, retaining encampment period resources as part of the New Jersey Brigade Unit.	Relocate access to the trailhead parking lot and historic trails to avoid conflicts with non-NPS operation of the leased facilities.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative B — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Interpretation reinforces the encampment period of significance, making the encampment more visible and understandable while acknowledging but de-emphasizing the other eras.	See specific park units below for actions.
Visitor Activities and Services	2. Visitor experience is largely shaped by contact with encampment period resources and activities.	See specific park units below for actions.
	See Common Management Prescription #3, above.	Park–town shuttle encompasses area Revolutionary War sites.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative B — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Interpretation and exhibits express the broad scope of activities at the Ford complex during the encampment (1779–80).	Construct new outdoor exhibits and waysides.
	2. The Ford Mansion historic furnished interiors represent the winter months that George Washington spent in the house in 1779–80.	Implement approved furnishings plan (Craig 1976, Craig and CMP 2001). Remove material that is not appropriate to time of day and year identified in the furnishings plan; for example, green vegetables in the kitchen.
	3. Museum exhibits focus entirely on the encampment events in Morristown in 1777; 1779–80.	Develop new exhibits in the rehabilitated museum. Create new exhibit plan highlighting encampment period artifacts and stories replacing, for example, the "Objects of 18th-Century Life" exhibit.
Visitor Activities and Services	See Common Management Prescription #3, above.	Create a strong pedestrian link among historical resources in downtown Morristown, the Schuyler-Hamilton House and the Ford Mansion along Morris Avenue, similar to the historic movement pattern. Develop a trail connection to the Ford Powder Mill archeological site. Create a new pathway system that directs visitors from the museum to the front of the Ford Mansion.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative B — Jockey Hollow & Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Encampment resources are interpreted in a visually compelling manner based on archeological data expressing the broad scope and magnitude of military activities.	Develop exhibits to interpret the processes of creating winter quarters: role of quartermaster in laying out the brigade sites, timber clearing, hut construction, provision of firewood and water. Field exhibits identify the physical extent of encampment sites. The scale and layout of all the cantonments are expressed. Details, like vaults/pit toilets, are interpreted to provide a clear understanding of a soldier's life. Enhance interpretation of military features and activities such as the signal network, defensive measures, supply routes, use of roads and trails, commissary, hospital, and drilling and parading. Enhance interpretation of the Pennsylvania Line huts, possibly using devices to mark the extent of the encampment.
	2. Visitors understand the agricultural context of the Jockey Hollow area at the time of the encampments.	The three farms in existence during the encampment period (Guerin, Kemble, and Wick) are highlighted in the interpretive program. Acquire the Kemble Farm and home site. Interpret its use by the Continental Army. Consider developing a new visitor contact station at that location. Acquire Leddell's Pond, mill, forge, and house and interpret their use during the Revolutionary War.
	3. The Wick House historic furnished interiors represent the encampment period of 1779–82.	Implement approved 1974 furnishings plan for the Wick House. Remove material that is not appropriate to time of day and year identified in the furnishing plan; for example, green vegetables in the kitchen.
Visitor Activities and Services	4. Visitors of all ages and physical abilities can participate in common 18th-century civilian and military activities.	Interpretive programs include living history, reenactments, musket firings, overnights, and winter activities. Visitors can cut wood in selected areas as part of rotational cutting program, and participate in apple harvest and cider production at the Wick Farm.

continued

Management Prescriptions: Public Enjoyment and Satisfaction, *continued*

Alternative B — Jockey Hollow & Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Visitor Activities and Services	5. Motorized traffic is minimized on all park roads, and pedestrian, bicycle, and transit use is encouraged.	Shuttle circulates on tour road within Jockey Hollow, and connects to Fort Nonsense, Morristown, and Washington's Headquarters. Existing visitor parking at the visitor center is maintained. Satellite parking areas along tour road are eliminated. Walking trails are expanded or relocated away from park roads. Their use by soldiers during the encampments is interpreted. Encourage use of Patriots Path trail connection to Lewis Morris County Park. Enforce one-way route and reduce motorized traffic along Sugar Loaf Road; encourage its use for hiking and bicycles. Close the park gate to Lewis Morris County Park for automobiles; retain access for pedestrians and bicycles. Close non-historic Grand Parade Road to motorized vehicles and consider removing the asphalt and making it a trail.
	6. Where feasible, roads and trails reflect historic character.	Convert Jockey Hollow Road to a historic trace between New York Brigade comfort station and visitor center. De-emphasize interpretation of the Aqueduct Trail. Convert the segment of Sugar Loaf Road from Grand Parade Road to Lewis Morris County Park entry to a trail or narrow dirt road.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative B — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the significance of the Upper Redoubt and its construction during the spring of 1777.	Construct a large three-dimensional interpretive exhibit to illustrate the 1777 Upper Redoubt, based on available documentation, and additional scholarship and archeology. Provide interpretive programs to support the exhibit.
Visitor Activities and Services	2. Access to the hilltop and visitor services reflect the site's historic character.	A trail connects the hilltop with the Green, and limited picnicking is available at the top. A more historic road surfacing is utilized on the existing access road and parking area.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative B — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	The principal buildings and gardens are not interpreted.	Retain the orientation kiosk at trailhead to describe history, trails, and programs at other units.
Visitor Activities and Services	No visitor activities and services are available.	Retain historic trails and the small parking lot at the trailhead. No staff or visitor use of other facilities (houses and garden).

Management Prescriptions: Partnerships and Outreach

Alternative B **Parkwide**

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	See Common Management Prescriptions #1, above.	Initiate volunteer or lease programs to revive historic land uses, including timber cutting and grazing.

Management Prescriptions: Operational Effectiveness

Alternative B **Parkwide**

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	See Common Management Prescriptions, above.	See Common Actions, above.

Costs: Alternative B

Estimated Costs	Amount
Operational costs, estimated annual	$2,750,000–$3,250,000
Research, planning, and construction costs, estimated	$11,000,000–$13,250,000
Land acquisition costs, estimated	$0–$35,000,000

ALTERNATIVE C: THE PROPOSED ACTION

I. PHILOSOPHY

Alternative C would emphasize the encampment period; however, it would also recognize the efforts of successive generations (1873–1942) to protect, interpret, and commemorate the encampments. The park would employ interpretive methods, such as programs, exhibits and other media, and focused rehabilitation of the landscape, to present to visitors a scene evocative of the encampment period. This alternative would also preserve selected 19th- and 20th-century conditions and features added to the historic scene, and might draw on them to illustrate the important and complex history of park resources.

Resource Preservation

Emphasis would be placed on the park's collections, and facilities would be improved and expanded through rehabilitation of the museum, and construction of an addition that respects the character of the existing building, to provide for exhibits, storage, and research access. This addition would be located toward the front (south) or sides of the museum. It would be more visible, highlighting the importance of the museum, while not detracting from the primary importance of the Ford Mansion. A small parking and drop-off area could be constructed off Washington Place to enable visitors to enter the site closer to the Ford Mansion. This alternative provides greater opportunity to improve the linkage between the Ford Mansion and the museum, improve vehicular and pedestrian access to and around the site, as well as buffer road noise from I-287.

Beyond established interpretive areas, such as the Wick Farm and Pennsylvania Line, lands would be managed to sustain a mixed hardwood forest as a cultural and natural resource, with special protection for archeological resources. Management would employ expanded scientific inventory and monitoring to provide information on biological diversity, sustainability, and potentially adverse changes.

To the fullest extent possible, park management would try to identify and prevent undesirable intrusions on lands surrounding the park. This could be accomplished through a range of conservation methods and authorization to acquire up to 500 acres on a willing-seller basis.

Public Enjoyment and Satisfaction

Interpretation would emphasize the encampment period, but would be thematically broad, placing the Morristown encampments within the wider contexts of the Revolutionary War and the history of related land use in the surrounding region. Research would be directed toward increasing knowledge of park resources from the encampment period, as well as those associated with later nationally and locally important efforts to protect and memorialize these resources. Additional interpretive emphasis would be placed on the changing meaning and evaluation of the Revolutionary War period by later generations, from the founding of the Washington Association in 1873 through the termination of the Depression-era federal agencies in 1942, as they sought to commemorate those events. This alternative would provide a greater opportunity to demonstrate and discuss concepts of sustainability.

Partnership and Outreach

This alternative would rely heavily upon successful partnerships, especially with the Washington Association, but also with other related organizations. In partnership with such organizations, the park would seek to inform visitors of the area's related historical resources, perhaps through a regional orientation center. A park–town shuttle service might be provided, possibly with the assistance of partners, to integrate the town and the different park units and to offer an alternative to dependence on private automobiles and to reduce the presence of automobiles in the historic scene.

Operational Effectiveness

As with the other alternatives, the NPS is required to protect the resources in its care under all applicable laws and regulations. However, this would be a new plan, and new park goals and a new strategic plan would be formulated to carry out its policies. Each alternative assumes that adequate staffing and budget will be provided to park managers, and no distinction should be made among alternatives in this regard.

Management Zones: Alternative C (see accompanying maps)

Developed / Park Operations

Desired Resource Conditions: All resources are maintained in good condition: access roads, visitor parking areas, paths, utility areas, and other visitor and park staff support facilities

Desired Visitor Experience: Provides for safe and direct vehicular and pedestrian access and park support activities

Management Activities / Treatment: Moderate levels of resource and visitor management

Treatment is preservation

Kinds and Levels of Visitor Use: High levels of visitor and staff use

Kinds and Levels of New Development: Minimal: orientation signs

Historical

Desired Resource Conditions: Historical and cultural resources reflect historical conditions: visitor centers, museums, historic structures, interpretive exhibits, limited restorations, archeological digs, narrow historic roads, trails and other visitor facilities

Desired Visitor Experience: High to moderate levels of interpretation; experience is often tranquil, contemplative, and educational

Management Activities / Treatment: Intensive management of resources and visitors

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Moderate to high levels of sightseeing and hiking; low levels of scenic driving; horseback riding and other recreational uses as appropriate

Kinds and Levels of New Development: Minimal: interpretive exhibits and park shuttle stops

Museum Development

Desired Resource Conditions: Resources reflect historical conditions: museum, interpretive exhibits, and other visitor facilities

Desired Visitor Experience: High to moderate levels of interpretation; experience is educational

Management Activities / Treatment: Intensive rehabilitation of structures and landscapes

Intensive management of visitors

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Moderate to high levels of sightseeing

Kinds and Levels of New Development: High to moderate: Rehabilitated and new museum facilities, interpretive exhibits, and other visitor facilities, consistent with the Secretary of the Interior's Standards for Historic Properties

Sustainable Forest

Desired Resource Conditions: Mixed hardwood forest is sustained, naturally regenerating, reflecting historic character, biodiversity, and natural processes: woodlands, buffer zones, fields, interpretive exhibits, trails, and scientific devices

Desired Visitor Experience: Reflective, tranquil, solace; little interpretation

Management Activities / Treatment: Predominantly moderate level of management, with limited areas of intensive management, directed by the results of ecological research

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Low levels of hiking, horseback riding, and other non-motorized recreational uses as appropriate

Kinds and Levels of New Development: Limited scientific devices and new small-scale interpretive wayside exhibits

continued

Management Zones: Alternative C, *continued* (see accompanying maps)

Hut Area

Desired Resource Conditions: Cultural resources are preserved: encampment period archeological features

Desired Visitor Experience: Varies from reflective and tranquil to highly interpreted in selected areas

Management Activities / Treatment: High level of protection and varied level of research

Treatment is rehabilitation

Kinds and Levels of Visitor Use: Varies from high to low levels of sightseeing

Kinds and Levels of New Development: Varies from extensive interpretive exhibits where resources lack integrity, to minimal development where integrity is high

Water Quality Protection

Desired Resource Conditions: No degradation of water quality as measured by biota and chemical parameters

Desired Visitor Experience: Reflective, tranquil, very low interpretation

Management Activities / Treatment: Moderate levels of resource and visitor management, including water quality monitoring and maintenance of narrow trails, bridges, and limited stream access points

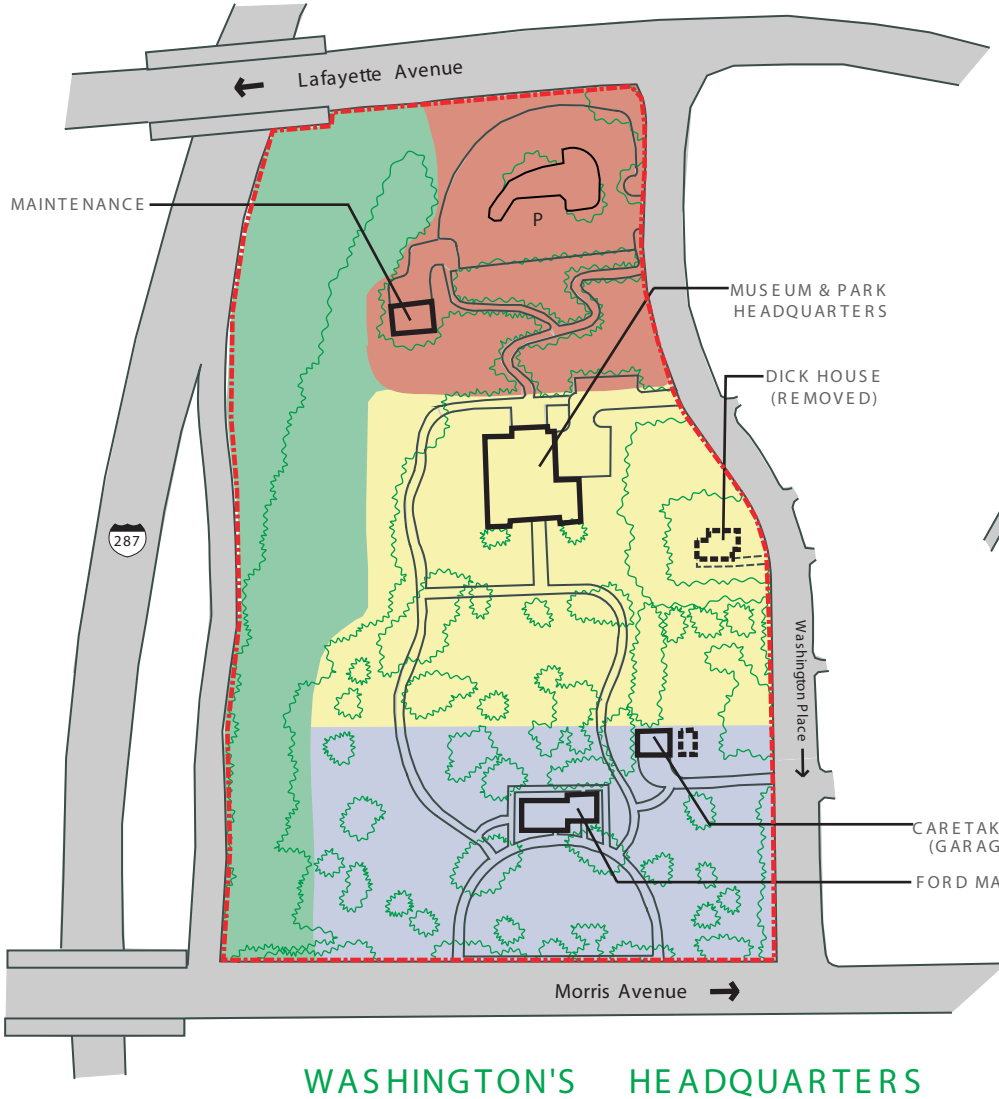
Treatment is rehabilitation

Kinds and Levels of Visitor Use: Low levels of hiking; fishing in accord with state regulations

Kinds and Levels of New Development: Minimal

ALTERNATIVE C

Figure 7 PREFERRED



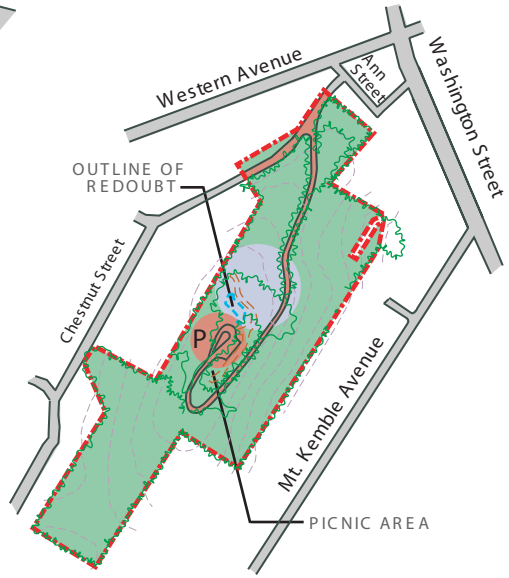
WASHINGTON'S HEADQUARTERS

North

0 50' 100' 200'

SCALE - 1" = 100'

* Property Line Is Approximate



FORT NONSENSE

North

0 1250' 2500' 5000 Feet

SCALE - 1" = 2500'

Management Zones

- Developed/ Park Opertaions
- Historical
- Museum Development
- Sustainable Forest
- Park Boundary
- Ex. Tree Canopy
- P Parking Area

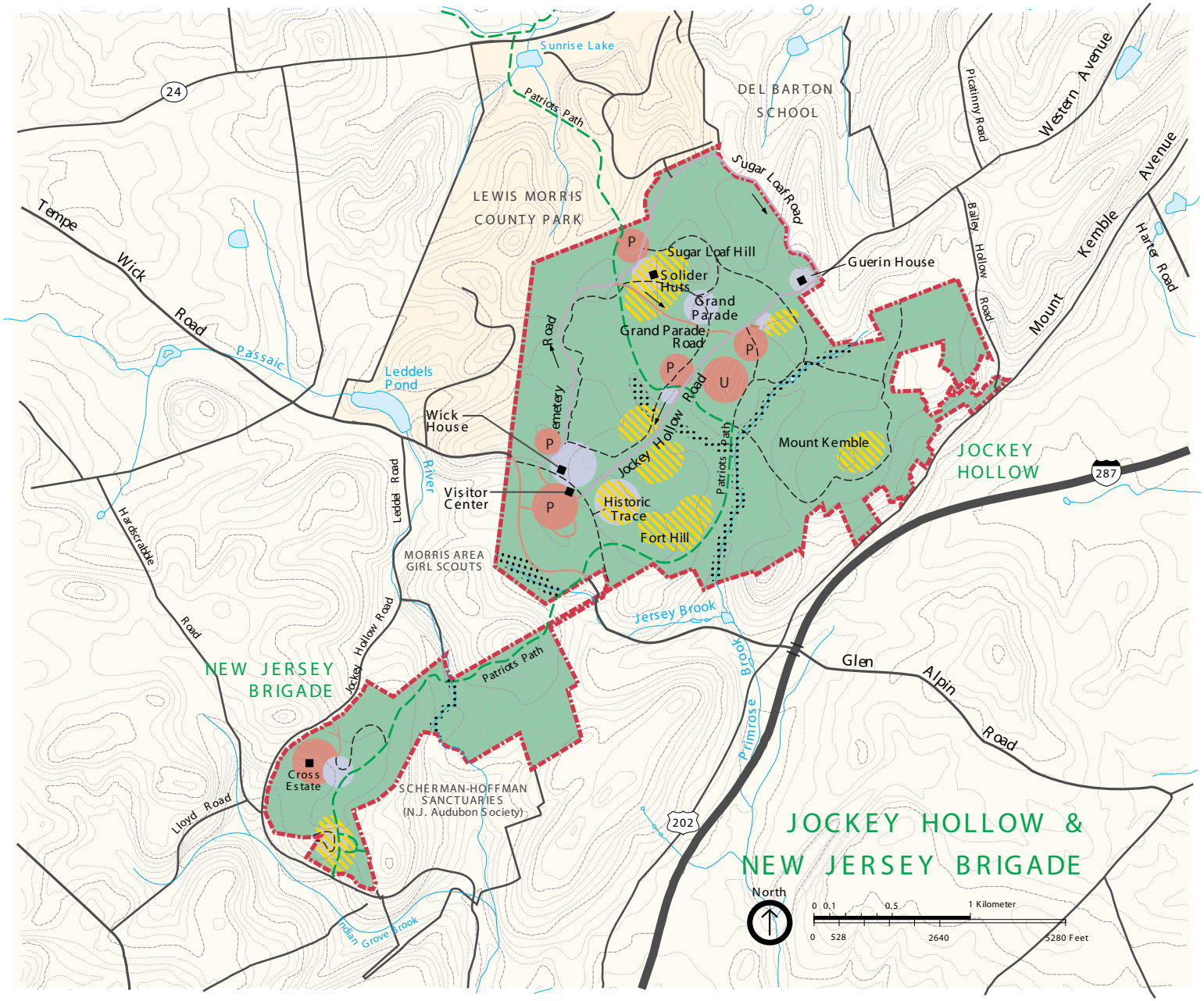
NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
February 2003

National Park Service · Boston Support Office
U.S. Department of the Interior

SHAPINS ASSOCIATES



ALTERNATIVE C

Figure 8 PREFERRED

Management Zones

- Developed/ Park Operations
- Historical Area and Roads
- Hut Area Overlay
- Sustainable Forest
- Water Quality Protection
- Park Boundary
- Patriots Path
- Other Trails
- P Parking Area
- U Utility Area

NOTE: This illustrative map is for planning purposes only. Management Zone designations represent approximate areas and locations.



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
February 2003

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U.S. Department of the Interior

SHAPINS ASSOCIATES

The following Management Prescriptions are in addition to those identified in the section "ELEMENTS COMMON TO ALTERNATIVES B AND C."

Management Prescriptions: Resource Preservation

Alternative C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Historic Landscapes, Structures, Features, Archeology, and Collections	1. The park's cultural and natural resources illustrate the encampment period (1777–82) and commemorative era, which includes actions of the Washington Association, the Town of Morristown, and certain individuals (1873–1933), and the National Park Service (1934–42) and other Depression-era federal agencies. Resources dating from outside these time frames are selectively removed or de-emphasized.	Preserve, rehabilitate, and maintain features representative of the encampment period and commemorative era. Preserve and rehabilitate most existing landscape treatments. Develop an archeology program to provide an understanding of the encampment and the preservation history of the park. Continue research on the encampment period, extending work to later commemorative era. Archeological activities articulate the relationships and linkages among the encampment and their commemoration, and explain how they reveal a continuum of land use at the park. Locate sites at each park unit suitable for long-term, ongoing digs that explore and investigate the site's evolution and the links to other areas. Become a center, or clearinghouse, for regional archeology on the American Revolution and historic preservation.
Boundaries	2. Significant Revolutionary War period resources and commemorative era sites outside park boundaries are considered for affiliation with the park.	Similar to Alternative B, establish a broad network of affiliations with related Revolutionary War and historic preservation sites. However, less emphasis is placed on acquisition. Sites representative of the commemorative era, though not entirely related to the Revolution, include Fosterfields and Historic Speedwell.

Management Prescriptions: Resource Preservation

Alternative C — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	1. The character of the unit reflects the period of General Washington's occupancy (1779–80), as modified by successive generations during the commemorative era (1873–1942).	Rehabilitate the landscape, preserving significant features that existed during early NPS management, such as the brick semicircular path in front of the Ford Mansion. Consider rehabilitating the axial path and garden between the Ford Mansion and the museum as completed in 1937. Consider rehabilitating portions of the Ford Mansion grounds to reflect its appearance under the early management of the Washington Association (1873–1933).
Structures	See Common Management Prescription #1, above.	Continue to preserve and rehabilitate the Ford Mansion to retain its historic qualities and to allow for continued visitation. To improve collections storage and other objectives at the museum, employ a combination of interior rehabilitation and construction of an addition toward the front (south) or sides of the museum, in compliance with the Secretary of the Interior's Standards for Historic Sites. Consider relocating functions from the museum to other park facilities, such as the Cross Estate. Remove the Dick House and Caretaker's Cottage garage as part of museum development.
Archeology	See Parkwide #1, above.	Same as in Alternative B, with additional investigation of post-encampment resources and reevaluation of commemorative-era archeology.
Collections	2. The collections focus on the 1777, 1779–80 encampments in Morristown, and the Washington Association, Morristown, and NPS commemorative era of 1873–1942.	Implement scope recommendations of the Collections Management Plan of 2001. Minor de-accessioning may be necessary. Most anomalies in the existing collections would be recognized and retained.

Management Prescriptions: Resource Preservation

Alternative C — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	1. Landscape character portrays the encampment period (1779–80), accepting later modifications made during the commemorative era. Treatments provide a sense of the patterns of field, forest, orchard, road, clearing, etc., consistent with an 18th-century working landscape.	Retain most existing landscape features, such as trails, the Wick herb garden, orchard, stone paths, and other CCC works in their current condition. Removal of modern wire fencing at the garden and orchard may be possible if deer are controlled through another management action or plan. Forested areas beyond major historical or interpretive features are managed for natural resource values and sustainability. Possible actions include aggressive removal of invasive plants, deer control, and reforestation.
Structures	See Parkwide #1, above.	Rehabilitate selected Wick Farm structures to create a sense of the 18th-century farm as portrayed during the living history experiment, c. 1938. Complete historical and archeological research to determine scope of preservation activities completed by the CCC. Retain the Mendham–Elizabethtown Road in its current historical location and condition. Retain the Guerin House, garage, and other historic structures in their current location and condition.
Archeology	See Parkwide #1, above.	Determine the extent of CCC work in conserving the encampment period resources. Determine the location of the CCC camp for protection and interpretation.

Management Prescriptions: Resource Preservation
Alternative C — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Landscapes	See Common Management Prescriptions #1, above.	See Common Actions, above.
Archeology	See Parkwide #1, above.	Research the series of redoubts (1777, circa 1935 NPS, current outline) extensively—preserving, to the greatest extent feasible, evidence of the 1777 fortification. Identify reconstruction treatments employed by the NPS.

Management Prescriptions: Resource Preservation
Alternative C — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	1. Not significant to the encampment or representative of the commemorative era, the Cross Estate serves park operations.	Structures provide park offices, meeting space, and accommodations for staff, with interns and temporary/seasonal employees in the main building. Rehabilitation of several structures potentially accommodates functions relocated from the museum. Partners restore and manage the gardens to serve as a horticultural exhibit.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the encampment period (1777–82) in the context of societal and environmental change. Interpretation of the commemorative era (1873–1942) allows visitors to become engaged in other aspects of Morristown's history, reinforcing the significance of the encampment period. Interpretation assists visitors to understand the encampments in the broad context of regional history.	Develop exhibits to interpret the locational advantages of the region related to the use of the area by the Continental Army, for example, defensible terrain, Philadelphia–New York context, forests, waters, iron, demographics. Develop exhibits to interpret the settlements, paths, and agricultural fields established by Native Americans, their reuse by the colonists and the Continental Army, and their persistence to the present. Develop exhibits to interpret the scope and motivations for the patriotic efforts, including substantial donations of collections, lands, and structures, undertaken to perpetuate the memory of the encampments and make them accessible to the American public. Develop exhibits to interpret relationships between the actions of the Washington Association and the town of Morristown in donating park lands with contemporary motivations for land conservation. Develop exhibits to interpret the development of a federal role in historic preservation and the importance of the park as the first national historical park. Develop exhibits that highlight regional sites where non-encampment land uses can be better understood, for example, Fosterfields for agriculture.
Visitor Activities and Services	2. Visitor experience is largely shaped by interpretive programs and calls on the visitor's imagination to re-create the historical scene.	Expand and enhance interpretive programs with new exhibits and personal services in all park units.
	See Common Management Prescription #3, above.	Park–town shuttle encompasses area's Revolutionary War and historic preservation sites.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative C — Washington's Headquarters

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. The visitor understands the importance of the geographic location, the Ford family, and George Washington's role. Interpretation of earlier and later time frames provides the context for appreciating the encampment period.	Develop new interpretive exhibits.
	2. Interior space of the Ford Mansion is used to tell an expanded narrative of the Ford family, Washington's use during the winter of 1779–80, and why those events inspired subsequent generations to save the property and share its story.	A new furnishings plan would be developed to assess furnished interiors and consider use of interpretive exhibits, vignettes, didactic hands-on displays. Include historical data on the mansion under the tenancy of the WANJ. Many furnished rooms may remain. Provide exhibits that interpret how and why period rooms and furnishings changed over time. Plan and fabricate new exhibits and interpretive media.
	3. The museum introduces the visitor to the events in Morristown in 1777 and 1779–80, and later commemorative efforts (1873–1942).	Develop a new exhibit to interpret the contributions of the WANJ, Town, NPS, and CCC. Include interpretation of Lloyd W. Smith's collection and John Russell Pope's plan for the museum.
Visitor Activities and Services	4. A regional orientation center informs visitors about the park's resources and related sites beyond the park's boundaries. Development and management is shared with park partners.	Add regional orientation functions to the expanded museum, or house them at a separate location. Possible locations include central Morristown or a cover over I-287. If feasible, create a pathway system that directs visitors from the regional orientation facility to the front of the Ford Mansion.
	See Common Management Prescriptions #2, above.	Retain existing walks that remain viable if parking and visitor access is changed. If feasible, provide parking and access so visitors can easily enter through the front doors of the Ford Mansion and the museum.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative C — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the large 1779–80 encampment and the later, smaller encampments, and can appreciate the activities of successive generations to commemorate the encampments.	Maintain and improve the Pennsylvania Line hut exhibits and update interpretative waysides at all cantonment areas. Highlight in the interpretive program the three farms that existed during the encampment period (Guerin, Kemble, Wick) and their later history. Develop exhibits to interpret the relationships among the encampments, the Morristown aqueduct system, and park establishment. Develop interpretive exhibits at the Passaic River mill sites to communicate their connection to the encampments. Exhibit the collection of photographs documenting CCC activities at the Wick Farm to illustrate the condition of Jockey Hollow when it was received by the NPS, and the processes of restoration. Interpret the 1930s hut replicas that existed at each brigade site. Interpret the CCC camp near the Pennsylvania Line. Reintroduce "living history" programs about the encampment in the spirit of the NPS/CCC demonstrations.
	2. The Wick House is used to tell an expanded narrative of early agriculture in the area, the Wick family, use by the Continental Army, and the aftermath.	A new furnishings plan would be developed to assess furnished interiors and consider use of interpretive exhibits, vignettes, and didactic hands-on displays. Develop exhibits to interpret the legend of Tempe Wick's horse and other myths, what inspired them, and why they resonate with people today. Interpret the history and integrity of existing facilities (house, barn, herb garden, and orchard) and additional buildings lost to fire or later management actions. Open up small sections of an interior wall in the Wick House to show the material that remains from the encampment period. Keep the interior and exterior interpretation unified, for example, communicate that the Wick garden and house both illustrate 1930s efforts to depict encampment conditions.

continued

Management Prescriptions: Public Enjoyment and Satisfaction, *continued*

Alternative C — Jockey Hollow & New Jersey Brigade

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Visitor Activities and Services	3. Visitors participate in a range of agricultural, military, and historic preservation activities.	Initiate programs for visitor participation in harvesting apples from the orchard, laying out mock encampments, and repairing hut replicas.
	4. Motorized traffic is minimized and pedestrian, bicycle, and transit use is encouraged.	Retain a tour loop road system, parking at the visitor center, and satellite parking lots related to historical interpretive zones. The park–town shuttle circulates on the tour loop road, connecting Jockey Hollow to the other park units, Lewis Morris County Park, and other locations in the region. Consider reorganizing tour loop road to improve conditions for pedestrians, closing Grand Parade Road to vehicles, and utilizing Sugar Loaf Road for one-way park traffic. Walking trails are expanded or relocated away from park roads. Retain and interpret the Wildflower Trail. Connect park to paved bike path(s) in Lewis Morris County Park. Reduce non-park motorized traffic along Sugar Loaf Road and encourage use for hiking and bicycles.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative C — Fort Nonsense

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the significance of the Upper Redoubt, its construction during 1777, and its archeological investigations and commemoration.	Develop new field exhibits to interpret the 1777 Upper Redoubt and the several post-encampment plans for the site: 1888 WANJ stone marker, Washington Park, NPS parkway, circa 1935 reconstruction of the redoubt, its removal and current stone outline.
Visitor Activities and Services	2. Visitor uses and facilities reflect the unit's urban context and outstanding interpretive value.	Retain the existing access road and consider expanding the parking area for school buses Develop a larger picnic area with a comfort station. Provide greater personal services.

Management Prescriptions: Public Enjoyment and Satisfaction

Alternative C — Cross Estate

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
Interpretation and Education	1. Visitors understand the story of the Cross family's involvement with the establishment of the park.	Develop a small interpretive exhibit to tell the story of the Crosses' involvement in the creation of the park, the development of the garden, and the acquisition of the estate.
Visitor Activities and Services	2. Limited visitor activities and services are available.	Provide good access to the historic trails, limited parking, and a self-guided tour of the estate.

Management Prescriptions: Partnerships and Outreach

Alternative C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	See Common Management Prescriptions, above.	Collaborate with partners on development and management of a regional orientation center to help visitors understand the park's place in the richly layered history of the Morristown region. Invite a partner to explore the feasibility and environmental impacts of operating a limited horse program.

Management Prescriptions: Operational Effectiveness

Alternative C — Parkwide

	Management Prescriptions	Examples of Appropriate Actions That May Result from the Management Prescription
	See Common Management Prescriptions, above.	See Common Actions, above.

Costs: Alternative C

Estimated Costs	Amount
Operational costs, estimated annual	$2,750,000–$3,250,000
Research, planning, and construction costs, estimated	$10,000,000–$12,000,000
Land acquisition costs, estimated	$0–$35,000,000

Comparison of Alternatives by Decision Point

Resource Preservation

Museum and Collections

How should the park preserve, protect and take greater advantage of its strong museum and archival collections, principally located in the museum at Washington's Headquarters?

Alternative A: Existing facilities in the museum would be modestly improved to store and display the collections. New programs for visitors and researchers would be developed within constraints of existing staff and facilities. The historic significance of the museum may remain undetermined.

Alternative B: Facilities and programs would be improved and expanded to store, display, and support public enjoyment of the collections through rehabilitation of the museum and construction of an addition to the rear (north) or sides of the museum, consistent with the Secretary of the Interior's Standards for Historic Sites.

Alternative C (preferred): Similar to Alternative B, except construction of an addition would be toward the front (south) or sides of the museum. As in B, the addition would also be consistent with the Secretary of the Interior's Standards for Historic Sites.

Forest Management

To what extent should park forests, significant for their cultural values, be managed to sustain their ecological values?

Alternative A: Current NPS policies require parks to exercise natural resource stewardship and demonstrate environmental leadership; however, the lack of staff and specific treatment plans that reflect the integrated nature of the Morristown NHP's cultural and natural resources would continue to limit the effectiveness of resource management programs in forested areas.

Alternative B: The park would rehabilitate a corridor adjacent to historic roads in Jockey Hollow, and at Fort Nonsense, to create landscape vignettes that reflect historic forest conditions.

The park would develop cultural landscape treatment plans to manage the forests beyond the Jockey Hollow corridors and Fort Nonsense as an integrated cultural and natural landscape. Treatment would seek to sustain the forests mixed hardwood composition and enhance their ecological value within the local network of undeveloped lands.

Alternative C (preferred): Unlike Alternative B, the park would manage all forests as integrated cultural and natural landscapes, to sustain their mixed hardwood composition and enhance their ecological value.

I-287

How should the park protect its important resources adjacent to Interstate 287 in Morristown from the effects of the road?

Alternative A: The park would concur with 1970s proposals to cover I-287 to reduce high noise levels, but remain concerned about possible adverse effects on the setting of the Ford Mansion due to the introduction of structures to cover the highway.

Alternative B: Same as in Alternative A.

Alternative C (preferred): Same as Alternative A; however, concerns about adverse effects would be extended to the setting of the museum. Additionally, development of an addition to the museum could create a sheltered garden with reduced noise levels more appropriate for visitor use and enjoyment, and in keeping with the character of the unit.

Boundary Expansion

Should the park expand its boundary to protect its existing park resources, and/or expand to include other related resources?

Alternative A: The park's acreage ceiling would limit acquisition to 8.56 acres. In general, the park could not look to expand its boundary; however, it would respond to opportunities to protect resources on a case-by-case, willing-seller basis, through special Congressional action.

Alternative B: The park would seek authority to increase the acreage ceiling, allowing acquisition of up to 500 acres. A land protection plan would identify priorities for land acquisition and protection, and employ a range of conservation tools including easements and purchase in fee, all on a willing-seller basis. Priorities would be lands with encampment-period resources or that are important to the stewardship of park resources, including the protection of historic character and solitude.

Alternative C (preferred): Same as in Alternative B.

continued

Resource Preservation, *continued*

Cross Estate

Should the park continue to utilize the principal buildings of the Cross Estate for operations, or should it seek alternative uses?

Alternative A: All principal buildings would be retained for operations, and would be treated as cultural resources eligible for listing on the National Register.

Alternative B: The park would seek approaches such as leasing or cooperative agreements to reduce its maintenance expenditures. If successful, only limited portions of the estate grounds and structures would be open to public use. If found infeasible, the park would consider demolition of the principal buildings. Until then, the buildings would be treated as cultural resources eligible for listing on the National Register.

Alternative C (preferred): Similar to Alternative A, principal buildings would be retained for park operations. The principal buildings would be rehabilitated for administrative purposes, and would be treated as cultural resources until a determination of eligibility for the National Register was made.

Comparison of Alternatives by Decision Point

Public Enjoyment and Satisfaction

Interpretation

Should park resources be interpreted and managed to focus exclusively on the period of the Revolutionary War winter encampments (1777–82), or should they also be managed to represent changing attitudes toward that history as expressed in later commemorative actions?

And, what is the appropriate general level of interpretation at the park, and what are the appropriate locations for these services?

Alternative A: Existing interpretive plans focus on the encampment period, but many interpretive devices are outdated and some park resources illustrate periods that are not interpreted.

Little interpretation of the connections between park units would be provided. Interpretation would continue to be focused at Jockey Hollow and Washington's Headquarters.

Alternative B: Interpretation would focus exclusively on the encampment period, treating additional military and civilian themes.

Interpretive media in each unit would be updated and would seek to integrate themes evident in other units.

Features from later time periods would be removed and the sites rehabilitated to facilitate interpretation.

Alternative C (preferred): Similar to Alternative B, interpretation would focus on the encampment, but new exhibits and programs would address themes associated with the commemorative era where appropriate, and where such interpretation would better reflect resource conditions.

As in Alternative B, interpretive media in each unit would be updated and seek to integrate themes evident in other units.

Contrasting with Alternative B, features from later time periods would be retained to improve visitor understanding of present resource conditions.

continued

Public Enjoyment and Satisfaction, *continued*

Access and Circulation

Should the park establish or participate in a public transportation system among and within park units, or should access be principally by private vehicles?

Alternative A: The park may implement an interpretive shuttle on the tour road in the Jockey Hollow unit; however, access to Jockey Hollow and other units would be principally through private motor vehicles.

Alternative B: In partnership with state and local governments and private and public organizations, the park would seek to establish a shuttle system to provide visitor access to all units and various locations in the Morristown area. The park would also seek to reduce motor vehicle traffic on roads in Jockey Hollow, and could close all or part of the loop system to restore historic conditions, enhance the visitor experience, and improve visitor safety. Access consistent with the mission of the park would be encouraged. The park would also seek to improve circulation and orientation to the Washington's Headquarters unit.

Alternative C (preferred): Same as in Alternative B, but with greater emphasis on shuttle connections to local non-NPS sites thematically related to the commemorative era.

Recreation

To what extent should the park's resources be managed to accept increased recreational uses not directly related to its history?

Alternative A: The park would support current levels of passive recreation, consistent with the mission of the park and which would not endanger or detract from the experience of other visitors, or have the potential to impair park resources.

Alternative B: Same as in Alternative A.

Alternative C (preferred): Same as in Alternative A.

Solitude

How should the park protect opportunities for visitors to enjoy solitude and tranquility?

Alternative A: Current NPS policies and the park's enabling legislation require the park to protect the existing tranquil, contemplative visitor experience, quiet natural soundscape, and dark night sky conditions. However, no park plans specifically target these values or prioritize actions to protect them.

Alternative B: Approaches would be developed to protect the tranquil and contemplative visitor experience, soundscape, and night sky where possible and appropriate. Such programs would include a land protection plan to avoid the introduction of modern intrusive structures or noise or light sources from new development on adjacent lands; efforts to reduce noise levels associated with traffic on I-287 and airplane overflights; and monitoring carrying capacity, particularly on trails.

Alternative C (preferred): Same as in Alternative B, but the baseline levels for noise and light might, in places, reflect the commemorative era rather than the encampment period.

Comparison of Alternatives by Decision Point

Partnership and Outreach

Leadership

To what extent should the park take the lead in establishing active partnerships with thematically related organizations and sites?

Alternative A: The park actively participates in planning with its neighbors and a network of regional organizations to preserve and interpret resources.

Alternative B: Same as in Alternative A, but with additional staff, the park would expand its activities in the region. Broader collaborative efforts would include a park–town shuttle, regional environmental leadership through watershed and land protection, providing direct and technical assistance to sites within the proposed Crossroads of the Revolution Heritage Area, establishment of an archeological field school, and expanding outreach to minority and inner-city youth. The park would also initiate volunteer programs to revive historic agricultural and woodlot management land uses.

Alternative C (preferred): Same as in Alternative B, but the park would collaborate with partners to develop a regional orientation center, outside the park, to help regional visitors understand and appreciate the richly layered history of the Morristown region.

Comparison of Alternatives by Decision Point

Operational Effectiveness

Staffing and Budget

How would the park's staff and budget be affected by additional resource management and visitor-related activities?

Alternative A: The park would continue to administer the four units as one entity and address the flat budget, key vacancies, fee collection, and housing.

Operational costs are estimated at $2,350,000–$2,800,000 annually.

Research, planning, and construction costs are estimated at $2,800,000–$3,350,000.

Land acquisition costs are estimated at $1,500,000–$2,000,000.

Alternative B: Funding would be increased to support new positions, projects, and land acquisition.

Operational costs are estimated at $2,750,000–$3,250,000 annually.

Research, planning, and construction costs are estimated at $11,000,000–$13,250,000.

Land acquisition costs are estimated at $0–$35,000,000.

Alternative C (preferred): As in Alternative B, funding would be increased to support new positions, projects, and land acquisition.

Operational costs are estimated at $2,750,000–$3,250,000 annually.

Research, planning, and construction costs are estimated at $10,000,000–$12,000,000.

Land acquisition costs are estimated at $0–$35,000,000.

ALTERNATIVES ELIMINATED FROM FURTHER STUDY

Provide Greater Support for Active Recreation

Acknowledging that demands for recreation at the park are increasing as the surrounding area becomes more urban, and in particular that there have been vocal demands to permit the use of mountain bikes, this proposal would accept the reality of increased recreational use and support it by various means. Some actions that might result would be to accommodate bicycles by allowing them on park trails and closing some park roads to private motor vehicles. Greater acceptance of recreation might actually lead to a gain in overall visitation to the park.

This proposal was dismissed because an adjacent county park, Lewis Morris County Park, is already set up to provide much fuller opportunities for recreation than anything Morristown NHP would be able to offer. Expanding recreational activity at the park would be unnecessarily duplicative. Moreover, it is likely that an expansion of recreational activity, particularly mountain biking, would have a negative impact on the environment, as seems to have been the case with respect to trails at Lewis Morris County Park. The most compelling argument against this proposal is that it would conflict with the defined purpose and significance of Morristown NHP, and in particular would be inconsistent with the tranquil, contemplative character of the park that was emphasized at the time of its establishment by Congress.

Create a Heritage Area

Known as the "Cockpit of the Revolution," New Jersey contains an aggregation of sites significant in that conflict. At present these sites are not well coordinated, so that opportunities for preservation, tourism, and education are lost or not fully exploited. A heritage area designation would expand opportunities to provide technical assistance and other forms of cooperation, which would benefit all of the Revolutionary War period sites in New Jersey, Morristown NHP included.

Treating this proposal as a separate alternative in the GMP would be redundant, because a concurrent feasibility study for creating a heritage area, the Crossroads of the Revolution, was recently completed. The potential of a heritage area was assessed as part of a separate study. If a heritage area is established, it is likely that the park would be prominent in it, probably the central resource. Conversely, treating the park administratively as only a part of a heritage area would not fully express the significance of its resources.

Restore Park to 1930s Appearance

This proposal originates in the belief that the integrity of park resources is highest to the 1930s. As the first national historical park, Morristown could be interpreted as a model of NPS management philosophy. Actions that might result could include restoration of features the NPS constructed at that time, such as replica huts, Fort Nonsense earthworks, and the formal landscape at Washington's Headquarters.

Overwhelming arguments led to the dismissal of this as a potential alternative. The significance and integrity of 1930s-era resources have not been fully assessed and are not uniform throughout the park. An emphasis on this era would almost certainly interfere with the primary period of significance of the park (1777–82), as recognized in its legislation. NPS managers in the 1930s were not seeking to create a distinct cultural landscape in Jockey Hollow, but were trying to the best of their ability to re-create 18th-century conditions. Adopting this management approach would perpetuate the limitations of technology and scholarship that prevailed in the 1930s. While perhaps compelling to NPS personnel, this management focus might be difficult to explain to the public and would probably be of limited interest. Insofar as the story of this era is important, it can be conveyed through interpretive methods, as proposed under Alternative C.

Fully Re-create the Encampment Scene

The park's enabling legislation stresses the encampment period, and much of its interpretation emphasizes the hardships undergone by the soldiers during an exceptionally harsh winter. At that time the forest would have been heavily cut over to provide wood for building huts and for fuel. A landscape with cut-down trees might evoke encampment conditions more accurately than the present fairly dense and attractive forest cover. This alternative would probably also result in large-scale reconstruction of huts and other encampment features.

This proposal was dismissed because of the massive environmental damage that heavy deforestation (estimated at 600 acres) would cause, for the lack of comprehensive knowledge about specific 18th-century environmental conditions in the park, as well as for other reasons. The environmental impacts, such as erosion, would be permanent, unlike the original encampment. Deforestation would damage the scenic quality and biodiversity of the park. This alternative would be economically unfeasible because of the enormous cost of creating and maintaining an unnatural static appearance. It is unlikely that commercial loggers would find it profitable to clearcut the park, as the Continental Army was obliged to do in 1779. Even if this alternative were adopted in theory, it would probably be impossible to execute. Our knowledge is not sufficient to make detailed decisions about precisely which areas would be cut and to what degree. Furthermore, this alternative primarily addresses Jockey Hollow and would be even less applicable to the other park units. Washington's Headquarters, now surrounded by intensive urban development, was then a sprawling farm. It would hardly be feasible to restore encampment-era conditions there or at Fort Nonsense.

Restore the Pre-encampment Ecology of the Forest

As in the previous dismissed alternative, this concept would mainly address Jockey Hollow. Since this unit is a large tract of forested land within a sea of suburbia, it could serve as a valuable reservoir for species and ecological processes that characterized the landscape before European settlement. It should not detract from surrounding land, such as by harboring nonnative species or large deer herds. This alternative would employ active scientific management, including experimental exclosures and reforestation of fields, to achieve maximum diversity of native species and other aspects of the pre-colonial forest.

While some of these goals may appear attractive, this proposal was dismissed because of technical and economic infeasibility. Our knowledge of the pre-colonial forest is not sufficient to restore the species composition that existed at that time. Even if we had this knowledge, some species that thrived before 1600, such as the passenger pigeon, have become extinct; while others, such as the American chestnut, were stricken by blight and are no longer viable. These species cannot be replaced, and the consequences for forest dynamics of the elimination of these important components are unknown. Reduction of the deer herd would have to be carried out on a continuing basis to achieve acceptable density. Similarly, the introduction of nonnative species from surrounding lands would require continual costly monitoring and removal efforts.

Given regional restraints (including climate change) and the lack of a complete species pool, this approach would create an artificial "living museum." It would thus be difficult for future managers to know whether to step in to interfere with processes they observed. As in the preceding proposal, this concept would not be readily applicable to the Washington's Headquarters and Fort Nonsense units.

Minimize Management of the Forest

This proposes nearly the opposite approach as the preceding concept. Recognizing that the forest as it appears today is the result of a continuum of land management, it would avoid active intervention and "allow nature to take its course." The forest today provides a visible record of past uses and practices and therefore has some historical interpretive value. Since no one can predict changes in the forest,

whether actively managed or not, this "hands-off" approach would avoid errors and inconsistencies and allow for small-scale experiments to test various outcomes.

This laissez-faire approach, while inexpensive in the short term, is not acceptable. A forested landscape, even if not a precise replica of the encampment era, remains an important goal of park management, clearly derived from Congressional intent. As studied by Russell and Ehrenfeld, trends over the last several decades have created substantial doubt about forest sustainability. Some degree of informed forest management seems unavoidable, even though, as with any management decision, there is no guarantee against error. A total abandonment of study and intervention could lead to damage that was irreversible or extremely costly to repair.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is *Alternative C.* This alternative promotes the national environmental policy expressed in NEPA (Sec. 101 (b)). This alternative best:

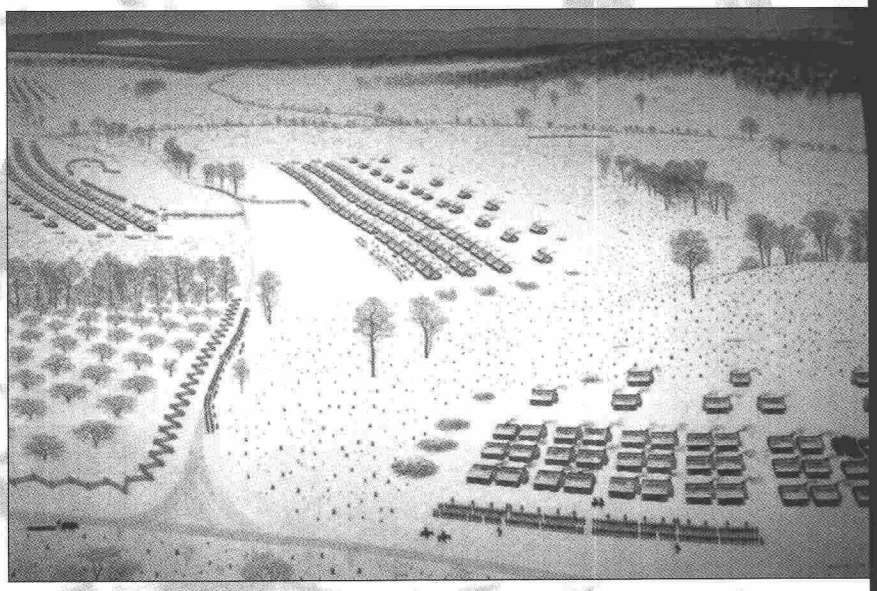
- fulfills the responsibilities of each generation as trustee of the environment for succeeding generations.
- ensures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- preserves important historic, cultural, and natural aspects of our national heritage and maintains, wherever possible, an environment that supports diversity and variety of individual choice.
- achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources.

In sum, *Alternative C* will cause the least damage to the biological and physical environment; and will also best protect, preserve, and enhance historic, cultural, and natural resources. A more detailed assessment of environmental consequences for each alternative follows in Chapter 4. At the conclusion of Chapter 4 a table summarizes and compares impacts for the alternatives.

CHAPTER 3: AFFECTED ENVIRONMENT

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A network of roads connected the main body of the army with strategically located outlying units and General Washington in Morristown. Troops assembled on a central parade ground in Jockey Hollow. Most main roads and some camp roads built by the soldiers remain today.

INTRODUCTION

This section is divided into five main sections: Cultural Environment, Natural Environment, Visitor Experience, Park Operations, and Socioeconomic Environment. The information is drawn from diverse sources listed in the bibliography.

I. LOCATION

The park is comprised of 1,697.55 acres situated in north central New Jersey, approximately 30 miles west of New York City. The park contains four geographically separate units, each of which are associated with the Revolutionary War winter encampments of the Continental Army.

II. UNITS

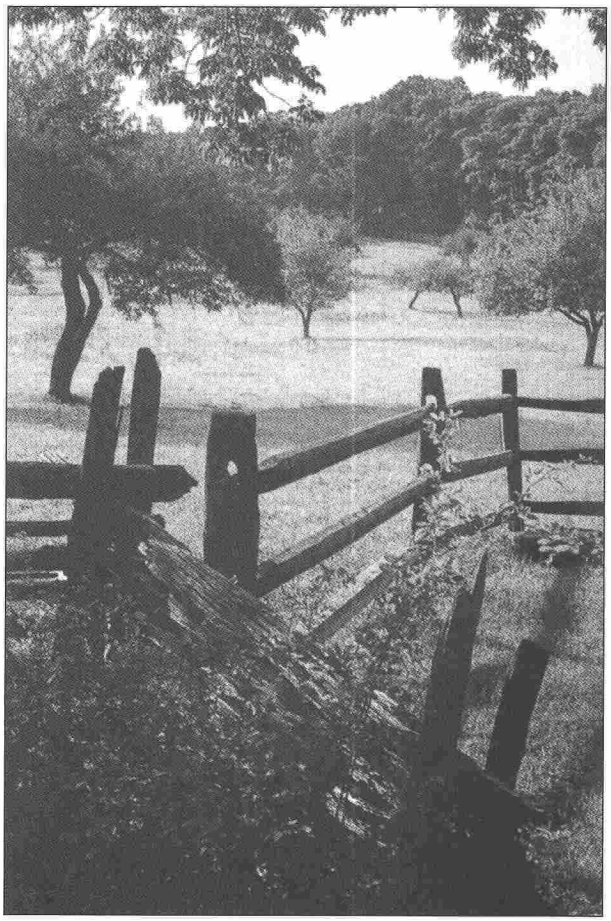
The park is comprised of four units as follows:

- ***Washington's Headquarters*** (approximately 10 acres), located in the town of Morristown, contains the Ford Mansion (1772), which served as General George Washington's headquarters during the winter of 1779–80. The house is furnished and open to the public. The adjacent museum, completed in 1937, houses the park's extensive collections of Revolutionary War materials, archives, and artifacts, serves as the park's administrative office, and functions as the main visitor contact station for the park.

- ***Fort Nonsense*** (approximately 35 acres) encompasses a prominent hill approximately 1 mile west of Washington's Headquarters overlooking the town of Morristown. Here the soldiers dug trenches and raised embankments in 1777 on the orders of General Washington, who wanted the strategic crest fortified. Visitors enjoy long views from the hilltop and see the footprint of the Upper Redoubt traced in small granite blocks.

- ***Jockey Hollow*** (approximately 1,330 acres), lying approximately 3 miles southwest of Fort Nonsense, is the site of the "log-house city" constructed by some 10,000 troops during the severe winter of 1779–80. The Grand Parade field, and the farmsteads of Henry Wick and Joshua Guerin, are also in the unit. The landscape consists of rolling hills covered with a mixed hardwood forest. Visitor services include the restored Wick House, re-creations of several soldiers' huts, a visitor center, parking lots, numerous hiking trails, and a one-way loop road.

- ***New Jersey Brigade*** (approximately 321 acres) preserves the site of the encampment of 1,000 troops from the New Jersey Brigade in 1779–80. Principally rolling hills supporting a mixed hardwood forest, it is located about 1 mile southwest of the main encampment area at Jockey Hollow. The former Cross Estate is also part of



The orchards yielded a bounty of apples for cider-making, cooking, and eating. Photo by Staples and Charles.

the unit. Several buildings are used for park operations, and the formal garden is open to the public.

CULTURAL ENVIRONMENT

I. HISTORIC AND DESIGNED LANDSCAPES

The historic and designed landscapes are among the park's most vital resources. These landscapes, when combined with the historic structures, archeological resources, and museum collections and archives, are essential in relating the park's significant stories. The relative absence of historic structures in all but the Washington's Headquarters unit places a greater burden on the landscapes in conveying these stories.

The hills, ridges, streams, roads, fence lines, farmsteads, and woodlots were the settings and contributing factors for the significant episodes of the park's history. Natural and human processes have altered many of these features. For example, numerous unused farm fields have become wooded over the years, and the size and configuration of fields, orchards, and woodlots have changed. Decades of routine maintenance have perpetuated the appearance of much of the park from the 1930s.

The steady spread of nonnative invasive plants, coupled with increased deer browse, is diminishing the historic character of the park. For example, historic roads and trails are being engulfed by vines, and native understory vegetation is absent in many forested areas, having been replaced by nonnative shrubs and vines. There is a strong possibility that the continuation of these processes threatens the very survival of the forest. The resulting landscape of vines, dead and dying trees, and nonnative shrubs, would not resemble the encampment period (or later commemorative era) in any aspect except for the lack of canopy trees in cantonment areas.

The historic integrity of cultural resources, including landscapes, as defined in National Register Bulletin #30, determines the authenticity of a site's identity, evidenced by the survival of physical characteristics that existed during the site's historic period. Often a subjective judgment, the evaluation of integrity must be grounded in an understanding of the site's physical features and characteristics and how they relate to its significance. The National Register employs seven aspects, or qualities, that in various combinations, define integrity: location, design, setting, materials, workmanship, feeling, and association. All seven aspects need not be present for eligibility, as long as the overall sense of past time and place is evident. Under this definition, a landscape can have integrity to more than one period of significance.

The park identifies three historic landscapes: Washington's Headquarters, Fort Nonsense, and Jockey Hollow/New Jersey Brigade. The Wick Farm and Cross Estate are component landscapes of Jockey Hollow/New Jersey Brigade.

Washington's Headquarters

The most important aspect of the unit that remains today is the Ford Mansion, with its formal appearance facing the road. Also contributing to the site's Revolutionary War significance are the semicircular drive and open lawn with large, scattered shade trees fronting Morris Avenue. Many features added to the site after the 18th century do not contribute to its significance. These include the pedestrian paths around the grounds, the museum, parking area, and neighboring structures. The existence of I-287 along the site's west boundary and the substantial suburban development on all sides of the property greatly diminish its integrity.

The Headquarters unit retains many features that contribute to the commemorative era. These include the Ford Mansion, circular drive, open lawn with scattered shade trees, and museum. No trees remain

that date to the encampment period. While its surroundings have changed, the character of the park property around the mansion remains much as it was during the 1930s. The axial relationship of the Ford Mansion and museum, and the siting of the support and administration facilities, are the only character-defining features from the commemorative era's spatial organization to remain. Views are cluttered and interrupted, and no longer retain the formal design intent. It is likely that the majority of the site's vegetation dates from the 1930s design or later. There are few character-defining features remaining from the 1930s landscape. These include five trees that lined the axial path to the museum and a screen of Norway spruce trees planted by the WANJ to screen the Dick House. The arrival of visitors to the Washington's Headquarters unit has been completely rerouted from that prevailing in the 1930s design. The museum and Caretaker's Cottage, as an element of the designed landscape, also contribute to the commemorative era.

Fort Nonsense

The Fort Nonsense unit landscape remains a contributing resource in relation to the encampment period of significance and later commemorative era. The site retains integrity to both. The primary elements of the site during the encampment were the fort, the topography, and the views of the surrounding landscape. While the above-ground remains of the fort are gone, the topography and views are intact. The primary elements of the site during the commemorative era were the topography, views, park road, stone monument, and archeological value of the fort site. Although alterations have taken place, such as tree growth, these elements remain. The unit continues to convey its purpose as a passive recreation and interpretive area.

Jockey Hollow and New Jersey Brigade

Overall, there is a moderate level of integrity to the Jockey Hollow and New Jersey Brigade encampment areas. The landscape that exists today has very little overall resemblance to its appearance during the encampments. No trees remain that date to the encampment period and the character of the forest has changed in several areas. However, many features that existed during the encampment are present today. They include historic roads, encampment remains, structures, and elements of the vegetation, streams, and spatial organization including strategic views from Mount Kemble to the east. These features combine to allow these areas to represent only two of the seven aspects of historic integrity: location and materials.

For the theme of commemoration, there is a high level of overall integrity in the Jockey Hollow encampment area. The landscape that exists today continues to represent its overall condition during the 1930s. Many changes have taken place and improvements to park facilities made, but the landscape continues to reflect its 1930s appearance. For this later era, Jockey Hollow represents six of the seven aspects of integrity; only the aspect of setting has been diminished since the 1930s. The setting has been diminished by more modern residential development that now surrounds the unit.

Wick Farm

The Wick Farm is an important component landscape of Jockey Hollow. It is the only one of three farms that were present during the encampment period that retains its identity as a farm. Consisting of approximately 20 acres of the original 800-acre farm, it includes the house, orchard, garden, and several reconstructed outbuildings.

The farm has high integrity of location, association, and setting to the encampment period, because the physical elements of the surrounding environment are relatively the same. The farm has moderate integrity of feeling. Features such as parking and walkways have been added, and the transition to a public space has created the appearance of a well-manicured park. However, the site has avoided

development, and the surrounding fields, orchard, and forest add to the feeling. The two main features, the house and orchard, contribute to a high integrity of workmanship. Overall integrity of design and workmanship is low, due to the loss of buildings, structures, vegetation, and circulation elements, and the addition of later vegetation and circulation.

The Wick Farm retains moderate to high levels of all aspects of integrity to the commemorative era. Many elements constructed or altered as a result of the commemorative era remain, such as the herb garden, despite some later alterations.

The Orchard: A fenced-in cider orchard is an important feature within the landscape of the Wick Farm. Its primary contribution lies in the fact of its documented existence since the late 18th century. It reflects the historic character of various time periods in its extant physical attributes and composition, including the varieties grown, as well as pruning style, trunk length, spacing of individual trees, and groundcover. Specifically, it presents elements of the commemorative era through its planting pattern and preservation of historic apple varieties, including "Westfield Seek No Further" and "Early Harvest." Some of the trees planted by the CCC during the 1930s may still exist.

Cross Estate

A component of the Jockey Hollow/New Jersey Brigade historic landscape, the Cross Estate (begun circa 1902) contains extensive landscaped grounds with several large specimen trees and a walled English country garden with a large pergola. Designed by Julia Newbold Cross and local landscape architect Clarence Fowler, the garden encloses a mountain laurel allée, and collections of native grasses and hollies. The New Jersey Historic Garden Foundation assists the NPS with maintenance of the gardens. The Cross Estate landscape is not significant to either the encampment period or the commemorative era.

II. BUILDINGS AND STRUCTURES

The park contains a number of buildings and structures that contribute to its historic significance:

Ford Mansion

Built between 1772 and 1774 in the Georgian style, the Ford Mansion was one of the grandest homes in the Morristown area. The house, consisting of a large, rectangular main block with a smaller rectangular wing, was built by Jacob Ford, Jr. (1738–76). Ford, a militia officer, died from illness contracted during the 1776 campaign. The mansion achieved its greatest fame during the period December 1779 through June 1780, when George Washington made it his military headquarters. It remained in the Ford family until 1873, when it was acquired by men who in the following year formed the Washington Association. This was a notable early success of the historic preservation movement. The NPS performed a major restoration of the mansion in 1939–40. It is listed on the National Register.

Museum

The museum was constructed in 1935–37 under the Public Works Administration to a design by the firm of John Russell Pope, a noted Colonial Revival architect. Pope's master plan called for a main building flanked by smaller pavilions connected by arcades, the whole recalling George Washington's complex at Mount Vernon and creating a formal, symmetrical relationship with the Ford Mansion.

Several elements of Pope's plan were constructed, but only the 21,000-square-foot main building was built. Problems with contracting and land acquisition caused the pavilions (two stories containing approximately 2,000 square feet each) and arcades to be omitted. However, NPS records indicate that "the plan of adding the wings [pavilions] to the structure as originally planned would not be abandoned, even though it is found impossible to erect them now. If the whole unit is not completed at this time, the remaining portions will be added at the first oppor-

tunity" (HSR 2002). The Historic Structures Report continues, "Unfortunately, but predictably, circumstances and history intervened and the pavilions have never been built. For one familiar with the original design of the building and the historical precedents on which it was based, the museum-library as it was built is stately but somehow incomplete, as if its arms had been chopped off."

When plans were drawn for the museum addition to house the Lloyd W. Smith collection in the 1950s, the land required to construct the pavilions was still unavailable. Completed in 1957, the addition was tucked relatively unobtrusively into the northwest corner of the museum. In 1975 the museum was substantially remodeled to address outdated mechanical systems, recurring moisture problems, and deferred maintenance issues. The remodel resulted in major alterations to all three floors. Spaces were reconfigured, administrative areas were dispersed, the elevator was removed, and several character-defining features, such as the monumental arched window on the north façade and vaulted ceilings in the auditorium, were lost or obscured.

The museum serves as the park's main visitor and administrative center. Recent studies identified several deficiencies with the building. The 1999 concept plan for expanding the museum found the building in need of extensive rehabilitation following the two major renovations. These projects greatly compromised the original design of the building, perhaps most importantly shifting the visitor entrance to the rear door. Visitors enter at the lower level and must find their way upstairs and past the library to the front of the building where the main exhibits are located—and where the main doors open to the Ford Mansion. The concept plan also identified a need for approximately 5,000 square feet of space to exhibit objects in the park's collections currently in storage and host traveling exhibitions, and recommended additional space for a research room, conference room, school groups, a gift shop, and areas to consolidate collections storage.

The 2001 Collections Management Plan determined that substandard environmental controls and space limitations make the museum inadequate for collections storage, although some controls have been improved in the library. Existing storage space suffers from lack of ventilation, control of sunlight and humidity, and fire prevention. The plan recommends an additional 2,120 square feet of climate-controlled space for storage, research, and related work. This might be accomplished within the existing footprint of the building; however, to do so would perpetuate many of the deficiencies identified in the conceptual expansion study.

The building is significant as the first museum constructed for a national historical park, one of the most prominent examples of architecture erected by the PWA, and as a public building designed by the architect John Russell Pope. The museum most likely meets the criteria for listing on the National Register.

Caretaker's Cottage

This house, a two-story rectangular-plan frame structure with a gable roof, was built or located on the site by the WANJ in 1886. There is evidence that it may be an older building that was moved to the Ford Mansion grounds at that time. It is managed as a historic structure and serves as the residence for a protection ranger. A small utilitarian, non-contributing garage was added next to the structure in 1963.

Wick House

The Wick House was constructed c.1750 by Henry Wick, the first farmer in this section of Jockey Hollow. It is a one-and-half-story, rectangular-plan, gable-roofed, frame building erected on a random rubble granite masonry foundation. The house remained in the Wick family until 1871. After being acquired by the NPS, it was thoroughly restored in 1935, under the direction of preservation architect T. T. Waterman. It is listed on the National Register. A number of outbuildings (barn, privy, well head, smokehouse, pigsty, sheep byre, and cow shed)

have been constructed or reconstructed by the NPS. In 1951 the reconstructed barn was razed and the foundation stabilized.

Guerin House

With the Wick House, this is one of two extant farmhouses in Jockey Hollow dating to the encampment period. It is believed to have been constructed in the late 18th century by Joshua Guerin. The house was extensively altered and enlarged in the 19th century. When acquired by the NPS it was severely deteriorated and was thoroughly rehabilitated in 1936–37. It is listed on the National Register and serves as the Superintendent's residence.

Roads and Trails

Within the park, two historic road traces are considered historic structures: the Old Camp Road, used during the encampment, and the original course of the Mendham–Elizabethtown Road (Tempe Wick Road), cut off after realignment in the 1970s. A portion of Tempe Wick Road has been restored as a heavily used wagon road. Jockey Hollow Road, which bisected the army encampment, was in existence as early as 1767. Maps from the period indicate it was the principal route to Morristown, following the course of modern Western Avenue. Tempe Wick Road is identified as an historic property in the National Register as "Tempe Wick Road—Washington Corners Historic District" (NR No. 00000959). It includes segments of Jockey Hollow and Cemetery Roads. These roads retain integrity of setting, location, association, and feeling.

Also lying within the park, Cemetery Road and Grand Parade Road were constructed in the 1930s to serve visitors. It is not known whether these were built on historic traces.

Several historic roads border the park. Sugar Loaf Road dates to 1776, and retains much of its original alignment and overall integrity despite costly modifications to accommodate park visitors in the 1930s. The park is concerned about increased use of Sugar Loaf by vehicles associated with the neighboring Delbarton School and commuter traffic. Park visitors have had some difficulty navigating the narrow, curving road when faced with large service vehicles and buses. Bailey Hollow Road was laid out in 1776, but its alignment has been changed somewhat. Basking Ridge Road, now called Route 202 or Mount Kemble Avenue, was one of the most important roads in Morris County, and was repeatedly used by troops during the war. In 1781 the French army under General Rochambeau marched south to Yorktown on this route.

The park contains over 27 miles of trails in the Jockey Hollow and New Jersey Brigade units. They are generally tranquil forest paths with narrow earthen beds. Several cross over small watercourses on rustic bridges. Most were in existence when the NPS acquired the land. Although no research has been completed on the origins of the network, several trails, such as segments of "Patriots Path," are believed to date to the Colonial period. It is likely that the Continental Army utilized the road system more than trails during the difficult winters at Morristown.

Others

Several small stone monuments dating to the late 19th century are located within the park boundaries. These include monuments to Stark's Brigade, Fort Nonsense (1888), and the Mutiny of 1781.

The park contains additional structures that do not contribute to the park's historic significance. The Jockey Hollow Visitor Center, a single-story, brown brick structure built for the Bicentennial in 1976, has some functional shortcomings. Space for fee collection, educational programs, and to support interpretive programs is limited. Other non-contributing structures include the comfort station at the New York Brigade (1976), hut reconstructions at the Pennsylvania Line (last rebuilt in the 1960s), an assortment of small sheds, and a number of houses used as park residences: the Hartshorne House (mid-1800s), the Dick House

(1880s–1900s), Quarters 35 (1965) and the Stroley House (1940s), and the Tuttle Farmhouse (mid-1800s). The assemblage of CCC structures in the utility area, dating to the 1930s, could become eligible for listing on the National Register if an appropriate context were developed.

Similarly, the Cross Estate, probably commenced in 1902 and repeatedly altered, with its numerous outbuildings and ruins, was recommended provisionally for listing on the National Register in 1987. It could be significant at the local level if an appropriate historical context, such as the Country Place, were established. The estate is managed as a cultural resource. Several buildings (main building, chalet, gardener's house, chauffeur's house, and garage) are used as park offices and residences. Its character makes it unsuitable for intensive park uses. Its interior layout is inefficient for administrative purpose, it has limited sanitary facilities (bathrooms and septic system), lacks modern data communication infrastructure, does not comply with ADA standards, and is in a remote residential location, accessed by narrow historic roads that are inappropriate for higher volumes of traffic.

III. ARCHEOLOGICAL RESOURCES

Archeological research at Morristown NHP began soon after the park was established and continued episodically until the close of the 1980s. In accord with the park's mission and purpose, these efforts focused on the encampment period. Generally the objective was to locate or confirm the location of historic resources in order to facilitate structural restoration or reconstruction projects. Insofar as these resources were authenticated, archeology informed interpretation, although that was not its primary purpose.

The emphasis on locating or studying specific features contributed to a fragmented approach, which made it difficult to view the park holistically. Even sites within a cohesive cluster such as the Wick Farm were often examined separately. In addition, the emphasis on sites and structures came at the expense of examining lifestyle issues, so that archeology did not contribute as fully as it might have to placing Morristown within larger Revolutionary War contexts. In situ resources still remain and have very high potential to yield information about the encampments. This vast resource is still not well understood.

A summary of encampment period resources for specific sites follows:

Ford Mansion

The grounds contain the remains of many razed outbuildings, wells, and other features. These features have archeological potential to provide information related to the Ford family, the Washington occupation, the 18th- and 19th-century residence, and the later commemorative era. The reported encampment site of Washington's "Life Guard" is just east of Morris Avenue, on private property.

Fort Nonsense

There are no surface remains of the fort, and the historical accuracy of a fort location here was contested in park records until a 1989 archeological study confirmed that this is indeed the site of historic Fort Nonsense. Despite the bulldozing of the reconstruction that occurred in 1965, the 1989 investigation determined that much of the original Upper Redoubt can still be detected beneath the remains of the reconstruction. In addition, there appear to be areas of the site, particularly on its downslope periphery, that may be largely undisturbed and retain high potential for data recovery. This could include the site of the suspected Lower Redoubt.

Jockey Hollow

New York Brigade: While this is one of the best-documented encampments in terms of its appearance on Revolutionary War maps and subsequent deeds, today there is no trace of the site. Archeological surveys have uncovered no evidence of the encampment. The area has been the site of a variety

of agricultural, aqueduct-related, and park-related disturbances, any of which may have had a negative impact on the site's integrity. Despite meticulous previous work, the possibility remains that the site has not yet been detected.

First and Second Pennsylvania Brigades—The Pennsylvania Line: The site has been under cultivation since the Revolutionary War, either as field crop or orchard. It is likely that the upper reaches of the site are least disturbed. Some hut sites were identified in the 1930s and in 1961. These were largely destroyed in the course of construction of replica huts. In sum, very little remains on the surface of this large encampment, and it is likely that archeological features are highly disturbed.

Stark's Brigade: An archeological survey in 1967, soon after the NPS acquired the site, found evidence of huts. A farm road and cultivation have reportedly disturbed many features within this encampment, but the extent of disturbance is unknown and many features may remain.

First and Second Maryland Brigades: These encampments remained visible and known into the late 19th century. While the site is generally suitable for agriculture and appears to be extensively disturbed, archeological investigations suggest that features exist that are related to the encampment. A high potential for data recovery exists.

Hand's Brigade: The location is well established, but all visible traces of the encampment have apparently been erased by cultivation. An earlier archeological investigation found hut features, but the report is confusing, and the extent of disturbance and the potential for data recovery remains unclear.

First and Second Connecticut Brigades: Archeological investigation found these sites to be in an "exceptional state of preservation." The Second Connecticut Brigade site has remained essentially undisturbed since its abandonment in 1780 and retains a high probability of archeological integrity.

Pennsylvania Division: This site relates to the encampment of General Anthony Wayne's division in 1780–81. Plowing has disturbed at least part of the site. Confusion exists between this site and the encampments of the previous winter, and provides an example of the difficulties caused by the complex patterns of troop movements at Morristown.

Fort Hill: Despite the potential importance of this site, it has never been subjected to competent archeological investigation. The site is probably archeologically significant, depending on disturbance, which is thought to be minimal.

Reputed Hand's Commissary Site: By 1936 this area was identified as a "commissary," although no archeological or historical evidence supports this designation. The features in this area, regardless of their eventual interpretation, appear to be in good condition.

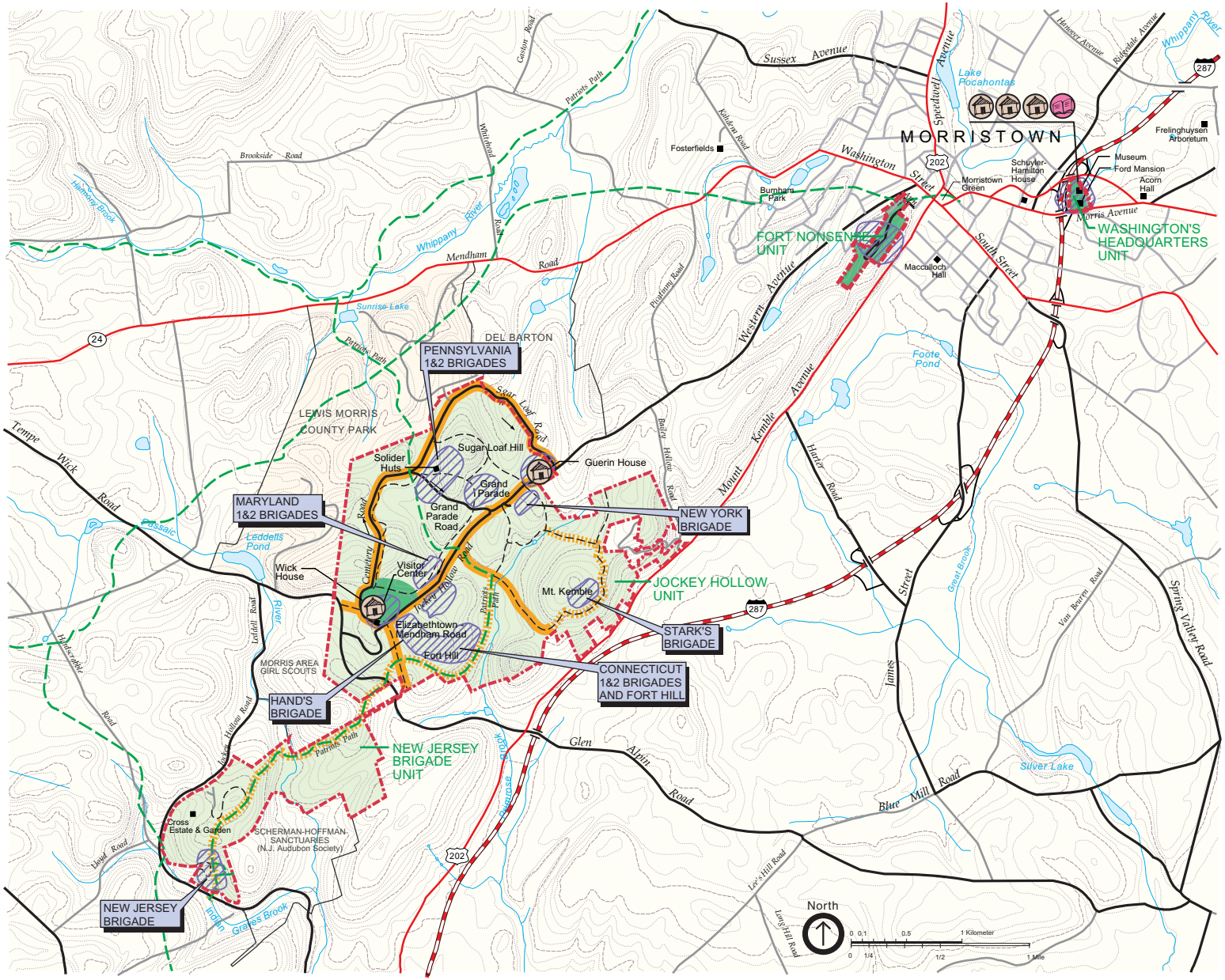
Reputed New Jersey Brigade Encampment: This reputed site relates to the 1781–82 encampment, but the site is in question and its attribution remains problematic. The site traditionally identified may be incorrect, and archeological evidence found nearby may indicate the correct site.

Guerin House

Archeological investigation in the 1930s stripped the soil for a distance of 50 feet around the house and reportedly found the remains of several outbuildings. Visible foundations still exist in this zone. Areas more than 50 feet from the house may still have integrity.

Wick Farm

Archeological work in the 1930s found several stone features, but those that could be interpreted included only an ice house and a barn. The original barn foundation and other historic features may remain.



CULTURAL RESOURCES: PARK

Figure 9

Legend

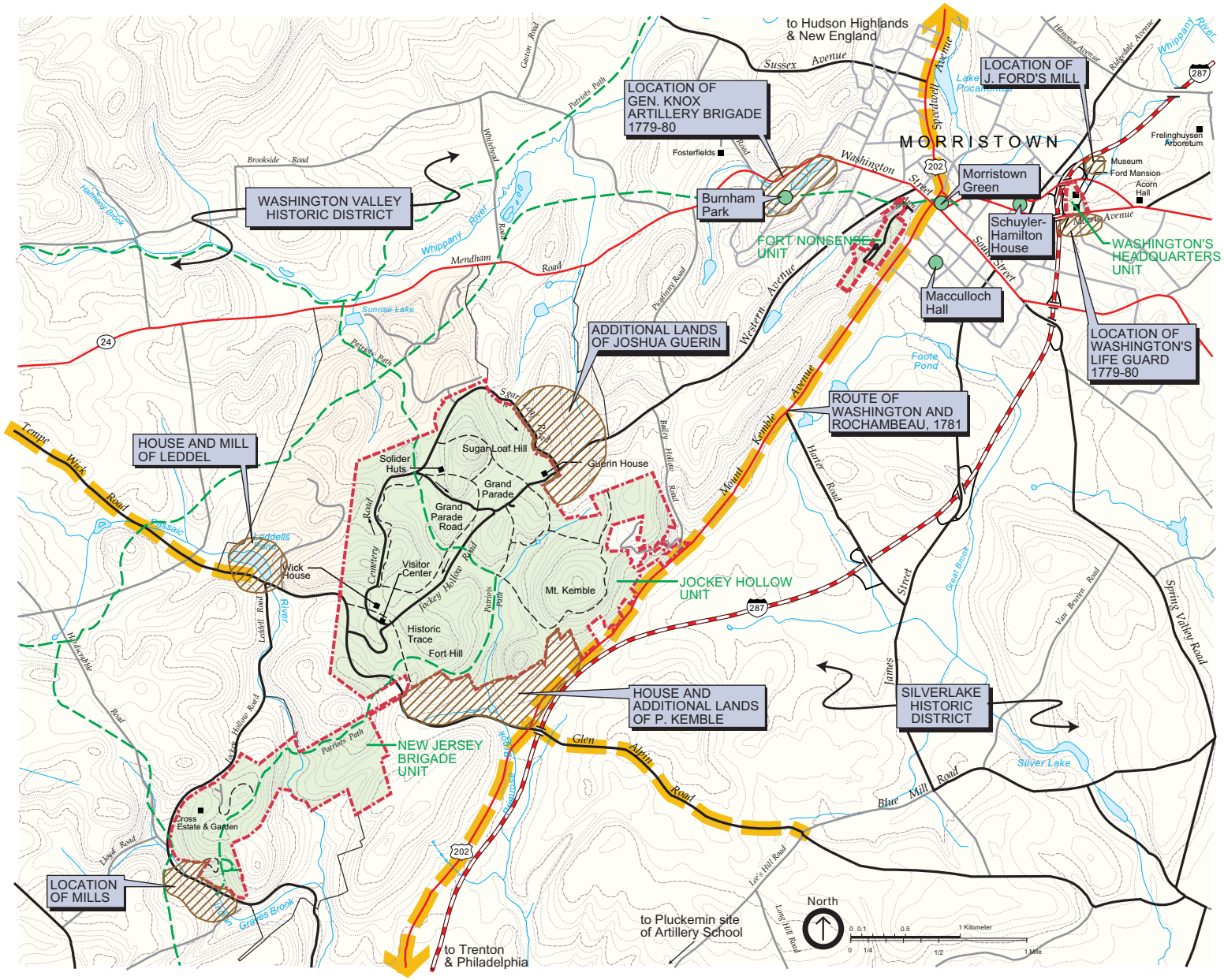
- Buildings & Structures
- Roads & Trails
- Cultural Landscapes
- Archeology
- Collections



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CULTURAL RESOURCES: PARK RELATED SITES

Figure 10

Legend

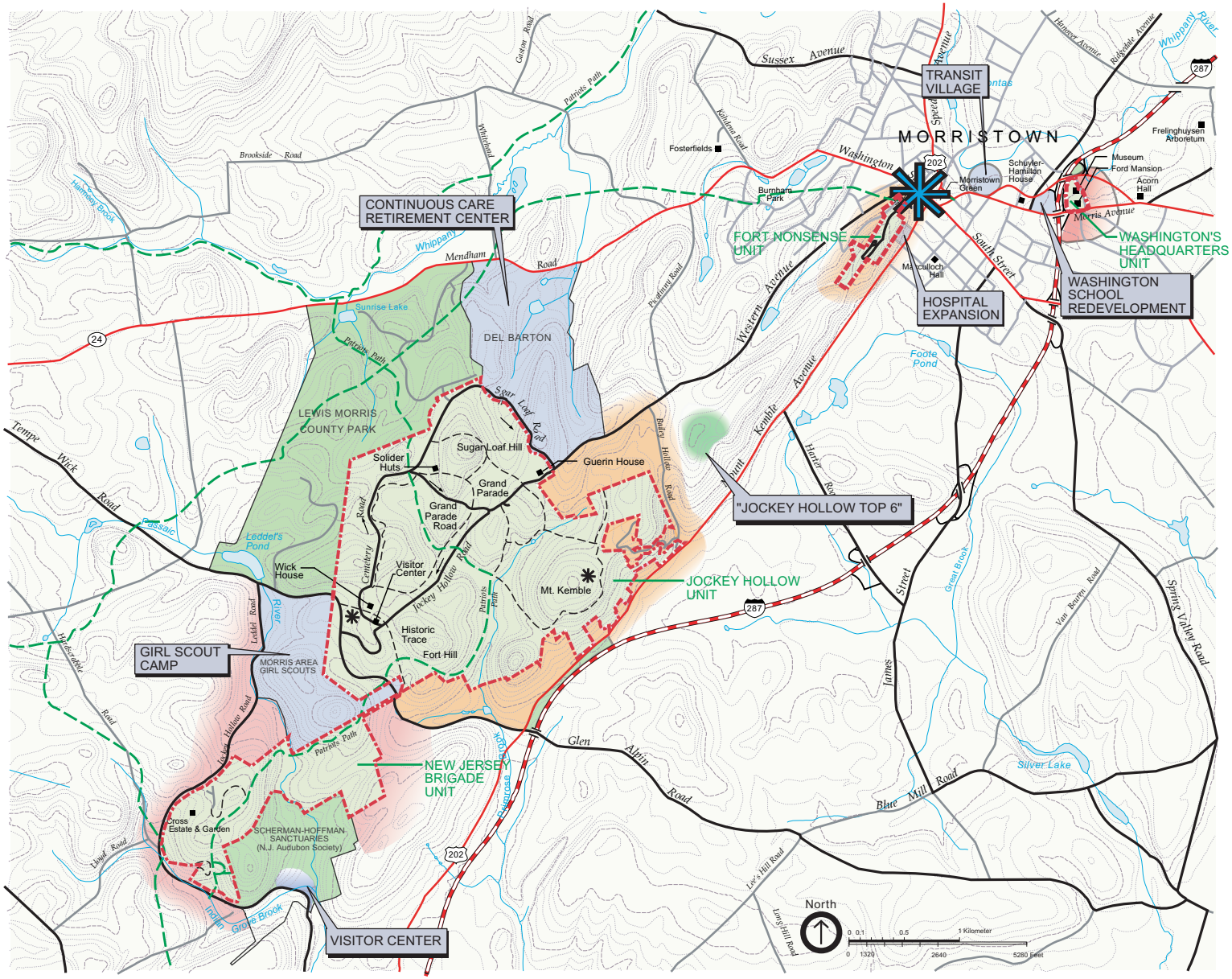
- Approximate Locations of Related Sites
- Historic Routes
- Related Historic Sites



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CULTURAL RESOURCES: ADJACENT LAND USE

Figure 11

Legend

- Proposed Development
- Steady Infill & Densification
- Dedicated Open Space
- Built-Out
- Morristown Regional Center
- Proposed Wireless Communication Tower Sites



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New Jersey Brigade Encampment

Through confusion with accounts of the 1781–82 encampment, it is only since 1967 that the 1779–80 encampment has been located and recorded. Archeological investigations found abundant evidence to confirm the site identification. At present foot traffic and casual tampering by visitors are harming the site. The remains are at risk.

Native American Resources and Resources from Other Periods

Due to the mandated focus on the period of the Revolutionary War, no formal archeological efforts have been directed toward other time periods. Incidental discoveries have been made in the course of investigating reputed military sites. In the process of testing encampment period sites, several Native American sites were found within the park boundary and one site was located just outside the park boundary near Leddell's Pond. However, these artifacts have not been discussed in reports, nor were any prehistoric site forms recorded. Historic records point to a generally high potential for the discovery of additional small Native American sites in the park. But no Native American archeological sites have been systematically investigated at the park.

In general, archeological resources in the encampment areas are being steadily diminished by surface erosion. Accelerated erosion can be seen along fallen trees. Decaying tree roots and burrowing animals also impact these resources. The lack of forest understory vegetation in some places may be accelerating the rate of soil erosion in the park. This may be adversely affecting archeological sites.

Historical evidence suggests that several sites within park boundaries could provide archeological evidence bearing on the rural economy from the 18th into the 20th centuries. For example, numerous remnants of the National Register–listed Morristown Aqueduct system are found in Jockey Hollow. The New Jersey Brigade area may contain evidence of an early industrial community known as Logtown. At the Cross Estate, the yard areas, dooryards, farmyards, and other features have the potential to provide information on the Country Place era.

IV. COLLECTIONS AND ARCHIVES

Museum Artifact Collection

The museum artifact collection has been built around a nucleus of artifacts donated to the park by the WANJ in 1933. Most of the original artifacts were associated with George Washington, the Ford family, Colonial America, and the Revolutionary War, but the current collection of over 40,000 objects has a wider range. About 25% of these items were recovered as a result of archeological investigations in the park. Only a small fraction of the collection is exhibited in the museum, Ford Mansion, and Wick Farm. The majority of the collection is kept on the third floor of the museum or stored off site.

Museum Archival Collection

The museum contains collections of books, manuscripts, and reference materials relating primarily to the Colonial and Revolutionary War periods. Since 1933 it has grown to more than 45,000 bound volumes, with nearly 17,500 manuscripts, journals, diaries, account books, letter books, military orderly books, inspection returns, and other documents. In 1958 the NPS added a library wing to the museum to accommodate this growth, particularly the Lloyd W. Smith collection. One of the special collections of value to students of the Revolution is the Lidgerwood Hessian Transcript Collection. Numbering approximately 21,000 pages of German script and almost 10,000 typescript pages of English transcription, it is the largest collection of translated documents from official German records dealing with the Revolutionary War.

Museum Archeology Collection

A major element in this category is a collection of Native American artifacts that were collected or purchased by Lloyd W. Smith. This collection was estimated to contain approximately 20,000 objects. Due to the way materials were acquired by Smith, little or no provenience data exist for them. The collection also contains between 12,000 and 13,000

artifacts known to have been recovered from within park boundaries or from property adjacent to the park. As they are specific to the park, these objects increase understanding of the park and can contribute to comparative analyses of various kinds.

Washingtoniana

This category includes material such as papers, books, letters, or relics relating to George Washington. This portion of the collection includes excellent examples of clothing, manuscripts and publications about Washington's life and death, portraits of Washington, and weapons worn or used by him.

Natural Resource Management Records

Important files on natural resource management are stored at the Cross Estate. Records include deer management files, environmental assessments, integrated pest management files, orchard and vegetation management files, water quality research and reports.

NATURAL ENVIRONMENT

The park's rich cultural resources are set against diverse and dynamic natural resources. While nature and human activity have shaped Morristown into a cultural landscape, the ecological role of the park in the greater region is still evident. The park remains one of the few large, undeveloped areas in northern New Jersey.

I. CLIMATE

The Middle-Atlantic region, including New Jersey, is typified by a continental climate, despite the proximity of most of its land to the coast. This is due to the predominance of a westerly airstream, which brings extreme temperatures more typical of a large landmass than of a coastal location.

The average temperature in January ranges from 24 degrees Fahrenheit in the northern part of the state to 34 degrees in the south. In July, the northern counties average around 70 degrees, and the southern parts of the state between 74 and 76 degrees. Morristown NHP is in the range that averages 26–28 degrees in January, and 72–74 degrees in July.

Nearly all of New Jersey averages over 40 inches of annual precipitation, with the highest amounts in the north central part of the state, which average over 48 inches. The highlands of the north cause lifting and cooling of air masses, resulting in greater precipitation. Morristown NHP averages 46–48 inches of annual precipitation.

II. GEOLOGY AND TOPOGRAPHY

The park lies at the junction between the Highland and Piedmont physiographic provinces, which trend in a southwest–northeast direction, following both the coastline and the orientation of the Appalachians. The Highlands are a southwestern extension of the New England Uplands, and the easternmost edge of the Appalachians. These hills are comprised of hard crystalline rocks, mostly gneiss, which contains deposits of iron, graphite, and mica. On the eastern side of the uplands, in the area of the park, is an extension of the hills known as the Trowbridge Range, itself part of the Reading Prong. The Piedmont is the downsloping east side of the uplands, which meets softer coastal-plain sediments. Morristown NHP consists of hilly terrain overlooking the plains to the east, with mountains to the north and west. The Ramapo Fault, running southwest–northeast, parallel to Route 202, marks this junction between hills and plains.

Northern New Jersey was the southernmost limit of glacial advance during the Pleistocene era, leaving a terminal moraine that runs across the grain of the uplands, from northwest to southeast. North of the moraine, the glacial valleys were partially filled with debris that resulted in the formation of lakes, while the uplands were scraped bare. South of the moraine, drainages were infused by large amounts of meltwater, creating fertile outwash plains.

The hills in the park are generally between 175 and 215 meters (580–700 ft) in elevation, while the lowest elevations are located along Indian Grove

Brook (known historically as Indian Grave Brook) and the Passaic River, approximately 110 meters (360 ft) in elevation.

The *New Jersey Brigade* unit is comprised of two hills separated by the Passaic River, which runs through the approximate center of the unit. In the southwestern portion is an unnamed hill that is bounded by Indian Grove Brook, and in the northeastern portion the unit includes a portion of Blachleys Hill. Elevations range from lows of 110 and 116 meters (360–380 ft) along Indian Grove Brook and the Passaic River, to highs of 182 meters (600 ft) on Blachleys Hill and 195 meters (640 ft) on the unnamed hill.

The *Jockey Hollow* unit consists of a small Y-shaped valley or "hollow" formed by two branches of Primrose Brook, surrounded by a series of low hills. The largest of these hills, Sugar Loaf, reaches 230 meters (756 ft) and lies at the northern edge of the unit. The other hills have peaks of between 189 and 213 meters (620–700 ft), and include Tea Hill (195 m) and Mount Kemble (213 m). A few lower terraces are also present in this unit, lying between 165 and 177 meters (540–580 ft). Primrose Brook gently flows north to south, beginning at 115 meters (380 ft) at the northern edge of the unit, and dropping to 112 meters (370 ft) at the southern edge.

Oil, gas, and other mineral industries have made no impact on park resources. The NPS Abandoned Mine Land Inventory indicates the presence of two mines in the Jockey Hollow unit. One is an abandoned mica mine. The other has no sign of mineral material. Several park residences have been measured to have high radon.

The *Fort Nonsense* unit lies on top of the long escarpment, the northeastern extension of Mount Kemble. With a peak of 177 meters (580 ft) at the center of the unit, and a low point of 122 meters (400 ft) at its northeastern edge, Fort Nonsense provides panoramic views to the east.

The *Washington's Headquarters* unit lies on a low terrace overlooking the Whippany River to the north. I-287 and Lafayette Avenue now lie between the unit and the Whippany River. This unit slopes gradually from 104 meters (340 ft) near the Ford Mansion to 91 meters (300 ft) in elevation at the visitor parking area.

III. SOILS

Soil in the area of Morristown NHP are classified as follows:

- ***Edneyville-Parker-Meckesville.*** Deep, moderately well-drained to somewhat excessively well-drained, gently sloping to very steep, gravelly, stony, and rocky soil. These soils are formed on bedrock uplands in the western part of the New Jersey Brigade unit.

- ***Edneyville-Parker-Califon.*** Deep, excessively drained to somewhat poorly drained, gently sloping to steep, gravelly, and stony sandy loams. These soils formed over granitic gneiss on uplands that are glacial deposits or weathered bedrock in the central and northern part of the Jockey Hollow unit.

- ***Parker-Edneyville.*** Deep, excessively drained and well drained, steep to very steep, gravelly and sandy loams. These soils also formed over granitic gneiss on uplands of glacial material or weathered bedrock in the western, southern, and eastern parts of the Jockey Hollow unit, as well as in the eastern portion of the New Jersey Brigade unit and the western part of the Fort Nonsense unit.

- ***Riverhead-Urban.*** Deep, well-drained to somewhat poorly drained, nearly level to strongly sloping, gravelly and sandy loams formed on outwash plains and terraces. These soils include all of the Washington's Headquarters unit, and the eastern part of the Fort Nonsense unit.

The majority of the park consists of gravelly and rocky soils formed on uplands of bedrock and glacial till. The Parker associated soils have implications for

historical land use, in that they were not particularly suitable for farming, and were better utilized for wood and hunting territory. The Riverhead soils, however, would have been suitable for agriculture.

IV. WATER RESOURCES

Surface Water

Significant surface water features in Morristown NHP are found only within the Jockey Hollow and New Jersey Brigade units. These units are largely located within the upper reaches of the 55.6 square-mile Great Swamp Watershed, a subunit of the Upper Passaic River Basin. As such, the park protects major tributaries to the Great Swamp National Wildlife Refuge and important sources of drinking water supply for the region. The park's water resources were important factors in the selection of Jockey Hollow for the winter encampments.

Predominant surface water features within the park include the following:

- Most of the headwaters of the Primrose Brook subwatershed, including 2.5 miles of the East and West Branches, are located in Jockey Hollow. The brooks vary from 3 to 5 feet in width. While most of the springs contributing to Primrose Brook surface within the park near Sugar Loaf and Mount Kemble, the source spring of the East Branch Primrose Brook is found in an area known as Military Hill, located on private land just outside the northeastern boundary of the park.
- The one-quarter-mile-long headwaters of Jersey Brook, a tributary of Primrose Brook, originates from springs in the southwestern portion of the Jockey Hollow unit. It runs roughly parallel to Tempe Wick Road to its confluence with Primrose Brook.
- A one-half-mile reach of the upper Passaic River, varying from 10 to 14 feet in width, arises about 3 miles northwest of the New Jersey Brigade unit. The river passes through areas of relatively low-density residential development, and is impounded at Leddell's Pond about 1 mile before it passes through this unit.
- A one-half-mile section of Indian Grove Brook, a tributary of the Passaic River, approximately 3 to 5 feet in width, arises about 1.2 miles northwest of the New Jersey Brigade unit. The brook runs through an area of low-density residential development as it parallels Hardscrabble Road.

A small artificial pond, Cat Swamp Pond, and two small marshes are also located within the upper Primrose Brook drainage (Ehrenfeld 1977). Cat Swamp Pond is a remnant of the water collection and storage system that was built as part of the Morristown Aqueduct Water System. The pond is surrounded by a construction berm, has no natural drainage, and its water level is maintained by the water table. While the pond has no natural outlet, it is connected to East Branch Primrose Brook by an overflow outlet pipe along the eastern edge of the berm. Another small marsh is found adjacent to Indian Grove Brook within the New Jersey Brigade unit (Ehrenfeld and Dibeler 1987).

Quality

The park monitors key water quality parameters on a monthly basis at 11 stations. The confluence of the East and West Branches of Primrose Brook is utilized as a water quality monitoring site by several state and federal agencies including the U.S. Fish and Wildlife Service and U.S. Geological Survey. The State of New Jersey, Department of Environmental Protection, Division of Watershed Monitoring, conducts macroinvertebrate sampling on the West Branch of Primrose Brook near the Trail Center parking lot.

Results indicate that the streams within the park generally exhibit very good to excellent water quality, being well oxygenated at all times, neutral in pH, low to moderate in alkalinity, and containing low to moderate nutrient concentrations. Total suspended solids, total dissolved solids, specific conductance, and chlorides, while low in streams, were slightly higher in Jersey Brook, Indian Grove Brook, and the Passaic River than they were in Primrose Brook (Trama and Galloway 1988). Increases in these

parameters may be associated with the close proximity of Tempe Wick Road to Jersey Brook and the low-density residential development found in the uppermost reaches of the Upper Passaic and Indian Grove Brook subwatersheds.

Fecal coliform bacteria levels exceed standards determined by the State of New Jersey Ground Water and Safe Drinking Regulations. In the early 1990s the park closed a public potable water source located at the Pennsylvania Line parking lot due to continual high levels of coliform. An intensive study concluded that contamination is not continuous, occurring seasonally in some streams and occurring throughout the year in others. The source of bacteria found in the water samples of this study is fecal matter from warm-blooded animals. The park does not have any untreated public drinking sources, and there are no official areas for swimming.

Trama and Galloway (1988) reported very low total recoverable aluminum concentrations in the stream water that pose no threat to aquatic life. Further analysis revealed high aluminum content in local soils. While it is unlikely that the aluminum poses a threat to aquatic organisms, in the event that aluminum from the soil was mobilized both water quality and aquatic biota could be impacted.

The water in Cat Swamp Pond is tannin-stained and has a heavy influx of leaf litter and a negligible rate of water exchange.

The New Jersey Surface Water Quality Standards (as amended, May 1998) designate all surface waters of the park as FW2-TP, trout production fresh waters.

Primrose Brook and the section of the Passaic River that flows through the park are also recognized by the state of New Jersey as Category One "Antidegradation" Waters. One of the highest-quality streams within the Great Swamp Watershed, Primrose Brook is the least human-influenced stream within the park (Trama and Galloway 1988).

The high water quality generally found in the streams flowing through the park can be attributed largely to the upper watershed location of the Jockey Hollow and New Jersey Brigade units. No permitted National Pollutant Discharge Elimination System (NPDES) discharges are known to occur into any of the streams above the park.

Subsurface Waters

Aquifers provide the primary water supply to many of the communities around the park. The Precambrian gneiss that underlies the park is fairly impermeable to water but does contain groundwater in scattered locations. Park visitor facilities, administrative buildings, and seven park residences rely on park wells. Both the Jockey Hollow and New Jersey Brigade units contain numerous natural springs and seeps emanating from a shallow aquifer. These provided an important water source to the encamped Continental Army. In the 1890s a growing Morristown began to utilize these natural springs as the public water supply. A series of trenches and ponds were constructed in order to facilitate water collection and storage. Water was conveyed to Morristown via the Morristown Aqueduct. This system was abandoned in 1933, but remnants including iron pipes, collection trenches, vaults, and storage ponds remain. While little information is available regarding current local ground water use, there are no known well fields or other significant withdrawals in the vicinity of the Jockey Hollow and New Jersey Brigade units (Mele 1983).

V. BIOLOGICAL RESOURCES

Vegetation

The vegetation of the Middle-Atlantic region has been in a state of change for many thousands of years. Environmental variables, such as the advance of glaciers, have had a major impact, but even more dramatic is the impact of European settlement over the past four centuries. Forests have been cut for fuel and construction material, and have been cleared for cultivation since the earliest arrival of Europeans in the 17th century. Prior to that time, Native Ameri-

cans also burned forests to clear areas for cultivation, especially along the coastal plains. In recent centuries, marshes and swamps have been filled or drained, to further prepare lands for development. It is therefore difficult to typify a "natural" state of forest.

Paleo-environmental studies indicate that a tundra environment accompanied and followed the advance of the glaciers and was, in turn, replaced by a taiga forest community (Gaudreau 1986; Jacobsen et al. 1987; Watts 1979). Tundra is comprised of low shrubs, sedges, mosses, grasses, flowers, and lichen, and was present only in the northern part of New Jersey at the height of the glacial advance, prior to about 15,000 years ago. Taiga consists mostly of cold-tolerant evergreen conifers with needle-like leaves, such as pine, fir, and spruce. Taiga was dominant in northern New Jersey and southern New York from approximately 15,000 to 8,500 years ago.

In northern New Jersey, it is likely that some hardwood trees became established soon after the retreat of the glacier, brought in the form of seeds that were carried by wind and animals from the south. Hemlock and oak became the dominant forest type from circa 8,500 to 5,000 years ago, with birch, alder, beech, and hickory also present. From approximately 5,000 to 2,500 years ago, oak and hickory were the most common forest species, with chestnut becoming plentiful as well. About 2,500 years ago, chestnut and white, red, and black oak were the most common upland species, with lesser numbers of maple, hickory, elm, and ash, among many other species. Swampland and other lowlands harbored communities of alder and hemlock (Russell 1979:126–132).

Early historical accounts of the Morristown area suggest that in the 18th century, a mesic red oak-chestnut forest covered the lower slopes, a more xeric oak-hickory forest covered the upper slopes, and forest openings vegetated with light-demanding species were common. In the first settlements, circa 1740–50, relatively small areas were cleared. The 1779–80 encampment of the Continental Army cleared some 600 acres of forest for huts and fuel. Similar to the park's water resources, the forest was an important factor in the selection of Jockey Hollow for the winter encampments. Some of these cleared areas reverted to forest immediately following the war. Most were retained as pasture, orchard, or cropland until the late 1800s. Fields reverted to forest at varying times during the late 19th and early 20th centuries. Ehrenfeld (1977) identified areas of Jockey Hollow that were plowed for cultivation, but there is no specific information about the field and forest pattern before, during, or immediately following the encampments. The establishment of the park in 1933 caused further changes in land use such as abandonment of more fields, efforts to eradicate black locust trees, brush clearing, and planting of white ash trees by the CCC.

Forest

The forests within the park consist primarily of a mix of native hardwood species, with a lesser number of introduced species. This is common in the Ridge-Valley and Piedmont provinces of New Jersey. The most abundant species are yellow poplar, black birch, and beech. Flowering dogwood is the most common understory species. Red maple, scarlet oak, sugar maple, yellow birch, shagbark hickory, mockernut hickory, white ash, green ash, black walnut, blackgum, hornbeam, black cherry, white oak, red oak, pin oak, black oak, sassafras, and black locust may also be found.

Three forest types have been described in Jockey Hollow: mature, successional, and pure stands. A mature forest type, that was probably never completely cleared for agricultural purposes (56%), consists mostly of mixed oaks. A successional forest type, which has regenerated on agricultural fields abandoned in the 19th and early 20th centuries (27%), consists of a broad mix of species. Pure stands account for approximately 11% of forest cover, the largest stand being 76 acres of yellow poplar. Chestnut, once common, disappeared following the blight of the early 20th century.

The black locust, a non-local species that was utilized by farmers in the 19th and 20th centuries, now exists in successional stands with white ash that were probably planted in the 1930s. These stands include dense patches of vines, primarily a mixture of native grapes and nonnative bittersweet. They typically lack any indication of succession, both where the vines are dense and elsewhere.

The vegetation of the New Jersey Brigade unit consists of a mixture of several types of upland hardwood forest, with varying dominance by yellow poplar, black birch, and chestnut oak, plus a wide range of minor species. Similar conditions exist at Fort Nonsense. However, tree plantings at Washington's Headquarters are principally ornamental in nature, with many fine specimens.

Historical records strongly suggest that when European explorers first arrived, the oak-dominated forests of northeastern North America were open, with little understory. In addition, by the time of the first encampment there were farms within Jockey Hollow, so it is very likely that farmers were grazing their livestock in the forest and using its resources for fuelwood, fencing, and other products. It is thus likely that the mature forest of that time had a relatively open understory.

In the late 1970s, a variety of understory shrubs and small trees were common in the park including flowering dogwood, grape, and spicebush (Ehrenfeld 1977). Speckled alder, witch hazel, gray winterberry, porter blackberry, black raspberry, lowbush blueberry, mapleleaf viburnum, blackhaw, and Tartarian honeysuckle could also be found (Ehrenfeld 1977). The composition of the understory has changed considerably since then, largely through the spread of invasive and exotic plant species.

Invasive and Exotic Plant Species

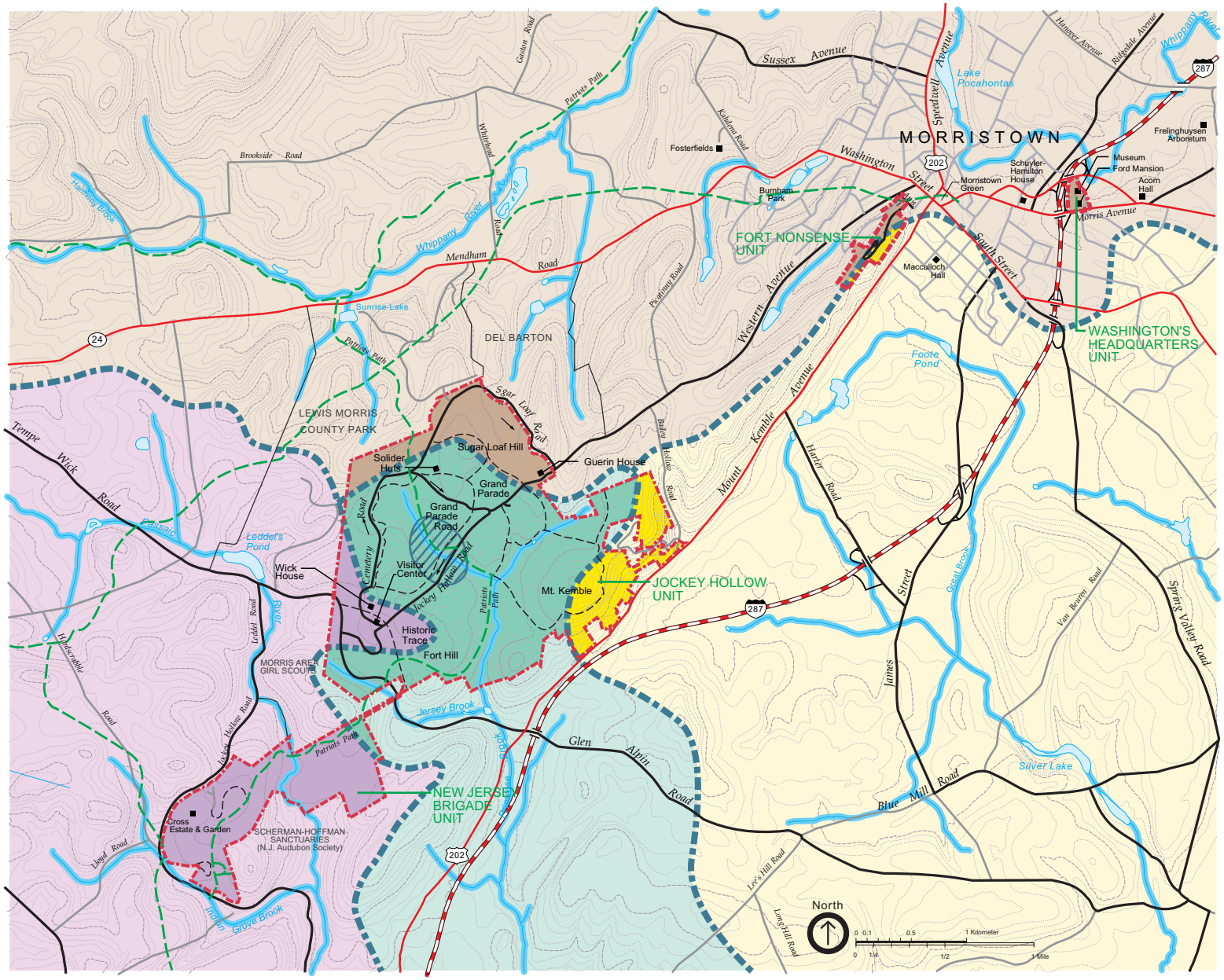
At present, invasive nonnative plants dominate the forest understory in parts of all units. The most prevalent nonnative invasive species are the Siebold's viburnum *(Viburnum sieboldii),* wire grass *(Microstegium vimineum),* Japanese barberry *(Berberis thunbergii),* and oriental bittersweet vine *(Celastrus orbiculatus).* Higher soil pH, nitrification, and populations of exotic earthworms have been found in association with these invasive species. Some changes in use by bird species have been identified as a result of the shift from native understory species to Japanese barberry.

There is concern that the steady spread of nonnative species and deer browse may be diminishing the health of the forest ecosystem. Currently, there are very few seedlings of native shrubs or trees surviving in the forest. Thickets of nonnative shrubs and vines are replacing the native vegetation, parti-cularly the understory. While it appears that the exponential growth of nonnative invasive plants is slowing, there is a strong possibility that the continuation of these processes threatens the very survival of the forest. The resulting landscape would be composed of vines, dead and dying trees, and nonnative shrubs.

Several studies involving wildlife exclosures in forested areas are currently being conducted in the park. The objectives are to compare over time the differences in type and structure of vegetation (invasive species, native seedlings, jack-in-the-pulpit, and native wildflowers) with and without deer browsing. The vegetation inside the exclosures and adjacent unfenced control plots are sampled on a yearly basis. Seedling plots confirm that most woody tree seedlings do not survive more than two to three years. The cause of seedling deaths, suspected to be deer browsing, has not been conclusively determined.

Fields

Fifteen fields are maintained in the Jockey Hollow and New Jersey Brigade units, totaling 122 acres. These remain from agricultural activities prior to the establishment of the park. To retain this historic appearance, most are kept open by mowing. Mowing frequency varies from every other year, to yearly, to two to four times a year. Field vegetation includes grasses, herbaceous and woody plants, and numerous



NATURAL RESOURCES: HYDROLOGY

Figure 12

Legend

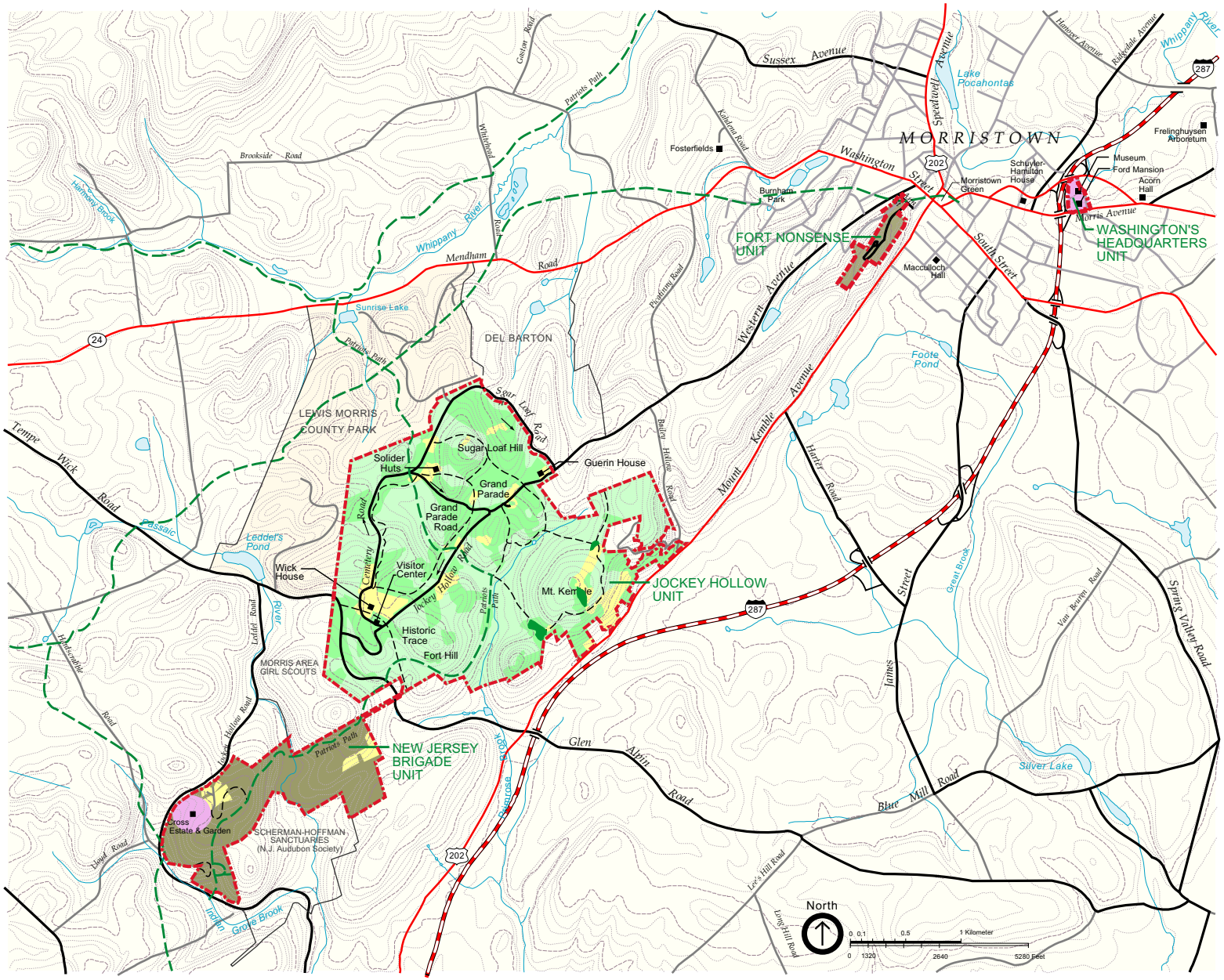
- Primrose Brook Watershed
- Passaic River Watershed
- Whippany River Watershed
- Great Brook Watershed
- Former Morristown Aqueduct
- Major Streams
- Watershed Boundary



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NATURAL RESOURCES: VEGETATION

Figure 13

Legend

- Ornamental
- Mixed Hardwood
- Mature Broadleaf
- Conifers
- Open (field/orchard)
- Successional Broadleaf



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species of birds, insects, and other animals that inhabit or frequent this community.

Orchard

The Wick Farm orchard contains 121 trees that are a mixture of modern and heirloom varieties. Many trees are protected with wire fencing from browsing by deer, but herbivory from voles has been observed. Other routine maintenance is minimal, and the apples are not formally harvested.

Landscaped Grounds

Informal plantings of trees, shrubs, and lawns are common in all park units, particularly along paths between visitor facilities. Such landscaped grounds are generally well maintained and in themselves do not represent an important resource. The Wick Farm contains lawn sections and many individual specimen trees around the house. Similarly, but on a larger scale, the Washington's Headquarters landscape contains lawns, shrub plantings, and numerous ornamental trees. Fort Nonsense contains many older canopy trees surrounding a sloping lawn and a few evergreen shrubs (*Rhododendron* spp.). Grasses (originally *Andropogon* spp.) outline the location of the 1777 Upper Redoubt. A limited amount of landscaping is maintained adjacent to the Jockey Hollow visitor center. More extensive lawns, specimen trees, and shrubs are maintained at the Cross Estate.

Gardens

The park contains two formal gardens. The herb garden at the Wick Farm is a highly organized collection of annuals and perennials from the Colonial period, but not necessarily associated with the Wick Farm, enclosed by a substantial non-historic wire fence. The walled garden at the Cross Estate is also highly organized. It contains principally ornamental plants.

Wetlands and Riparian Resources

Wetland and riparian areas in the park are for the most part small in size and associated with streams and minor tributaries. National Wetland Inventory maps do not show these features. However, based on indicator plants such as skunk cabbage, wetland acreage is estimated at approximately 64 acres. The most extensive riparian areas in the Jockey Hollow unit flank Primrose Brook. Two small marshes are nearby. The first, Cat Swamp Pond, is currently dominated by forested wetland vegetation including black willows and other wetland trees and shrubs. The second marsh, similar in composition, is located below Cat Swamp Pond on the East Branch of Primrose Brook.

Wetland and riparian areas are found along the floodplain of Indian Grove Brook within the New Jersey Brigade unit. A small forested wetland lies at the intersection of Indian Grove Brook and a small feeder stream that runs southwest from Patriots Path. This wetland lies in an area of saturated soils.

A section of the Passaic River that runs through the New Jersey Brigade unit is the only portion of the park lying within a 100-year floodplain.

Other Vegetation

The park's 1995 herbaceous plant inventory identified 291 species of herbaceous plants, along with 22 species of ferns. Five herbaceous plants found in the inventory are on the State of New Jersey list of threatened plants.

Diatoms are the predominant algae in park waterways, with maximum growth occurring during the spring. Species are characteristic of shallow rocky streams exhibiting high water quality, and appear to form an excellent food base for the herbivorous aquatic macroinvertebrates occurring in these waters. No rooted macrophytes were observed at any sampling site. The absence of these plants could be due to swift currents, rocky substrates, changing water levels, low nutrient availability, and limiting amounts of solar radiation during the growing season. However, an aquatic moss, *Fontinalis* spp., is common, and liverworts are sometimes found on exposed rocks in the stream channel or along the wet banks (Trama and Galloway 1988).

Fire

There is no record of a major forest fire in the region for the past 70 years. Since 1950, there have been 31 fires in the park, 19 of them occurring in or on the boundary of the Jockey Hollow unit, 11 of them occurring in or on the boundary of the Fort Nonsense unit, and one occurring in the New Jersey Brigade unit. Of these fires, 21 have been under 0.25 acre, and 10 of them have been up to 10 acres in size. Only one of the fires was caused by lightning, while the remaining fires were either human-caused or unknown. At present, due to concerns for visitor safety and the proximity of adjacent homes, it is the policy of the park to suppress all fires.

The park's Eastern deciduous forests typically have a relatively low fuel load. But downed trees are prevalent in many areas of the park. Damage from wind and ice storms contribute to the fuel load. The oaks that dominate the park's forests are naturally fire resistant. Other tree species commonly found in the park, such as red maple, are very fire-sensitive and would have been eliminated if fires were common.

Wildlife

The Middle-Atlantic region has harbored a wide range of animal life, both terrestrial and marine, which has changed over the past millennia as the environment evolved. During and immediately after the greatest advance of the glaciers, cold-weather species such as caribou, elk, moose, mastodon, saber-toothed tiger, dire wolf, short-faced bear, cave bear, and tapir inhabited the area, only to retreat north or become extinct by 10,000 years ago. In more recent times, deer, rabbit, otter, beaver, raccoon, squirrel, opossum, wolf, fox, mountain lion, and bobcat have inhabited the forests, some more common in the uplands than the coastal plains. Some species, such as wolf and mountain lion, were affected by human settlement, opening a niche for other species such as coyote.

Bird populations have been affected less by changing climates than by human impacts. Turkey, geese, grouse, pigeons, gulls, and a variety of songbirds have inhabited the area for many millennia. As wetlands were developed into workable land, and fields returned to forest, certain species declined or were entirely eliminated from the region.

Deer and Small Mammals

White-tailed deer *(Odocoileus virginianus)* are abundant in the park. Other large faunal species such as coyote, black bear, and red fox are rarely observed. Common smaller mammals include red and gray squirrel, rabbit, skunk, and raccoon. Voles are numerous in the Wick orchard and herb garden, and cause much damage to the apple trees.

A feasibility study of a fertility-control program for white-tailed deer is currently underway (Underwood 1997). Phase I provided a population estimate of the white-tailed deer population at the Jockey Hollow unit of 60.5 deer per square kilometer (151.2 deer per square mile) in 1997, and can be compared to a 1985 estimate of 65.4 per square kilometer or (163.5 per square mile). It appears that the maximum sustainable population for this environment has been reached, with the exponential phase of population growth having occurred a decade or so ago.

Deer are abundant in the surrounding areas, and in the region as a whole. Lewis Morris County Park, adjacent to the Jockey Hollow, conducted deer control programs in 1996 and 1997. Deer spotlight counts show an approximate 40–50% lowering in the number of deer observed in Jockey Hollow since the initiation of the Lewis Morris hunt. These numbers correspond to estimates by Underwood of deer density in the Jockey Hollow unit in 1998 to be 30 deer per square kilometer.

Birds

Over 100 species of birds were documented during a recent bird census. Commonly found birds include the turkey vulture, red-tailed hawk, mourning dove, downy woodpecker, hairy woodpecker, Northern flicker, black-capped chickadee, white-breasted nuthatch, Northern mockingbird, yellow-rumped

warbler, scarlet tanager, chipping sparrow, song sparrow, common grackle, and American goldfinch.

Amphibians and Reptiles

A reptile and amphibian inventory was conducted by the Wildlife Conservation Society in 2000 as part of the NPS Inventory and Monitoring Program. A total of seven salamander species were found including Northern red salamander, Northern dusky salamander, Northern two-lined salamander, Eastern red-backed salamander, Northern slimy salamander, and red-spotted newt. A total of six frog species were found including bull frog, green frog, pickerel frog, wood frog, Eastern American toad, and gray tree frog. A total of five species of turtles were found including Eastern box turtle, Eastern painted turtle, snapping turtle, common musk turtle and wood turtle. Four species of snakes were found including Eastern garter snake, Northern ringnecked snake, Northern water snake, and Eastern milk snake.

The survey determined that the park's herpetofauna has noticeably declined, not only in species composition, but also in population sizes, when compared with past observations. There was also a noticeable decline in spring peeper and gray tree frogs observed on park property compared to previous surveys and those seen on nearby properties. The draft survey report states that there are several plausible causes for the discrepancies: an increased deer population, an invasive earthworm species, increases in invasive nonnative plants, localized poor water quality, outbreaks of a virus, or a decrease in marsh habitat in the park.

Fish

Fish found in the park's Jockey Hollow and New Jersey Brigade waterways include the blacknose dace, slimy sculpin, creek chub, brook trout, brown trout, and rainbow trout. Golden shiners are the only species found in Cat Swamp Pond. The brown and rainbow trout are considered invasive, nonnative species. The State of New Jersey lists the brook trout *(Salvenius fontinalis)* as a threatened species. The New Jersey Division of Fish, Game, and Wildlife has designated Indian Grove Brook and a segment of the Passaic River from its source to Route 202 as "Wild Trout Streams." This designation recognizes the presence of a viable wild trout population and regulates stocking and fishing. The State does not stock within the park.

The types of benthic fauna found in park waters indicate a typical stony or hard-bottom habitat supporting a number of pollution-intolerant indicator species of mayflies, stoneflies, and caddis flies. A thorough evaluation of community structure indicates that all streams within the park support healthy, diverse, and abundant macroinvertebrate communities.

Pests

Following NPS policy, the park allows native pests to function unimpeded, except as noted below. Many fungi, insects, rodents, disease organisms, and other organisms that may be perceived as pests are, in fact, native organisms existing under natural conditions and are natural elements of the ecosystem. Also, native pests that were evident in pesticide-free times are traditional elements in the park's cultural settings. The park may control native pests to:

- Conserve threatened, rare, or endangered species, or unique specimens or communities
- Preserve, maintain, or restore the historical integrity of cultural resources
- Conserve and protect plants, animals, and facilities in developed areas
- Prevent outbreaks of a pest from invading uninfested areas outside the park
- Manage a human health hazard when advised to do so by the U.S. Public Health Service

Deer ticks are common in the park, and there is considerable public concern about their role in the transmission of Lyme disease. Studies in the 1990s noticed that ticks preferred areas of higher moisture, such as in leaf litter. They tended to be found in lesser abundance along trails. A display in the Jockey Hollow visitor center presents this information to visitors and suggests staying on the trail. Brochures

on Lyme disease from the Center for Disease Control are regularly available at the visitor center.

In 1999 there was intense concern about mosquitoes transmitting West Nile viral encephalitis in the region. Two dead crows were found at the Washington's Headquarters unit in 2000. They were tested and one was found to be infected. The Morris County Mosquito Commission was invited to inspect the park. The commission declined, noting that the park possessed little wet habitat that would be appropriate to monitor. The park is part of an emergency response plan developed by local agencies to confront a major outbreak.

At various times in the past, gypsy moths have infested portions of the park woodlands. In partnership with the U.S. Forest Service, aerial and ground surveys for gypsy moths were conducted in the 1990s. Ground checks are no longer conducted, presumably due to the absence of moths. Aerial surveying continues. The park treats important specimen trees to control damage, such as hemlocks for woolly adelgid, *Adelges tsugae,* but otherwise views such occurrences as part of a natural cycle.

VI. SPECIES OF SPECIAL CONCERN

Several species that may be expected to utilize areas around or within the park are on the New Jersey State list or the federal list of threatened and endangered species. The species include the following:

- The bog turtle *(Clemmys muhlenbergii),* federally listed (threatened), is known to occur within 1.5 miles of the park. These small, semi-aquatic turtles consume a varied diet of insects, snails, worms, seed, and carrion. They inhabit open, unpolluted emergent and scrub/shrub wetlands such as shallow spring-fed fens, sphagnum bogs, swamps, marshy meadows, and wet pastures. National Wetland Survey maps suggest that no bog turtle habitat is present within the park; however, more detailed survey may determine otherwise.
- The Indiana bat *(Myotis sodalis),* federally listed (endangered), is known to inhabit Morris County. The closest known hibernacula are located within approximately 10 miles of the park. Indiana bats hibernate in caves and abandoned mine shafts from October through April. Between April and August, they inhabit floodplains, riparian and upland forests, roosting under loose tree bark during the day, and foraging for flying insects in and around the tree canopy at night. The park's large expanse of contiguous forested upland, traversed by forested wetland stream corridors, is highly suitable habitat for roosting and foraging bats. From late August to mid-November, Indiana bats congregate in the vicinity of their hibernacula, building up fat reserves for hibernation. Protection of Indiana bats during all phases of their life cycle is essential to preserving this species.
- Bald eagles *(Haliaeetus leucocephalus),* federally listed (endangered), are known to occasionally occur within the vicinity of the park.
- The wood turtle *(Clemmys insculpta),* state listed (threatened), has been observed on several occasions in the park around the Passaic River within the last few years.
- The cerulean warbler *(Dendroica cerulea),* federally listed as Category 2, has been occasionally observed in the park.
- The Cooper's hawk *(Accipter cooperi),* state listed (threatened), nested in the park in 1995.

Several other bird species have the potential to occur in the park's fields. None are listed federally, but all are at some level of state concern. State endangered species are: upland sandpiper *(Batramia longicauda),* Northern harrier *(Circus cyaneus),* and sedge wren *(Cistothorus platensis).* State threatened species are: grasshopper sparrow *(Ammodramus savannarum),* savannah sparrow *(Passerculus sandwichensis),* and bobolink *(Dolichonyx oryzivorous).*

State of New Jersey threatened plants species sighted at the park include rattlesnake plantain *(Goodyera repens),* twinleaf *(Jeffersonia diphylla),* slender pinweed *(Lechea tenuifolia),* strict blue-eyed grass *(Sisyrinchium montanum),* and oak fern

(Gymnocapium dryopteris). A recent study conducted by Rutgers University did not verify the presence of these state listed species in the park.

VII. AIR QUALITY

Morristown NHP is located approximately 30 miles from New York City, in a densely populated region. High levels of ozone are frequent during the summer months. The ambient air quality standard for the park is designated as Class 2, and allows moderate increases in air pollution. For comparison, Class 1 represents the highest standard and permits no new sources. Although air quality elements are measured in Chester, nearly 5 miles from the Jockey Hollow unit, it is suspected that pollutants, particularly from non-park sources, may be affecting park resources. The levels of carbon monoxides, nitrogen oxides, hydrocarbons, and ozone are particular areas of concern.

The unit of the park suffering the most severe air quality is Washington's Headquarters, which has Interstate-287 forming its western boundary. Historic structures, vegetative and other natural resources, and employee health may be adversely affected by air pollution.

Vegetation has been cleared from the Fort Nonsense unit of the park for the purpose of creating historic vistas. Poor visibility at the overlook during certain weather conditions may be related to regional haze, automobile and truck emissions, and industrial sources.

Acid rain deposition is suspected to contribute to the changes in the composition and structure of the forested areas in the Jockey Hollow and the New Jersey Brigade units; however, this has not been scientifically established.

An air quality monitoring site for the State of New Jersey is located in the center of Morristown; however, there is a lack of similarity between the park and the Morristown sample location. Unfortunately, no other information on air quality relevant to the park exists.

VIII. SOUND

The urban and suburban setting presents substantial intrusive sounds to park visitors and staff. Yet the prevailing experience at all but the Washington's Headquarters unit is a peaceful one. The two chief sources of elevated sound levels are heavy vehicular traffic, and aircraft. On the grounds of the Washington's Headquarters unit, traffic noise from adjacent Interstate-287 dominates the visitor experience. Noise levels greatly diminish visitor enjoyment of the attractive historic setting, and prevents park staff from giving outdoor interpretive talks. Noise levels have been estimated at between 70 and 75 decibels, a range common in areas along highways. EPA studies indicate that exposure to such conditions over extended periods of time may cause damage to human hearing. These elevated noise levels may also impact wildlife at the unit.

At the Jockey Hollow and New Jersey Brigade units, the natural forest soundscape is predominantly quiet, representing an important resource often remarked on by park visitors. This is occasionally broken by sounds of other visitors, automobiles slowly touring the park, and distant traffic. Airplane overflights are becoming more common, with the majority of aircraft approaching Newark International Airport or Morristown Airport, a general aviation airport. Both Newark and Morristown airports are planning to increase their capacities. Baseline data from FAA monitoring studies at the Jockey Hollow visitor center (2001 and 2002) are expected to be available shortly.

No baseline data exist for the natural ambient sound levels in any park unit, but the presence of some man-made sounds is not inconsistent with the park's mission. Sounds from activities such as mowing fields, demonstrating the firing of muskets, soldiers drilling, or hut construction are all appropriate to the park's historic character and mission. And since its inauguration, the park has permitted automobiles on the loop road.

VISITOR EXPERIENCE

I. VISITOR ACTIVITIES AND SERVICES

The park is open daily, year-round. Only the buildings close for Thanksgiving, Christmas, and New Year's Day. The grounds and most comfort stations are open from 9 a.m. to dusk. An entrance fee is collected at the reception desks inside the museum and at the Jockey Hollow visitor center.

Characteristics of Visitation

Visitors are divided, in general, between those who visit because of history and those looking for recreation. They participate in a wide range of activities and utilize the many park services at the different units. On average, the park receives approximately 530,000 visitors annually.

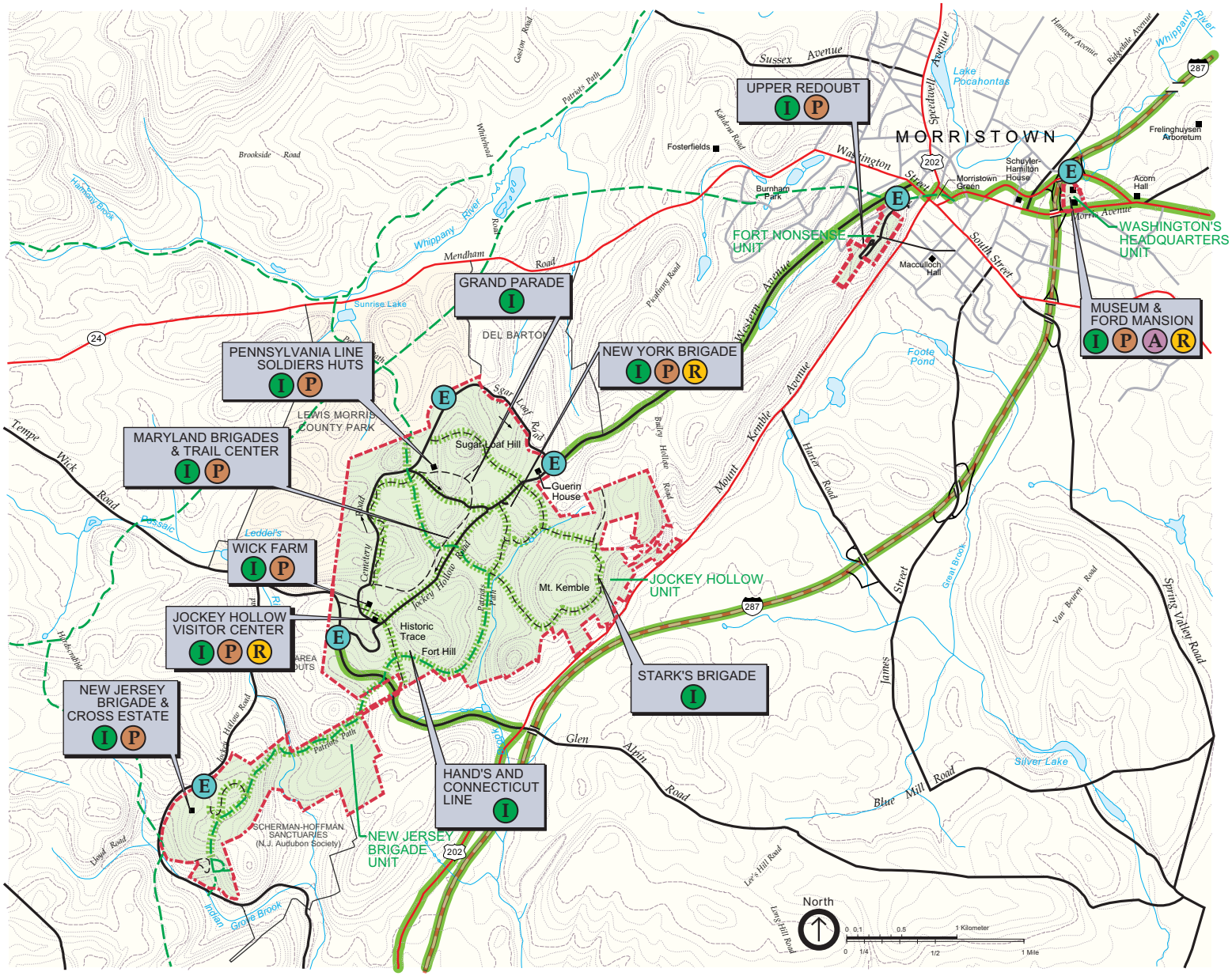
Those interested in history include serious scholars, college classes, fourth–sixth-grade student groups from northern New Jersey, historic house aficionados, and reenactment groups. At Washington's Headquarters they may take self-guided visits of the museum with exhibits on the Revolutionary War in Morristown, period weapons, and objects of 18th-century life. Visitors can view a short film in the 100-seat museum auditorium. The building also has restrooms and a small bookstore managed by Eastern National. Visitors may also perform research in the museum library, the location of several important collections and archives. The research facilities are open only limited hours and require an appointment. Approximately 50 research visits are made to the library annually. The Washington Association uses this facility for its monthly meetings. Beyond the museum, visitors may take a 45-minute ranger-led interpretive tour of the Ford Mansion, or walk the landscaped grounds.

Visitors to Jockey Hollow tend to begin at the visitor center, being oriented to the unit by a large mural that depicts the encampment landscape during the winter of 1780. Visitors may also take in a short film and an exhibit portraying a cross-section of a soldier's hut, and visit a small bookstore. These exhibits are of critical importance because as the forest has returned, visitors have difficulty understanding the scale and scope of military activities that took place in Jockey Hollow. Guests leave the visitor center and walk or drive the gently rolling 3-mile loop road in Jockey Hollow, stopping at wayside markers, the Wick Farm, and five hut replicas at the Pennsylvania Line—the location of annual reenactments of the encampment. A network of unpaved trails intersects the road. The interpretive and educational program is focused at the Wick House and garden, which can be toured independently. Restrooms are available at the visitor center and near the park's Western Avenue gate. Overall, the visitor experience in the historic landscape is peaceful, offering moments of solitude and opportunity to reflect on historic events.

The New Jersey Brigade unit contains interpretive markers of the encampment. Rough outlines of several huts, with their hearth stones loosely refitted, lie sheltered below the forest canopy. This area gives visitors one of the best chances to imagine the soldier's experience. Visitors may access the area from a trailhead parking area in the Cross Estate, or by hiking the Patriots Path from Jockey Hollow.

Visitors to Fort Nonsense may observe a simple stone outline of the earthen fortification on the hilltop and gain an appreciation for Morristown's strategic setting from vistas overlooking the area. The vistas have grown narrower over time but remain compelling. On September 11, 2001 a large crowd formed on the hilltop, watching the fires in the towers of the World Trade Center. A series of wayside exhibits, a cannon, and a stone monument further communicate the history of the site. Narrow trails climb to the hilltop.

Increasing numbers of visitors come to the park for recreational purposes, utilizing park roads and trails, particularly in the Jockey Hollow and New Jersey Brigade units, for walking (often with young children and dogs), jogging, and bicycling. Modest numbers of visitors come to the park to ride horses



VISITOR EXPERIENCE: FACILITIES

Figure 14

Legend

- I — Interpretive Facilities & Sites
- P — Parking
- R — Restrooms
- E — Entrances
- A — Archive
- Principal Trails
- Major Roads



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and ski the trails and roads. Recreational visitors are primarily from the local area and arrive by car or bicycle. They may park at the visitor center or in the small satellite lots along the loop road. A small parking lot on Jockey Hollow Road serves as a trail center and provides central access to the park's 27 miles of trails. A small parking area adjacent to the New York Brigade site serves as an informal staging area for horseback riding. The trails offer visitors solitude, contact with nature, and scenic views. Several routes have been designed and marked. A pamphlet-sized map of these routes is available. Some visitors make use of the park's links to longer trails like the Patriots Path that extend beyond park boundaries. All park trails are closed to motorized vehicles and bicycles.

The park's natural environment attracts visitors looking for solitude, early evidence of springtime, and colorful forest displays in the autumn. Some areas are used for informal picnics, and Fort Nonsense is commonly used as a pleasant spot to eat lunch. The gardens at the Cross Estate are open to visitors, and are tended by members of the New Jersey Garden Club. Except for special events, the remainder of the estate is not open to the public.

The steadily rising interest in active recreation threatens to conflict with other park uses. Concern for maintaining a peaceful atmosphere so valued by the more traditional users—and referenced in the park's authorizing legislation—has led management to deny special-use permits for competitive athletic events in the park, and prohibit mountain biking on trails. Skateboarding, roller-blading, and similar sports are growing activities, and pose similar issues to mountain biking, but are not prohibited.

Additionally, park visitors:

- tend to consist of small family groups living within 100 miles of the park and returning home at day's end;
- include both Boy and Girl Scout groups, who visit when camped in Lewis Morris County Park;
- include bus groups who stop for very brief visits;
- include new corporate employees being oriented to the area;

Average Visits (1998–2000)

Month	Washington's Headquarters	Jockey Hollow	Fort Nonsense	New Jersey Brigade (incl. the Cross Estate)	Total
January	6,912	62,689	5,996	4,369	79,966
February	9,689	84,092	9,246	4,629	107,656
March	7,914	71,385	10,046	9,456	98,801
April	11,231	114,128	13,147	10,802	149,308
May	7,344	115,571	13,168	10,516	146,599
June	7,537	129,341	15,388	9,875	162,141
July	10,896	129,389	13,017	8,080	161,382
August	8,672	133,048	14,653	6,506	162,879
September	6,391	128,250	13,856	4,663	153,160
October	6,348	148,849	8,111	6,800	170,108
November	5,459	106,862	10,710	4,631	127,662
December	6,534	55,915	4,911	3,434	70,794
Total	31,642	426,506	44,083	27,920	530,152
% of Total	6.0%	80.4%	8.3%	5.3%	100.0%

- attend special events in the park, including encampments, "walk-a-thons," weddings, and seasonal celebrations sponsored by partners; and
- include few minorities and inner-city residents.

Statistics

Over the past five years, visitation at Morristown has averaged 526,867 annually. Visitation is fairly evenly distributed across the year. Jockey Hollow is the exception. There, visitation peaks during October (foliage season) and drops off substantially in midwinter. Jockey Hollow also receives the most visitors (426,506 yearly from 1998 through 2000) and accounts for approximately 80% of all park visits. Based on observations by park staff, the majority of these visitors come for recreational purposes not directly related to the park's history.

Visitation is roughly equivalent among the other three units. It should be noted that lower visitor counts at Washington's Headquarters reflect the park's temporary reduction in school field trips as it introduces new curriculum-based programs.

Amounts are calculated from traffic counters in Jockey Hollow, Fort Nonsense, and the Cross Estate, and head counts at Washington's Headquarters. These figures represent visits, not visitors, since visitors tend to appear at more than one unit.

Shuttle

The park's 1975 interpretive prospectus and 1976 master plan determined that interpretation and visitation in Jockey Hollow would revolve around a shuttle bus system. Much of the interpretive program was constructed, including the loop road, the comfort station at the Western Avenue gate, and many waysides were positioned for viewing from within vehicles. However, the shuttle buses were never purchased. Without the unifying interpretive device a shuttle bus system was intended to provide, visitors perceive the park's aesthetic qualities more readily than its historical ones.

Special Events

Several special events are notable. The park's spring and fall Revolutionary War encampments generally draw 450–600 visitors over a weekend. The annual proclamation of the Declaration of Independence at the Washington's Headquarters unit has consistently been well attended (250–400), despite rain. Other events include celebrations of George Washington's Birthday, Saint Patrick's Day, and a Holly Walk in December.

II. INTERPRETATION AND EDUCATION

The educational and interpretive programs focus on four themes outlined in the park's 1975 interpretive prospectus:

- Interpret military daily life, training, organization, supply, equipment, morale, housing, and discipline of Continental Armies during the winters of 1777 and 1779–80 at Fort Nonsense and at Jockey Hollow.
- Interpret the role of George Washington as Commander-in-Chief during 1777 and 1779–80 and the personal qualities that made him a great military leader, politician, and diplomat.
- Interpret life in Morristown as a typical village caught up in the American Revolution; its relationship to the Continental Army encamped on its doorstep; and domestic life in the 18th century.
- Interpret pre-1777 and post-1780 history, stories, and impacts of the Revolutionary War in Morristown, New Jersey, in 1779–80.

The park seeks to accomplish these through a well-developed program of printed materials, exhibits, films, tours, demonstrations, and living-history activities. Costumed and uniformed interpreters engage visitors from their posts at the museum, the Jockey Hollow visitor center, and the Wick House. Typical demonstrations include 18th-century woodcarving, spinning, weaving, herb gardening, and hut-building. Interpreters also give talks at venues outside the park. Educational staff operates the highly subscribed program for school

groups. However, many of the waysides are now dated or worn, and there is ongoing debate about the correctness and significance of several reconstructed interpretive devices like the Pennsylvania Line log huts. Several exhibits in park visitor areas, such as the films, are in need of rehabilitation.

Untold Stories

As part of an NPS initiative, the park has begun developing programs to address untold stories, or themes not previously interpreted. Examples of these themes include ethnic diversity among the soldiers; how Morristown benefited from CCC and PWA labor in the 1930s; and the role of the Washington Association prior to the park's establishment in 1933.

"Parks as Classrooms" Program

The park's activities in this NPS program are focused on helping to meet the curricular needs of fourth- and fifth-grade students in New Jersey. The first unit, titled *From Farming Village to Log House City,* introduces students to the histories of Morristown's encampments and to the effects that they had on the Continental Army's officers and soldiers, as well as the town's civilians. It aims to convey the great costs, personal hardships, and organizational obstacles associated with building and sustaining an army and winning American independence. Pre-visit activities place Morristown in the context of the American Revolution. Students use geography and locate the site for the winter encampment and lay out the camp. They study one of the historic figures of Morristown and experience the impact of the war on one individual. Students arrive at Jockey Hollow as one of the historic figures of Morristown, taking the role of a soldier, officer, or civilian. At the park they engage in a series of ranger-led activities, exploring various aspects of the site associated with historic figures. A series of post-visit activities complete the unit. The park provides a kit of materials including a teacher's guide, map, timeline poster, and cards from NPS Revolutionary War parks. A second unit is planned for Washington's Headquarters.

III. PARKING, CIRCULATION, AND ACCESS

Regional Context

The closest major airport is Newark International Airport, located approximately 20 miles southeast. Nearby general aviation airports include Morristown and Teterborough. Several highways, including I-287, and State Routes 202 and 24 serve the area. New Jersey Transit's Morris & Essex rail line connects Morristown with Newark and Penn Station in Manhattan.

Vehicular Circulation and Parking

Once in the area, new visitors face a very confusing network of roads. There are difficulties in getting to the units, and in traveling between the units. High traffic speeds, congestion, and inadequate directional signage combine to create a profound sense of disorientation and frustration.

Access to the Washington's Headquarters unit is via three-lane, one-way Morris Avenue which takes visitors past the front of the Ford Mansion, through a residential neighborhood. The road leads visitors to a left turn that merges with three other lanes of high-speed traffic on Lafayette Avenue. Visitors must turn sharply left onto Washington Place, followed by a quick right into the parking lot. Several serious accidents have occurred at the intersection of Lafayette Avenue and Washington Place.

The main parking area (approximately 50 spaces, 6 handicapped, 6 bus) is spacious and well designed. However, the museum is located above the parking lot, is screened by trees, and is flooded by traffic noise from I-287. This tends to further diminish the sense of arrival. To exit the unit, visitors are again confronted with the same one-way loop whether they are headed to another park unit or to nearby highways.

The Fort Nonsense unit is reached from the Morristown Green by making a series of turns onto Washington Street, Western Avenue, and Ann Street. The paved two-lane park road leads from Ann Street to the hilltop where there are 12 parking places and a narrow turnaround.

The Jockey Hollow unit is most commonly reached from I-287. Visitors exit the highway and take local two-lane roads (Route 202 and Tempe Wick Road) for about 3 miles to arrive at the well-marked main entrance. Parking (112 spaces, including bus and handicapped spaces) is available at the visitor center. Entry to the paved loop road is from the parking lot. The road provides access to most of the features in the park, each with small satellite parking areas. The road also connects several staff residences. An extension to the loop, Sugar Loaf Road, connects the park to Lewis Morris County Park and the Western Avenue gate. A narrow, winding portion of Sugar Loaf Road receives fairly heavy traffic from the Delbarton School. This traffic includes school buses, service vehicles, and faculty and student vehicles. The segment of Jockey Hollow Road between the Western Avenue gate and Tempe Wick Road receives substantial non-park through traffic, particularly commuters avoiding congestion on other area roads.

The New Jersey Brigade unit can be reached from I-287 in much the same way as Jockey Hollow. Access is from a rural section of Jockey Hollow Road. Parking for visitors (up to 30 spaces) and park staff (8 spaces) is at the Cross Estate. Nearby are several park housing units, each with developed parking areas.

The difficulties associated with local travel appear to discourage new visitors from reaching more than one unit. Given the interrelated nature of the units, visitors who only stop at one unit may not gain a full understanding of Morristown's place in history, or appreciate the range of resources protected by the park.

Pedestrians

At the Washington's Headquarters unit, asphalt and concrete paths connect the visitor parking lot, museum, and Ford Mansion. The paths from the visitor parking lot to the museum are steep and wind through a small patch of trees, perhaps intending to provide some space for visitors to decompress from their drive to the park. They drop visitors at a small landing, adjacent to the staff parking lot, at what was originally the back door of the museum, now reconfigured as the main entry. The whole of the arrival sequence is not very satisfactory, particularly as noise levels are high (due to adjacent highway traffic) and there is a very poor sense of orientation (there are no glimpses of the Ford Mansion). The patch of trees, intended to reflect the forest of Jockey Hollow, is perhaps too small to convey that idea. Visitors more likely perceive the area as ill-maintained.

From the small landing, visitors may either enter the building or take an uphill path to the Ford Mansion around the west side of the museum, passing within yards of I-287. Other paths connect the museum to the Ford Mansion. These curve circuitously from the museum's original main entry to the front of the Ford Mansion. From these paths, the formal, symmetrical relationship between the museum and the mansion, a principal objective of the NPS circa 1935 plan for the site, is not part of the visitor's experience.

The town maintains a sidewalk along Morris Avenue, in front of the Ford Mansion. It connects to the historic semicircular brick path that approaches the mansion. The sidewalk also leads into Morristown center. However, the route is quite difficult. To reach the unit on foot, from the train station for example, requires visitors to cross numerous signalized intersections and at least one non-signalized highway on-ramp. Most paths are in need of repair.

Apart from the trails described earlier, there are limited facilities for pedestrians at the other, more rural units. Fort Nonsense has a short interpretive loop at the hilltop. Pedestrian circulation at the New Jersey Brigade unit is restricted to trails. The improved walkways in the Jockey Hollow unit are at the visitor center and Wick Farm complex. Wide paths connect the visitor center with the parking lot and the Mendham–Elizabethtown trace. Sidewalks bring visitors to the Wick House from the small

adjacent parking lot. In addition to the trails and minor walks, pedestrians make extensive use of the loop road.

Buses

All paved park roads can accommodate bus traffic, and most units have provisions for bus parking. Washington's Headquarters and Jockey Hollow both have dedicated parking areas for about six buses each. Most buses can negotiate the turnaround at the top of Fort Nonsense; however, no parking is available. Buses can access the Cross Estate in the New Jersey Brigade unit and park adjacent to the road or in an open field.

IV. AMERICANS WITH DISABILITIES ACT COMPLIANCE

Outdoor exhibits, the Jockey Hollow visitor center, the Wick House, and the museum at Washington's Headquarters are accessible and have conveniently located handicapped parking. The two-story Ford Mansion has limited accessibility. The remaining park facilities, including trails, are not generally accessible.

V. CARRYING CAPACITY

In general, there are few issues related to carrying capacity as park facilities are adequate for current visitation. Most visitors judge the present visitor experience in the park to be satisfactory; however, there are several concerns, as follow:

- Historic roads in Jockey Hollow: Increases in automobile traffic may exceed the road's capacity to provide an enjoyable visitor experience for pedestrians and bicyclists, the predominant visitor group. Proposed wireless communication facilities and adjacent development could introduce numerous vehicles to the historic road network. Conflicts among modes of travel could become a safety issue as well as diminish the visitor experience. Similar conflicts could develop on certain park trails should their use for horseback-riding increase. A carrying capacity study of trails for horseback-riding should also address potential natural resource impacts. These could further detract from the visitor experience. Furthermore, development of the Saint Mary's Abbey/ Delbarton property, including a retirement facility and athletic fields, could vastly increase vehicular use of the historic road. Mixing resident, service, and emergency medical vehicles, with the current levels of bicyclists, park visitors in private automobiles, school buses (Delbarton School), and county residents looking to cut through to Route 24, could exceed the carrying capacity (and service capacity) of the road.
- Historic structures: Should visitation increase markedly, wait-time and crowding at the Ford Mansion and Wick House could diminish the quality of the visitor experience. Furthermore, while current use levels do not present problems, the safe occupant loads for the buildings have not been determined. Visitation is controlled at the Ford Mansion with scheduled tours limited in size to no more than 35 persons. On occasion visitors have to wait for up to an hour to visit the Ford Mansion. At the Wick House, visitors tend to self-regulate occupancy of this smaller space to between 5 and 15 persons. Waits are generally shorter. In addition to concern for the two buildings' structural integrity, park staff have expressed concern for protecting exhibits and furnishings. Similarly, the park has no indoor facilities to accommodate large groups, particularly school groups, participating in the park's education program. At present, such groups crowd into common space in the Jockey Hollow visitor center, or gather outdoors (in good weather) but encounter noisy conditions at the museum, or in the auditorium—which must then be closed to other visitors. Under these conditions certain interpretive activities are not possible and the visitor experience may become unsatisfactory.

PARK OPERATIONS

I. ADMINISTRATION AND OPERATIONS

The park identifies 38 positions in 7 divisions on its organizational chart as necessary to operate

the park. The number of full-time-equivalent (FTE) positions is 34. As of November 2001, the park employed 27 professionals in various fields. Ten positions are currently vacant. In fiscal year 2001, the park's operational budget was approximately $2,005,000.

Divisions, Key Positions, and Facilities

Management

Superintendent: Supervises seven division chiefs and key staff responsible for the day-to-day operation of the park. Provides overall direction for staff in the administration, maintenance, rehabilitation, protection, interpretation, and development of the park. Provides direction for short- and long-range planning efforts. Represents the park and Regional Director, maintaining liaison with private, state, and federal agencies, for the purpose of protecting and accomplishing the missions of the park and NPS.

Management Support Advisor: Provides direct assistance to the superintendent in park management and operation. Serves as the primary coordinator and manager of reports, coordinating park compliance with the Government Performance Results Act (GPRA), Performance Management and Data System (PMDS), Performance Management Information System (PMIS), Accountability Core Team (ACT), partnership services, youth services, internships and volunteer services, and Eastern National. Performs other duties related to analysis of data, and coordination and dissemination of information. Assists with the development of new programs that help to protect the park and accomplish its mission.

Administrative

Administrative Officer: Responsibilities include formulating the park's budget; and executing the budget, especially as it relates to tracking and balancing accounts against the total budget. In addition, the AO is responsible for the management and oversight of the collection of donated funds and fees. This officer also supervises an administrative staff, and advises division chiefs on filling personnel vacancies. Responsibilities also include pay administration, payroll, timekeeping, purchasing of goods and services, property management, tracking and logging equipment, assistance with contract agreements, and coordinating computing and telecommunication services.

Administrative operations are located in the museum library wing, with ancillary offices and meeting spaces at the Cross Estate, utility area, and Jockey Hollow visitor center. At present, an experiment to share administrative services with Edison NHS, located some 20 miles away, is being attempted.

Resource and Visitor Protection

Chief of Resource and Visitor Protection: Manages and plans complex programs in resource and visitor protection, and visitor use management through law enforcement park rangers. Serves as an advisor to the superintendent on matters involving security, liaison with local law enforcement offices, boundary protection, and land acquisition. Responsible for all matters pertaining to security, traffic control, crowd control, special events, and special uses in the park. Ensures that law enforcement park rangers provide information and general interpretation to the general public. Serves as the coordinator for firearms, health and fitness, wildland fire, and annual fire training. Collateral duties include coordinating volunteers and trail program, managing the Student Conservation Association program, court liaison, and Central Violation Bureau liaison. Develops projects, budgets, recruits and hires to support the park.

Activities of the division and the percentage of staff time involved are as follow:

- Opening and closing park (16%)
- Patrolling (8%)
- Responding to incidents (7%)
- Reporting/administrative functions (10%)
- Training (6%)
- Collateral duties (20%)

- Other (30%). (This category includes annual and sick leave, and travel between park units.)

Typical issues facing the division include traffic-related incidents, illegal hunting, and vandalism. Traffic-related incidents include speeding violations, failure to comply with road signs, and vehicle equipment violations. Service incidents include all visitor assists (lost visitors, jump starts, keys locked in car), as well as escorts to the bank for fee deposits and assisting other local agencies with traffic accidents.

The park relies on local towns to provide additional law enforcement, and structural fire and EMS assistance when requested. The park does not have formal MOUs with any of the towns; however, concurrent jurisdiction allows local officers to maintain police authority within the park. The park does its best to assist other agencies when requested: providing assistance to Harding Township with traffic accidents outside the park on Tempe Wick Road, assisting Morris County Park police with incidents at Lewis Morris County Park, and assisting Morristown during July 4th events.

In general, staffing is inadequate; only one ranger is usually on duty at a time. Annual leave, sick leave, and training further reduce this level of staffing. Certain areas of the park, like Fort Nonsense, need to be patrolled at night on a regular basis due to problems with closure violations, drinking, etc. These types of "special patrols" are not generally possible. Most importantly, the November 2000 Visitor Management Resource Protection Assessment Program (VRAP) calculated that the park needs 10.80 Full Time Equivalent positions to run a proper program: twice the park's current level.

The division operates with the following facilities and equipment:

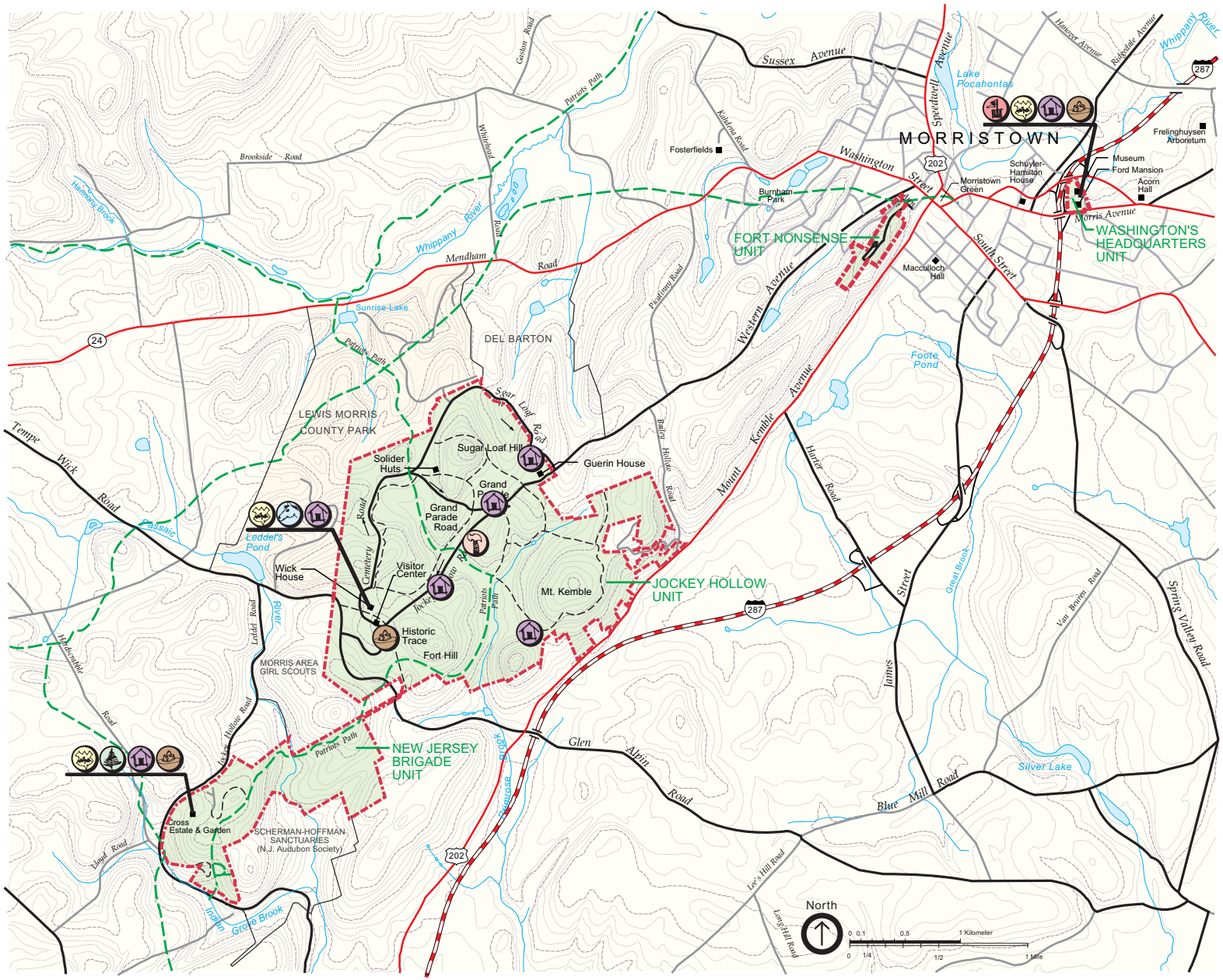
- Ranger station in the New Jersey Brigade unit, utilizing the former carriage house of the Cross Estate
- Auxiliary office in the Jockey Hollow Visitor Center where some equipment and supplies are stored
- Four patrol vehicles with radios linking to the park dispatcher, the Morris County Sheriff's Communication Center, and the Morris County Park Police
- Two horses kept at the Wick Farm

Facility and Maintenance

Chief of Facility Management: Responsible for the maintenance, rehabilitation, and upkeep of all roads, trails, grounds, structures, employee housing, buildings, and utilities on park land. Supervises a staff of laborers, carpenters, mechanics, and janitors. Develops plans and budgets; participates in project scoping, project management, and proposal development.

Typical activities of the division include providing custodial work for all buildings; restoration work to all historic structures (including carpentry, painting, HVAC, plumbing, and electrical); and routine maintenance for all other structures (visitor center, ranger station, utility area, housing units, and the Cross Estate). The division maintains all cultural landscapes (mowing turf areas, field mowing, tree removal and pruning); provides snow removal services; and performs preventive maintenance on all park vehicles and equipment. Approximately 80% of staff time is spent on working on structures, while 20% of staff time is spent on the cultural landscape. Approximately 80% of work is planned, and 20% is emergency work, often caused by adverse weather. Backlog maintenance work is being contracted, with mixed results.

The primary maintenance facility (utility area) is located in the Jockey Hollow unit. It consists of four concrete buildings and service yards. The buildings are used for warehousing, offices, and storing building materials and equipment. One building inadequately supports carpentry, painting, automotive and equipment work. Maintenance equipment



ADMINISTRATION AND OPERATIONS: FACILITIES

Figure 15

Legend

- Park Headquarters
- Utility Area (maintenance)
- Law Enforcement Offices
- Natural Resources Offices
- Horse Barn
- Staff Housing
- Interpretation Offices



MORRISTOWN
NATIONAL HISTORICAL PARK
NEW JERSEY
February 2003

National Park Service · Boston Support Office
U.S. Department of the Interior

SHAPINS ASSOCIATES

includes four trucks, a skid loader, a bucket loader, two Excel Hustlers, and a number of snow blowers and attachments for equipment.

Natural Resources

Biologist and Director of Natural Resource Operation: Directs the planning and implementation of the park's natural resource management program and performs a wide variety of technical, management, and procedural duties in natural and cultural resources management, including vegetation management (and restoration), wildlife management, integrated pest management, cultural landscape management, hazardous waste, water quality, and wetland monitoring; prescribed fire management; and compliance procedures. In cooperation with researchers, designs, develops tests, and implements scientific inventory and monitoring protocols for the long-term monitoring of natural resources. Coordinates natural resources program by other agencies and organizations on adjacent lands. Develops and submits projects that help the park meet its mission. Responsible for compliance with the National Environmental Policy Act, the National Historic Preservation Act, and other regulations. Coordinates GIS, integrated pest management program, and manages the Youth Conservation Corps program. The division is critically understaffed.

Cultural Resources

Chief of Cultural Resources: Responsible for carrying out policy and applying standards established to ensure preservation, systematic arrangement, accountability, proper storage, and accessibility of the large and complex collection of archival, cartographic, photographic, microfilm, rare books, and other historical documentary materials. Determines the objects that should be acquired to maintain a balanced collection. Arranges additions, loans, and makes proper disposal of items no longer needed. Cooperates with state and local organizations for special exhibits. Prepares guidelines, standards, and operating procedures governing the physical care, use, storage, and preservation of collections. Provides advice to the interpretative division for the replacement of original artifacts with reproductions for program use. Provides scholarly and historical reference and research services, including the preparation of written replies and finding aids, relating to the holdings and significance of the collections. Provides assistance to the superintendent in matters pertaining to museum expansion, preservation and rehabilitation of historic structures, the development of the park's general management plan, and the development of an administrative history of the park. A museum curator and other support staff are needed.

Interpretation, Education, and Fee Operation

Chief of Interpretation, Education, and Fee Operation: Responsible for program management, budget, and supervision of the year-round interpretative program through nine park rangers and park guides. Administers park-wide programs for interpretation, special interpretative events, and interpretative tours. Ensures that the park conducts routine dynamic living-history programs for both adults and children, and that staff members are conducting such programs consistent with the mission of the park. Prepares comprehensive planning documents, proposals, and reports as required by the NPS. Manages school-based and curriculum-based programs. Develops and expands such programs in a manner that fulfills the park's mission and satisfies New Jersey Core Content Standards in the area of history. Oversees the community outreach program in tourism councils, at planning board meetings, and in interpretive and historical programs and conferences. Ensures that fees are collected in accordance with the NPS Fee-demonstration program. Ensures that quality interaction with the visitors is occurring in fee collection, and that receipts of fees are balanced daily.

II. PARTNERSHIPS AND OUTREACH

The Washington Association of New Jersey

Stewards of the Ford Mansion from 1873 to 1933, the Washington Association of New Jersey was designated as the park's advisor in the 1933 legislation that established the park. Meeting at the park monthly, the WANJ has been of enormous assistance to the park. Recent WANJ activities include spon-

soring archeological research, hosting special commemorative events, and donating historic resources and collections. At present, the association is raising funds to complete the museum rehabilitation and enhance interpretation at Fort Nonsense.

Cooperative Agreements

The park has cooperative agreements for research and technical support with William Patterson and Rutgers Universities.

Special-Use Permits

The park's issuance of special-use permits is done in accordance with RM-53, Special Park Use Guidelines. In general, the park receives more requests for permits than it issues. Requests for weddings are most common. The park's policy on weddings is quite restrictive; there has only been one permit issued for a wedding since 1999. Other common requests are for bicycle races and walk-a-thons in Jockey Hollow, and business meetings and luncheons at the Cross Estate. Most requests for bike events or charitable walk-a-thons are denied, usually on the basis that the event would restrict public use and does not have a connection to the purpose for which the park was established.

Most permits for luncheons and business meetings have been issued to organizations that have a pre-established relationship with the park, such as the New Jersey Historical Garden Foundation, Great Swamp Watershed Association, Sojourners, and Boy Scouts.

Special-use permit requests involving rights-of-way for wireless communication towers are becoming more frequent, particularly in Jockey Hollow. These have the potential to cause serious environmental impact and damage to the visitor experience. A recent permit issued to conduct a test on the hill above Quarters #35 resulted in damage to two park areas. Another party has expressed interest in a site near the Stark's Brigade encampment area, one of the park's most scenic trails. At present, seven carriers are licensed in the Jockey Hollow area.

Other permits that are of great importance are those that affect normal park operations or have the potential for law enforcement concerns. For example, the Second Amendment Sisters rally in Jockey Hollow in May 2001 had the potential for counter-demonstrators. This caused the park to bring in additional law enforcement rangers from other parks and block off areas of the visitor center parking lot to normal traffic.

SOCIOECONOMIC ENVIRONMENT

I. INTRODUCTION

Morristown NHP is located in Morris and Somerset Counties. Both counties are located approximately 30–40 miles west of New York City, and are part of the largest metropolitan area in the nation. Morris County encompasses 469 square miles, while Somerset County encompasses 305 square miles.

II. DEMOGRAPHIC PROFILE

Population in Morris and Somerset Counties grew at a rate faster than the state of New Jersey, which grew 8.6% overall in the 1990s.

Morris County grew by 48,859 people in the 1990s to 470,212 counted in the 2000 Census, an 11.6% increase. Morris County's population is predominantly white (88.4%), with small, but increasing Asian and Hispanic populations. Population density is high, with 1,002.6 people per square mile in Morris County compared to the average of 964.7 people per square mile across the state.

The median household income in Morris County was $56,273 in 1990 (the most recent data available) compared to the statewide median household income of $40,927 in 1990. The median family income in Morris County was $62,749 in 1990 compared to the statewide median family income of $47,589 in 1990. The median non-family household income in Morris County was $31,859 in 1990 compared to the statewide median non-family household income of $22,287 in 1990.

Morris County is comprised of 39 municipalities and is a mixture of city and suburban environments with an increasingly diverse population, industry, and major office buildings.

The Town of Morristown is Morris County's largest population center with 18,544 residents.

The 1990s saw Somerset County grow by 57,211 people to 297,490 in 2000, an increase of 23.8%—nearly double the rate of Morris County. Somerset County's population is predominantly white (79.3%), with growing Black, Asian, and Hispanic populations. Population density is high, with 975.4 people per square mile in Somerset County compared to the state average of 964.7.

The median household income in Somerset County was $55,519 in 1990 (the most recent data available) compared to the statewide median household income of $40,927 in 1990. The median family income in Somerset County was $62,255 in 1990 compared to the statewide median family income of $47,589 in 1990. The median non-family household income in Somerset County was $33,472 in 1990 compared to the statewide median non-family household income of $22,287 in 1990.

Somerset County is comprised of 21 municipalities and contains urban and suburban neighborhoods and limited rural land.

III. ECONOMY

The economy of Morris County includes pharmaceuticals, electrical machinery and equipment, chemicals, scientific and controlling instruments, stone, rubber, and plastic products, printing, publishing, and fabricated metal products.

The economy of Somerset County includes services, manufacturing, retail, trade, finance, insurance, real estate, communications, utilities, wholesale trade, transportation, construction, agriculture, and mining.

Large numbers of residents in both counties commute to employment centers outside of the area, including New York City and Newark.

Tourism is a significant sector of the Morris County (39 municipalities) economy. In 1999, travel and tourism were responsible for $1.4 billion in expenditures in the county: $493 million at restaurants; $396 million at retail stores; $220 million for car rentals; $178 million for lodging; $102 million for recreation; $15 million for local transportation. The tourism sector in Morris County in 1999 accounted for 39,000 jobs, $907 million in payroll, $172 million in state taxes, and $91 million in local taxes. Morris County has 33 hotels, motels, and bed-and-breakfasts, with a total of 5,134 rooms.

According to the "Historic Morris Visitors Center, Inc. Heritage Tourism Assessment" (2000), an estimated one million overnight visitors experienced historic Morristown, 2% of New Jersey's total tourism market. Morristown NHP is the leading heritage attraction in Morris County. The Historic Morris Visitors Center, Inc., which serves all of Morris County, uses the park as a centerpiece in marketing heritage tourism in Morris County.

Economic Impact of Visitation

Between 1998 and 2001, an annual average of 530,000 visitors came to Morristown NHP. The park's museum and Ford Mansion attracted 32,000 visitors. Approximately 498,000 visitors entered other units of the park for recreational purposes. Through employing the NPS's Money Generation Model 2, it is apparent that there are specific economic impacts generated by Morristown NHP. Between 1998 and 2001, visitors to the museum spent an estimated annual average of $893,600 in the surrounding community for meals, rooms, shopping, and services. The breakout of

expenditures by categories of visitor follows in the table below.

The 498,000 visitors who did not visit the museum were mostly local residents coming for a ride or walk through the park. Most of these visitors would have no net economic impact on the community. Nevertheless, a certain proportion of the 498,000 visitors would be in the area as tourists, and would make some expenditures. Since Morristown NHP has not surveyed visitors for their average expenditures, it is difficult to estimate their economic impact, although there is a beneficial impact of some amount.

The expenditures of visitors to the museum generated 16 jobs in the local tourism industry and led to an additional 9 jobs supplying products and services to tourism businesses. The total economic impact of direct and indirect spending was $1,233,200, and personal income was $330,600. This does not include the impact from expenditures of those visiting other units of the park.

IV. DEVELOPMENT TRENDS

The development trends in Morris and Somerset Counties roughly reflect the population fluctuations and economic conditions nationwide. In 1990 Morris County reported a total of 798 building permits, while Somerset County reported a total of 1,273 building permits. In 2000, Morris County reported 2,684 building permits, while Somerset County reported 2,282 building permits.

In 1990 Morris County had a housing vacancy rate of 6.6%, while Somerset County had a housing vacancy rate of 7.9%. In 2000 Morris County had a housing vacancy rate of 3.5%, while Somerset County had a housing vacancy rate of 3.8%. In 1990 Morris County had 155,745 total housing units, while Somerset County had 92,653 total housing units. In 2000 Morris County had 174,379 total housing units, a 10.7% increase, while Somerset County had 112,023 total housing units, a 17.3% increase.

V. ADJACENT LANDS

The Washington's Headquarters and Fort Nonsense units are located within the town of Morristown. Adjacent lands, already densely developed, are in several cases being redeveloped to still greater densities. These projects include the redevelopment of the nearby Washington School site for condominiums, a mixed-use "Transit Village" on lands owned by New Jersey Transit adjacent to the station, and construction of additional housing units on hillside lots that back up to Fort Nonsense.

The Jockey Hollow and New Jersey Brigade units, however, are located in a more rural area, which for the last several decades has been experiencing a rapid population increase facilitated by the completion of new highways and improved access to New York City. Changing land use patterns, associated with sprawl, are dramatically changing the character of the area. The rolling hills, intersected by streams, valleys, and wetlands, were until recently either

Average Annual Visitor Expenditures (1998–2001)

Visitor Type	# Visitors	# Parties	Expend/Party/Day	Expenditures
Overnight (20%)	6,400	3,200	$179	$572,800
Daytrippers (55%)	17,600	8,800	$31	272,800
Students (25%)	8,000	8,000	$6	48,000
Total	32,000			$893,600

farmed or covered with mixed hardwood forests. At present, the prevailing character is of an affluent suburb with single-family residential development on large lots (2 to 5 acres). Numerous office parks, other commercial establishments, and expanded recreational facilities, such as golf courses, are connected via a heavily traveled road network. Accompanying these land uses are eight FAA-approved wireless carriers. There is increasing pressure on the park to provide sites for communication towers.

As in Morristown, several large-scale development projects loom on the park's Jockey Hollow boundary. These projects include development of a 500-bed retirement community adjacent to Sugar Loaf Road, a sports center across the street from the Guerin farmhouse, and an expanded and upgraded, all-weather Girl Scouts camp on a hilltop overlooking Tempe Wick Road.

Real estate costs continue to increase throughout the area. Small lots with small homes off Route 202 often sell for prices above $500,000. And the few large parcels remaining, such as the Saint Mary's Abbey/Delbarton School property, are guarded for their potential to support large, profitable development.

As the region has grown, noise from aircraft frequently intrudes on the visitor experience. Newark International and Morristown airports are the two busiest airports in New Jersey. Both continue to expand.

VI. LAND CONSERVATION

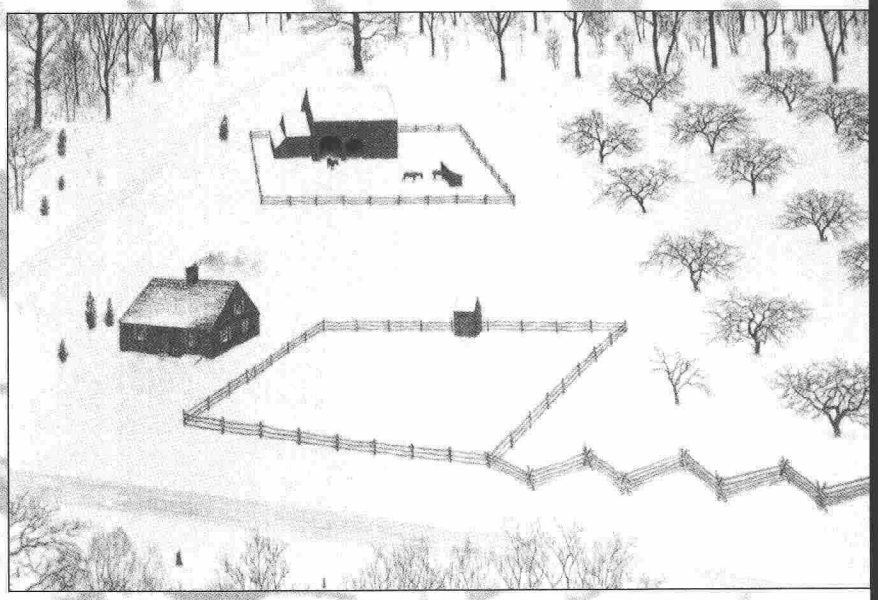
Counter to this trend, advocacy for land conservation runs strong. Several long-standing organizations, such as the Great Swamp Watershed Association, are joined by newer groups like the Jockey Hollow Neighborhood Association in an effort to protect open space, environmental quality, and the remaining rural character. Morris County has invested heavily in trails, and recently completed an award-winning plan for the restoration of the nearby Rockaway River—with similar studies underway for the Whippany River. The Morris County Parks Commission manages numerous fine parks, including the historical farm at Fosterfields, and recently acquired Historic Speedwell, a collection of historic houses and structures about 1 mile north of Morristown.

The State of New Jersey is also very active in land conservation. Through the Green Acres Program the state proposes to spend $27 million in 2001 to purchase land for historical, recreational, agricultural, and ecological values. This and other state programs reflect an increasing awareness among New Jersey citizens of the importance of conservation—and the urgency of taking action now. Likewise, Morris County citizens have overwhelmingly voted to increase their own taxes for open space preservation. This is a tangible mandate.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

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The encampment spread out across three large farms in Jockey Hollow. Henry Wick rented half of his house to General St. Clair and several officers on his staff. The house and many portions of his farm remain.

METHODOLOGY

This chapter describes the potential environmental consequences, or impacts, associated with implementation of the alternatives. It identifies the categories of resource impacts evaluated, as well as resource impacts deemed not relevant to this plan. Impacts for each of the alternatives are presented by category. The chapter concludes with a comparative summary of impacts for all three alternatives.

The potential for implementation of the alternatives to generate environmental impacts was examined by an interdisciplinary team drawn from Morristown NHP, NPS Boston Support Office, NPS Northeast Region, and consultants. In a series of meetings, the team determined the type, intensity, and duration of impacts. In making the evaluations the team drew upon current scholarship, information provided by experts in the NPS and other agencies, and their professional experience in resource management. It is important to remember that all the alternatives include mitigating measures to minimize or avoid impacts. If mitigating measures described below and in the alternatives were not applied, the potential for resource impacts and the intensity of those impacts would increase.

The draft GMP/EIS is a programmatic statement. The alternatives each consist of a basic management framework for future decision making. Specific potential actions for each alternative are included to the extent that they have been developed. Decisions about specific actions will be deferred to implementation planning. Before any major individual actions described in the alternatives are undertaken, more detailed, site-specific analyses and compliance documentation required by National Environmental Policy Act (NEPA) and Section 106 of National Historic Preservation Act (NHPA) would be developed.



The Ford Mansion was built between 1772 and 1774 by a wealthy iron manufacturer, Jacob Ford. Photo by Mike Warren.

I. TYPE OF IMPACT

Adverse: Impacts would tend to diminish the quality, health, or integrity of resources and values.

Beneficial: Impacts would tend to strengthen or improve the quality, health, or integrity of resources and values.

II. INTENSITY OF IMPACT

Thresholds for evaluating the intensity of impacts are described differently for the different resource types as follows:

Natural

- Negligible: The impact would be localized and not detectable, or would be at the lowest levels of detection.
- Minor: The impact would be localized and slightly detectable but would not affect the overall structure of any natural community.
- Moderate: The impact would be clearly detectable and could have an appreciable effect on individual species, communities, and/or natural processes.
- Major: The impact would be highly noticeable and would have a substantial influence on natural re-

sources, including impacts on individuals or groups of species, communities, and/or natural processes.

Cultural

- Negligible: The impact would be barely perceptible and not measurable; it would be confined to small areas or would slightly affect a single contributing element of a historic landscape or structure.
- Minor: The impact would be perceptible and measurable, would remain localized and confined to a single contributing element of a historic landscape or structure, or would not affect the character-defining features of a historic landscape or structure.
- Moderate: The impact would be sufficient to cause a change in a character-defining feature but would not diminish the integrity of the resource to the extent that its eligibility for listing on the National Register of Historic Places would be jeopardized, or it generally would involve a single or small group of contributing elements.
- Major: The impact would result in substantial and highly noticeable change in character-defining features, which would diminish the integrity of the resource to the extent that it would no longer be eligible for listing on the National Register, or it would involve a large group of contributing elements and/or significant resources.

Visitor Experience

- Negligible: The impact would be barely detectable, would not occur in highly visited areas, or would affect few visitors.
- Minor: The impact would be slight but detectable, would not occur in highly visited areas, or would affect few visitors.
- Moderate: The impact would be readily apparent, would occur in highly visited areas, or would affect many visitors.
- Major: The effect would be severely adverse or exceptionally beneficial, would occur in highly visited areas, or would affect the majority of visitors.

Socioeconomic

- Negligible: Impacts with less than a 1% change
- Minor: Changes of 1–10%
- Moderate: Changes of 11–15%
- Major: Changes over 15%

III. DURATION OF IMPACT

Impacts are characterized as short-term or long-term as follows:

Short-term: The impact would last less than one year, normally only during construction.

Long-term: The impact would last more than one year.

IMPACTS CONSIDERED IN ANALYZING THE ALTERNATIVES

In accordance with federal law and regulations and NPS policies, this draft GMP/EIS evaluates the environmental consequences resulting from the alternatives against the topic areas listed below. Topics that were determined not to be relevant to the park are listed in the section "Impact Topics Eliminated from Further Evaluation."

I. CULTURAL RESOURCES

The National Historic Preservation Act, as amended in 1992 (16 USC 470 *et seq.*); the National Environmental Policy Act; and the NPS Cultural

Resource Management Guidelines (1994) and Management Policies (2001) require the consideration of impacts on cultural resources listed on or eligible for listing on the National Register of Historic Places. The undertakings described in this document are subject to Section 106 of the National Historic Preservation Act, under the terms of the 1995 Programmatic Agreement among the NPS, the Advisory Council on Historic Preservation (ACHP), and the National Conference of State Historic Preservation Officers. Numerous park resources are listed on the National Register, and by virtue of their location within a national park, all other cultural resources are considered eligible for listing. The four resource categories are historic landscapes, structures, archeology, and collections. Treatment of these resources is a focus of the draft GMP/EIS.

II. NATURAL RESOURCES

Soils

National Park Service policies require the consideration of impacts to soils. The park's soils, overlaying rolling hills, ridges, and valleys, are moderately prone to accelerated erosion. The alternatives propose policies and actions that have the potential to impact soils, principally through modification of vegetation.

Water Resources

NPS policies require protection of water resources consistent with the Federal Water Pollution Control Act, commonly known as the Clean Water Act. The waters within the park are also protected by the State of New Jersey Water Quality Standards. Primrose Brook and its tributary are designated as FW-2 Trout Production Waters. Primrose Brook is also recognized as Category One water (antidegradation) that is further protected from measurable changes to existing water quality. The State of New Jersey designates the Upper Passaic River and Indian Grove Brook as Wild Trout Streams. Actions proposed under the alternatives have the potential to impact water resources.

Biological Resources

The National Environmental Policy Act (1969) requires analysis of impacts on all affected components of the ecosystem, including biotic communities of plants and animals, and wetlands and riparian areas. NPS Management Policies (2001) requires maintenance of these communities, including their natural abundance, diversity, and ecological integrity. Large areas of undeveloped land in the Jockey Hollow and New Jersey Brigade units supports a range of important biological resources. Actions proposed under the alternatives have the potential to impact biological resources.

Floodplains and Wetlands

NPS Director's Order 77-1 and further guidelines and policies require consideration of impacts on floodplains and wetlands (Executive Orders 11988 and 11990). An area along the Passaic River lies in the 100-year floodplain, and several wetlands and riparian areas are present within the park. The alternatives contain proposed actions that have the potential to impact floodplains and wetlands.

Species of Special Concern

The Endangered Species Act (1973) requires disclosure of impacts on all federally threatened or endangered species. NPS policy also requires analysis of effects on federal- as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species. Several plant and animal species of concern have been documented in the park and region. Consultation with the U.S. Fish and Wildlife Service identified the potential for actions proposed in the alternatives to impact species of special concern. Official communication with the U.S. Fish and Wildlife Service is included in Appendix III.

Air Quality

The Federal Clean Air Act, as amended in 1977, stipulates that federal land managers have an affirmative responsibility to protect a park's air-quality-related values (including visibility, plants, animals,

soils, water quality, cultural resources, and visitor health) from adverse impacts due to air pollution. The ambient air quality standard as established by the State of New Jersey for the area covering the park is Level II. Actions proposed under the alternatives have the potential to impact air quality.

Sound

NPS Management Policies (2001) and DO-47, Soundscape Preservation and Noise Management, state that parks will preserve, to the greatest extent possible, the natural soundscape. The natural soundscape is the aggregate of all the natural sounds that occur in parks, together with the physical capacity for transmitting natural sounds. The relatively natural soundscape at most units of Morristown NHP has been identified as critical to the visitor experience. Actions proposed under the alternatives have the potential to impact the natural soundscape.

III. VISITOR EXPERIENCE

Visitor Activities and Services

The mission of the NPS, as defined by its Organic Act of 1916, states that the purpose of all parks is to *"conserve the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same."* NPS Management Policies (2001) direct the park to promote and regulate appropriate use of the park and provide the services necessary to meet the basic needs of park visitors and to achieve each park's mission goals. The alternatives have the potential to change the wide range of visitor activities and services available in all park units.

Interpretation and Education

Guided by NPS policy, each park's interpretive and educational program must be grounded in (1) park resources, (2) themes related to the park's legislative history and significance, and (3) park and NPS mission goals. The intent is to provide each visitor with an interpretive experience that is enjoyable and inspirational, within the context of the park's resources and the values they represent. In addition, visitors should be made aware of the purposes and scope of the national park system. Within this framework, the alternatives considered in the GMP propose substantial differences in the objectives of the park's interpretive and educational program.

Carrying Capacity

National Park Service policies, including DO-2, require the consideration of impacts to the carrying capacity of park facilities—the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions. This topic is included because policies and actions outlined in the alternatives have the potential to affect carrying capacity.

IV. PARK OPERATIONS

Administration and Operation

The NPS Strategic Plan for 2001–2005 directs the park to use effective management practices, systems, and technologies to accomplish its mission. The GMP alternatives propose important differences in resource management that have implications for park administration and operation.

Partnerships and Outreach

The NPS Strategic Plan for 2001–2005 directs the park to strengthen and expand its network of partners and work cooperatively to preserve and interpret resources related to Morristown NHP and the larger context of the park in relation to the Revolutionary War. The alternatives in this GMP outline different approaches to fulfilling Service-wide goals for partnership and outreach.

V. SOCIOECONOMIC ENVIRONMENT

NEPA considers "impacts to the human environment" to include any effects of federal actions on the social and economic well-being of communities and individuals. Research on socioeconomic impacts was done by obtaining socioeconomic data from Morristown NHP and state and local agencies.

Economic impacts were determined by using the formulas provided in *Estimating National Park Visitor Spending and Economic Impacts: Money Generation Model Version 2* (Stynes, Propst, Chang, and Sun 2000.) The estimated visitor expenditures were drawn from "Table C3: Generic Spending Profile—Historic Sites—High," page C.4. The employment and spending multipliers were taken from "Table E4. Multipliers for states (state level regions or regions including larger metro areas with populations of 1 million and more)," page E-2.

VI. CUMULATIVE IMPACTS

The Council on Environmental Quality (CEQ) regulations implementing NEPA require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined by CEQ 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 can result from individually minor but collectively significant actions taking place over a period of time.

VII. IMPAIRMENT OF RESOURCES

NPS Management Policies (Section 1.4, NPS 2001) and Director's Orders 12 and 55 require that potential impacts be analyzed to determine whether or not proposed actions would impair the resources of the unit. The fundamental purpose of the national park system, established by the 1916 Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve resources and values. National park managers must always seek ways to avoid or minimize, to the greatest degree practicable, adverse impacts on the resources and values. However, the laws do give the NPS the management discretion to allow impacts on the resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS this management discretion, that discretion is limited by the statutory requirement that the Service must leave the resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of the resources and values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact on any resource or value may constitute impairment. An impact would be most likely to constitute an impairment if it affected a resource or value whose conservation would be (a) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, (b) key to the natural or cultural integrity of the park or to opportunities to enjoy it, or (c) identified as a goal in the park's GMP or other relevant NPS planning documents. Impairment might result from NPS activities in managing a park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park.

VIII. SUSTAINABILITY AND LONG-TERM MANAGEMENT

NPS policy (DO-12) requires consideration of (1) short-term uses and long-term productivity, (2) irreversible and irretrievable commitment of resources, and (3) unavoidable adverse effects on park resources. The alternatives considered in the GMP, particularly for collections storage and forest management, have implications for sustainability and long-term management.

IMPACT TOPICS ELIMINATED FROM FURTHER EVALUATION

The following topics are not considered in the evaluation of the environmental consequences of the alternatives.

I. GEOLOGY AND TOPOGRAPHY

NPS policies require the consideration of impacts on geology and topography. The alternatives do not propose policies or actions that would affect this topic. However, potential impacts associated with accelerated erosion on the park's rolling hills, ridges, and valleys are considered under the heading Soils.

II. PRIME AND UNIQUE FARMLANDS

CEQ requires an assessment of impacts to all prime and unique farmlands within the project area (August 1980). Such resources do not exist within the park. Therefore, this was not considered a relevant impact topic.

III. ENVIRONMENTAL JUSTICE

Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities. The communities surrounding the park contain a mix of incomes and ethnic backgrounds and are not considered predominantly minority or low income. The actions contained in the GMP would not have significant adverse impacts on minorities and low-income populations and communities; therefore this topic is not addressed further.

IV. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA), SACRED SITES, AND INDIAN TRUST RESOURCES

NPS and other federal regulations and policies concerning Native American resources and federal trust responsibilities require assessment of impacts to these resources within a framework of government-to-government consultation with affected tribes. No Native American archeological sites within park boundaries have been recorded with the Historic Preservation Office of the New Jersey Department of State. There are no sacred sites or trust resources within the park, and surveys would be completed prior to any construction activities or ground-disturbing maintenance; therefore this impact topic is not analyzed.

CONSEQUENCES OF ALTERNATIVE A

Summary of Alternative A

This alternative represents a continuation of current practices with current plans remaining in force. All projects under approved plans could be carried out; however, it might be difficult to respond to conditions that have changed since the adoption of the Bicentennial-era master plan. This alternative should be considered the "no action" baseline for comparison with the "action" alternatives. Key actions include:

- Modest improvements are made to the museum for collections storage and exhibits.
- Forest management continues to be limited.
- Interpretation remains centered on the encampments.
- An interpretive shuttle is developed in Jockey Hollow.
- Land acquisition is limited to 8.56 acres on a willing-seller basis to protect park resources.
- Participation in regional initiatives is minor.

Management prescriptions and possible actions under this alternative are described in detail in Chapter 2.

I. CULTURAL RESOURCES

Historic Landscapes

The existing Revolutionary War period landscape resources, such as the setting of the Ford Mansion and the Wick Farm, have deteriorated to the point where they are only in fair condition. However, these resources are stable, and would remain so given present maintenance practices. Although the current plan does not address cultural landscapes as a distinct

resource, other planning documents, such as cultural landscape inventories and reports, inform management. Continuing existing management policies under Alternative A would likely have negligible impacts on encampment period historic landscapes.

Commemorative era resources, such as the museum and restoration work on the Wick House, are not formally recognized as historically significant. Minor features, such as walks and fences, do not receive the same level of maintenance as other resources. Several have been lost; many continue to deteriorate, and may be lost in a matter of years if no action is taken to protect and stabilize them. Continuing existing management policies under Alternative A would likely have a major, long-term, adverse impact on commemorative landscapes.

The high value of the forest as a cultural resource—its ability to inspire and cause visitors to reflect on the virtues of the American Revolution as referenced by NPS Director Horace Albright in the 1930s—continues to degrade. This is evidenced in part by the spread of nonnative plant species, such as Japanese barberry and Siebold's viburnum. Documented by Rutgers University ecologist Emily Russell (1995, 2001), this process is particularly acute in large portions of the Jockey Hollow forest where the native understory is being replaced by invasive species. The eventual result of this condition, if left unchecked, would likely be a substantial loss of the character that Congress was trying to protect when it created the park. Without intervention, it is likely that the native hardwoods would not regenerate, and the area could eventually become a shrubby thicket with little scenic value or ability to provide the desired visitor experience. Alternative A does not provide direction for management in terms of how to arrest or reverse this deterioration of what is considered to be a critical cultural and natural resource for the park. Continuing existing management policies under Alternative A would likely have a major, long-term, adverse impact on the historic forest.

Alternative A would maintain the acreage ceiling (see Appendix II) at 8.56 acres and focus on acquiring limited abutting properties. However, significant resources have been identified on more than 8.56 acres of adjacent lands. Further, there are development proposals for several large parcels that would likely diminish the integrity of historic park landscapes. In several cases, the mitigation proposed by private developers would reduce but not avoid major impacts. The present acreage ceiling restricts and delays the park's ability to respond to incompatible development proposals. Impacts associated with retaining the 8.56-acre ceiling would likely be major, long-term, and adverse.

Structures

The museum would continue to suffer from gradual deterioration from water infiltration. The structure could be rendered unusable for collections storage if these conditions are not reversed. In addition, this structure and others in the park do not have fire suppression systems, contrary to NPS policies and guidelines. Plans are underway to address water-related issues for the building, but these will only partially resolve them. There is also a lack of specific knowledge and information regarding the significance of the structure, although a historic structure report is in draft form (2002). If existing management policies are continued under Alternative A, impacts to the museum would likely be moderate, long-term, and adverse.

Commemorative era structures have not been formally recognized as nationally significant. Structures such as the museum, Wick Farm outbuildings, and the thoroughly rehabilitated Guerin House could be adversely affected by continued lack of action to identify and protect these resources. However, these structures are recorded on the List of Classified Structures and are managed as cultural resources. Continuing existing management policies under Alternative A would likely have a moderate, long-term, adverse impact on commemorative structures.

There is currently no program to deal with the deposition of airborne pollutants, and the impacts of these depositions on historic structures is not known. The exposure to pollutants would be greatest

at Washington's Headquarters. The NPS does not have enough information to evaluate the duration or intensity of these potential impacts.

Archeology

Numerous NPS programs are in place to preserve and protect Revolutionary War resources. However, continuing the current forest management practices that do not monitor or mitigate the effects of plant roots on archeological sites could have an adverse affect on resources in the Jockey Hollow and New Jersey Brigade units. These impacts would likely be adverse, long-term, and could range from minor to moderate in intensity.

Under Alternative A, commemorative era archeological resources would remain subject to degradation or loss due to a lack of knowledge about their location and extent. This was documented in the Integrated Cultural Resources Report (2001). The NPS may lose altogether the potential for interpreting these resources and providing the opportunity to protect them. Furthermore, the current NPS policy of "preservation in place" does not provide for interpretive opportunities and may lead the NPS to lose touch with the resource, resulting in a failure to fulfill the NPS mandate for visitor understanding. To the extent that post-encampment archeological resources remain uninvestigated, this alternative exposes these resources to illegal excavation and collecting. If existing management policies are continued under Alternative A, impacts to commemorative era archeological resources would likely be major and long-term. Because the significance of these resources has not been determined, the type of impacts (adverse or beneficial) cannot be evaluated at this time.

Collections

Under Alternative A there would continue to be gradual deterioration of collection and archival materials as a result of improper storage conditions. These conditions, documented in the Collections Management Plan (2001), include excessive humidity as a result of inadequate climate controls in the museum, resulting in mold and rot. There is also the threat of actual loss of resources through water damage or fire. There have been numerous instances where water has leaked through the roof, and fire suppression and control equipment is far below NPS standards. Similar conditions exist for collections housed in the Cross Estate basement and Wick House, as well as other scattered locations.

Alternative A, through the CMP, raises serious concerns about storage conditions and proposes several temporary improvements. But this alternative does not envision or support major changes in the way museum collections and archived materials are being stored. The continued failure to comply with NPS standards could allow further deterioration, possibly to the point of loss or impairment of some of these resources. Archival and library resources would be among the most likely affected. Impacts under Alternative A would likely be adverse, moderate–major, and long-term.

Cumulative Cultural Resources

By failing to provide new or enhanced facilities, staff, and management approaches, Alternative A would likely have major, long-term, adverse impacts on cultural resources.

II. NATURAL RESOURCES

Soils

In general, impacts to soils would remain limited to forested areas and park trails. In Jockey Hollow, the topsoil horizon has been observed to be thinning (Russell 2001), primarily in the areas associated with invasive plant species. Elevated nitrogen levels have also been identified in areas of invasive plants. An inventory and monitoring program is needed to determine if these adverse impacts are the result of visitor use, maintenance practices, or result from invasive species or some other cause. The NPS is unable to determine the intensity or duration of the potential impacts from existing levels of public use and maintenance on soils along various trails.

Water Resources

Increased erosion and sedimentation levels have been noted in park waters. Due to the fact that the park contains Primrose Brook and the headwaters of

the Passaic River, which feed the Great Swamp NWR, this is cause for concern among the NPS, FWS, and the public. There are localized, seasonally high coliform levels, but the NPS has been unable to determine causes. The USGS is commencing a project to study this issue in the park. These and other impacts to water quality may be due to deer populations, impacts from adjacent septic systems, or from lawn fertilization. The NPS currently has no policy to monitor or protect park water resources from the private development that surrounds the park. Under Alternative A, these adverse impacts may continue, and their causes may remain undetermined. Their effects would likely be moderate and long-term.

Biological Resources

Vegetation

For decades, the park has practiced a policy of passive forest management or benign neglect which appears to be having an adverse impact on park resources. The absence of a specific forest management focus during the last 25 years has failed to remedy the decline of native understory plants, herbaceous plants, and native tree regeneration, especially their survival to mature sizes. These declines are attributable, at least in part, to the invasion of species such as Siebold's viburnum and Japanese barberry. The causes of these changes have not been conclusively determined, but they are likely to include deer browse, introduction of nonnative species from adjacent lands, changes in soil fertility, and large-scale climate change (Russell 2001). Changes in the forest structure and species composition have ecological consequences that are difficult to predict. However, studies indicate that the forest "could consist of vines, dead and dying trees and nonnative shrubs, not resembling in any aspect...or condition the forest at the time of the encampment" (Russell 2000). Under Alternative A, impacts could be major, long-term, and adverse.

Wildlife

As a result of the changes in the forest described above, the wildlife population is likely changing. The "no action" alternative does not envision additional studies that are be needed to determine if there are specific steps the NPS can and should take to protect wildlife. However, the park would continue to monitor specific animal populations such as deer. The park does not have enough data to establish causal relationships or evaluate the potential impacts at this time.

Floodplains and Wetlands

Alternative A does not propose any actions that would affect the Passaic River floodplain. However, the changes to the forest described above may affect factors critical to wetlands. These include accelerated soil erosion, sedimentation, changes in species composition, and elevated nutrient levels in waters. Impacts are likely to be adverse and long-term, but their intensity cannot be determined at this time.

Species of Special Concern

Given present policy and management, several State of New Jersey or federally listed species may be impacted. Passive management of the forest, and the steady process of forest change trending toward becoming a vine/shrub thicket, could negatively affect species such as the Indiana bat *(Myotis sodalis),* cerulean warbler *(Dendroica cerulea),* Cooper's hawk *(Accipter cooperi),* and bald eagle *(Haliaeetus leucocephalus)* found in the area. Plant species potentially impacted include the rattlesnake plantain *(Goodyera repens),* twinleaf *(Jeffersonia diphylla),* slender pinweed *(Lechea tenuifolia),* strict blue-eyed grass *(Sisyrinchium montanum),* and oak fern *(Gymnocapium dryopteris).*

The bog turtle *(Clemmys muhlenbergii),* federally listed (threatened), and wood turtle *(Clemmys insculpta),* state listed (threatened), could be affected by unregulated human activity in wetland and riparian areas, and by the high nitrogen levels in park waters.

The NPS does not have enough information to evaluate the duration or intensity of potential impacts.

Air Quality

Ozone levels, resulting from off-site activities, would remain periodically high. The NPS does

not have enough information to determine the sources, or evaluate the duration or intensity of potential impacts.

Implementation of an interpretive shuttle at Jockey Hollow could improve air quality by reducing private automobile traffic in the unit. Private cars could be prohibited on the tour road. Under Alternative A, impacts on air quality at Jockey Hollow could be moderate, long-term, and beneficial.

Sound

In the Jockey Hollow, New Jersey Brigade, and Fort Nonsense units, the natural soundscape is compromised by car, truck, and airplane traffic, but the overall experience is still that of a rural forested area. Much of the noise comes from traffic off site. However, by reducing in-park traffic, implementation of an interpretive shuttle in Jockey Hollow could substantially reduce noise levels. Utilization of electric shuttle vehicles could have a moderate, beneficial, long-term impact on the natural soundscape at Jockey Hollow.

Due to the proximity of Interstate-287 to Washington's Headquarters, decibel levels are too high for visitor use and enjoyment of the historic scene and for interpretive programs. Noise and vibration levels may be adversely impacting the structural integrity of the museum and Ford Mansion. Studies are needed to determine if these impacts could impair these resources. Implementation of this alternative would not change these conditions. Impacts under Alternative A at Washington's Headquarters would likely be moderate, long-term, and adverse.

Cumulative Natural Resources

The 1976 master plan did not recognize the importance of the park's natural systems. As a result, the park lacks adequate baseline data, which inhibits proper and effective resource management. Under the "no action" alternative, only limited new information would be developed to determine causes and potential solutions to existing problems. There are currently no management provisions for addressing natural resources in the context of the larger ecosystem, such as how the park fits into regional network of wildlife corridors. The large green spaces currently act as forested islands in a larger suburban setting, and a decline in biodiversity and habitat within the park could have regional consequences. Alternative A could have moderate, long-term, adverse cumulative impacts on natural resources.

The lack of baseline information, especially in regard to natural resources, leaves the park without the ability to determine impacts and causal effects of past, present, and future actions, and restricts the ability of the NPS to properly manage the resources. This could result in deterioration of Revolutionary War features and commemorative era resources.

III. VISITOR EXPERIENCE

Visitor Activities and Services

Visitor activities and services would remain largely unchanged under Alternative A. Visitor experience is generally reported to be satisfactory. However, several aspects of park facilities are inadequate. Researcher space (access to the collections and archives), space for books and gifts, and outdoor group interpretive areas would remain inadequate at Washington's Headquarters. Indoor group interpretive areas and fee-collection facilities would remain inadequate at Jockey Hollow. And the park would not provide visitors the opportunity to purchase snacks on site. These conditions might result in fewer visits, shorter visits, and less opportunity for visitors to experience the park's resources. The impact on visitor experience would likely be moderate, long-term, and adverse.

Access to and circulation among the four units would continue to be confusing. This would be particularly acute for vehicles arriving at and departing from the Washington's Headquarters unit. Pedestrian access, and connections between the unit and downtown Morristown, are unsafe and can be confusing and frustrating to visitors. Orientation from the unit to Fort Nonsense and the New Jersey Brigade units is quite difficult. The main route to Jockey Hollow involves travel over a congested major

highway, and the approach to Jockey Hollow from Route 202 is becoming less rural, offering less time and distance for visitors to decompress to make an appropriate transition to the historical park. The experience of moving between units in private automobiles breaks and severely disrupts the continuity of experience in the park. Impacts on the visitor experience associated with continuing this pattern of access would be moderate to major, long-term, and adverse.

Proposed in the 1976 master plan, Alternative A could implement an interpretive shuttle in Jockey Hollow. Circulating on the tour road, the shuttle would provide an alternative method for visiting the unit. Automobile traffic and conflicts with pedestrians would be reduced, and opportunities for visitors to learn about the park would be expanded. Impacts to the visitor experience would be moderate, long-term, and beneficial.

Under Alternative A, the park would continue to prohibit bicycles from using unpaved trails. NPS Management Policies (2001) states, "designation of bicycle routes, other than on park roads and in parking areas, requires a written determination that such use is consistent with the protection of a park's natural, cultural, scenic, and esthetic values, safety considerations, and management objectives, and will not disturb wildlife or other park resources." Bicycle use of unpaved trails would likely have major adverse and long-term impacts on park values (such as tranquility), visitor safety (conflicts with hikers), and other park resources such as soils and vegetation. Continuing the prohibition, but allowing bicycles on park roads, would have moderate, beneficial, and long-term impacts on the visitor experience.

Interpretation and Education

Under Alternative A, the park would continue to focus interpretation on the Revolutionary War period, and not address the later commemorative era, resulting in limited visitor understanding of the park and its resources. Contributions of the WANJ, the Town of Morristown, and the CCC/PWA to the park would not be regularly shared with visitors. Additionally, efforts to interpret the nexus between park units would remain minimal. Interpretation at each unit would continue to focus on the events that occurred on site, without building a greater context for understanding the whole of the winter encampment or war. This is problematic because most visitors only visit one unit—and hence get just a portion of the Morristown story. This narrow focus would continue to limit visitor understanding of the broad scope of the Continental Army's activities in the Morristown region, and of the important later efforts to memorialize them. The adverse impacts on visitor understanding would be major and long-term.

Interpretive devices describe the encampments in text and images, but the appearance of landscape does not convey historical conditions. This is most notable at Fort Nonsense and the brigade encampment areas in Jockey Hollow. It is difficult to understand the drama and massive scale of the encampments—that 10,000 to 12,000 soldiers occupied the area—or that the Ford Mansion was set in an agricultural landscape. Under the "no action" alternative, only minor improvements, such as repairs to existing wayside exhibits, would be made.

Existing plans do not aid visitor understanding of the potentially dramatic changes occurring to the park's forest. Interpretation would not treat ecological issues, such as climate change, invasive species, water quality, or deer impacts. Yet, more visitors than ever are interested in the ecological functions of the park.

In 1976, the park did not envision the numbers and kinds of recreational visitors the park now faces and that there would be increasing conflicts with cars. In Alternative A, the primary theme of the park would remain military history, but the use of the park for passive recreation would continue to steadily grow. Many visitors are not principally interested in the rich cultural and historic features of the park. Existing plans do not direct or encourage the park to reach out to underserved groups.

Under Alternative A, these various shortcomings to interpretation would not be addressed, and impacts would likely be adverse, moderate, and long-term.

Furthermore, the original sequence of visitation at Washington's Headquarters from the 1930s was reversed in the mid-1970s. Visitors arrived in front of the Ford Mansion, visited the interior, and then walked downhill to the museum. At present, visitors arrive at the unit's lower parking lot and face the rear of the museum. They walk uphill through a tangle of trees, enter the museum's back door, and travel through the exhibits, emerging from the front of the museum to visit the Ford Mansion. This sequence diminishes the importance of the Ford Mansion by obscuring the subordinate relationship of the museum to the mansion. Alternative A would not change this sequence. The impact of the sequence on visitor experience would be moderate, long-term, and adverse.

Lastly, existing plans do not envision the extent or character of new residences and transportation infrastructure that has been developed adjacent to all park units. New homes, with lights and ancillary structures, and mechanical noise (from aircraft and road traffic) intrude upon the historic setting. Under Alternative A, land protection would remain limited, and new development would continue to degrade the visitor experience. The impact on visitor experience at Washington's Headquarters could be major, long-term, and adverse. Impacts at the other units would be moderate, long-term, and adverse.

Carrying Capacity

Alternative A recognizes the potential for visitation to exceed the carrying capacity of the Ford Mansion, Wick House, and historic roads in Jockey Hollow, degrading the visitor experience. As a routine component of resource management the park could study carrying capacity. No actions or policies are proposed that would substantially change the type and level of visitation at the Ford Mansion or Wick House. While the intensity cannot be determined at this time, impacts to the visitor experience are likely to be adverse and long-term. Conversely, by introducing a shuttle in Jockey Hollow, conflicts between pedestrians and automobiles could be reduced substantially. The impact on carrying capacity and visitor experience would likely be beneficial, moderate, and long-term.

Cumulative Visitor Experience

Under Alternative A, the visitor experience would continue to be diminished by the narrow interpretation of the encampment; lack of interpretation of the complexity of what visitors see and experience; the difficulty of movement between units; and the lack of a cohesive or comprehensive narrative for the entire park. Current plans fail to provide visitors with an understanding of important resources, especially the significance of and threats to those that post-date the encampments. Impacts could be moderate, long-term, and adverse.

IV. PARK OPERATIONS

Administration and Operation

The 1976 master plan was directed toward physical development with little guidance on management or operation. Office space located in the museum is dispersed, restricts exhibit space, displaces collections, and results in competition for space among various divisions and programs. Several other structures used for park offices are in fair condition and poorly located to efficiently serve operations. Under the "no action" alternative, these conditions would continue. Adverse impacts to administrative and operational efficiency would continue to be moderate and long-term.

Existing plans, drawn before acquisition of the Cross Estate, do not recognize the need for additional personnel to manage the large complex of buildings and landscape features. The overall result is that these facilities are not maintained to NPS standards, and compliance is not done adequately or in a timely fashion. There is also an increasing reliance on volunteers, who in turn need supervision and training. Alternative A would perpetuate this

condition. Adverse impacts on administration and operation would be moderate and long-term.

The 1976 Master Plan calls for removal of park housing, but doesn't address the need for housing, or its relation to employee retention and hiring. Housing costs in the area have increased exponentially in the past 25 years, resulting in few employees being able to find suitable housing at a reasonable commuting distance from the park. In some cases, historic structures, such as the Guerin House, have been preserved through use as employee housing. Although this is generally considered a beneficial impact, it restricts their access by the public. Alternative A would not change these conditions. Adverse impacts to administration and operation would be minor and long-term.

Increased administrative duties, such as NHPA and NEPA compliance, GPRA, and PMIS result in less time to devote to visitor, staff, and collections needs. As a result, staffing and funding have lagged far short of actual needs. Under the "no action" alternative, this condition would continue. Adverse impacts would be moderate and long-term.

Partnerships and Outreach

The 1976 Master Plan does not encourage partnerships beyond the WANJ, nor does it envision a regional role for the park in preserving and interpreting aspects of the American Revolution. While the park has established cooperative agreements and working relationships with other institutions, Alternative A would leave the park substantially reliant upon a single group and with a narrow focus. Additionally, the park would remain unable to provide dedicated support space for Eastern National (books and gifts) or other groups. The adverse impact on the ability of the park to accomplish its mission with assistance from partners would be moderate and long-term.

V. SOCIOECONOMIC ENVIRONMENT

Alternative A would not likely bring new visitors to Morristown NHP because no new visitor facilities would be built. This alternative would likely add 3.5 full-time-equivalent (FTE) positions. Approximately $2.8–$3.35 million worth of projects would be implemented over the course of implementing the GMP. This would entail some construction employment and economic spinoff in the community. Land acquisition could also have socioeconomic impacts; however, these are difficult to evaluate given market uncertainties. It should also be pointed out that there would be additional economic benefits from the salaries for new employees. In sum, the added impacts from Alternative A would be negligible (under 1%).

VI. IMPAIRMENT OF RESOURCES

The park's collections and historic forest character are resources whose conservation is (a) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, (b) key to the natural or cultural integrity of the park or to opportunities to enjoy it, and (c) identified as a goal in the park's GMP or other relevant NPS planning documents. Alternative A fails to address collections storage or the remarkable changes in the composition and character of the forest. It is conceivable that without attention in the near future, portions of the collections could deteriorate to the point of impairment. In similar fashion, the processes of forest change could convert large tracts of the Jockey Hollow and New Jersey Brigade units into landscapes of vines, dead and dying trees, and nonnative shrubs, not resembling the forest at the time of the encampment. Alternative A could impair collections, the historic forest, and violate the NPS Organic Act.

VII. SUSTAINABILITY AND LONG-TERM MANAGEMENT

Numerous long-term and potentially irreversible adverse impacts may result from implementation of Alternative A.

- The lack of active forest management may result in long-term change to the forest, with the loss of critical attributes that Congress directed

the park to preserve: encampment period archeological resources and historic forest character. This irreversible change in the structure and character of the forest may result in a loss of the forest's ability to sustain itself as a mixed hardwood forest.

- Collections and archives stored under present substandard conditions would likely damage or impair critical resources.
- Continued development of private lands adjacent to the park may disturb or destroy Revolutionary War archeological resources.
- The current acreage ceiling and focus on abutting properties may not effectively protect the visitor experience, and may harm other resources, such as water quality.

CONSEQUENCES OF ALTERNATIVE B

Summary of Alternative B

This alternative would suggest, to the fullest extent possible, the character of the park during the encampment period of 1777–82. The park would employ interpretive methods such as programs, exhibits and other media, and extensive rehabilitation of the landscape to present to visitors a scene evocative of the period. Lost features could be replaced or reconstructed, and features introduced after the encampments could be selectively removed or de-emphasized to provide visitors the direct experience that is being sought. This alternative thus attempts to create a meaningful visitor experience through direct contact with the physical landscape conditions encountered during the military encampments.

However, it recognizes that a completely faithful restoration of those conditions is unattainable considering the limited documentation of specific historic conditions, and the intervening changes to the forest such as the demise of chestnut trees in the early 20th century. In some ways a full restoration is undesirable, considering, for example, the environmental damage associated with the extensive clearcutting practiced during the encampments.

Key actions include:

- The museum is rehabilitated and a 5,000–10,000-square-foot addition is constructed to improve collections storage and exhibits. The proposed locations for the addition are either at the rear of the museum or along either side, set back from its south façade.
- A cultural landscape treatment plan integrates cultural and natural resource management objectives to protect cultural resources and historic character and to sustain the park's mixed hardwood forest.
- Interpretation centers exclusively on the encampments *(similar to Alternative A)*. Landscape vignettes are created along historic road corridors in Jockey Hollow suggesting aspects of the encampments.
- A park–town shuttle is developed with partners to serve multiple units.
- The authorized acreage ceiling is adjusted upward to better facilitate land acquisition on a willing-seller basis to protect park resources.
- The park is a leader in regional initiatives related to the Revolutionary War and environmental stewardship.

Management prescriptions and possible actions under this alternative are described in detail in Chapter 2.

I. CULTURAL RESOURCES

Historic Landscapes

Landscape rehabilitation to support Alternative B would temporarily disrupt the historic scene during implementation, visually, audibly, and through increased construction-related traffic. Rehabilitation would encompass approximately 5 acres of the Washington's Headquarters unit, up to 30 acres at Fort Nonsense, and up to 80 acres in corridors along

historic roads and features in Jockey Hollow. Actions would include vegetation removal, replanting, and changes to paths and trails. The resulting landscape would more closely reflect the landscape encountered by the Continental Army during the encampment period. Impacts would likely be beneficial and long-term. Impacts would be moderate rather than major because the resulting landscape would still only suggest historical conditions.

Landscape rehabilitation could entail removal or modification of features that post-date the encampments. These include ornamental plantings around the Ford Mansion, and the Wick flower garden and orchard. In most cases, the significance of these features has not been determined. All work would be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Landscapes. The impact of these actions would be long-term, but the type and intensity cannot be evaluated at this time.

Construction of an addition to the museum would not affect the setting of the Ford Mansion. If constructed on either side of the museum, or behind (north of) the museum, the structures would not be visible from the mansion. The landscape in these areas lacks integrity to the encampment period.

Resource management actions to sustain the mixed hardwood forest would be guided by a cultural landscape treatment plan. These actions, possibly including replanting, deer exclosures, and removal of invasive plants, would protect the character of the park's forests, an important cultural resource recognized by Congress at the establishment of the park. Treatment would be limited to the areas outside the historic road corridors in Jockey Hollow and at the New Jersey Brigade unit: a total of approximately 1,500 acres. Impacts associated with these actions would be long-term, major, and beneficial.

Alternative B would seek authority to raise the park's acreage ceiling by 500 acres. A land protection plan would address acquisition of easements and lands, on a willing-seller basis, to protect park resources from incompatible development on adjacent properties. Residential development intensifying along the park boundary already degrades the park's historic setting. Proposals are underway to introduce additional residential and commercial uses. Increasing the acreage ceiling would enable the park to quickly respond to opportunities for land acquisition, and help communicate to the local community the National Park Service's interest in acquiring adjacent lands on a willing-seller basis. The impact on historic landscapes would be major, long-term, and beneficial.

Structures

The interior of the museum would be rehabilitated, both in terms of structural integrity (roof) and physical plant, and updating to current codes and NPS standards for collections storage. All work would be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Structures and would not diminish the integrity of the building. Impacts would be beneficial, major, and long-term.

Under Alternative B, the park would construct an addition to the museum. The specific design would be developed as a continuation of Section 106 compliance. All work would be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Structures.

Removal of the Dick House and the garage of the Caretaker's Cottage, two non-contributing structures, would have no impact on historic structures. However, the Caretaker's Cottage is also proposed for removal. The NPS would first make a determination of the significance of the structure. All work to be done on other structures listed on the park's List of Classified Structures would be done in conformance with the Secretary of the Interior's Standards for the Treatment of Historic Structures. The impact of these actions would be long-term, but the type and intensity cannot be evaluated at this time.

The lease of the principal building of the Cross Estate would specify that the structure be main-

tained in a manner so as not to diminish its eligibility for the National Register. And the NPS would evaluate the significance of the principal building. Under this condition, impacts would be negligible.

Archeology

The ACHP and SHPO require review of archeological research actions under Alternative B. Potential impacts would be studied and mitigated. Otherwise, investigations to gain information for improved interpretation (the active role for archeology envisioned in Alternatives B) could consume resources, bring greater risk of vandalism in open sites, and have major, long-term adverse impacts on archeological resources. All archeological resources would be protected and preserved in accordance with NPS policies and guidelines.

This alternative proposes to implement a high level of site stabilization, particularly at the brigade cantonment areas and at Fort Nonsense, to preserve, to the maximum extent feasible, evidence of the encampment and 1777 redoubts. In new management zones, the effects of vegetation on archeological resources would be monitored and mitigated in accordance with NPS policy. These actions would have major, long-term beneficial impacts on archeological resources.

The construction of an addition to the museum in either of the proposed locations would likely have a negligible impact on archeological resources, as both of locations have been previously disturbed. Any new pathways and exhibits located outdoors would be subject to archeological investigations prior to beginning construction to ensure no disturbance of subsurface resources, as per standard NPS practices.

Numerous NPS programs are in place to preserve and protect Revolutionary War resources. However, Morristown's archeological resources that post-date the encampment are subject to degradation or loss due to a lack of knowledge about their location and extent. This was documented in the Integrated Cultural Resources Report (2001). The NPS may lose altogether the potential for interpreting these resources and providing the opportunity to protect them. As with historic landscape features and structures, the significance of these resources has not been determined. The impact would be long-term, but the type and intensity cannot be evaluated at this time.

Collections

Museum rehabilitation and construction of an addition would necessitate temporary relocation of the collections and archives. The park would take appropriate measures to protect objects during transport and storage. Impacts to the collections should be negligible.

Under Alternative B, the scope of collections would be revised and portions of the collections could be deaccessioned to fit the focus on the encampments. This action would be limited by the terms of donations which often specify they be kept at the park. This would apply to the extensive and far-ranging Lloyd W. Smith collection, among others. It is likely that impacts to the physical resources would be negligible.

Rehabilitation of the museum and construction of an addition would enable the park to move the collections and archives from substandard space, into climate-controlled, fire-safe conditions. This would dramatically reduce the rate of deterioration and the need for later conservation treatment of deteriorated objects. These actions would also provide for greater public access to the collections for research. Relocating administrative function from the museum would make additional space available for collections storage and exhibits. The beneficial impacts on preservation of collections would be major and long-term.

Cumulative Cultural Resources

By providing new and enhanced facilities, staff, and management approaches, Alternative B would have major, long-term, beneficial impacts on cultural resources from the encampment period. Alternative B's focus on the encampment could also have long-term impacts on cultural resources from the commemorative era. Because the significance of resources that post-date the encampment has not been

determined, the type and intensity of impact cannot be evaluated at this time.

II. NATURAL RESOURCES

Soils

Similar to Alternative A, soils in forested areas and park trails could be affected under Alternative B. In Jockey Hollow, the topsoil horizon has been observed to be thinning (Russell 2001), primarily in the areas associated with invasive plant species. Elevated nitrogen levels have also been identified in areas of invasive plants. A carrying capacity study or inventory and monitoring program would be completed to determine if these adverse impacts are the result of visitor use, maintenance practices, competition from invasive species, or other causes. The study would establish appropriate use levels and maintenance practices. The NPS is unable to determine the intensity or duration of potential adverse impacts from existing levels of public use and maintenance on soils along various trails.

Construction of an addition to the museum would disturb soil resources at Washington's Headquarters. The 5,000–10,000-square-foot addition would likely have two stories, with a footprint of 2,500–5,000 square feet. The total extent of soil disturbance, including the building footprint and associated work areas, would be less than one-quarter acre. The NPS would employ erosion control measures to minimize soil loss, and all disturbed areas outside the addition would be fully landscaped. Adverse impacts to soil resources would be minor and short-term.

In addition to these impacts, the creation of historic landscape vignettes under Alternative B could potentially disturb soils in up to 5 acres at Washington's Headquarters, up to 30 acres at Fort Nonsense, and up to 80 acres in Jockey Hollow. Adverse impacts would likely be short-term and minor, as erosion would be controlled during implementation and all treated areas would be revegetated.

Resource management actions to sustain a mixed hardwood forest, potentially involving replanting, deer exclosures, and removal of invasive plants, could impact soil resources. Adverse impacts would likely be short-term and minor, as erosion would be controlled during implementation and all treated areas would be revegetated.

Water Resources

Under Alternative B, the park would address the sources of increased erosion and sedimentation levels and seasonally high coliform levels through new management approaches, including a Water Quality Protection zone, acquiring easements and lands, and other measures. Long-term adverse impacts may continue; however, they would be of negligible intensity.

In Alternative B, landscape rehabilitation to create historical landscape vignettes would potentially disturb water resources in Jockey Hollow through siltation. In a similar manner, resource management actions to sustain a mixed hardwood forest, potentially involving replanting, deer exclosures, and removal of invasive plants, could impact park waters through siltation. However, management actions within the Water Quality Protection zones would address present conditions and mitigate impacts due to proposed landscape treatment and visitor use. Mitigation in this zone could include revegetating eroded banks to control erosion and restricting visitor access to stream banks. Impacts to surface waters would likely be short-term and negligible.

Biological Resources

Vegetation

Under Alternative B, a new integrated treatment plan to sustain a mixed hardwood forest would be developed through interdisciplinary research. The research to determine treatment, involving extensive inventory and monitoring, is not likely to have adverse impacts. Implementation of the plan would likely impact park vegetation. Landscape treatment would be parkwide, with particular emphasis on the Jockey Hollow and New Jersey Brigade units. The type and intensity of short-term impacts cannot be determined at this point. Over the long term,

sustaining a mixed hardwood forest would have a major beneficial impact on park vegetation.

Landscape rehabilitation to create historical landscape vignettes would likely have impacts due to the removal of trees at Washington's Headquarters, Fort Nonsense, and Jockey Hollow. Treatment could encompass up to 115 acres in three units. Treatment would employ a combination of clearing in some forested areas and reforestation in mowed fields, each based on historical research and interpretive needs. Impacts to vegetation would vary depending on the existing conditions and the treatment selected. The type and intensity of short-term impacts cannot be determined at this point. However, in the long term there would likely be no major impact or impairment to vegetation.

Wildlife

Under Alternative B, wildlife would likely be impacted due to implementation of the landscape treatment plan. The plan's actions to create historical vignettes and sustain the mixed hardwood forest could reduce habitat for certain species and increase habitat for others. Impacts would be both short and long term, but would likely be minor or moderate. Some impacts could be beneficial; however, the scope of these cannot be determined at this time.

As a result of the changes in the forest management, the wildlife population would likely change. Alternative B envisions a robust research program to determine if there are specific steps the NPS can and should take to protect wildlife. As in Alternative A, the park would continue to monitor specific animal populations such as deer. The park does not have enough data to establish causal relationships or evaluate the potential impacts at this time.

Floodplains and Wetlands

Alternative B does not propose actions that would affect the Passaic River floodplain. However, landscape treatment described above may affect factors critical to park wetlands. These include accelerated soil erosion, sedimentation, changes in species composition, and elevated nutrient levels in waters. The Water Quality Protection zone proposed under Alternatives B and C encompasses the Passaic River floodplain and all park wetlands. While focused on protecting water quality, management actions would also protect floodplains and wetlands. Impacts would likely be avoided or minimized, and the heightened management of these areas could have a moderate, long-term, beneficial impact.

Species of Special Concern

Under Alternative B, landscape rehabilitation to create historical landscape vignettes and to sustain the mixed hardwood forest could involve clearing acres of mature trees. This could have direct, indirect, or cumulative impacts on federally or state-listed species. The Indiana bat *(Myotis sodalis),* cerulean warbler *(Dendroica cerulea),* Cooper's hawk *(Accipter cooperi),* and bald eagle *(Haliaeetus leucocephalus)* could potentially be affected.

The U.S. Fish and Wildlife Service (FWS) would be consulted prior to implementing landscape treatment plans, and mitigation measures recommended by the FWS would be developed. For the Indiana bat, a species not recorded in the park but known to inhabit Morris County, these measures include: bat surveying, keeping the size of clearings to under 1 acre, and scheduling work for November 15 to April 1, when the bats are hibernating in areas outside the park.

Alternative B seeks to preserve wetland and riparian areas for their habitat value and as critical to maintaining high water quality. Visitor activities would be controlled in these areas, and supporting facilities would also be limited. These areas are potential habitat for the federally listed bog turtle *(Clemmys muhlenbergii),* known to occur within 1.5 miles of the park, and several state-listed threatened plant species. The park would follow FWS recommendations to survey for the presence of bog turtles and other species.

By consulting with the FWS prior to implementing landscape treatment plans, and by adopting specific

recommendations, Alternative B would have negligible adverse impacts on species of special concern.

Air Quality

Similar to Alternative A, ozone levels would continue to be periodically high. The NPS would not have enough information to determine the sources, or evaluate the duration or intensity of potential impacts.

Implementation of a park–town shuttle could improve air quality by reducing private automobile traffic at each unit. For example, private cars would be discouraged on the Jockey Hollow tour road. Under Alternative B, impacts on air quality could be moderate, long-term, and beneficial.

Sound

In the Jockey Hollow, New Jersey Brigade, and Fort Nonsense units, the natural soundscape is compromised by car, truck, and airplane traffic, but the overall experience is still that of a rural forested area. Most of the noise comes from off-site traffic. However, landscape rehabilitation to create historical landscape vignettes, possibly using modern machinery, could temporarily increase manmade sounds. Implementing a park–town shuttle could reduce in-park traffic and substantially reduce noise levels, most notably at Jockey Hollow where there are few non-park noises. Utilization of electric shuttle vehicles could have additional beneficial impacts on the natural soundscape. The overall impact of these actions on the natural soundscape would vary among and within units and would likely be of moderate intensity.

As in Alternative A, the high decibel levels at Washington's Headquarters would remain too high for visitor use and enjoyment of the historic scene and for interpretive programs. Noise and vibration levels may be adversely impacting the structural integrity of the museum and Ford Mansion. Studies would be completed to determine if these impacts could result in impairment of these resources. Under Alternative B, the significance of the museum would be determined and, if found eligible, could justify intervention. Impacts at Washington's Headquarters would likely be adverse, moderate, and long-term.

Cumulative Natural Resources

The increased inventory and monitoring, and heightened management of natural resources would likely have beneficial long-term impacts. The intensity of the impacts cannot be determined at this time.

III. VISITOR EXPERIENCE

Visitor Activities and Services

Under Alternative B, new activities and services would be provided, and interpretation of the encampment period would be enhanced. The long-term impact of these actions would be major and beneficial. However, there would be short-term adverse impacts, as follows.

There would be temporary impacts to the visitor experience during landscape rehabilitation, particularly the creation of vignettes. Some areas could be inaccessible. However, the process of rehabilitation would be treated as an educational opportunity. Impacts would likely be short-term and negligible.

There would be short-term and minor adverse impacts during rehabilitation and expansion of the museum. Construction would introduce visual intrusions, noise, dust, vibrations, and traffic. Visitors would need to be routed around the construction area in order to visit the unit. The public would have no access to museum exhibits, and researchers would not have access to the collections or archives. Such a limited experience would result in an incomplete understanding or appreciation of the park.

Despite the short-term construction-related impacts associated with the museum rehabilitation and construction of an addition, this alternative would have a major, beneficial, and long-term impact on the visitor experience. Visitors would have greater opportunity to enjoy programs in the museum and adjacent landscape. Researchers and school groups would be better accommodated. Visitors would find a greater range of books and related gifts. New pedes-

trian links and signage from downtown Morristown to the park would enhance opportunities for visitors to include other cultural sites in their visit to Morristown, and to reach the park using public transit. The new pathways at the unit would provide better circulation through the site from visitor parking areas, and between the Ford Mansion and museum.

Rehabilitation of the Jockey Hollow visitor center would have similar short-term adverse impacts, and long-term beneficial impacts. The work would be done in such a manner so as to preserve the building's character-defining features, yet achieve greater utility in support of core programs and services.

Sustaining a mixed hardwood forest would involve persistent research and treatment in much of the forested areas of the Jockey Hollow and the New Jersey Brigade units. These actions could restrict visitors from portions of the park for long periods of time. Actions would be designed to minimize impacts on visitors through measures such as keeping treated areas modest in size, or locating experimental plots away from trails. Given the large size of the forest, and the extensive trail network, opportunities for visitors to enjoy the park would not be greatly diminished. Impacts would be adverse, but minor. Over the long term, sustaining the scenic and ecological values of the forest, both highly valued by visitors, would more than compensate for the minor impacts.

Several actions under this alternative involve changes to vehicular circulation at Jockey Hollow. Closure and restoration of road segments could result in reductions in numbers of visitors and times of visitation. Types of uses, such as private vehicles, may be restricted to certain times, or eliminated. Motorists may need to take alternate routes. Emergency access would be preserved. The objectives of these actions include enhancing the historic scene and reducing or eliminating unsafe conditions involving vehicular traffic, bicycles, and pedestrians. Unsafe conditions are particularly acute along Sugar Loaf Road. Any such actions would be done only after the opportunity for public review of proposals and opportunity for comment.

Vehicular circulation would be improved beyond Jockey Hollow through implementation of a park–town shuttle. Running among park units, downtown Morristown, and other related regional attractions, the shuttle would have major long-term benefits to visitor safety, enjoyment, and understanding. It would reduce visitor exposure to high traffic volumes, substituting a safe and comfortable experience. The shuttle would also facilitate visitation of more than one park unit, potentially increasing visitor understanding of the significance of Morristown NHP.

As in Alternative A, the park would continue to prohibit bicycles from using unpaved trails. NPS Management Policies (2001) states, "designation of bicycle routes, other than on park roads and in parking areas, requires a written determination that such use is consistent with the protection of a park's natural, cultural, scenic, and esthetic values, safety considerations, and management objectives, and will not disturb wildlife or other park resources." Bicycle use of unpaved trails would likely have major adverse and long-term impacts on park values (such as tranquility), visitor safety (conflicts with hikers), and other park resources such as soils and vegetation. Continuing the prohibition, but allowing bicycles on park roads, would have major, beneficial, and long-term impacts on the visitor experience.

Leasing portions of the Cross Estate might reduce public access to the formal gardens and trailheads. Within the terms of the lease the park would require adequate maintenance and appropriate public access to minimize these long-term adverse impacts.

Interpretation and Education

In Alternative B, historical landscape vignettes portraying aspects of the encampment in Jockey Hollow would be created to enhance interpretation. Located along the tour road corridor and at major interpretive sites such as the Pennsylvania Line, the vignettes and new waysides would be seen by the

majority of park visitors. Landscape rehabilitation at the other units would have a similar goal. Additionally, new permanent and traveling exhibits at the museum and updated waysides elsewhere would provide visitors with a better orientation to the park, and a better understanding of the events associated with the encampment period and Washington's use of the Ford Mansion. Efforts would be made to improve the arrival sequence, putting more emphasis on the Ford Mansion and interpreting the scope of the Ford Farm. Orientation and interpretation of all park themes would be provided at each unit. The park would open extensive vistas at Fort Nonsense to portray conditions extant during the encampment period. The clearing, combined with new large-scale interpretive exhibits, would give visitors a better sense of the military significance of the hilltop. The overall approach would make the conditions experienced by the Continental Army, and the broad range of their military activities during the encampments, more tangible and visible. Beneficial impacts on visitor understanding and enjoyment would be major and long-term.

As in Alternative A, under this alternative the park would continue to focus interpretation on the encampment period and not address later time periods. Potential deaccessioning could severely reduce the intellectual and research value of the collections. Contributions of the WANJ, the Town of Morristown, and the NPS/CCC/PWA to the park would not be regularly shared with visitors. The adverse impact on visitor understanding is judged to be moderate and long-term.

Interpretation of forest management activities would complement the historical focus. Connections between natural resources, such as water and a mature forest, and General Washington's selection of Jockey Hollow for the winter encampment would help visitors understand the National Park Service's investments to protect water quality and sustain the hardwood forest. Communicating the ecological functions and values of Morristown NHP would resonate with local communities that treasure the park's open space and relatively natural setting. Impacts on visitor understanding would be major, long-term, and beneficial.

Carrying Capacity

Alternative B recognizes the potential for visitation to exceed the carrying capacity of the Ford Mansion and historic roads in Jockey Hollow, and proposes actions that could affect carrying capacity. Rehabilitation of the museum would likely bring approximately 4,800 additional visitors to the unit annually. Support facilities (parking, restrooms) are generally adequate; however, wait time to visit the Ford Mansion could be slightly increased. This inconvenience would be offset substantially by new and improved exhibits in the museum and rehabilitated landscape. The impact on the visitor experience would likely be adverse, negligible, and long-term.

A second group of actions, introduction of a park–town shuttle and other restrictions on automobile traffic in Jockey Hollow, would tend to improve carrying capacity. Conflicts among visitors using different modes of travel would be substantially reduced. The impact on the visitor experience would likely be beneficial, moderate, and long-term. The park would study carrying capacity prior to implementing these actions.

Cumulative Visitor Experience

Through preserving important park values, refocusing interpretation on treating the encampments in greater depth, and providing new services such as the park–town shuttle, Alternative B would have major, long-term, beneficial impacts on the visitor experience.

IV. PARK OPERATIONS

Administration and Operation

Impacts on park operations associated with proposed actions under Alternative B have several elements. There would be moderate, short-term, adverse impacts to park administrative staff who would have to either relocate to other facilities within the park, possibly the Cross Estate, or to an

off-site facility during rehabilitation of the museum. This temporary relocation would also result in less access for visitors to park staff, decreased staff efficiency due to increased travel time, and additional duties for maintenance personnel and protection rangers, with associated costs.

If the park acquires an existing residence adjacent to the Jockey Hollow unit to serve as administrative headquarters, there would be beneficial, minor, and long-term impacts on administrative efficiency. These would result from reduced staff travel time among units, particularly as Jockey Hollow is the most heavily visited unit. This action would likely have negligible impacts on traffic and natural resources. The roads surrounding Jockey Hollow generally have the capacity to accept the projected minor increase in traffic, and most residential properties in the area would likely have adequate facilities to support administrative functions without substantial site modification.

The removal of the Caretaker's Cottage, its garage, and the Dick House would result in staff having to relocate. If staff members move temporarily to the Cross Estate, this would result in added travel time to and from Washington's Headquarters. Curatorial staff would also experience additional burdens from having to monitor conditions at temporary, remote, and possibly multiple locations where the collections and archives would be stored during rehabilitation. The collections and archives would need to be relocated to an appropriate site, resulting in substantial additional costs, such as storage fees and administrative time to set up, move, and retrieve materials. Visitor protection rangers would also have added duties associated with monitoring construction sites and ensuring security for visitors and resources. The addition of planning and cultural resource staff would help the park care for its resources and support its greater regional participation. Park facilities following rehabilitation and expansion of the museum would be adequate to accommodate additional staff. Consolidated work areas for curatorial staff would allow for more efficient operations. Major, beneficial, long-term impacts would result from increases in staff (4.5 full-time and 10 seasonal positions), consolidation of space, and clear resource management objectives.

Actions under Alternative B would have minor, long-term, beneficial impacts on the maintenance division. Additional staff would be secured to maintain the new spaces in the museum and relocated administrative headquarters, operate the shuttle, implement the new forest management plans, and maintain the new landscape vignettes, waysides, and trails. Reductions in paved roads, and limitations on their use, would reduce maintenance requirements in terms of personnel time and equipment. Reductions in user conflicts along major park roads would also reduce traffic incidents requiring law enforcement involvement.

Use of the Cross Estate main house by up to 10 NPS employees would be discontinued, resulting in the need for them to find alternative housing, which may be difficult given the economic conditions surrounding the park. Removing maintenance of the house and gardens from the NPS would have a beneficial impact in that park funds, materials, and staff time would be available for more significant resources and programs.

Partnerships and Outreach

Alternative B encourages the park to develop partnerships beyond the WANJ, and envisions a vital regional role in preserving and interpreting aspects of the American Revolution. A major focus of partnership could be the proposed Crossroads of the American Revolution heritage area. Alternative B also supports partnership with organizations such as the Morristown Partnership (to operate the shuttle) and outreach to organizations, such as the Great Swamp Watershed Association, involved in natural resource stewardship and protection. Actions such as rehabilitation of the museum and Jockey Hollow visitor center would enable the park to provide dedicated support space for Eastern National (books and gifts) or other groups. The impact on

the ability of the park to accomplish its mission with assistance from partners would be beneficial, major, and long-term.

V. SOCIOECONOMIC ENVIRONMENT

Unlike Alternative A, the rehabilitation and expansion of the museum would attract additional visitors. Based on increases at similar historic sites, the project is estimated to generate a 15% jump in visitation, bringing 4,800 additional museum visitors. This would lead to an additional $134,000 per year in tourism expenditures as some of those visitors would stay overnight in the local area. This alternative would also likely add 4.5 full-time-equivalent (FTE) positions and 10 seasonal positions. Under Alternative B, $11–$13.25 million worth of projects would be implemented over the course of implementing the GMP. This would entail some construction employment and economic spinoff in the community. Land acquisition could also have socioeconomic impacts; however, these are difficult to evaluate given market uncertainties. It should also be pointed out that there would be additional economic benefits from the salaries for new employees at Morristown NHP. These spending estimates are fairly conservative and could go higher depending on the nature of the museum programming, the shuttle, and other improvements to the visitor experience. The beneficial impacts from Alternative B would be moderate and long-term.

VI. IMPAIRMENT OF RESOURCES

Alternative B proposes a number of new approaches to preserve and interpret park resources whose conservation is (a) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, (b) key to the natural or cultural integrity of the park or to opportunities to enjoy it, and (c) identified as a goal in the park's GMP or other relevant NPS planning documents. As such, adoption of Alternative B would not impair park resources or values and will not violate the NPS Organic Act.

VII. SUSTAINABILITY AND LONG-TERM MANAGEMENT

Several long-term and potentially irreversible adverse impacts are avoided as a result of implementing Alternative B.

- Integrated forest management intervenes in the process of forest change, avoiding the development of a shrub-vine thicket, protecting archeological resources, and sustaining the mixed hardwood forest with the structure and character valued by Congress when authorizing the park.
- Collections and archives would be stored under proper conditions in an addition to the museum. Improved storage conditions would dramatically reduce the rate of deterioration and the need for future conservation treatment, saving money and staff time.
- An increased acreage ceiling helps the park move more quickly to protect historic landscapes and Revolutionary War resources from incompatible development on adjacent lands. Other resources, such as the visitor experience and water quality, would also be protected.

In contrast, resources that post-date the encampment, particularly those from the commemorative era, would not be protected and could be removed. Resources like the Caretaker's Cottage could be lost.

CONSEQUENCES OF ALTERNATIVE C: PROPOSED ACTION

Summary of Alternative C

This is the ***proposed action.*** Alternative C would emphasize the encampment period; however, it would also recognize the efforts of successive generations (1873–1942) to protect, interpret, and commemorate the encampments. The park would employ interpretive methods, such as programs, exhibits, and other media, and focused rehabilitation of the landscape to present to visitors a scene evocative of the encampment period. This alterna-

tive would also preserve selected 19th- and 20th-century conditions and features added to the historic scene, and might draw on them to illustrate the important and complex history of park resources.

Key actions include:

- The museum is rehabilitated and a 5,000–10,000-square-foot addition is constructed to improve collections storage and exhibits *(same as in Alternative B).* The proposed locations for the addition are along either side of the museum, and may extend south of its south façade.
- A cultural landscape treatment plan integrates cultural and natural resource management objectives to protect cultural resources, historic character, and sustain the park's mixed hardwood forest. *(Same as in Alternative B. However, the scope of treatment is greater than in Alternative B, as landscape vignettes are not created in Jockey Hollow.)*
- Interpretation remains centered on the encampments, but treats other themes including commemoration and historic preservation.
- A park–town shuttle is developed with partners to serve multiple units. *(Same as in Alternative B.)*
- The park's authorized acreage ceiling is adjusted upward to better facilitate land acquisition on a willing-seller basis to protect park resources. *(Same as in Alternative B.)*
- The park is a leader in regional initiatives related to the Revolutionary War, its commemoration, and environmental stewardship.

Management prescriptions and possible actions under this alternative are described in detail in Chapter 2.

I. CULTURAL RESOURCES

Historic Landscapes

Landscape rehabilitation to support Alternative C would temporarily disrupt the historic scene on approximately 5 acres at Washington's Headquarters during implementation, visually, audibly, and through increased construction-related traffic. Actions would include vegetation removal, replanting, and changes to sidewalks and paths. All work would be done in accordance with existing or soon-to-be-completed treatment plans and other associated studies, as well as in accordance with applicable NPS standards and guidelines. The resulting landscape would more closely reflect the commemorative landscape established in the mid-1930s. As in Alternative B, impacts would likely be beneficial, major, and long-term.

Construction of an addition to the museum under Alternative C could affect the setting of the Ford Mansion. If constructed on either side of the museum, the structures would not be visible from the mansion. However, if constructed in the area to the south of the museum, the structures would be visible from the Ford Mansion. While visible, this area is considered to be of secondary importance to the setting of the mansion, and the new structure would be designed so as not to diminish the integrity of the setting.

As in Alternative B, resource management actions to sustain the mixed hardwood forest would be guided by a cultural landscape treatment plan. These actions, possibly including replanting, deer exclosures, and removal of invasive plants, would protect the character of the park's forests, an important cultural resource recognized by Congress at the establishment of the park. Treatment under Alternative C would encompass all woodlands outside the major interpretive areas in the Fort Nonsense, Jockey Hollow, and New Jersey Brigade units: a total of approximately 1,600 acres. As in Alternative B, impacts associated with these actions would be long-term, major, and beneficial.

Like Alternative B, Alternative C would seek authority to raise the park's acreage to 500 acres. A land protection plan would address acquisition of easements and lands, on a willing-seller basis, to protect park resources from incompatible develop-

ment on adjacent properties. Residential development intensifying along the park boundary already degrades the park's historic setting. Proposals are underway to introduce additional residential and commercial uses. Increasing the acreage ceiling would enable the park to quickly respond to opportunities for land acquisition, and help communicate to the local community the National Park Service's interest in acquiring adjacent lands on a willing-seller basis. The impact on historic landscapes would be major, long-term, and beneficial.

Under Alternative C, park partners would restore and manage the Cross Estate gardens to serve as a horticultural exhibit. These volunteers would provide services unavailable from park staff. Impacts would be long-term, moderate, and beneficial.

Structures

As in Alternative B, the interior of the museum would be rehabilitated, both in terms of structural integrity (roof) and physical plant, and updating to current codes and NPS standards for collections storage. All work would be done in compliance with the Secretary of the Interior's Standards for Historic Structures and would not diminish the integrity of the building.

As in Alternative B, the park would construct a 5,000–10,000-square-foot addition to the museum. However, the locations proposed are along either side of the museum (as in Alternative B) and could extend south of its south façade. On the latter site the park could consider constructing pavilions linked to the museum, in a manner sensitive to the property's 1930s commemorative design. Regardless of the site, the specific design would be developed as a continuation of Section 106 compliance, and as in Alternative B all work would be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Structures.

Removal of the Dick House and the garage of the Caretaker's Cottage, both non-contributing structures, would have no impact on historic structures. All work on other structures listed on the park's List of Classified Structures (Arbogast 1985) would be done in conformance with the Secretary of the Interior's Standards for the Treatment of Historic Structures.

Under this alternative, the architectural significance and National Register eligibility of the Cross Estate main building would be evaluated. The park would continue to maintain the building in accordance with its status on the List of Classified Structures. Under Alternative C, impacts would be negligible.

Archeology

As in Alternative B, the ACHP and SHPO require review of archeological research actions. Potential impacts would be studied and mitigated; otherwise, investigations to gain information for improved interpretation (the active role for archeology envisioned in Alternatives C) could *consume* resources, bring greater risk of vandalism in open sites, and have major, long-term, adverse impacts on archeological resources. All archeological resources would be protected and preserved in accordance with NPS policies and guidelines.

This alternative proposes to implement a high level of site stabilization, particularly at the brigade cantonment areas and at Fort Nonsense, to preserve, to the maximum extent feasible, evidence of the encampment and 1777 redoubts. In new management zones, the effects of vegetation on archeological resources would be monitored and mitigated in accordance with NPS policy. These actions would have major, long-term, beneficial impacts on archeological resources.

The construction of an addition on either side of the museum would likely have a negligible impact on archeological resources, as both these areas have been previously disturbed. The area behind (north) the museum is relatively less disturbed, and investigations have not ruled out the possibility for encountering archeological resources related to the encampment period. This site, and any new pathways or exhibits located outdoors, would be subject to archeological investigations prior to beginning

construction to ensure no disturbance of subsurface resources, per standard NPS practices.

Under Alternative C, commemorative archeological resources would be preserved and protected alongside Revolutionary War resources. Their location and extent would be investigated, and information from such studies would be incorporated in interpretive plans. In contrast to Alternative B, these actions would have major, long-term, beneficial impacts on commemorative era resources.

Collections

As in Alternative B, museum rehabilitation and construction of an addition would necessitate temporary relocation of the collections and archives. The park would take appropriate measures to protect objects during transport and storage. Impacts to the collections should be negligible.

As in Alternative B, rehabilitation of the museum and construction of an addition would enable the park to move the collections and archives from substandard space into climate-controlled, fire-safe conditions. This would dramatically reduce the rate of deterioration and the need for later conservation treatment of deteriorated objects. These actions would also provide for greater public access to the collections for research. Relocating administrative function from the museum would make additional space available for collections storage and exhibits. The beneficial impacts on preservation of collections would be major and long-term.

Cumulative Cultural Resources

By providing new and enhanced facilities, staff, and management approaches, Alternative C would have major, long-term, beneficial impacts on cultural resources from the encampment period and commemorative era.

II. NATURAL RESOURCES

Soils

As in Alternatives A and B, impacts to soils would be limited to forested areas and park trails. In Jockey Hollow, the topsoil horizon has been observed to be thinning (Russell 2001), primarily in the areas associated with invasive plant species. Elevated nitrogen levels have also been identified in areas of invasive plants. A carrying capacity study or inventory and monitoring program would be completed to determine if these adverse impacts are the result of visitor use, maintenance practices, competition from invasive species, or other causes. The study would establish appropriate use levels and maintenance practices. The NPS is unable to determine the potential impacts from existing levels of public use and maintenance on soils along various trails.

As in Alternative B, construction of an addition to the museum would disturb soil resources at Washington's Headquarters. The 5,000–10,000-square-foot addition would likely have two stories, with a footprint of 2,500–5,000 square feet. The total extent of soil disturbance, including the building footprint and associated work areas, would be less than one-quarter acre. The NPS would employ erosion control measures to minimize soil loss, and all disturbed areas outside the addition would be fully landscaped. Adverse impacts to soil resources would be minor and short-term.

As in Alternative B, resource management actions to sustain a mixed hardwood forest, potentially involving replanting, deer exclosures, and removal of invasive plants, could impact soil resources. Adverse impacts would likely be short-term and minor, as erosion would be controlled during implementation and all treated areas would be revegetated.

Water Resources

As in Alternative B, the park would address the sources of increased erosion and sedimentation levels, and seasonally high coliform levels through new management approaches, including a Water Quality Protection zone, acquiring easements and lands, and other measures. Under Alternative C, long-term adverse impacts may continue; however, they would be of negligible intensity.

In Alternative C, resource management actions to sustain a mixed hardwood forest, potentially involv-

ing replanting, deer exclosures, and removal of invasive plants, could impact park waters through siltation. However, management actions within the Water Quality Protection zones would address present conditions and mitigate impacts due to proposed landscape treatment and visitor use. Mitigation in this zone could include revegetating eroded banks to control erosion and restricting visitor access to stream banks. Impacts to surface waters would likely be short-term and negligible.

Biological Resources

Vegetation

Under Alternative C, a new integrated treatment plan to sustain a mixed hardwood forest would be developed through interdisciplinary research. The research to determine treatment, involving extensive inventory and monitoring, is not likely to have adverse impacts. Implementation of the plan would likely impact park vegetation. Landscape treatment would be parkwide, with particular emphasis in the Jockey Hollow and New Jersey Brigade units. Unlike Alternative B, this alternative does not create landscape vignettes. The type and intensity of short-term impacts cannot be determined at this point. Over the long term, sustaining a mixed hardwood forest would have a major beneficial impact on park vegetation.

Wildlife

Under Alternative C, wildlife would likely be impacted due to implementation of the landscape treatment plan. The plan's actions to sustain the mixed hardwood forest could reduce habitat for certain species, and increase habitat for others. Impacts would be both short- and long-term, but would likely be minor or moderate. Some impacts could be beneficial; however, the scope of these cannot be determined at this time.

As a result of the changes in the forest management, the wildlife population would likely change. Alternative C envisions a robust research program to determine if there are specific steps the NPS can and should take to protect wildlife. As in Alternative A, the park would continue to monitor specific animal populations such as deer. The park does not have enough data to establish causal relationships or evaluate the potential impacts at this time.

Floodplains and Wetlands

Like Alternative B, this alternative does not propose actions that would affect the Passaic River floodplain. However, landscape treatment described above may affect factors critical to park wetlands. These include accelerated soil erosion, sedimentation, changes in species composition, and elevated nutrient levels in waters. The Water Quality Protection zone proposed under Alternatives B and C encompasses the Passaic River floodplain and all park wetlands. While focused on protecting water quality, management actions would also protect floodplains and wetlands. Impacts would likely be avoided or minimized, and the heightened management of these areas could have a moderate, long-term, beneficial impact.

Species of Special Concern

Under Alternative C, landscape treatment to sustain the mixed hardwood forest could involve the removal of several mature trees. This could have direct, indirect, or cumulative impacts on federally or state listed species. The Indiana bat *(Myotis sodalis),* cerulean warbler *(Dendroica cerulea),* Cooper's hawk *(Accipter cooperi),* and bald eagle *(Haliaeetus leucocephalus)* could potentially be affected.

As in Alternative B, the U.S. Fish and Wildlife Service (FWS) would be consulted prior to implementing landscape treatment plans, and mitigation measures recommended by the FWS would be developed. For the Indiana bat, a species not recorded in the park but known to inhabit Morris County, these measures include: bat surveying, keeping the size of clearings to under 1 acre, and scheduling work for November 15 to April 1, when the bats are hibernating in areas outside the park.

Like Alternative B, Alternative C seeks to preserve wetland and riparian areas for their habitat value and as critical to maintaining high water quality. Visitor activities would be controlled in these areas, and supporting facilities would also be limited. These

areas are potential habitat for the federally listed bog turtle *(Clemmys muhlenbergii),* known to occur within 1.5 miles of the park, and several state-listed threatened plant species. The park would follow FWS recommendations to survey for the presence of bog turtles and other species.

By consulting with the FWS prior to implementing landscape treatment plans, and by adopting specific recommendations, Alternative C would have negligible adverse impacts on species of special concern.

Air Quality

Similar to Alternatives A and B, ozone levels would continue to be periodically high. The NPS would not have enough information to determine the sources, or evaluate the duration or intensity of potential impacts.

Implementation of a park–town shuttle could improve air quality by reducing private automobile traffic at each unit. For example, private cars would be discouraged on the Jockey Hollow tour road. Under Alternative C, impacts on air quality could be moderate, long-term, and beneficial.

Sound

In the Jockey Hollow, New Jersey Brigade, and Fort Nonsense units, the natural soundscape is compromised by car, truck, and airplane traffic, but the overall experience is still that of a rural forested area. Most of the noise comes from off-site traffic. Implementing a park–town shuttle could reduce in-park traffic and substantially reduce noise levels, most notably at Jockey Hollow where there are few non-park noises. Utilization of electric shuttle vehicles could have additional beneficial impacts on the natural soundscape. The overall impact of these actions on the natural soundscape would vary among and within units, and would likely be of moderate intensity.

As in Alternatives A and B, the high decibel levels at Washington's Headquarters would continue to diminish the visitor experience and restrict interpretive programs. Noise and vibration levels may be adversely impacting the structural integrity of the museum and Ford Mansion. Studies would be completed to determine if these impacts could result in impairment of these resources. Under Alternative C, the significance of the museum would be determined and if found eligible, could justify intervention. If the museum addition created a courtyard similar to the space envisioned in the 1930s, the building wings would substantially reduce noise and improve conditions for visitation. With this mitigating factor, overall impacts at Washington's Headquarters would likely be adverse, minor, and long-term.

Cumulative Natural Resources

The increased inventory and monitoring, and heightened management of natural resources would likely have beneficial long-term impacts. The intensity of the impacts cannot be determined at this time.

III. VISITOR EXPERIENCE

Visitor Activities and Services

Like Alternative B, Alternative C would provide for new activities and services, and interpretation of the encampment period would be enhanced. Interpretation would be expanded to treat a commemorative theme. The long-term impact of these actions would be major and beneficial. However, there would be short-term adverse impacts as follows.

There would be short-term and minor adverse impacts during rehabilitation and expansion of the museum. Construction would introduce visual intrusions, noise, dust, vibrations, and traffic. Visitors would need to be routed around the construction area in order to visit the unit. The public would have no access to museum exhibits, and researchers would not have access to the collections or archives. Such a limited experience would result in an incomplete understanding or appreciation of the park.

Despite the short-term construction-related impacts associated with the museum rehabilitation and construction of an addition, this alternative would have major, beneficial, and long-term impacts on the visitor experience. Visitors would have greater

opportunity to enjoy programs in the museum and adjacent landscape. Researchers and school groups would be better accommodated. Visitors would find a greater range of books and related gifts. New pedestrian links and signage from downtown Morristown to the park would enhance opportunities for visitors to include other cultural sites in their visit to Morristown, and to reach the park using public transit. The new pathways at the unit would provide better circulation through the site from visitor parking areas, and between the Ford Mansion and museum.

Rehabilitation of the Jockey Hollow visitor center would have similar short-term adverse impacts, and long-term beneficial impacts. The work would be done in such a manner so as to preserve the building's character-defining features, yet achieve greater utility in support of core programs and services.

Sustaining a mixed hardwood forest would involve persistent research and treatment in much of the forested areas of Fort Nonsense, Jockey Hollow, and the New Jersey Brigade units. These actions could restrict visitors from portions of the park for long periods of time. Actions would be designed to minimize impacts on visitors through measures such as keeping treated areas modest in size, or locating experimental plots away from trails. Given the large size of the forest, and the extensive trail network, opportunities for visitors to enjoy the park would not be greatly diminished. Impacts would be adverse, but minor. Over the long term, sustaining the scenic and ecological values of the forest, both highly valued by visitors, would more than compensate for the minor impacts.

As in Alternative B, several actions under this alternative involve changes to vehicular circulation at Jockey Hollow. Closure and restoration of road segments could result in reductions in numbers of visitors and times of visitation. Types of uses, such as private vehicles, may be restricted to certain times, or eliminated. Motorists may need to take alternate routes. Emergency access would be preserved. The objectives of these actions include enhancing the historic scene and reducing or eliminating unsafe conditions involving vehicular traffic, bicycles, and pedestrians. Unsafe conditions are particularly acute along Sugar Loaf Road. Any such actions would be done only after the opportunity for public review of proposals and opportunity for comment.

Vehicular circulation would be improved beyond Jockey Hollow through implementation of a park–town shuttle. Running among park units, downtown Morristown, and other related regional attractions, the shuttle would have major long-term benefits to visitor safety, enjoyment, and understanding. It would reduce visitor exposure to high traffic volumes, substituting a safe and comfortable experience. The shuttle would also facilitate visitation of more than one park unit, potentially increasing visitor understanding of the significance of Morristown NHP.

As in Alternatives A and B, the park would continue to prohibit bicycles from using unpaved trails. NPS Management Policies (2001) states, "the designation of bicycle routes, other than on park roads and in parking areas, requires a written determination that such use is consistent with the protection of a park's natural, cultural, scenic, and esthetic values, safety considerations, and management objectives, and will not disturb wildlife or other park resources." Bicycle use of unpaved trails would likely have major adverse and long-term impacts on park values (such as tranquility), visitor safety (conflicts with hikers), and other park resources such as soils and vegetation. Continuing the prohibition, but allowing bicycles on park roads, would have major, beneficial, and long-term impacts on the visitor experience.

Interpretation and Education

Interpretive actions are similar to those of Alternative B with the exception that Alternative C involves less landscape rehabilitation (no vignettes), more extensive interpretive exhibits, and encompasses commemorative themes. As in Alternative B, orientation and interpretation of all park themes would be provided at each unit to the extent feasible.

Landscape rehabilitation at all units would have a consistent goal. New permanent and traveling exhibits at the museum and updated waysides elsewhere would provide visitors with a better orientation to the park, a better understanding of the encampment period and Washington's use of the Ford Mansion, and later efforts to commemorate these events. Efforts would be made to improve the arrival sequence, putting more emphasis on the Ford Mansion. The park would open less expansive vistas at Fort Nonsense than under Alternative B. These clearings would be combined with new large-scale interpretive exhibits, as under Alternative B; however, the intent would be to interpret the 1777 redoubts and later commemorative efforts. Expanding and upgrading services at Fort Nonsense would cause typical short-term construction impacts. The actions would enable access to school groups and better accommodate use of the unit for picnics. The overall approach enhances visitor understanding of the conditions experienced by the Continental Army, the broad range of their military activities during the encampments, and later commemorative efforts of groups such as the WANJ, the Town of Morristown, and the NPS. Beneficial impacts on would be major and long-term.

Interpretation of forest management activities would complement the historical focus. Connections between natural resources, such as water, and General Washington's selection of Jockey Hollow for the winter encampment would help visitors understand the National Park Service's investments to protect water quality and sustain the hardwood forest. Communicating the ecological functions and values of Morristown NHP would resonate with local communities that treasure the park's open space and relatively natural setting. Impacts on visitor understanding would be major, long-term, and beneficial.

Under Alternative C, a modest interpretive exhibit would be developed to tell the story of the Crosses' involvement in the park, the development of the garden, and the Park Service's acquisition of the estate. Impacts on visitor experience would be beneficial, moderate, and long-term.

Carrying Capacity

Like Alternative B, this alternative recognizes the potential for visitation to exceed the carrying capacity of the Ford Mansion and historic roads in Jockey Hollow, and proposes actions that could affect carrying capacity. Rehabilitation of the museum would likely bring approximately 4,800 additional visitors to the unit annually. Support facilities (parking, restrooms) are generally adequate; however, wait time to visit the Ford Mansion could be slightly increased. This inconvenience would be offset substantially by new and improved exhibits in the museum and rehabilitated landscape. The impact on the visitor experience would likely be adverse, negligible, and long-term.

A second group of actions, introduction of a park–town shuttle and other reductions of automobile traffic in Jockey Hollow, would tend to improve carrying capacity. Conflicts among visitors using different modes of travel would be substantially reduced. The impact on the visitor experience would likely be beneficial, moderate, and long-term. The park would study carrying capacity prior to implementing these actions.

Cumulative Visitor Experience

Through preserving important park values, refocusing interpretation on treating the encampments in greater depth while expanding interpretation to encompass commemorative themes, and providing new services such as the park–town shuttle, Alternative C would have major, long-term, beneficial impacts on the visitor experience.

IV. PARK OPERATIONS

Administration and Operation

As in Alternative B, impacts on park operations associated with proposed actions under Alternative C have several elements. There would be moderate, short-term impacts to park administrative staff who would have to either relocate to other facilities within the park, possibly the Cross Estate, or to an off-site facility during rehabilitation of the museum. This temporary relocation would also result in less access for visitors to park staff, decreased staff

efficiency due to increased travel time, and additional duties for maintenance personnel and protection rangers, with associated costs.

If the park acquires an existing residence adjacent to the Jockey Hollow unit to serve as administrative headquarters there would be beneficial, minor, and long-term impacts on administrative efficiency. These would result from reduced staff travel time among units, particularly as Jockey Hollow is the most heavily visited unit. This action would likely have negligible impacts on traffic and natural resources. The roads surrounding Jockey Hollow generally have the capacity to accept the projected minor increase in traffic, and most residential properties in the area would likely have adequate facilities to support administrative functions without substantial site modification.

The removal of the garage for the Caretaker's Cottage would have a negligible impact on park operations. However, removal of the Dick House would result in staff members having to relocate. If staff members move to the Cross Estate, either temporarily or for a longer duration, this could result in relocation of park employees currently housed there, as well as added travel time to and from Washington's Headquarters. Curatorial staff would also experience additional burdens from having to monitor conditions at temporary, remote, and possibly multiple locations where the collections and archives would be stored during rehabilitation. The collections and archives would need to be relocated to an appropriate site, resulting in substantial additional costs such as storage fees and administrative time to set up, move, and retrieve materials. Visitor protection rangers would also have added duties associated with monitoring construction sites and the increased visitation at Fort Nonsense. The addition of planning and cultural resource staff would help the park care for its resources and support its greater regional participation. Park facilities, following rehabilitation and expansion of the museum, would be adequate to accommodate additional staff. Consolidated work areas for curatorial staff would allow for more efficient operations. Major, beneficial, long-term impacts would result from increases in staff (6.5 full-time and 5 seasonal positions), consolidated space, and clear resource management objectives.

Actions under Alternative C would have minor, long-term, beneficial impacts on the maintenance division. As in Alternative B, additional staff would be required to maintain the new spaces in the museum, relocated administrative headquarters, operate the shuttle, implement the new forest management plans, and maintain the new waysides and trails. Reductions in paved roads and limitations on their use would reduce maintenance requirements in terms of personnel time and equipment. Reductions in user conflicts along major park roads would also reduce traffic incidents requiring law enforcement involvement. Unlike Alternative B, however, this alternative would require the park to continue to maintain the Cross Estate with no new staff.

Partnerships and Outreach

Alternative C, like Alternative B, encourages the park to develop partnerships beyond the WANJ, and envisions a vital regional role in preserving and interpreting aspects of the American Revolution. A major focus of partnership could be the proposed Crossroads of the American Revolution heritage area. The alternative also supports partnership with organizations such as the Morristown Partnership (to operate the shuttle) and outreach to organizations, such as the Great Swamp Watershed Association, involved in natural resource stewardship and protection. Unlike Alternative B, under Alternative C the park would be encouraged to collaborate on the development of a regional orientation center to help visitors understand the park's role in the rich heritage of the Morristown region. Furthermore, actions such as rehabilitation of the museum and Jockey Hollow visitor center would enable the park to provide dedicated support space for Eastern National (books and gifts) or other groups. The impact on the ability of the park to accomplish its mission with assistance from partners would be beneficial, major, and long-term.

V. SOCIOECONOMIC ENVIRONMENT

As in Alternative B, the rehabilitation and expansion of the museum would attract additional visitors. Based on increases at similar historic sites, the project is estimated to generate a 15% jump in visitation, bringing 4,800 additional museum visitors. This would lead to an additional $134,000 per year in tourism expenditures as some of those visitors would stay overnight in the local area. Alternative C would also likely add 6.5 full-time-equivalent (FTE) positions and 5 seasonal positions to the staff. Approximately $10–$12 million worth of projects would be implemented over the course of implementing the GMP. This would entail some construction employment and economic spinoff in the community. Land acquisition could also have socioeconomic impacts; however, these are difficult to evaluate given market uncertainties. It should also be pointed out that there would be additional economic benefits from the salaries for new employees at Morristown NHP. These spending estimates are fairly conservative and could go higher depending on the nature of the museum programming, the shuttle, and other improvements to the visitor experience. As in Alternative B, the beneficial impacts from Alternative C would be moderate and long-term.

VI. IMPAIRMENT OF RESOURCES

Alternative C proposes a number of new approaches to preserve and interpret park resources whose conservation is (a) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, (b) key to the natural or cultural integrity of the park or to opportunities to enjoy it, and (c) identified as a goal in the park's GMP or other relevant NPS planning documents. As such, adoption of Alternative C would not impair park resources or values and will not violate the NPS Organic Act.

VII. SUSTAINABILITY AND LONG-TERM MANAGEMENT

As in Alternative B, several long-term and potentially irreversible adverse impacts are avoided as a result of implementing Alternative C.

- Integrated forest management intervenes in the process of forest change, avoiding the development of a shrub-vine thicket, protecting archeological resources, and sustaining the mixed hardwood forest with the structure and character valued by Congress when authorizing the park. Prospects for sustaining the forest would be slightly greater under this alternative than in Alternative B. This would be due to sustainable treatment of the 80 acres located in the core of Jockey Hollow that otherwise would be manipulated to create vignettes in Alternative B.
- Collections and archives would be stored under proper conditions in an addition to the museum. Improved storage conditions would dramatically reduce the rate of deterioration and the need for future conservation treatment, saving money and staff time.
- An increased acreage ceiling helps the park move more quickly to protect historic landscapes and Revolutionary War resources from incompatible development on adjacent lands. Other resources, such as the visitor experience and water quality, would also be protected.
- Commemorative resources would be protected and interpreted to visitors.

Summary of Impacts by Alternative

Cultural Resources
Landscapes
Alternative A: Adverse, Moderate–Major, Long-term (loss of commemorative resources; ineffective forest management; restrictive acreage ceiling)
Alternative B: Adverse, Minor, Short-term (landscape and museum rehabilitation)
Beneficial, Major, Long-term (landscape and museum rehabilitation; increased acreage ceiling; integrated forest management)
Undetermined type, Undetermined intensity, Long-term (possible removal of commemorative resources)
Alternative C (proposed action): Adverse, Minor, Short-term (landscape and museum rehabilitation)
Beneficial, Major, Long-term (landscape and museum rehabilitation; increased acreage ceiling; integrated forest management)
Structures
Alternative A: Adverse, Moderate, Long-term (degradation of museum; loss of commemorative resources)
Alternative B: Beneficial, Major, Long-term (museum rehabilitation)
Undetermined type, Undetermined intensity, Long-term (removal of Caretaker's Cottage and other structures)
Alternative C (proposed action): Beneficial, Major, Long-term (museum rehabilitation)
Archeology
Alternative A: Adverse, Minor–Moderate, Long-term (degradation due to limited forest management)
Undetermined type, Major, Long-term (loss of commemorative resources)
Alternative B: Beneficial, Major, Long-term (increased stabilization)
Undetermined type, Undetermined intensity, Long-term (loss of commemorative resources)
Alternative C (proposed action): Beneficial, Major, Long-term (increased stabilization)
Collections
Alternative A: Adverse, Major, Long-term (storage conditions)
Alternative B: Beneficial, Major, Long-term (museum rehabilitation)
Alternative C (proposed action): Same as Alternative B
Cumulative
Alternative A: Adverse, Moderate–Major, Long-term
Alternative B: Beneficial, Major, Long-term
Undetermined type, Undetermined intensity, Long-term (loss of commemorative resources)
Alternative C (proposed action): Beneficial, Major, Long-term

Summary of Impacts by Alternative

Natural Resources
Soil
Alternative A: Adverse, Undetermined intensity, Undetermined duration (visitor use of trails)
Alternative B: Adverse, Undetermined intensity, Undetermined duration (visitor use of trails)
Adverse, Minor, Short-term (museum and landscape rehabilitation, forest management)
Alternative C (proposed action): Same as Alternative B
Water
Alternative A: Adverse, Major, Long-term (ineffective forest management)
Alternative B: Adverse, Negligible, Short- and Long-term (resource protection in special management zone)
Alternative C (proposed action): Same as Alternative B
Vegetation
Alternative A: Undetermined type, Undetermined intensity, Undetermined duration (forest change)
Alternative B: Beneficial, Major, Long-term (landscape rehabilitation; forest management)
Undetermined type, Negligible–Moderate, Short-term (creation of vignettes; forest management)
Alternative C (proposed action): Beneficial, Major, Long-term (landscape rehabilitation; forest management)
Wildlife
Alternative A: Adverse, Major, Long-term (storage conditions)
Alternative B: Undetermined type, Minor–Moderate, Short- and Long-term (landscape rehabilitation; forest management; creation of vignettes)
Alternative C (proposed action): Undetermined type, Minor–Moderate, Short- and Long-term (landscape rehabilitation; forest management)
Floodplains and Wetlands
Alternative A: Adverse, Undetermined intensity, Long-term (forest change)
Alternative B: Beneficial, Moderate, Long-term (resource protection in special management zone)
Undetermined type, Undetermined intensity, Long-term (loss of commemorative resources)
Alternative C (proposed action): Same as Alternative B
Species of Special Concern
Alternative A: Adverse, Undetermined intensity, Undetermined duration (forest change)
Alternative B: Adverse, Negligible, Short- and Long-term (landscape rehabilitation; forest management; creation of vignettes)
Alternative C (proposed action): Adverse, Negligible, Short- and Long-term (landscape rehabilitation; forest management)
Air Quality
Alternative A: Beneficial, Moderate, Long-term (interpretive shuttle)
Alternative B: Beneficial, Moderate, Long-term (park–town shuttle)
Alternative C (proposed action): Same as Alternative B
Sound
Alternative A: Adverse, Moderate, Long-term (I-287)
Alternative B: Adverse, Moderate ,Long-term (I-287)
Beneficial, Moderate, Long-term (park–town shuttle)
Alternative C (proposed action): Same as Alternative B
Cumulative
Alternative A: Adverse, Moderate, Long-term
Alternative B: Beneficial, Undetermined intensity, Short- and Long-term
Alternative C (proposed action): Same as Alternative B

Summary of Impacts by Alternative

Visitor Experience

Visitor Activities and Services

Alternative A: Adverse, Moderate, Long-term (inadequate facilities; confusing circulation among units) and

Beneficial, Moderate–Major, Long-term (interpretive shuttle; bicycles only on paved roads)

Alternative B: Adverse, Minor, Short-term (landscape rehabilitation; museum rehabilitation; forest management)

Beneficial, Major, Long-term (landscape rehabilitation; museum rehabilitation; forest management; park–town shuttle and other circulation improvements)

Alternative C (proposed action): Same as Alternative B

Interpretation and Education

Alternative A: Adverse, Minor–Moderate, Long-term (narrow interpretive focus; no ecological information; poor circulation; intrusive adjacent development)

Alternative B: Beneficial, Major, Long-term (improved orientation, treatment of ecological themes, new vignettes and other exhibits)

Adverse, Moderate, Long-term (no treatment of commemorative themes)

Alternative C (proposed action): Beneficial, Major, Long-term (improved orientation, treatment of ecological and commemorative themes, and new exhibits)

Carrying Capacity

Alternative A: Adverse, Undetermined intensity, Long-term ("no action" at Ford Mansion)

Beneficial, Moderate, Long-term (JH shuttle reduces pedestrian–auto conflicts)

Alternative B: Adverse, Negligible, Long-term (longer wait to visit Ford Mansion)

Beneficial, Moderate, Long-term (park–town shuttle reduces pedestrian–auto conflicts)

Alternative C (proposed action): Same as Alternative B

Cumulative

Alternative A: Adverse, Moderate, Long-term

Alternative B: Beneficial, Major, Long-term

Alternative C (proposed action): Same as Alternative B

Park Operations

Administration and Operation

Alternative A: Adverse, Minor–Moderate, Long-term (inefficient administrative space; no direction for Cross Estate; reduced housing)

Alternative B: Adverse, Moderate, Short-term (disruptions from rehabilitation) Beneficial, Major, Long-term (additional staff, consolidated space, and clear resource management objectives)

Alternative C (proposed action): Same as Alternative B

Partnerships and Outreach

Alternative A: Adverse, Moderate, Long-term (restrictive scope)

Alternative B: Beneficial, Moderate, Long-term (greater scope and assistance with mission)

Alternative C (proposed action): Beneficial, Major, Long-term (greater scope and assistance with mission that includes commemoration)

Summary of Impacts by Alternative

Socioeconomic

Alternative A: Negligible (limited new staff and projects)

Alternative B: Beneficial, Moderate, Long-term (increased visitation, staff and projects)

Alternative C (proposed action): Same as Alternative B

Impairment

Alternative A: Yes: Collections and historic forest character could be impaired

Alternative B: No

Alternative C (proposed action): Same as Alternative B

Sustainability

Alternative A: Adverse: - Inadequate collections storage facilities - Changing forest character - Development destroys resources on adjacent lands - Development on adjacent lands harms park values and resources

Alternative B: Beneficial: - Proper collections storage facility - Archeological resources stabilized - Historic forest character sustained - Development addressed with land protection plan and increased acreage ceiling

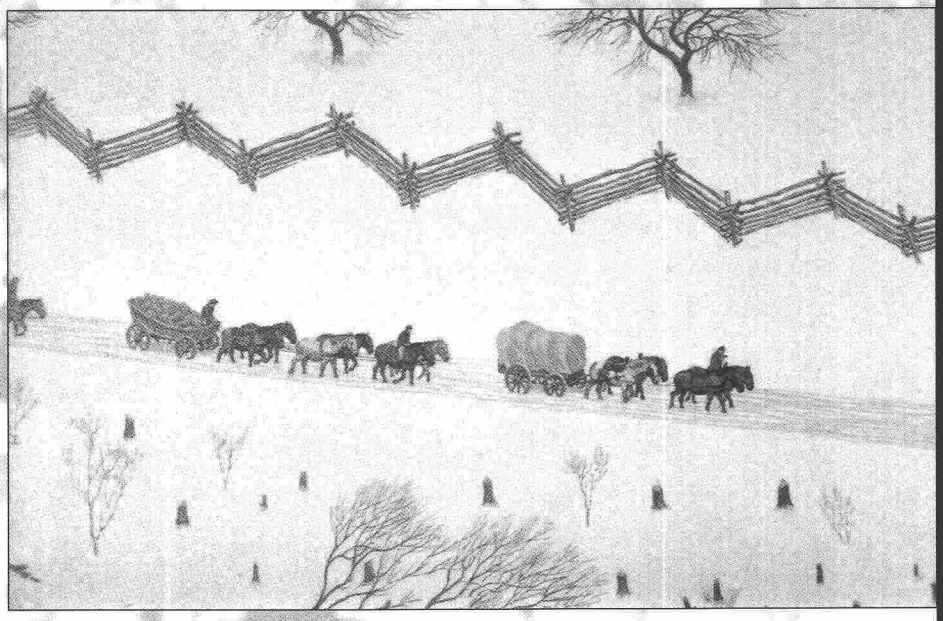
Alternative C (proposed action): Same as Alternative B

CHAPTER 5: PLANNING PROCESS

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Frequent deep snows complicated the movement of supplies on the country roads. Soldiers chronically lacked food and clothing as the formal supply system largely broke down. Only a forced requisition on New Jersey civilians enabled the army to survive.

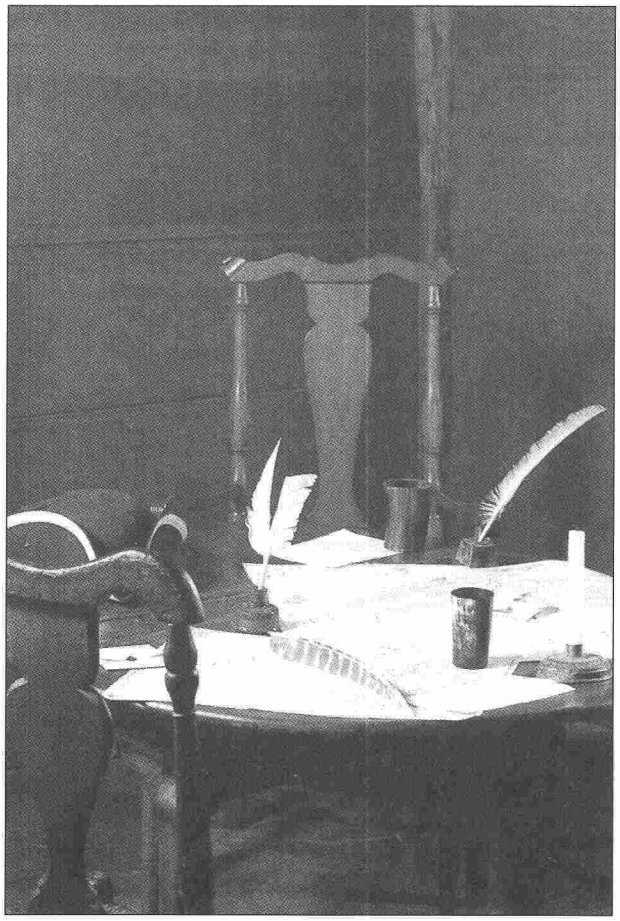
METHODS

The National Park Service takes an interdisciplinary approach to planning. Individuals skilled in the areas of cultural resource management, history, historic preservation, interpretation, collections management, landscape architecture, archeology, and natural resource management comprised the planning team for Morristown NHP. The planning team also included the Superintendent and all division chiefs at the park.

Numerous research projects were undertaken to provide the best available information with which to make decisions during planning. Subject matter experts conducted research on such topics as the park's cultural landscape, visitor use, collections, and furnishings. (Chapter 1 describes the research projects undertaken.) The information generated from the research projects was incorporated into the planning process as it became available.

As a starting point for planning, the team reviewed the park's purpose as defined in its enabling legislation and the park's legislative history. The team then developed a significance statement that identifies the resources that make the park nationally significant. The team also developed goals that articulate the ideal conditions that the park aspires to achieve.

To acquaint the community and interested citizens with the GMP planning process, to solicit comments and concerns regarding the future of Morristown NHP, and to report on the status of planning, the planning team held three public scoping sessions. Two sessions were held in Morristown at the park's museum, the other in Somerset County at the Cross Estate. In addition to notice in the Federal Register, the meetings were announced in local newspapers and invitations were mailed to approximately 1,000 New Jersey citizens. All meetings were well attended. At the sessions, the team members reviewed the purpose and significance statements and the park's goals with the participants.



A parlor in the Wick House used during the Revolution for an office and meeting room. Photo by George Fistrovich.

The team published a follow-up newsletter to highlight comments received from the public and to report on the status of planning. The newsletter was distributed to about 1,500 people and was also made available on the park's web site.

Team members reviewed the public comments and identified issues that the plan should address. These are expressed as Decision Points. Developing ways to resolve the issues became the focus of the

preliminary alternatives, which were the subject of the second newsletter. The park's revised mission statement was also included in the second newsletter. This newsletter was distributed to about 1,500 people and was also made available on the park's web site. The number of postage-paid comment cards returned to the park was very limited (approximately 30).

In addition to the public scoping sessions and newsletters, public input was sought at meetings with various public stakeholder groups. In May 2000, the planning team met to discuss interpretive themes and new directions for improving the experience of visiting the park. The two-day workshop was attended by members of the local community, managers of historic sites in New Jersey, and experts in interpretive planning from the NPS and the private sector. The group analyzed interpretive themes, diagnosed existing problems, and developed a slate of recommendations to improve visitor understanding and enjoyment.

In the winter of 2001, the planning team presented the preliminary alternatives to area planners and local officials. In early spring, the planning team presented the preliminary alternatives to local managers of parks and other protected areas. Later that spring, the planning team provided input at a Morris Township meeting that focused on the potential impacts of a proposed retirement facility adjacent to Jockey Hollow.

The public response expressed at the various meetings and in response to the newsletters allowed the team to refine the alternatives and develop the preferred alternative presented in this document.

The Draft GMP/EIS was available for public review from March 7, 2003 to May 9, 2003, a period of 60 days. The vast majority of public comments received express support for Alternative C (the proposed action.) Other comments recommend further increasing the park's acreage ceiling; ask the park to propose specific actions regarding visitor circulation; ask the park to develop a specific deer management plan; and anticipate the need for further public review when implementation plans are developed. Copies of the comment letters and the National Park Service's responses to those comments are included in Appendix IV. Draft text and graphics were refined and clarified where necessary, and respond to the public comments.

The plan enjoys considerable support, assessed in formal public meetings, newsletters, special briefings, discussions with the U.S. Fish and Wildlife Service, public review of the draft plan, and the Superintendent's numerous consultations with state (including the State Historic Preservation Office) and local governments. Congressman Frelinghuysen supports the plan's ideals and advocates implementation of the proposed museum rehabilitation and expansion.

The Final GMP/EIS will be available to the public for 30 days. If no comments requiring major document revision are received during this waiting period, a Record of Decision (ROD) will be signed indicating which alternative has been selected as the proposed plan, and authorizing the National Park Service to implement the plan.

CALENDAR

1998

October: Funds are first made available for preparation of a GMP. Initial research and development of information on existing conditions begins.

1999

April: Museum Expansion Study completed, recommending phased rehabilitation, and addition and site improvements.

November: Initial meeting of GMP team (Aviles, Brodhead, Green, Henderson, Kendall, Ketel, Lowenthal, Marcocci, Masson, Mendik, Peskin, Vecchioli) at the park to discuss objectives, schedule, and budget; project agreement begun. Supporting research discussed.

Adjacent Lands Study completed, identifying properties potentially containing significant resources, or with the potential for greater development, and potentially impacting park resources or the visitor experience.

December: Meeting of GMP team to coordinate related research at park.

2000

January: Meeting of GMP team with park advisors (Foulds, Hay, Gall, Pendery, Uschold, Vietzke, Weinbaum), researchers (Ehrenfeld, Handel, Russell, Underwood), and Associate Regional Director, Northeast Region (ARD-NER) (McIntosh, Maounis) to discuss natural and cultural resources.

February: Goal-setting workshop with GMP team at Cross Estate.

March: Notice of Intent (NOI) and schedule/location for public meetings printed in the Federal Register.

Advisory Council on Historic Preservation (ACHP) and New Jersey State Historic Preservation Office (NJSHPO) contacted by letter re 106 consultation.

April: Advertisement of public scoping meetings appears in Morristown newspaper.

First and second public scoping meetings held at Cross Estate and Washington's Headquarters.

May: Invitations to additional public scoping meetings mailed.

GMP team, advisors, invited subject matter experts, and representatives from local organizations participate in visitor's experience workshop at the Cross Estate. New directions for improved education and interpretation emerge.

June: Third scoping meeting for the WANJ held at Washington's Headquarters.

Final public scoping meeting held at Washington's Headquarters. Findings from meetings are analyzed during the summer, resulting in draft decision points.

August: GMP team preliminary alternatives workshop at Cross Estate and Washington's Headquarters outlines preliminary alternative concepts.

September: GMP team gives briefing to park advisors and ARD-NER on preliminary alternatives at Cross Estate; team participates in review of working draft of the Integrated Cultural Resources Report. Participants expand and refine the alternatives.

October: Meeting of GMP team and park advisors further develop alternatives in Boston. Preliminary alternatives are refined. Subsequent reviews result in consensus on three alternatives.

December: GMP team gives briefing to ARD-NER on alternatives in Boston.

Final NPS review of mission statement; project agreement signed by the Regional Director (RD-NER) (Rust).

First newsletter outlining project purposes, park mission statement, and public comments from scoping meetings is mailed.

2001

January: Park receives funding for alternative transportation feasibility study.

February: Briefing for planners in the Morristown area is held at Washington's Headquarters.

Briefing for the WANJ held at Washington's Headquarters.

Federally recognized Native American tribes (Delaware) contacted by letter re 106 consultation.

March: GMP team testifies at meeting of Morris Township Planning Commission on potential impacts to park from development of Saint Mary's Abbey/Delbarton property.

NPS contracts with Volpe Transportation Center for alternative transportation feasibility study.

May: Briefing for land managers in the Morristown area is held at Washington's Headquarters and Frelinghuysen Arboretum.

GMP team helps define objectives and schedule for research phases of museum rehabilitation project.

June: Second newsletter outlining revised mission, draft alternatives, and process mailed.

July: U.S. Fish and Wildlife Service species list requested by mail per NPS DO-12. Reply received September 19, 2001.

GMP team reviews expanded outline of the plan at park retreat.

August: GMP team reviews progress and schedule for GMP environmental compliance at park.

October: GMP team and advisors review partial draft GMP: purpose/need, alternatives, and affected environment. Comments incorporated.

GMP team completes a draft land protection plan, including an update of the Adjacent Lands Study.

2002

January: GMP team and advisors review working draft GMP/EIS.

March: GMP team meetings with advisors identify and evaluate potential impacts and landscape treatments.

August: Final review of working draft by GMP team, advisors, ARD-NER.

September: NJSHPO review of working draft GMP/EIS.

Park superintendent and Director-NER select the preferred alternative.

October: NPS Washington office and Colorado divisions review draft GMP/EIS.

2003

March: Notice of availability of the draft GMP/EIS appears in the Federal Register; announcements and documents mailed.

April: Public meetings held in Morristown on draft GMP/EIS.

April and May: Public comments received.

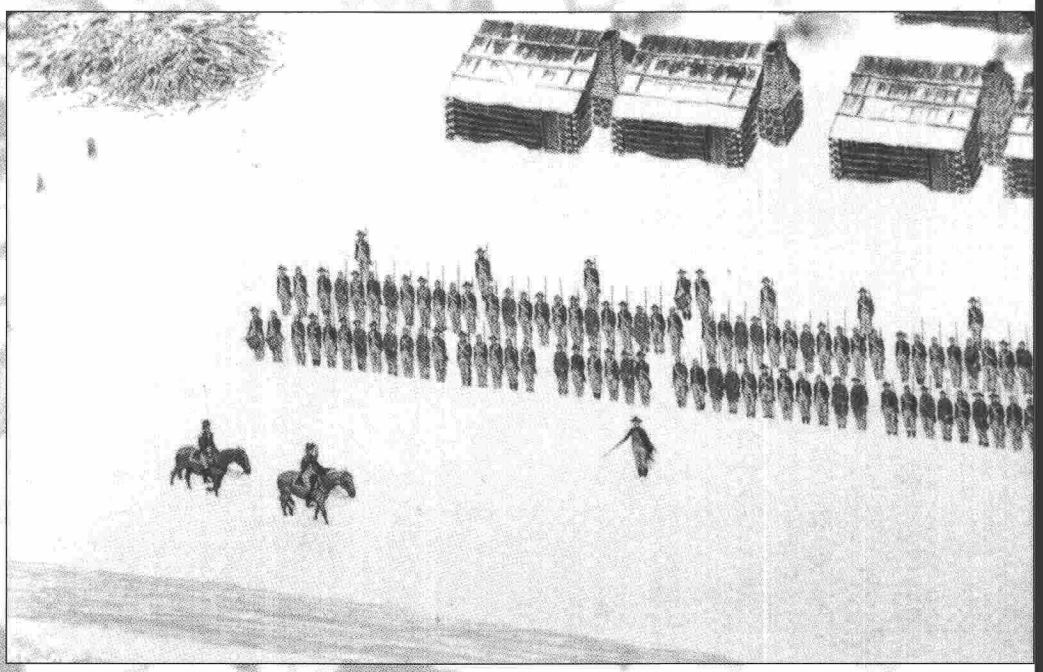
Summer: Responses to public comment and revisions to draft are accomplished.

December: Notice of Availability (NOA) issued and Final GMP/EIS distributed. Record of Decision follows no earlier than 30 days later.

CHAPTER 6: CONSULTATION AND COORDINATION

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Regular drilling helped maintain discipline during the first winter in Jockey Hollow. However on New Year's Day of 1781, again unpaid and seemingly forgotten, Pennsylvania troops marched off to lay their grievances before the State Government.

CONSULTATION

In implementing the Morristown NHP General Management Plan, the NPS will comply with all applicable laws and Executive Orders, including those listed below. Formal and informal consultation with the appropriate federal, state, and local governments and agencies has been conducted during the preparation of this document. The following parties were consulted during the development of the Final GMP/EIS:

Congressional Delegation
Congressman Rodney P. Frelinghuysen
Congressman Rush Holt

Federal Agencies
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service, Great Swamp National Wildlife Refuge
U.S. Fish and Wildlife Service, New Jersey Field Office

Native American Tribes (federally recognized)
Delaware Tribe of Indians, Oklahoma
Delaware Tribe of Western Oklahoma

State Agencies
New Jersey Department of Environmental Protection
New Jersey Division of Fish, Game and Wildlife
New Jersey State Historic Preservation Office

Local Governments
Bedminster Township
Bernards Borough
Bernards Township, Planning
Harding Township, Planning
Mendham Township, Planning
Morris County, Department of Transportation
Morris County, Freeholders
Morris County, Heritage Commission
Morris County, Historical Society
Morris County, Parks Commission
Morris County, Planning
Morris County, Visitors Center (previously Historic Morris)
Morris Township, Planning
Skylands of New Jersey Tourism Council
Somerset County, Parks Commission
Somerset County, Planning
Ten-Towns, Planning
Town of Bernardsville
Town of Morristown, Mayor
Town of Morristown, Planning
Town of Morristown, Environmental Commission



Drums, like this reproduction side drum, were used in the Revolution to convey orders to troops. Photo by George Fistrovich.

Organizations
Burnham Park Association
Crossroads of the American Revolution Association
Great Swamp Watershed Association
Harding Land Trust
Humane Society of the United States, Mid-Atlantic Regional Office
Jockey Hollow Preservation Association
Jockey Hollow Organized Preservation Effort
Morris Area Girls Scouts Council
Morristown Parking Authority
Morristown Partnership
New Jersey Audubon Society, Scherman-Hoffman Wildlife Sanctuaries
New Jersey Conservation Foundation
Saint Mary's Abbey/Delbarton School
Sierra Club, Morris County
TransOptions, TMA
Washington Association of New Jersey
Washington's Headquarters Neighborhood Association
Washington Valley Community Association

The Final EIS that accompanies the GMP is essentially a programmatic statement, presenting an overview of potential impacts relating to each management option. More detailed plans may be developed for individual actions outlined in the options. The more detailed plans would be subject to a more detailed review of environmental impacts, possibly involving project-specific NEPA and Section 106 compliance.

PUBLIC COMMENTS ON THE DRAFT AND NPS RESPONSES

Public review is a key element of the GMP planning process. As with review of the newsletter that described the preliminary alternatives, review of the Draft GMP/EIS helped ensure that all relevant issues and feasible alternatives were considered, and that all pertinent consequences of the alternatives were analyzed. Public review also assists the NPS to understand the level of support for proposed actions. This section is intended to provide an accurate and comprehensive description of the comments received, and the NPS responses to those comments.

The NPS received 28 comment letters on the Draft GMP/EIS. Most were received during the formal 60-day review period that ran from March 7, 2003 to May 8, 2003. A few letters were received shortly after the close of the review period, but were accepted as part of the record. Comments were expressed verbally at the two public meetings held in the park on the 10th and 11th of April, 2003. These comments were recorded on flip charts.

All comments received were reviewed and considered by the GMP team in preparation of the Final GMP/EIS as required by federal regulations (40 CFR 1503). All comment letters have been reproduced in full in Appendix IV. Responses to all substantive comments are presented below. As defined in NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis, and Decision Making, comments are considered substantive when they question, with reasonable basis, the information `in the EIS, the adequacy of environmental analysis, present reasonable alternatives other than those presented, or cause changes or revisions in the proposal.

The substantive comments address the following topics:
- Changes to the park boundary
- Improving visitor circulation
- Managing deer
- Sharing information about park projects

Changes to the Park Boundary

Comment: Many parties express support for provisions to increase the park's acreage ceiling. However, several comments suggest that the appropriate increase should be 670 acres, not 500 acres as planned under the preferred alternative. They argue that the additional acreage is necessary to create an effective buffer, conserve views, and improve the visitor experience by protecting the sense of "going back in time." Acquisition of lands at the park's gateways, particularly those associated with the proposed Crossroads of the American Revolution National Heritage Area, is suggested, along with properties adjacent to the Fort Nonsense and Washington's Headquarters units.

Response: The NPS is encouraged by the broad public support for increasing the park's acreage. The last decades have seen explosive growth in residential and commercial development and continued erosion of the area's formerly rural character. The perimeter of the park is increasingly characterized by dense suburban development that detracts from the historic setting. Large developments are now proposed, and some have been undertaken on properties adjacent to Jockey Hollow and Fort Nonsense previously thought to be protected or undevelopable due to site constraints. Perhaps more importantly, significant Revolutionary War archeological resources have been documented on many adjacent properties that have little long-term protection. The continuation of these processes threatens the park's purpose and significance by undermining aspects basic to its character—its beauty, tranquility, historic integrity, and its ability to reveal an important time in American history.

In anticipation of drafting land protection recommendations in the GMP, the park completed a study of adjacent lands in 1999. NPS planning staff undertook this study, with technical support from the University of Rhode Island, particularly for GIS mapping and modeling of viewsheds. The study examined all adjacent properties (several thousand acres) in the field, through GIS and in county records. The study identified categories of properties that could be of interest to the park. The GMP team then applied recently adopted NPS criteria for land acquisition (Management Policies 2001, section 3.5) to evaluate the potential for acquiring these properties. In order for a property to be eligible for acquisition, the following questions need to be answered in the affirmative:

- Would acquisition protect significant resources or values, or enhance opportunities for public enjoyment related to park purposes?
- Would acquisition address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads?
- Will added lands be feasible to administer, considering their size, configuration, and ownership, hazardous substances, costs, opinions of and impacts on local communities and surrounding jurisdictions, and other factors?
- Are other alternatives for management and resource protection inadequate?

The evaluation determined that there are approximately 500 acres that meet the criteria and could be of interest to the park should they become available. This finding is the basis for requesting a 500-acre increase to the park's acreage ceiling in the GMP. While the park can anticipate locating other Revolutionary War features as it improves its baseline data, the present analysis does not justify an additional 170 acres. Therefore, while the acreage ceiling increase must be limited to 500 acres, the plan does state that the park will cooperate with other parties in land conservation necessary to protect park resources and values.

Improving Visitor Circulation

Comment: Several concerns were expressed about visitor circulation.

A) It was suggested that the closure of the park's Western Avenue gate to automobile traffic, a possibility considered in the alternatives, could be problematic.

B) It was suggested that the Draft GMP/EIS did not adequately describe measures to reduce traffic flows in the Washington's Headquarters neighborhood, and should more aggressively promote public transportation, pedestrian, and bicycle access.

C) The potential construction of a small parking area and drop-off area on Washington Place to access the Ford Mansion and museum was seen as unnecessary and inconsistent with the character of the unit.

Responses: A) A considerable number of drivers utilize the park's Western Avenue gate to shortcut traffic congestion on other roads. Typically moving at high speeds on historic Jockey Hollow Road, this traffic diminishes the quality of the experience for other park visitors, and detracts from the setting of several historic structures such as the Guerin House. Closing the gate could require all driving visitors to utilize the park's Tempe Wick Road entry, an inconvenience to some. However, closure could substantially improve the safety and enjoyment of the park for the majority of visitors—a key GMP objective. Cut-through traffic might also be reduced by closing Jockey Hollow Road at the New York Brigade parking area. Further monitoring of visitor use would precede a decision to close the gate.

B) Improving vehicular and pedestrian access to the Washington's Headquarters unit is an important GMP objective. The one-way road network and awkward intersections make this one of the more confusing areas in Morristown, while busy on- and off-ramps interrupt the only pedestrian connection to town. These also have the effect of lowering visitation: the park is very hard for out-of-town visitors to reach. The GMP proposes a park–town shuttle as part of the solution. Already authorized to operate a shuttle within the Jockey Hollow unit, the park retained a team of transportation planners to define and evaluate alternatives for providing public transit for visitors to all park units and several cultural and historic sites in the area. Completed in late 2001, the study outlines shuttle routes connecting the park with various locations, such as the Morristown Green, train station, hotels, Morristown Hospital, town parking lots, and the Frelinghuysen Arboretum. There could be numerous benefits to town business establishments, the Washington's Headquarters neighborhood, and visitors from such an arrangement. Planners from the Morristown County Department of Transportation, Morristown Parking Authority, the Morristown Partnership, TransOptions, and other stakeholders and potential partners were consulted as part of the study. The park will continue to seek ways to improve transportation through discussions with these groups and the Washington's Headquarters Neighborhood Association and the Town of Morristown.

C) Rehabilitation and expansion of the museum is one of the most important issues addressed in the GMP. The plan proposes the drop-off and small parking area as part of a larger concept for rehabilitation and expansion. Among other objectives, the concept seeks to improve visitor orientation and access to the Ford Mansion and museum. Introducing the new areas could be accomplished without compromising the character of the unit, and would eliminate the climb from the existing parking area that drops visitors at the museum's back door rather than its front. To improve visitor safety the concept considers eliminating the dangerous intersection of Washington Place with Lafayette Avenue. In compliance with federal regulations the park will seek further public comment as the plans are developed.

Managing Deer

Comment: It was suggested that the Final GMP/EIS should identify a specific population target and action plan for managing deer in the park.

Response: Deer management remains an important and sensitive issue at Morristown NHP and other parks in Northeastern states where forest recreational, archeological, and ecological values are high. Scientific studies underway at several parks are examining the northern temperate forest in a holistic manner, designed to understand the role of deer as one of several factors influencing the future of the forests. At this point the NPS does not have ad-

equate information to conclude that specific population densities or deer management practices would effectively protect the park's forest. For this reason, the GMP identifies forest sustainability as the appropriate long-term goal. As studies provide more decisive information, specific action plans could be developed and implemented, with public consultation and environmental review, to manage deer in the context of sustaining the forest.

Sharing Information about Park Projects

Comment: It was suggested that the Draft GMP/EIS does not provide adequate information on several potential projects such as the rehabilitation of the museum at Washington's Headquarters, a comprehensive traffic management plan, shuttle operations, or acquisition of specific properties.

Response: It is important to remember that the Final GMP/EIS is programmatic in nature, and that under the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA), additional regulatory review may be required for specific proposed actions. The plan outlines the management prescriptions, or goals, that the NPS will seek to achieve. Specific implementation plans are not included in GMPs. Estimated budgets are provided to enable comparison of alternatives, but do not represent federal funding commitments. Implementation plans for specific projects will provide greater detail and will seek further public consultation. In general, the park seeks regular, natural, and sustained interaction with state and local governments, individuals, and a broad range of civic organizations to accomplish its mission.

Aside from the comments addressed above, all of the letters that express a position on the alternatives strongly support the park's selection of Alternative C as the preferred alternative. The other letters do not express preferences, but commend the park on the preparation of the plan or identify other areas of concern.

AGENCIES, ORGANIZATIONS, AND INDIVIDUALS COMMENTING ON THE DRAFT GMP/EIS

Between 300 and 400 copies of the Draft GMP/EIS were distributed to agencies, organizations, and individuals who were either on the park's mailing list or who requested a copy. Approximately 900 to 1,000 copies of a five-page summary were mailed. Copies of the full document were also placed in the reference sections of four local and regional libraries. The following list identifies the authors of comment letters. An asterisk indicates that the party also signed in at a public meeting.

Federal Agencies

U.S. Environmental Protection Agency
U.S. Department of the Interior, Fish and Wildlife Service

State Agencies

New Jersey Department of Environmental Protection, Division of Parks and Forestry, Historic Preservation Office

Local Agencies

Harding Land Trust
Harding Township Committee*
Town of Morristown, Environmental Commission (2 letters)

Organizations

Burnham Park Association
Crossroads of the American Revolution Association
Great Swamp Watershed Association
Jockey Hollow Organized Preservation Effort
Jockey Hollow Preservation Association
Morris County Heritage Commission*
Morris County Historical Society
Morristown Historic Reservation Commission
Morris County Trust for Historic Preservation*
Sierra Club, Morris County
Washington Association of New Jersey
Washington Valley Community Association

Individuals
Mary Arnold
Eileen Cameron
Glenn K. Coutts
Geoff Dobson
Reverend Canon James Elliot Lindsley
Philip H. Pitney
Sharon M. Reider*
Wendy Rudman
Scott Shepherd
Linda Coutts Snyder
Dorothea K. Stillinger

LAWS AND REGULATIONS RELATED TO CULTURAL RESOURCES

The NPS is mandated to preserve and protect its resources through the Service's Organic Act of August 25, 1916 (39 STAT.535, as amended, 16 U.S.C.§1). Cultural resources within the national historic park are managed in accordance with that act and the Antiquities Act of 1906 (16 USC 431); the National Historic Preservation Act of 1966, as amended (16 USC 470); the National Environmental Policy Act of 1969, as amended (42 USC 4321, 4331, 4332); the Archeological Resources Protection Act of 1979 (16 USC 470); and the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001). In addition, cultural resource management is guided by National Park Service Management Policies, 2001 Edition, Director's Order 28: Cultural Resource Management, Director's Order 2: Park Planning, and Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision Making.

DO-12, Section 4.7, prohibits the NPS from taking or authorizing any action that would, or is likely to, impair park resources or values. NPS Management Policies, 2001, Sections 1.4.1 through Section 1.4.7, set out the NPS's obligations in regard to preventing impairment, defining what constitutes "impairment," what is meant by "park resources and values," and the decision-making requirements on how to avoid impairment.

I. CULTURAL RESOURCE CONSULTATION REQUIREMENTS

Section 106 of the National Historic Preservation Act of 1966, as amended, requires that federal agencies that have direct or indirect jurisdiction take into account the effect of undertakings on National Register properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Toward that end, the NPS works with the New Jersey State Historic Preservation Officer (SHPO) and the Advisory Council to meet the requirements of 36 CFR 800 and the September 1995 programmatic agreement among the National Conference of State Historic Preservation Officers, the ACHP, and the NPS. The latter agreement requires the NPS to work closely with the SHPO and the ACHP in planning for new and existing NPS areas.

The 1995 Programmatic Agreement also provides for a number of programmatic exclusions for specific actions that are not likely to have an adverse effect on cultural resources. The actions may be implemented without further review by the New Jersey State Historic Preservation Officer or the Advisory Council on Historic Preservation provided that the NPS internal review finds the actions to meet certain conditions. Undertakings, as defined in 36 CFR 800, not specifically excluded in the Programmatic Agreement must be reviewed by the SHPO and the Advisory Council before implementation. Throughout the process there will be early consultation on all potential actions.

As evidence of appropriate early consultation, letters to the ACHP, SHPO, and Delaware Tribes, sent at the beginning of the GMP process, are attached as references to this report.

Prior to any ground-disturbing action by park managers, a professional archeologist would deter-

mine the need for archeological activity or testing evaluation. Any such studies would be carried out in conjunction with construction and would meet the needs of the state historic preservation office. Section 110 of the National Historic Preservation Act requires the National Park Service to identify and nominate to the National Register of Historic Places all resources under its jurisdiction that appear to be eligible. Historic areas of the national park system are automatically listed on the National Register upon their establishment by law or executive order.

The following table identifies actions contained within the general management plan alternatives that would likely require review under Section 106 of the National Historic Preservation Act and under the 1999 Programmatic Agreement. The nature of the review is identified.

LAWS AND REGULATIONS RELATED TO NATURAL RESOURCES

The National Environmental Policy Act (NEPA) of 1969, as amended (42 USC Sections 4321 et seq.), requires that an EIS be prepared for all major federal actions significantly affecting the quality of the human environment. Director's Order 2, the NPS policy and guidance document for park planning, provides that EISs are usually prepared with GMPs. The process followed for this GMP/EIS satisfied NEPA requirements.

Endangered Species Act of 1973 (16 USC 1531–1544; PL 93–205): It is NPS policy to survey for, protect, and strive to recover all species native to national park system units that are listed under the Endangered Species Act. The NPS will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both pro-actively conserve listed species and prevent detrimental effects on these species. Consultation with the U.S. Fish and Wildlife Service confirmed the presence of listed species in and around the park.

Analysis of Impacts on Prime and Unique Agricultural Lands in Implementing the National Environmental Policy Act (45 FR 59189): A memorandum dated August 11, 1980 from the Council on Environmental Quality requires federal agencies to assess the effects of their actions on soils classified by the

Summary of Actions and Compliance Requirements

Potential Actions Which May Occur in One or More Alternative	Compliance Requirements
Rehabilitate and construct an addition to the museum at the Washington's Headquarters unit.	SHPO consultation on planning and design
Remove/modify/replant woodlands to create landscape vignettes along historic road corridors in Jockey Hollow.	SHPO consultation on cultural landscape treatment plan
Clear new vistas to enhance interpretation at Fort Nonsense hilltop.	SHPO consultation on cultural landscape treatment plan
Rehabilitate cultural landscape features at the Washington's Headquarters and Jockey Hollow units.	SHPO consultation on cultural landscape treatment plan
Expand trail system to provide ADA-compliant opportunities in the Jockey Hollow unit.	SHPO consultation
Modify interpretive waysides and exhibits in all units.	SHPO consultation on exhibit plan
Improve vehicular entrances and exits at the Washington's Headquarters unit.	SHPO consultation
Modify the Jockey Hollow tour road to improve the pedestrian experience and safety.	SHPO consultation
Preserve and maintain historic structures.	Review by NPS cultural resource specialists (stipulation IV.B, 10)

U.S. Natural Resources Conservation Service as prime or unique farmlands. This policy was developed to minimize the effect of federal programs in converting prime, unique, or locally important farmland to nonagricultural uses. There are no prime, unique, or locally important farmlands within Morristown NHP; therefore prime or unique farmlands were not examined.

Clean Air Act, as amended (42 USC 7401 et seq.): Morristown NHP is designated 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 cannot be exceeded. Class II increments allow modest industrial activities in the vicinity of a park. Section 118 of the act requires all federal facilities to comply with existing federal, state, and local air pollution control laws and regulations. Morristown NHP would work with the New Jersey Department of Environmental Protection to ensure that all activities at the site meet the requirements of the state air quality implementation plan. In addition, the park is participating in the CLEAR strategy as described in Chapter 3 above.

Executive Order 11988, Floodplain Management: All federal agencies are required to avoid construction within the 100-year floodplain unless no other practical alternative exists. Flood zone maps published by the Federal Emergency Management Administration (FEMA) show areas adjacent to the Passaic River are in the designated 100-year floodplain (Item I.D. #3404290001B.P dated April 17, 1984).

Executive Order 11990, Protection of Wetlands, and Director's Order and Procedural Manual #77-1, Wetland Protection: The executive order requires that all federal agencies must avoid, where possible, impacts on wetlands. The director's order states the policies and procedures that the NPS uses to implement that executive order. The director's order and manual require that NPS planning documents incorporate a sequence of (1) avoiding wetland impacts, where practicable; (2) minimizing impacts that cannot be avoided; and (3) compensating for any remaining wetland impacts through restoration of previously degraded wetlands. The NPS will comply with applicable local and state laws and regulations regarding wetlands protection, as well as the above-referenced internal NPS requirements, upon implementation of the preferred alternative.

Executive Order 11987, Exotic Organisms: This executive order requires federal agencies to restrict the introduction of exotic species into the natural ecosystems on lands and waters which they own, lease, or hold for purposes of administration and into any natural ecosystem of the United States and to encourage the states, local governments, and private citizens to prevent the introduction of exotics into natural ecosystems of the United States. The actions in this document conform to the intent of the executive order.

Executive Order 13148, Greening the Government through Leadership in Environmental Management: This executive order requires all federal agencies to integrate environmental accountability into agency day-to-day decision making and long-term planning processes, across all agency missions, activities, and functions. Among the practices contained in follow-up regulations are the use of sustainable landscape practices, including use of native plants where feasible. The regulation, however, recognizes the NPS's use of varied management zones in satisfying this order. The actions in this document conform to the intent of this order.

Federal Water Pollution Control Act, as amended (9 USC 1251 et seq., as amended, 33 USC 1251-1376, and 1987 Federal Water Quality Act): Proposed actions would have little if any negative effect on water quality. Any future actions undertaken by the park that may have water quality impacts upon the Great Swamp National Wildlife Refuge will comply with the requirements of sections 401 and 404 of the Clean Water Act and other applicable federal, state, and local regulations.

LAWS AND REGULATIONS RELATED TO THE SOCIOECONOMIC ENVIRONMENT

Pursuant to Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the NPS must consider the impacts of its actions on minority and low-income populations and communities, as well as the equity of the distribution of benefits and risks of those decisions.

According to the standards set in this publication, the communities surrounding the park contain a mix of incomes and ethnic backgrounds and are not considered predominantly minority or low income. All of the alternatives proposed in the draft GMP offer the potential to make a positive impact on the region's overall economic health and vitality. Economic impacts from employment, associated earnings, and construction due to the management options proposed are expected to be positive. Further, none of the alternatives proposed would result in disproportionately high and adverse environmental effects, including human health, economic, and social effects, on minority or low-income communities. There are no air or water pollution impacts that would adversely impact human health. There would be no change in types or character of land use in the surrounding area that could affect minority or low-income communities.

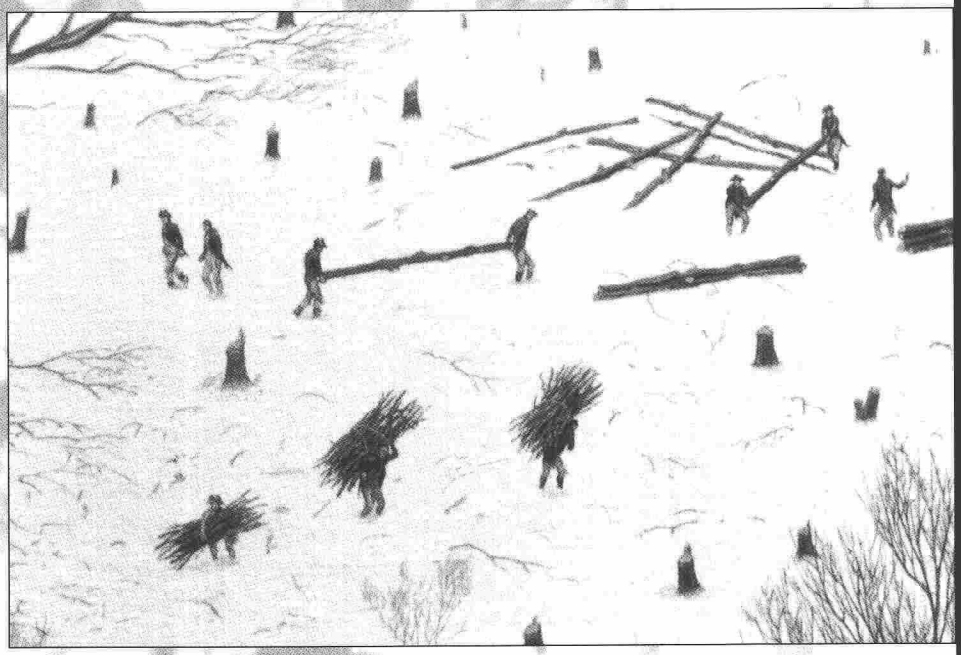
UNIVERSAL ACCESS

Federal guidelines published in accordance with the Americans with Disabilities Act of 1990 define specific requirements for disabled access to parking facilities, pathways, and buildings. The accessibility requirements apply to government facilities (Title II) and to private entities that provide public accommodations (Title III). An important issue in this planning process has been to ensure appropriate access for persons with special needs or disabilities. The NPS anticipates going beyond the specific requirements of this law as outlined in the alternatives contained in this document. The ADA will be complied with in the construction of new facilities and the alteration of existing facilities contained in the proposed action. In addition, any non-complying structures will be brought into compliance with the Act.

APPENDICES

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By the time the army left in June some 600 acres of Mr. Wick's land and an unknown number of acres from his neighbors property had been cleared for fuel and construction. The forest steadily returned, covering much evidence of the encampments. Jockey Hollow lay essentially undeveloped and was incorporated in the new park in 1933.

APPENDICES

APPENDIX I: LEGISLATION

The legislative mandates that relate to the establishment and expansion of the park are as follow:

- **Act of March 2, 1933 - to provide for the creation of the Morristown National Historical Park:**

72nd CONGRESS, SESS. II, CHS.182. MARCH 2, 1933.
AN ACT
To provide for the creation of the Morristown National Historical Park in the State of New Jersey, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when title to all the lands, structures, and other property in the military campground areas and other areas of Revolutionary War interest at and in the vicinity of Morristown, New Jersey, as shall be designated by the Secretary of the Interior, in the exercise of his discretion, as necessary or desirable for national-park purposes, shall have been vested in the United States, such areas shall be, and they are hereby, established, dedicated, and set apart as a public park for the benefit and enjoyment of the people and shall be known as the Morristown National Historic Park: *Provided,* That the United States shall not purchase by appropriation of public monies and by lands within the aforesaid areas, but such lands shall be secured by the United States only by public or private donation: *And provided further,* That such areas shall include, at least, Jockey Hollow camp site, now owned by Lloyd W. Smith and the town of Morristown, Fort Nonsense, now owned by the town of Morristown, and the George Washington Headquarters, known as the Ford House, with its museum and other personal effects and its grounds owned by the Washington Association of New Jersey.

Sec. 2. The Secretary of the Interior is hereby authorized to accept donations of land, interests in land, buildings, structures, and other property within the boundaries of said park as determined and fixed hereunder and donations of funds for the purchase of and / or maintenance thereof, the title to lands purchased to be satisfactory to the Secretary of the Interior: *Provided,* That to accept on behalf of the United States other lands, easements, and buildings of Revolutionary War interest in Morris and adjacent counties in New Jersey as may be donated for the extension of the Morristown National Historical Park.

Sec. 3. After the acquisition of the museum and other personal effects of the said Washington Association by the United States, including such other manuscripts, books, painting, and other relics of historical value pertaining to George Washington and the Revolutionary War as may be donated to the United States, such museum and library shall forever be maintained as a part of said Morristown National Historical Park.

• **Act of March 2, 1933 - to provide for the creation of the Morristown National Historical Park (cont'd):**

Sec. 4. The Washington Association of New Jersey, Lloyd W. Smith, and the town of Morristown having by their patriotic and active interest in conserving for posterity these important historical areas and objects, the board of trustees and the executive committee of the said association, together with Mrs. Willard W. Cutler, its curator, and Clyde Potts at present mayor of Morristown, shall hereafter act as a board of advisers in the maintenance of said park. The said association shall have the right to hold its meetings in said Ford House.

Sec. 5. Employees of the said Washington Association, who have been heretofore charged with the care and development of the said Ford House and its museum and other effects, may, in the discretion of the Secretary of the Interior, hereafter be employed by the National Park Service in the administration, protection, and development of the said park without regard to the laws of the United States applicable to the employment and compensation of officers and employees of the United States.

Sec. 6. The administration, protection, and development of aforesaid national historical park shall be exercised under the direction of the Secretary of the Interior by the National Park Service, subject to the provisions of the Act of August 25, 1916, entitled "An Act to establish a National Park Service, and for other purposes," as amended (U.S.C. title 16 secs.1-4): *Provided,* that no appropriation for Federal funds for administration, protection, and maintenance of said park in excess of $7,500 annually shall be made for the fiscal years 1934, 1935, 1936.

Sec. 7. Nothing in this Act shall be held to deprive the State of New Jersey, or any political subdivision thereof, of its civil and criminal jurisdiction in and over the areas included in said national historical park, nor shall this Act in any way impair or affect the rights of citizenship of any resident therein; and save and except as the consent of the State of New Jersey may be hereafter given, the legislative authority of said State in and over all areas included within such national historical park shall not be diminished or affected by the creation of said park, nor by any terms and provisions of this Act.

Approved, March 2, 1933

APPENDIX II: SUMMARY OF LAND ACQUISITION AUTHORITY AND ACREAGE

• Establishing Legislation, Act of March 2, 1933 (P.L. 72–409, 47 Stat. 1421) authorized the acquisition by public and private donation only of approximately 1,051.38 acres.

• Act of June 6, 1953 (P.L. 83–54, 67 Stat. 53) authorized the conveyance to the Town of Morristown; 0.41 acre (Fort Nonsense unit) disposed.

• Act of September 18, 1964 (P.L. 88–601, 78 Stat. 957) authorized the acquisition of up to 281 additional acres by donation, purchase with appropriated funds, or otherwise; 0.03 acre disposed by exchange, and 259.71 acres (Stark's Brigade camp site in Jockey Hollow unit) acquired.

• Federal Register Notice of boundary extension, Vol. 34, No. 16, January 24, 1969, citing authority of the Act of March 2, 1933, revised boundary to include an additional 25.45 acres (New Jersey Brigade unit). This is not included in the ceiling.

• Act of October 26, 1974, (P.L. 93–477, 88 Stat. 1445) authorized acquisition of up to 465 acres; 460.98 acres (Cross Estate added to the New Jersey Brigade unit) were acquired.

• Act of October 21, 1976 (P.L. 94–578, 90 Stat. 2733) authorized acquisition of up to 600 additional acres; 593.44 acres (Jarvis Tract added to the New Jersey Brigade unit) acquired.

• Act of October 4, 1991 (P.L. 102–118, 105 Stat. 586) authorized acquisition of up to 615 additional acres; 606.44 acres (North property added to the New Jersey Brigade unit) acquired.

• Act of November 6, 1998 (P.L. 105–355, 112 Stat. 3264) authorized a boundary revision to include up to 15 acres (Warren property added to the Jockey Hollow unit) and authorized the acquisition of it in addition to the existing acreage ceiling of 615.

There are 8.56 acres remaining under ceiling (as of February 21, 2001).

Acreage:

Federal Land	1,696.77
Non-Federal Land	6.03
Gross Area	1,702.80

Funding:

Land and Water Conservation Fund Appropriated	$3,873,948.68
Land and Water Conservation Fund Expended	$3,869,536.69
Remaining Balance (as of December 31, 2000)	$4,111.99

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Jersey Field Office
Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
http://njfieldoffice.fws.gov

ES-01/543

September 19, 2001

Brian Aviles, Project Manager
Boston Support Office, Planning & Legislation
National Park Service
15 State Street
Boston, Massachusetts 02109-3572

Dear Mr. Aviles:

This responds to your July 30, 2001 request to the U.S. Fish and Wildlife Service (Service) for information on the presence of federally listed endangered and threatened species within the vicinity of Morristown National Historical Park (NHP) located in Morris, Harding, and Mendham Townships and Bernardsville Borough, Morris County, New Jersey. The Service understands that the National Park Service (NPS) is initiating a general management planning effort for Morristown NHP to address natural resources and visitor experiences. Forest management will be one focus of the planning effort, in order to address declining forest health as a result of overgrazing by deer, invasive species, and other unknown causes.

AUTHORITY

This response is provided pursuant to Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA) to ensure the protection of federally listed endangered and threatened species. These comments do not address all Service concerns for fish and wildlife resources and do not preclude separate review and comments by the Service pursuant to the December 22, 1993 Memorandum of Agreement among the U.S. Environmental Protection Agency, New Jersey Department of Environmental Protection (NJDEP), and the Service, if project

implementation requires a permit from the NJDEP pursuant to the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:913 et seq.); nor do they preclude comments on any forthcoming environmental documents pursuant to the National Environmental Policy Act of 1969 as amended (83 Stat. 852; 42 U.S.C. 4321 et seq.).

FEDERALLY LISTED SPECIES

Indiana Bat

There are known hibernacula of the federally listed (endangered) Indiana bat *(Myotis sodalis)* located in Morris County, the closest located within approximately 10.0 miles of Morristown NHP. Indiana bats hibernate in caves and abandoned mine shafts from October through April. Between April and August, Indiana bats inhabit floodplain, riparian, and upland forests, roosting under loose tree bark during the day, and foraging for flying insects in and around the tree canopy at night. During these summer months, numerous females roost together in maternity colonies. Maternity colonies use multiple roosts in both living and dead trees. From late August to mid-November, Indiana bats congregate in the vicinity of their hibernacula, building up fat reserves for hibernation (Harvey 1992). Protection of Indiana bats during all phases of their annual life cycle is essential to preserving this species. Threats to the Indiana bat include disturbance or killing of hibernating and maternity colonies; vandalism and improper gating of hibernacula; fragmentation, degradation, and destruction of forested summer habitats; and use of pesticides and other environmental contaminants.

Bog Turtle

There is a known occurrence of the federally listed (threatened) bog turtle *(Clemmys muhlenbergii)* located within 1.5 miles of Morristown NHP. These small, semi-aquatic turtles consume a varied diet including insects, snails, worms, seeds, and carrion. Bog turtles inhabit open, unpolluted emergent and scrub/shrub wetlands such as shallow spring-fed fens, sphagnum bogs, swamps, marshy meadows, and wet pastures. These habitats are characterized by soft muddy bottoms, interspersed wet and dry pockets, vegetation dominated by low grasses and sedges, and a low volume of standing or slow-moving water, which often forms a network of shallow pools and rivulets (Bourg 1992). Bog turtles prefer areas with ample sunlight, high evaporation rates, high humidity in the near-ground microclimate, and perennial saturation of portions of the ground. Threats to bog turtles include habitat loss from wetland alteration, development, pollution, natural vegetation succession, and illegal collection for the commercial pet trade (Bourg, 1992).

Except for the above-mentioned species and an occasional transient bald eagle *(Haliaeetus leucocephalus),* no other federally listed or proposed endangered or threatened flora or fauna under Service jurisdiction are known to occur within the vicinity of the proposed project site. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered. A list of federally listed and candidate species occurring in New Jersey is

enclosed. The Service encourages federal agencies and other planners to consider federal candidate species in project planning.

OTHER SPECIES OF CONCERN

There is a known occurrence of the globally (G4) and State (S3) rare wood turtle *(Clemmys insculpta)* located within Morristown NHP. The wood turtle is listed as threatened by the State of New Jersey. Further information regarding the wood turtle and other State-listed or rare species is available from the New Jersey Endangered and Nongame Species Program (ENSP) and the New Jersey Natural Heritage Program (addresses enclosed).

SERVICE RECOMMENDATIONS

Threatened and endangered species and their habitats are afforded protection under Section 7(a)(2) of the ESA, which requires every federal agency, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. An assessment of potential direct, indirect, and cumulative impacts is required for all federal actions that may affect listed species. Therefore, the Service recommends that any plans developed for Morristown NHP include provisions and procedures for initiating and completing consultation with the Service prior to any NPS action or activity that may affect federally listed species in the Park..

In addition, Section 7(a)(1) of the ESA directs all federal agencies, in consultation with the Service, to utilize their authorities in furtherance of the purposes of ESA by carrying out programs for the conservation of listed species. The Service offers the following recommendations to assist the NPS in incorporating its responsibilities under Section 7(a)(1) into the current planning efforts for Morristown NHP.

Indiana Bat

Morristown NHP offers a large expanse of contiguous forested uplands, traversed by forested wetland stream corridors. Such habitat is highly suitable for foraging and roosting bats. To protect Indiana bats, as well as other bat species, the Service recommends minimizing tree clearing within Morristown NHP. If small areas must be cleared, this work should be done between November 15 and April 1, while bats are in hibernation. If larger areas (more than 1 acre) are proposed for clearing, or if any clearing is scheduled between April 1 and November 15, the NPS should re-initiate consultation with the Service pursuant to Section 7 (a)(2) of the ESA to assess potential impacts to Indiana bats.

The Service further suggests that the NPS consider including bat surveys in Morristown NHP management plans in order to obtain information regarding use of the Park by Indiana and other bat species. The Service should be notified prior to any Indiana bat surveys and consulted for

technical assistance. Surveys for summering bats involve mist netting. Mist netting guidance and a list of recognized qualified bat surveyors are enclosed. A survey plan must be provided to this office for approval.

If any caves or mines are present within the Park, the NPS may also wish to consider having these features surveyed for hibernating bats. Please note that not all biologists on the enclosed list are Service-approved to survey caves and mines. If cave or mine surveys are proposed, a Service-approved biologist should be retained for this work, and the surveyor must contact this office to obtain a copy of the Service protocol for assessing the suitability of caves and mines as Indiana bat hibernacula. A survey plan must be provided to this office for approval. Potential Indiana bat hibernacula must not be disturbed. In addition, many caves and mines are safety hazards. Therefore, these areas must not be entered unless accompanied by a Service-approved biologist.

Bog Turtle

A review of the Service's National Wetlands Inventory maps (Morristown and Bernardsville, New Jersey quadrangles) suggest that no bog turtle habitat is present within Morristown NHP. However, if any scrub/shrub or emergent wetlands are known to occur within the Park, the Service recommends surveying such areas for the presence or absence of bog turtle habitat and, if appropriate, for bog turtles. Survey guidance and a list of recognized qualified bog turtle surveyors are enclosed. If bog turtles are present within the Park, the NPS should work with the Service to develop and implement conservation measures as part of the Morristown NHP planning effort.

Survey Results and Continuing Coordination

The results of any surveys for federally listed species, whether showing presence or absence, should be forwarded to this office for review. The Service is available to provide technical assistance regarding federally listed species during planning efforts for Morristown NHP, including early identification of any proposed activities that may adversely affect listed species, as well as recommendations for forest management practices to maintain and enhance bat habitat. The Service requests the opportunity to comment on any draft policy or management plans; comments will be provided within 30 days.

Other Species of Concern

Finally, the Service recommends that the NPS address the wood turtle and other rare species in the planning effort for Morristown NHP. Please contact the ENSP for recommendations to protect wood turtles, and to maintain and enhance habitat for this and other sensitive wildlife species. Please contact the New Jersey Natural Heritage Program for information regarding occurrences of other rare species in the Park.

SERVICE CONTACT

The Service looks forward to working cooperatively with the NPS as you work to update the comprehensive plan for Morristown NHP, and thereby strengthen natural resource management on this significant tract of forest habitat. Please contact Wendy Walsh of my staff at (609) 6469310, extension 48 if you have any questions about the enclosed material or require further assistance regarding federally listed endangered or threatened species.

Sincerely,

Annette Scherer

for John C. Staples
Assistant Supervisor

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAY 13 2003

Michael D. Henderson, Superintendent
Morristown National Historic Park
30 Washington Place
Morristown, New Jersey 07960-4299

Class: LO

Dear Mr. Henderson:

The Environmental Protection Agency (EPA) has reviewed the draft environmental impact statement (EIS) on the draft General Management Plan for the Morristown National Historic Park (GMP) (CEQ # 030083), located in Morris and Somerset Counties, New Jersey. This review was conducted in accordance with Section 309 of the Clean Air Act, as amended (42 U.S.C. 7609, PL 91-604 12(a), 84 Stat. 1709), and the National Environmental Policy Act (NEPA).

Morristown National Historic Park, the first national historic park in the national park system, was established in 1933 to preserve the lands and resources associated with the encampments of the Continental Army during the War for Independence. The park comprises 1,697 acres, and is separated into four units which include: Washington Headquarters, Fort Nonsense, Jockey Hollow, and the New Jersey Brigade. The proposed draft GMP is intended to set forth a basic management philosophy for the park and to provide a framework for future decision making. The draft GMP addresses four general concerns: 1) preservation of the park resources, 2) the types and general intensities of development, 3) visitor carrying capacities, and 4) potential boundary modifications. These concerns were considered during the formulation of alternatives to be included in the draft EIS. The three alternatives evaluated in the draft EIS include: 1) Alternative A- "No Action"; 2) Alternative B- which would to the fullest extent possible, characterize the Park as during the "encampment period" of 1777-1782 of the Revolutionary War; and 3) Alternative C- which would characterize the "encampment period" of 1777-1782, as well as successive generations (1873-1942). The draft EIS identifies Alternative C as the preferred alternative for the project. It should be noted that the draft EIS is programmatic in nature, and that additional NEPA documents will be prepared for specific future actions proposed under the preferred alternative. Based on our review of the draft EIS, EPA offers the following comments.

EPA is pleased with the selection of Alternative C as the preferred alternative because it provides for the greatest protection of cultural and environmental resources, and promotes continued public access to the Park's resources. With this in mind, EPA does not believe that implementation of the proposed project would result in significant adverse impacts to environmental or cultural resources. Accordingly, EPA has no objections to the implementation of the proposed project.

Thank you for the opportunity to comment. Should you have any questions concerning this letter, please contact Mark Westrate of my staff at (212) 637-3789.

Sincerely yours,

Robert W. Hargrove, Chief
Strategic Planning and Multi-Media Programs Branch

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New Jersey Field Office
Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
http://njfieldoffice.fws.gov

In Reply Refer to:

SP-03/17

APR 29 2003

Michael D. Henderson, Superintendent
Morristown National Historic Park
30 Washington Place
Morristown, New Jersey 07960-4299

Dear Mr. Henderson:

The U. S. Fish & Wildlife Service's New Jersey Field Office (NJFO) has reviewed the Morristown National Historic Park Draft General Management Plan and Environmental Impact Statement, dated January 2003.

The NJFO concurs with the selection of Alternative C as the preferred alternative. Alternative C is designed to cause the least damage to the biological and physical environment while protecting, preserving, and enhancing historic, cultural, and natural resources. At this time, the NJFO has no additional comments beyond those addressing federally listed species already included under heading of "Official Communication with the U.S. Fish & Wildlife Service" on pages 210 to 214 of the subject document.

The NJFO appreciates the opportunity to have reviewed the Morristown National Historic Park Draft General Management Plan and Environmental Impact Statement. Please contact Clay Stern of my staff at 609/383-3938, extension 27 if you have further questions about this review.

Sincerely,

Clifford G. Day

Clifford G. Day
Supervisor

HPO-C2003- 29
Log # 03-002-1 and 03-0895-1

State of New Jersey

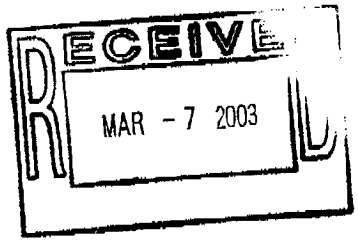
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Governor

Department of Environmental Protection
Division of Parks & Forestry, Historic Preservation Office
PO Box 404, Trenton, NJ 08625
TEL: (609) 292-2023 FAX: (609) 984-0578
www.state.nj.us/dep/hpo

Bradley M. Campbell
Commissioner

March 4, 2003

Mr. Michael D. Henderson
Superintendent, Morristown
National Historical Park
30 Washington Place
Morristown, NJ 07960-4299



RE: Morris County, Morristown
Morristown National Historical Park
General Management Plan and
Proposed Museum Addition

Dear Mr. Henderson,

Thank you for the opportunity to review and comment on the Draft General Management Plan (GMP) and Environmental Impact Statement for Morristown National Historical Park. We have reviewed the document and encourage the efforts of the National Park Service (NPS) to update the GMP, which to the best of our knowledge, was last updated in 1976.

Generally, we believe that Alternative C will provide the best balance between the emphasis of the encampment period and the recognition and preservation of commemorative period resources. Although the NPS has not reached agreement that the commemorative period and associated resource is significant, the Historic Preservation Office (HPO) does consider to be a significant period in the development of the park. Under Alternative C we are interested to see that the treatment of historic resources is consistent with the intent of the Alternative C. On the map provided in the Draft GMP, the museum is included in the Museum Development zone, which is distinctly separate from the Historical zone. Under this Alternative, for example, additions to the museum and alterations to the landscape should be consistent with the Secretary of the Interior's Standards and we want to ensure that exclusion from the Historical zone would not prevent consideration of such treatment.

Regarding the proposed addition to the Museum, first we would like to make it clear that it is our position that the literal construction/completion of the Pope museum would not be consistent with the Secretary of the Interiors Standards for the Treatment of Historic Properties. Instead a design should be developed that will be compatible with the architecture and character

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of the existing museum, as well as the setting and landscape from the commemorative period and, to the extent possible encampment period. Further, as with the "Contemporary Pope" scheme proposed in the study of the project by Einhorn Yaffe Prescott, it would be appropriate for the proposed addition to refer to design and intention of the complete original Pope design.

Thank you again for the opportunity to comment on the GMP and the proposed addition to the museum. We look forward to working with you further as plans for these project progress. If you have any questions please contact Meghan Baratta of my staff at (609) 292-1253.

Sincerely,

Dorothy P. Guzzo,
Deputy State Historic
Preservation Officer

C: my documents \ ... \ 03-0002-1_Morristown.doc
DG/kl

P.O. Box 576
New Vernon, NJ 07976
973/377-2176
Fax 973/765-0092
hardinglandtrust@att.net

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May 12, 2003

Michael D. Henderson, Superintendent
Morristown National Historical park
30 Washington Place
Morristown, NJ 07960-4299

Dear Mr. Henderson, Michael

We have been most interested in the February 2003 draft of the General Management Plan and Environmental Impact Statement for the Morristown National Historical Park.

The Harding Land Trust would like to add its support for Alternative C., which is closest in spirit to our own mission: to preserve open space, in order to protect the character of Harding's countryside and ensure the integrity of our water resource.

Jockey Hollow, the largest segment of the park, comprises more than 1300 acres of Harding Township's most beautiful, environmentally sensitive and beloved land.

Historically, Primrose Brook provided drinking water to General Washington's troops. Later, it was tapped by a water company to serve area residents. Now, classified as a trout production stream, it supplies the denizens of the Great Swamp National with their only really pure water.

Recognizing that our landscapes shape our history just as our history shapes our landscapes, we look forward to the realization of the planned Crossroads of the Revolution National Heritage Area. We feel that with its balanced approach to preservation and enhancement of both historic, cultural and natural resources, Alternative C will be the best plan for the future of the Jockey Hollow section of the Morristown National Historical Park and its neighboring community, Harding Township.

Sincerely yours,
Penny Hinkle

Penny Hinkle
Executive Director



TOWNSHIP OF HARDING
Morris County, New Jersey

Blue Mill Road, Box 666
New Vernon, New Jersey 07976
973-267-8000

May 6, 2003

Mr. Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Dear Mr. Henderson:

The Harding Township Committee (the Township's governing body) has considered the February 2003 draft of the General Management Plan and Environmental Impact Statement for the Morristown National Historical Park. This letter comments on the Plan.

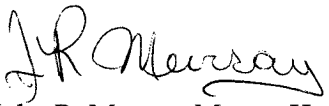
Much of the Park's 1,330-acre Jockey Hollow unit is within Harding Township. The Township has long considered itself fortunate to host this significant national resource. Harding's commitment to preserve the natural and historical features of the Park has been stated in our Master Plan since its initial adoption more than two decades ago.

The Township Committee supports the recommendation for Alternate Plan C. We find this interpretive scheme, which includes an appreciation of the layered history of the region, most appropriate. We believe that Alternative C has the best approach to managing the natural resources that we share with the Park. With regard to land acquisition, the Committee agrees that inappropriate development immediately outside Park boundaries can be very detrimental to Park resources and to the visitor experience. To provide a buffer for the Park, we concur with Harding's Planning Board that consideration should be given to raising the ceiling for land acquisition to 670 acres. The Committee hopes this will also enable preservation of the historic character of the gateways and corridors that lead visitors to the Park. This will be particularly important to the proposed Crossroads of the Revolution National Heritage Area. We agree that the historic Kemble site should be acquired if possible and that the Kemble farm should be included as an important part of the interpretive plan for the Park.

The Township Committee was disturbed to read in the plan that proposals to locate wireless communications facilities in Jockey Hollow are becoming more frequent. Not only are these modern visual intrusions inappropriate in or near a park that commemorates significant events of the 18th century, but the clearing of land for installation of support structures can cause serious damage, particularly on steep slopes. We believe that alternatives must be sought to ensure that the historical and environmental integrity of the Park is not compromised.

We commend the Park Service staff and consultants for their work on this plan. We look forward to continuing our longstanding relationship of friendship and support.

Sincerely,



John R. Murray, Mayor, Harding Township
On behalf of the entire Township Committee

cc: Hon. Rodney Frelinghuysen
Senator Jon Corzine
Senator Frank Lautenberg
Morris County Board of Chosen Freeholders

THE TOWN OF MORRISTOWN

ENVIRONMENTAL COMMISSION

200 South Street, CN914, Morristown, New Jersey 07963-0914

May 9, 2003

Via Fax at: 973-539-8361 & Regular Mail

Michael D. Henderson, Superintendent
Morristown National Historic Park
30 Washington Place
Morristown, NJ 07960-4299

RE: Comments to the Draft General Management Plan/Environmental Impact Statement For the Morristown National Historical Park, New Jersey

Dear Mr. Henderson:

On behalf of the Town of Morristown Environmental Commission, we submit the following comments to the draft General Management Plan/Environmental Impact Statement (hereafter referred to at the "GMP/EIS") for the Morristown National Historical Park ("NHP"). As stated in the GMP/EIS, only the Washington Headquarters and Fort Nonsense units of the NHP lie within the Town of Morristown and accordingly we wish to address our comments to those units, but in particular to the Fort Nonsense unit.

A separate letter to you from another Morristown Environmental Commission member, (one Arthur J. Clark and dated May 8, 2003) dealt mainly with the Washington Headquarters Unit and our letter will deal with the Fort Nonsense unit which to a great extent, fronts on to Chestnut Street, in the 4th Ward in Morristown.

Our concern relates to two particular properties. One is closest to 60 Chestnut St (Block 7601 Lot 16), apparently now being built upon, and the other is a vacant lot that exists between Judge Noonan's home (84 or 86 Chestnut St.) and the boarding house at #90 Chestnut St. (Block 8501 Lot 11).

Let us deal with the former first. There is little you can do about it now (despite your past helpful attempts to stop the project when it came before our zoning and planning boards) but please realize that the view and topography from Fort Nonsense is now and will more so, when this project is completed, will be functionally and irreparably damaged by their cutting down of a significant number of trees, destroying a single family home and the potential for blasting they will experience to place their footings for these condo/apartments.

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Your Fort Nonsense unit has faced similar encroachment from the building development known as the Entrance Ave apartments. Here you may have a unique opportunity to avoid that fate and expand the footprint of the park by taking the following action that we strongly recommend.

We urge you to consider the purchase of the property known as Block 8501 Lot 11, which will significantly increase your acreage and offer a potential new pedestrian / footpath up to your Fort Nonsense Unit. There are a great many trees in excess of 300 years that could be saved and a meandering footpath up to the crest of Fort Nonsense and would provide an additional benefit to the park.

For your information, with regard the vacant lot Block 8501 Lot 11, over the past years several attempts to develop and/or build condominiums/apartments that have been denied by our municipal boards. Your purchase of this now vacant lot would be in perfectly in keeping with those past board decisions.

This may be your final opportunity to enlarge this unit of the NHP, as there is no further land available in this area for you to do this.

Cordially,

Don Kissil & Tom Brunelli (members)
Morristown Environmental Commission

Copy: John Jay Delaney, Mayor
Members of the Morristown Environmental Commission

THE TOWN OF MORRISTOWN

RECEIVED
MAY - 9 2003

ENVIRONMENTAL COMMISSION

200 South Street, CN914, Morristown, New Jersey 07963-0914

May 8, 2003

VIA E-MAIL & REGULAR MAIL

Michael D. Henderson, Superintendent
Morristown National Historic Park
30 Washington Place
Morristown, NJ 07960-4299

Re: Comments to the Draft General Management Plan/Environmental Impact Statement for the Morristown National Historical Park, New Jersey

Dear Mr. Henderson:

On behalf of the Town of Morristown Environmental Commission, I submit the following comments to the draft General Management Plan/Environmental Impact Statement for the Morristown National Historical Park ("NHP"), New Jersey (hereinafter referred to as the "GMP/EIS" or the "Plan"). As stated in the GMP/EIS, only the Washington Headquarters and Fort Nonsense units of the park lie with the Town of Morristown, accordingly, our comments apply only to those units.

General Comments

1. Public Coordination - Although the Plan cites to a number of State, Regional and local governing bodies, associations and interest groups that the NHP plans to consult with, it does not provide a comprehensive plan for public coordination. In this respect, the current Plan lacks detail and fails to fully achieve its Partnership and Outreach Goal. The Plan should, at a minimum, identify how the NHP plans to coordinate with these groups by giving specific schedules for meetings, timetables for rolling-out the proposed Plan, and identifying opportunities for public comments. Additionally, the NHP should add the Morristown Environmental Commission as one of the groups it will consult with on an ongoing basis regarding the Washington Headquarters and Fort Nonsense units.

2. Relationship With Other Plans and Projects - The Plan cites to the Morris Township Master Plan but does not cite to any Town of Morristown codes, regulations or plans to guide the NHP in its management of Washington

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Headquarters and Fort Nonsense. At a minimum, the Town of Morristown should be consulted on how NHP will comply with the Town's ordinances and other requirements.

3. Comprehensive Regulatory Review - Under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq. ("CERCLA"), the United States Environmental Protection Agency ("USEPA") is obligated to research, evaluate and implement all Applicable, Relevant and Appropriate Requirements relevant to its projects. This process, called the ARAR process, involves a comprehensive review of state and local requirements that must be considered, and complied with, prior to the implementation of USEPA projects. The NHP should implement a similar program so that it can identify and implement not only state and local statutes and regulations but local requirements that are relevant and appropriate in the context of redeveloping and managing Washington Headquarters and Fort Nonsense.

4. Comprehensive Traffic Management Plan - The Plan is void of a comprehensive traffic management plan. The current Plan fails to account for traffic that flows into and out of Washington Headquarters and Fort Nonsense from roads other than Route 287. In particular, Washington Headquarters is located in the historic Washington Headquarters Neighborhood. This neighborhood is experiencing increased traffic volumes on its residential streets that threaten the well being of its residents, particularly young children. The Plan should be modified to specifically state the NHP's plan for dissuading traffic flow through the residential streets of the Washington Headquarters Neighborhood, and directing traffic to and from Route 287 using main roads such as Morris and Lafayette Avenues. The NHP should also coordinate with the Washington Headquarters Neighborhood Association, the Town of Morristown and Morris Township to promote traffic calming in the region. Moreover, the Plan should more aggressively promote and develop public transportation, bicycling and pedestrian access routes to Washington Headquarters and Fort Nonsense.

5. The NHP as Centerpiece of Local Cultural Institutions and Sites - The Plan accurately describes the NHP's role as a centerpiece of Revolutionary War preservation. In particular, Washington Headquarters and Fort Nonsense are the centerpiece of an historic area that extends throughout New Jersey and into several other states. However, Washington Headquarters and Fort Nonsense are also the centerpieces of a number of local cultural institutions and sites that lie within one to two miles of these units. Specifically, to the east of Washington Headquarters along the Morris Avenue/Columbia Turnpike/Whippany Road corridor, there are four important cultural institutions: Acorn Hall, Frelinghuysen Arboretum, the Morris Museum, and the Morris County Library. In the vicinity of Fort Nonsense and in areas to the west of Washington Headquarters in the Town of Morristown, there are numerous cultural institutions and sites including the Green, the Historic Morris County Courthouse, and historic homes and churches near the center of town. To the south and east of Washington

Headquarters, lies the historic Washington Headquarters Neighborhood. The area surrounding Fort Nonsense also contains numerous historic homes and buildings. The Plan should be revised to specifically state that the NHP recognizes the existence of Morristown's other cultural institutions and sites and that it will promote local efforts to preserve and enhance their use, quiet enjoyment and visitor experience. The Plan should include specific goals for connecting these areas with one another by developing trails, safe pedestrian walkways and bikeways. The Plan should also do more to promote traffic calming in the region by supporting local traffic calming efforts. Finally, the Plan needs to do more to promote pedestrian access from Washington Headquarters and Fort Nonsense to these cultural institutions through public outreach programs.

Comments Regarding Alternative C

1. Parking/Pedestrian Drop Off - We believe the plan to build a small parking area and drop off area off of Washington Place, close to the Ford Mansion, is unnecessary, ill-advised and inconsistent with the nature and character of the Washington Headquarters unit. The current entry to the park provides visitors with adequate egress into the park's facilities and creates a sense of anticipation when visitors ascend to the Ford Mansion from the rear. We believe the funds set aside for this parking/drop-off area would be better spent enhancing the pedestrian access to the unit along Morris and Lafayette Avenues as well as linking the unit to the other cultural sites located along the Morris Avenue/Whippany Road corridor. See comment 5 above.

2. Park/Town Shuttle - We favor the use of public transportation to access the park from the Town of Morristown. However, the details of the planned shuttle, such as its route, hours of operation and schedule have not been provided. Therefore, the NHP has not provided the public with an adequate opportunity to comment on the shuttle. We reserve the right to comment on the shuttle plan prior to its implementation. Notwithstanding this reservation of rights, we believe that the planned shuttle should operate in accordance with the Washington Headquarters Neighborhood Associations' traffic calming initiative by not using local residential streets as part of its route, abiding by local speed limits, and confining its operation to reasonable hours at a reasonable frequency. We also believe that a feasibility study of the shuttle should be conducted prior to its implementation to determine whether the shuttle will actually meet NHP's expectations, reduce traffic and increase access to the Park.

3. Interconnectivity -The Plan should provide for the enhancement of the pedestrian interconnectivity between Washington Headquarters and Fort Nonsense and the other Morristown cultural sites located in the Town of Morristown and along the Morris Avenue/Whippany Road corridor. Alternative C provides a scant $80,000 to improve cross walks and side walks at Washington Headquarters but provides no funds for interconnecting the unit with other Morristown Cultural sites. The Plan states that it will extend Patriots Path from the Whippany River to the Ford Mansion but fails to allocate any funds for this project. The Plan also proposes to create a strong

pedestrian link between historical resources in downtown Morristown, the Schuyler-Hamilton House and the Ford Mansion (we believe this link should be extended to the sites identified in comment 5 above), but no funds have been allocated for this link. Meanwhile, $885,000 is being allocated for the shuttle, the feasibility of which has not been proven. The NHP should prioritize funds for the enhancement of the pedestrian interconnectivity of Washington Headquarters and Fort Nonsense with the other cultural sites in Morristown and stay the spending on the shuttle until a feasibility study of the shuttle's effectiveness is completed.

4. Route 287 Noise -The Plan should aggressively pursue any and all methods that abate the noise emanating from Route 287. Instead of merely citing to unspecific methods for noise reduction, a feasibility study should be conducted by the NHP to review, analyze and ultimately select the various noise abatement alternatives that are available. An Environmental Impact Statement of the noise abatement technologies should also be conducted. Funds should be allocated for these studies in the Plan.

5. Acquisition of Adjacent Lands - The Plan should more aggressively seek out non-residential open spaces in the vicinity of Washington Headquarters and Fort Nonsense and identify them for acquisition by the Federal government's power of eminent domain. The Plan falls short of identifying specific properties and again fails to allocate funds for such acquisitions in the vicinity of Washington Headquarters and Fort Nonsense.

6. Whippany River Watershed - The Plan should more fully develop, emphasize and promote conservation efforts at Washington Headquarters to protect and preserve the Whippany River and its watershed. NHP should take a more active role in the protection of this natural resource by participating in its preservation through local and regional environmental conservation groups.

If you have any questions about these comments, please do not hesitate to contact me at 973 596-4659.

Sincerely yours,

Arthur J. Clarke, Member
Environmental Commission

cc: Mayor Jay Delaney
Members of the Morristown Environmental Commission

Burnham Park Association
c/o Dr. Lynn L. Siebert, President
178 Hillcrest Ave.
Morris Township, NJ 07960
Phone: (973) 540-1586
FAX: (973) 540-1956
} HYPERLINK "mailto:don.lynn@verizon.net" don.lynn@verizon.net

May 17, 2003

Michael Henderson, Superintendent
Morristown National Historical Park
National Park Service
30 Washington Place
Morristown, NJ 07960

Dear Superintendent Henderson,

As you may know, The Burnham Park Association, a neighborhood association representing approximately 450 households in the southwestern portion of Morris Township, has been actively involved in preservation of natural and historical resources in this general geographic area for over 50 years. We welcome and commend the Park Service efforts to prepare a comprehensive and thorough General Management Plan and to solicit public input in the process.

Addressing the latter, I have been asked by the Trustees of our Association to submit comments to you on the draft General Management Plan / Environmental Impact Statement for Morristown National Historical Park. Our Association unequivocally supports Alternate Plan C, believing it to be the best alternative for the reasons set forth below:

It is the best plan for the preservation of natural resources. We appreciate the fact that, unlike Plan B, it does not involve setting up additional landscape vignettes which we feel will cause more damage to the biological and physical environment. Moreover, it includes a plan for forest management and permits the National Park Service the freedom to address crucial issues such as deer predation/management, invasive plant mitigation, deforestation and, especially, water quality protection - a major concern in one of the most critical and pristine water source locations in the county.

It is the best alternative to allow for land acquisition - an essential requirement to buffer the park from the constant threat of intrusive development which could only degrade the visitor experience and damage the fundamental mission of the park. It is vital to be able to add lands adjacent to the park in order to insure the ongoing viability of the park experience - to protect that sense of truly "going back in time". To that end, we respectfully request that the allowable land acquisition acreage be increased from 550 to 670 acres to protect against viewshed destruction and significant other negative impacts associated with encroaching development.

We also think alternative plan C offers the best option for allowing the means for the public to fully enjoy and see the highly varied collections of historical artifacts owned by the Morristown National

Historical Park. Many of these items, for want of adequate space and proper facilities, have not been on public display. Were they exhibited, visitor interest and awareness of the historical richness of the Morristown holdings would grow immeasurably (along with visitor numbers!).

We fully support another aspect of Plan C: a shuttle system. This would clearly enable visitors to travel more easily between the multiple sites within the Morristown National Historical Park (especially those visitors unfamiliar with the area). Such a system would not only make visitation considerably easier (and likely, therefore, to boost the number of visitors) but it would also enhance the coherence of the visitor experience. A visitor wouldn't have to negotiate local roads, parking and hard-to-find entrances in order to go from site to site. We suggest that the Park Service consider having brochures, informational tapes and/or interpretive narration on the shuttles - to further enhance the learning experience for visitors as they move from site to site.

Finally, we feel that Alternative C allows the Park to become a leader in regional initiatives. Part of the history of the area is not confined to the encampment period and it is certainly a worthy goal to acknowledge the subsequent efforts as part of the ongoing history of the park. We think providing this flexibility for the Park and recognizing the value of 19th and 20th c. features allows for the fullest understanding of the place over time.

Our thanks to the National Park Service for its efforts to plan carefully for the future of this most special treasure, our first National Historical Park and to do so in a concerted and thorough manner. We very much appreciate the opportunity to comment and hope that Alternative C is ultimately adopted.

Sincerely,
Dr. Lynn L. Siebert
Dr. Lynn L. Siebert,
President



Kevin
<kevin@techrepro.com
>

05/10/2003 10:54 AM
AST

To: Michael_Henderson@nps.gov
cc: ILUVTALES@aol.com
Subject: Crossroads Comments on GMP

Dear Michael,
The Board of the Crossroads of the American Revolution Association wished me to convey our support for the the Preferred Alternative as described in the draft General Management Plan. The Crossroads Association would also request that it be included as an interested/consulting party in future NHPA Section 106 or other reviews conducted as a result of federal actions that may affect the MNHP.
As we seek congressional designation for the Crossroads, we feel the complementary nature of the proposed NHA and MNHP will continue to grow in importance for the future understanding of the American Revolution for the American people and residents of New Jersey. We look forward to working with park management on achieving our mutually supportive goals.
Regards,

Kevin Tremble
Crossroads of the American Revolution Association

April 29, 2003

Michael D. Henderson, Superintendent
National Park Service
Morristown National Historical Park
30 Washington place
Morristown, NJ 07960-4299

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Chairman

Marshall P. Bartlett
Vice Chairman

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Julie A. Keenan
Edward G. Kirby, Ph.D.
Judith A. Kroll
Nancy Miller-Rich
Ann Parsekian
Jean L. Rich
Dorothea Stillinger
Tim Tweed

Executive Director
Julia M. Somers

Development Director
Bonnie S. Gannon

Mr. Henderson,

On behalf of the Great Swamp Watershed Association, I submit the following comments on the draft General Management Plan/Environmental Impact Statement for Morristown National Historical Park.

We support Alternate Plan C. We believe it is the best alternative for the following reasons:

- It is the best plan for land acquisition to permit better buffering of the park, improve visitor experience, and add lands adjacent to the park that are important to the mission of the park. We request that the proposed allowable land acquisition be increased from 550 acres to 670 acres.
- It is the best plan for ecological preservation and natural resource management, such as forest management. It best allows the National Park Service to address issues such as water quality protection, deforestation, deer predation and management, and invasive plant species mitigation.
- It is the best plan for managing and presenting the extraordinary range of historical artifacts and archived items in your collection, most of which are not accessible to the public.
- We are very supportive of the proposal for a regional transportation system linking the different sites of the National Historical Park to Morristown and hope the system can be expanded in the future.
- The plan will allow the National Park Service to best reach out and work with other regional historic sites. We believe it would be a mistake to limit the historic aspects of the park to the 18th Century encampments and that era alone.

I applaud your efforts to improve and expand this critically important public asset

Sincerely,

Julia M. Somers
Executive Director

Great Swamp Watershed Association

JHOPE

JOCKEY HOLLOW ORGANIZED PRESERVATION EFFORT

April 3, 2003

Superintendent Michael Henderson
Morristown National Historic Park
50 Washington Park
Morristown, NJ 07960

RE: Morristown National Historic Park Draft General Management Plan and Environmental Impact Statement

Dear Superintendent Henderson,

I am the director of **JHOPE** (Jockey Hollow Organized Preservation Effort), a community-based organization concerned about development within the Jockey Hollow area, a place of special historic significance and containing several environmental treasures.

On behalf of this community organization, I am writing to give you our opinion on the plan for the future of the Morristown National Historic Park. We believe that Alternative C is by far the best plan for the future of the park., and we urge that the park service do what it can to increase the acreage of the park.

In many places in New Jersey – including the area around the park – there are great pressures of development. Every effort should be made to increase the acreage as much and as quickly as possible in order to protect the atmosphere of the park and its historic and natural resources. If development should occur, the area around the park will surely deteriorate and some wonderful view-sheds from the park will be lost (to eyesores of development). We must act quickly and aggressively, for if we do not then we fear that irreparable damage will be done.

JHOPE hopes that the National Park Service will choose Alternative C.

Respectfully,



Jeffrey Grayzel

Director, JHOPE

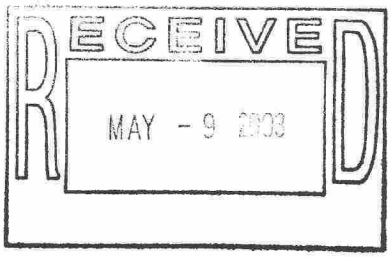
✓CC: Brian Avelas
Project Manager, National Park Services
15 State Street
Boston, MA 02109

JEFFREY GRAYZEL, DIRECTOR
ONE INDIAN HEAD ROAD • MORRISTOWN, NJ • 07960
PHONE: (973)-889-9155 • FAX: (973)-889-9158



Jockey Hollow
Historic Preservation Association

P.O. Box 1598, Morristown, New Jersey 07962-1598
www.jockeyhollow.org



May 8, 2003

Michael D. Henderson
Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Dear Superintendent Henderson:

The Jockey Hollow Historic Preservation Association has reviewed the February 2003 draft General Management Plan for Morristown National Historical Park. After careful consideration of the three alternatives presented, we believe that Alternative "C" best serves the needs of the public and best furthers the purpose of historic preservation.

Jockey Hollow Historic Preservation Association urges the Park Service to adopt Alternative C.

Sincerely,

Rebecca P. Shepard
Director

CC: Brian Aviles



Acorn Hall • 1853

MORRIS COUNTY HISTORICAL SOCIETY
at Acorn Hall
68 Morris Avenue, Morristown, New Jersey 07960-4212
973-267-3465 • Fax 973-267-8773

May 8, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Dear ~~Superintendent~~ Michael Henderson:

I read with great interest the January 2003 Draft General Management Plan and Environmental Impact Statement. I appreciate the time and effort that has gone into this plan. After careful review, I believe Alternative C to be the most compelling opportunity for MNHP.

Alternative A, which I understand is a federally mandated alternative, does not reflect the need for the Park to meet the needs of the public or MNHP's vast collections. Alternative B is intriguing as an abstract historical experiment, but limits the opportunity to bring a wider audience to the Park. I also believe it would have a negative impact on the environment.

Since Morristown National Historical Park is the first national historical park, Alternative C would provide visitors with a deeper appreciation of the National Park Service. As an organization whose mission is to promote an understanding of historic preservation, the Morris County Historical Society would support the efforts to introduce the public to the early historic preservation movement as related to the history of the Washington Association of New Jersey and the Civilian Conservation Corps.

I believe that the visitor experience would be enhanced by the additional interpretive measures. In particular, additional interpretive staff would provide the public with a greater opportunity to seek further information, particularly at the Jockey Hollow site. Rehabilitating the existing museum will allow the Park to more fully engage a public who expect an entertaining, as well as educational experience. The addition of an archeology program is an excellent way to further connect to the public throughout the Park. An interpretive exhibit at the Cross Estate would be particularly beneficial. Having been to the site on several occasions, I can attest to being somewhat confused as to the building's history and its relationship to the Park.

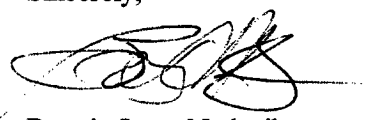
I feel that greater access to the site would benefit not only Morristown National Historical Park, but the many historic sites surrounding the park as well. Although our site, Acorn Hall, is from a much later time period, 1853, its preservation can be linked to the history of the preservation movement and the history of the community surrounding the park. The Morris County Historical Society would be very interested in possible opportunities to partner with MNHP on programs relating to both local history and historic preservation.

One concern about Alternative C, and this may be a case of personal preference, is the interpretation of the CCC and WANJ periods. I think that this type of interpretation should be limited to very specific areas within the Park or the general public may be easily confused. Young children in particular may not grasp the differences between the hut building of 1779 and the hut building of the commemorative period.

Ultimately Alternative C provides for a much higher level of visitor experience. Currently many local people remember the Park as a place they visited on school trips. Many other potential visitors are lost to more prominent parks such as Valley Forge. The expansion of the museum and enhanced interpretation would bring the Park to life. The plan also provides the opportunity for partnerships with other local organizations, and give the rich historical nature of the Morristown area would be beneficial in attracting visitors to all of the sites.

Please let me know how the Morris County Historical Society or I can be of future service to Morristown National Historical Park.

Sincerely,



Bonnie-Lynn Nadzeika
Director

THE MORRIS COUNTY TRUST
FOR HISTORIC PRESERVATION

It is a privilege to be able to comment on such a comprehensive, well-thought-out plan.

The plan makes a convincing case for Alternative C, and that is the choice we strongly support. We believe that this alternative reflects an intelligent NPS philosophy of interfacing the Revolutionary era with later periods of history, a difficult marriage when it must be expressed in three-dimensional terms like architecture and forest management. Too often historic site managers deal with their present-day contexts by turning their backs on them, dressing up in funny old clothes (but wearing wristwatches), and trying to recreate the "historic experience." With the roar of traffic all too close by, we cannot always successfully suspend our disbelief. We are impressed with the plan's understanding that history did not stop at the 18th century; our own local development created substantial 19th-century assets which we also struggle to preserve. It will be a source of great strength to the community that our major NPS asset seeks to be integrated among those others, and to join with us in the continuous existential river of history.

We cannot exaggerate our gratitude for the current superintendent's work to connect the park into community life. Since he first joined us, Michael Henderson has made unusual efforts to meet local people and groups, attend local meetings, and join us in support of historic projects. This results in more active involvement of citizens in park affairs, rather than just passive enjoyment of the facilities. Michael's understanding of conditions here outstrips that of many residents, and his suggestions are always thoughtful and innovative. We are very lucky to have him.

We see this supportive philosophy in the plan's intention to preserve and reuse any anachronistic but historic buildings on NPS property. Similarly, we believe that an increased acreage ceiling would benefit both the park and the community, as we are under extreme pressure from inappropriate development that threatens both publicly and privately owned historic sites.

In particular, we applaud the emphasis on forest management and landscape rehabilitation, which will add new value to an aspect of the park that has not always had its deserved attention.

We suggest that there is still discernible around Morristown a pattern of roads which derives from Revolutionary times. Recognition of scenic and significant highways is becoming increasingly popular as a form of historic preservation, and we wonder whether it could not be applied usefully here.

We hope that both of the organizations signing below may join the list of consulting parties to this very promising plan.

May 5, 2003

Marion O. Harris

Marion O. Harris, Chairman
Morris County Trust for Historic Preservation
Morristown Historic Preservation Commission

14 OAK STREET, MORRISTOWN, NEW JERSEY 07960-5240



"Mills, Chris" <millsc@citigroup.com >

04/16/2003 11:14 AM AST

To: "'Anne_DeGraaf@nps.gov'" <Anne_DeGraaf@nps.gov>
cc:
Subject: Morristown Nat Park draft plan

Anne,

In response to your request for comments on the draft plan, I'd like to register my strong support for Alternative C, which I believe provides the best mix of promoting the understanding of the area's history while also preserving environmental quality in the area.

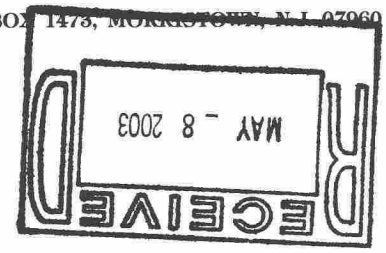
Regards,

Chris Mills
Morris County Conservation Chair,
Sierra Club.



WASHINGTON ASSOCIATION OF NEW JERSEY

P.O. BOX 1473, MORRISTOWN, N.J. 07960



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May 8, 2003

Michael D. Henderson
Superintendent
Morristown NHP
30 Washington Place
Morristown, NJ 07960

Re: Draft General Management Plan

Dear Superintendent Henderson,

A copy of the Draft General Management Plan has been made available to each member of the Board of Trustees of the Washington Association of New Jersey.

The Association agrees with the general plans and goals for the long-term management of the Morristown National Historical Park set forth as Alternate C.

It is hoped that upon the completion of the proposed renovation and enlargement of the museum, that consideration be given to providing further facilities for the exhibition of the Park's vast collection of artifacts pertaining to the American Revolution, when additional funding becomes available.

Congratulations for a job well done!

Clifford W. Starrett,
President

WASHINGTON VALLEY COMMUNITY ASSOCIATION

March 31, 2003

Superintendent Michael D. Henderson
Morristown National Historic Park
30 Washington Place
Morristown, NJ 07960

Dear Superintendent Henderson,

The members of the Washington Valley Community Association have studied the plan for the future of the Morristown National Historic Park. It is our opinion that Alternative C is by far the best plan for the future of the park. We are very much in favor of rehabilitating the museum. We are especially anxious to see the park acreage increased. The pressures of development in the State of New Jersey are so great that every effort must be made to increase the acreage as much and as quickly as possible in order to protect the atmosphere of the park and its historic, cultural, and natural resources. If we do not act aggressively now, irreparable damage will be done.

We hope that the National Park Service will choose Alternative C.

Very truly yours,

Jean L. Rich, President

7 Jonathan Smith Road, Morristown, N. J. 07960

Mary Arnold, MBA
27 West Lake Boulevard
Morristown, NJ 07960

mary.arnoldmba@verizon.net
Phone: 973-605-5830
Fax: 973-455-1047

May 18, 2003

Michael Henderson, Superintendent
Morristown National Historical Park
National Park Service
30 Washington Place
Morristown, NJ 07960

Dear Superintendent Henderson:

I commend the Park Service's efforts to prepare a comprehensive and thorough General Management Plan and to solicit public input in the process. I have written to express my support for Alternate Plan C.

The natural resources of the Jockey Hollow Section of the National Historic Park have taken major hits from deer predation and private development. The geomorphic changes in stream corridors -- cut banks that send sediment into what should be pristine headwaters -- and the lack of native biodiversity are some results. Alternate Plan C includes a plan for forest management and permits the National Park Service the freedom to address crucial issues such as deer predation and management, invasive plant mitigation, deforestation, and water quality protection, including waters that are part of public drinking water supplies.

Alternate Plan C also allows for land acquisition. If anything, the amount of acreage authorized for acquisition should be increased. Clearly more acreage for the park is essential to buffering its sacred ground and natural and cultural resources -- including historic viewsheds -- if only from ongoing development in Morris Township. In my opinion, this municipality is failing miserably to protect the park. One example is township officials' voluntarily rezoning areas of a favored adjoining landholder's property for inappropriate commercial development and an outdoor sports complex without any apparent regard for the park's historic value to the nation or its economic value to this region. It was my observation that township officials blew off serious concerns about visual and other intrusive impacts on the park experience for hundreds of thousands of visitors annually. Alternate Plan C faces and deals responsibly with this very unfortunate situation. This plan gives the National Park Service the tools it needs to defend this national park's resources and its experiences for visitors from two threats: development, including by developers who see the park as an asset that increases the amount of money they can ask from buyers, and a handful of barbaric, small town politicians.

I have lived in this area for nearly 20 years. In all that time, I don't recall the basic exhibits changing at the Jockey Hollow visitors' center, the Wicke House, or

Washington's Headquarters. My family and the out of town and foreign visitors we have brought there have greatly enjoyed Jockey Hollow. However, more access to a changing array of the full resources and artifacts of Morristown National Historic Park and more interpretation would better utilize these invaluable resources. I believe that these enhancements also would increase public interest in the park's resources and history, and increase the public benefits that would result from this. For example, interpretation about the origins of the park and other aspects of its 19th - 21st century history would be of great public interest and could provide invaluable information and guidance in a day and age of open space and historic preservation initiatives at every level of government. Plan C addresses these points.

My thanks to the National Park Service for its efforts to prepare a responsible plan for the future of our first National Historical Park. At a time in history when Americans have cause to reflect on what it means to be an American and enjoy the liberties that the men in Jockey Hollow fought and died for, it is fitting that plans should be made to secure the park's future. Please adopt Alternative Plan C with increased acreage and then secure the resources needed to implement it. Thank you for your attention in this matter.

Sincerely,

Mary Arnold, MBA

cc: Hon. Rodney Frelinghuysen, US Congress

Spring Valley Road
Morristown, New Jersey
May 1, 2003



Supt. Michael Henderson
Morristown National Historical Park
30 Washington Street
Morristown, New Jersey 07960-4299

Dear Michael,

I have read the Morristown National Historical Park's General Management Plan with great interest. It appears to be quite in depth and complete in its survey of the national park here in Morristown and the changes that have occurred since the last plan in 1976.

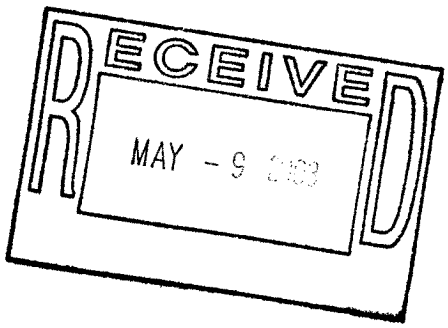
It is important to Morristown, New Jersey, the new effort to create the Crossroads of the Revolution Park here in New Jersey and to the nation, that the Morristown Revolutionary sites are protected and preserved for the future generations of our democracy. If we can not demonstrate to children how our democratic nation came to be and how the sacrifices and beliefs of the revolutionary troops and patriots helped achieve this prize, we could be in danger of losing this knowledge and perhaps the democracy.

The Plan Alternate C appears to have the required components to carry the park into the twenty-first century with all the changes that time and development in New Jersey present. As I understand, the museum needs updating and expansion to care for and display the priceless artifacts which are now in poor storage conditions. The park and museum needs to be up-to-date to attract the interest of the public and to present the history of the Revolution in an engaging and interesting modern manner.

I hope that Plan C can be implemented and the nation's first national historical park can be preserved and take its place with the other great sites of our nation.

Sincerely yours,

Eileen Cameron
Washington Association of New Jersey Board



May 9, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Re: Draft General Management Plan and Environmental Impact Statement

Dear Superintendent Henderson,

Please accept my gratitude for the National Park Service's thorough review and in-depth research for the important revision to the National Historical Park's General Management Plan.

I encourage the adoption of Draft Alternative C, as I feel it would help to preserve this historically significant and environmentally-sensitive park, and the surrounding community.

Thank you.

Sincerely,

Glenn K. Coutts
5 Old Orchard Road
Morristown NJ 07960
(973) 539-3818

GEOFFREY M. DOBSON
1 MILITARY HILL DRIVE
MORRISTOWN, N.J. 07960

Michael D. Henderson, Superintendent
Morristown National Park Service
30 Washington Place
Morristown, N.J. 07960

April 24, 2003

Re: Draft GMP/EIS

Dear Superintendent Henderson;

Thank you for providing a copy of the subject for my review. Overall, it is an excellent report. I support your recommendation for Alternative C.

As my property, where I have lived for 18 years, abuts Jockey Hollow (across from the Guerin House), I am concerned about the park's effect on its neighbors. For instance, the report implies that the deer population has declined, due to a reduction in the understory. I feel that this has shifted the deer population onto the residential areas adjoining the park. I would like to see the report include a "Targeted" deer population forecast to include the effect of the park on its neighbors.

The report also mentions the possibility of closing the Western Avenue entrance to automotive traffic. If this occurs, where would the pedestrian and bike visitors park their cars? Currently in the winter months when the park gates open later and close earlier, cars sometimes park in the CCC church parking lot or on Bettin Drive.

Lastly, to whom does Sugar Loaf Road, running off Jockey Hollow Road, belong ? I share your concern about the Delbarton traffic which will only increase when the CCRC is developed.

Sincerely,

Geoff Dobson

The Rev. Canon James Elliott Lindsley
Historiographer, Diocese of New York
Maplegarth
Box 881, Millbrook, New York 12545

845-677-6401
Fax 677-0458
jelgardenaol.com

21 March, 2003

Michael D. Henderson, Superintendent,
Morristown National Historical Park,
30 Washington Place,
Morristown, NJ 07960

Dear Mr. Henderson:

Though I will doubtless see you tomorrow at the Washington Association, I will put in writing my response to the draft Management Plan kindly mailed to me the other day.

I can speak with some certainly about the matter because, apart from being the author of a history of the Ford Mansion, I am probably the only non-staff person who knows the extent and variety of artifacts once belonging to the Washington Association that have been hidden in storage for many years. I was, in fact, long ago a reluctant participant in choosing certain items from that collection which were sent on loan to, I believe, the reception rooms of the State Department building in Washington. In those days their storage was somewhat haphazard in the museum building. Since then, I know, better storage and expert listing has prevailed.

Nevertheless, such an extensive collection of porcelain, silver, fabrics, portraits, fire-arms, and numerous other categories of worthy items ineligible for inclusion in the Ford House ought to be available for wide public inspection in Morristown. I heartily endorse plans for an addition to the museum building and will state that I might add several appropriate Morristown pieces if such an addition is built.

I hope that the addition will receive favorable and speedy action. Thank you for all your efforts on behalf of the Morristown National Historical Park.

Yours sincerely,

James Elliott Lindsley

PHILIP H. PITNEY
P. O. Box 451
28-2 Lloyd Rd
Bernardsville, NJ 07924

March 20, 2003

Michael D. Henderson, Superintendent
National Park Service
30 Washington Place
Morristown, NJ 07960

Dear Michael,

I received your 3/7/03 letter regarding the availability of the draft General Management Plan/Environmental Impact Statement. This is a most worthwhile plan for the preserving of our valuable park system.

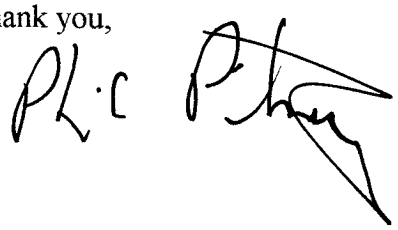
As a Cross Garden volunteer, and board member, I was only a little upset that our library was not included in those libraries which will have draft plan copies available for review.

Please send a copy of the plan to:

Karen Yanetta, Library Director
Bernardsville Public Library
1 Anderson Hill Rd.
Bernardsville, NJ 07924

We had our first volunteer encampment Wednesday morning. We are off to a late start but have a number of new volunteers. Hope to see you in the garden soon.

Thank you,



cc: Karen Yanetta

Sharon M. Reider

36 Kinney Street #1, Madison, NJ 07940

Supt. Michael D. Henderson
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

May 8, 2003

Dear Supt. Henderson,

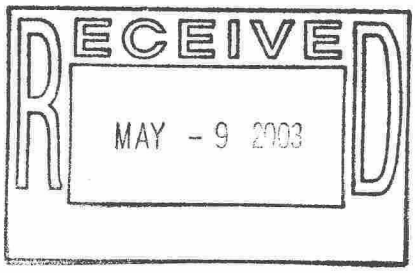
I have reviewed the MNHP Draft General Management Plan and would like to offer my support for the vision articulated in Alternate C. Though only a New Jersey resident for the last few years (having spent the first part of my life in the Cincinnati, Ohio area) I, nonetheless, did come to see the Washington Headquarters site as a child. Obviously, I was raised in a family where the importance of history and visiting historic sites was highly valued. As the teaching of history seems to be constantly imperiled in our nation's schools and (if polls and studies are believed) the average American knows less and less about their American heritage, I believe it is now even more important than ever to foster that same sense of "important destination" at the historic sites of our nation, a list on which MNHP certainly holds great prominence.

Alternate C, with its many expansive and embracing components, most assures that the MNHP will be an important destination. I cite in particular Alternate C's support for further research for even more appropriate interpretation, greater opportunities for "first-person" interpretation, interconnection of MNHP units and other local historic sites via a shuttle, the aggressive improvement of accessibility throughout the Park, and the rehabilitation and expansion of the Headquarters Museum (including collections display, storage and research opportunities). Thus, Alternate C contributes to a vision of vibrancy and evolution at the MNHP and will best assure that the history of the site, our American heritage in general and the understanding of the cost of our legacy of freedom, will all be appropriately commemorated and celebrated for years to come.

As a history professional, and now Executive Director of the Washington Association of New Jersey (WANJ), I am especially interested in the sub-themes exploring the site's preservation and commemoration. I believe interpreting these themes will also afford the visiting public an awareness and understanding of exactly why historic preservation is vital to our society; a belief to which I personally most heartily subscribe. I would hope it would also inspire visitors to join in historic preservation efforts in whatever part of the nation – or the world – they reside.

And, finally, I most strongly support Alternate C's proposed "expansion of boundaries" to interrelate the MNHP's history with other prominent local historical sites and to more actively involve the Morristown/Morris County community at large. I state this in general because I strongly believe such interconnectivity engenders even greater understanding and appreciation of history and historic resources; in particular, because you personally offer the leadership style and initiative to make such outreach viable and rewarding for everyone involved. Alternate C outlines the most ambitious future for the MNHP but, having worked first with you when I was Director of Morristown's Historic Speedwell and now more directly with you in my position with WANJ, I support it in confidence knowing that you are uniquely qualified to see it through.





May 9, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Re: Draft General Management Plan and Environmental Impact Statement

Dear Superintendent Henderson,

I would like to commend the National Park Service for its very thorough discussion and presentation of resource preservation and visitor experience issues in its February 2003 Morristown National Historical Park General Management Plan and Environmental Impact Statement.

In the quarter century that has elapsed since the last review of the Park's management plan, significant issues have arisen regarding the protection of historic viewsheds and the enhancement and preservation of the Park's historic, cultural and natural resources. Undesirable intrusion onto lands adjacent to the Park has become a major threat to the integrity of this national treasure, particularly with regard to the Jockey Hollow Unit. I applaud the inclusion of Draft Alternative C, which would seek authority to raise the Park's acreage ceiling.

Draft Alternative C also promotes the park-town shuttle, which will have a beneficial effect on the historic roads in Jockey Hollow, as well as the relative tranquility of the existing soundscape.

I encourage the National Park Service to adopt Draft Alternative C, as it is most likely to prevent irreversible adverse impacts on the Park's unique and irreplaceable resources.

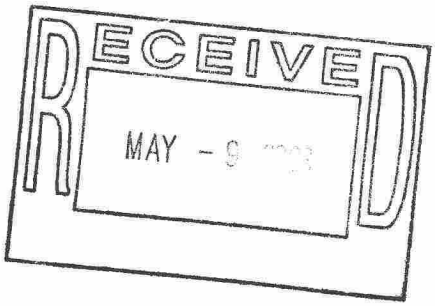
Sincerely,

Wendy Rudman

Wendy Rudman
P.O. Box 274
Clifton, VA. 20124

Scott Shepherd
33 Molly Stark Drive
Morristown, NJ 07960

Telephone: 973 / 292-0548
E-Mail: S.Shepherd@att.net



May 8, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Dear Michael,

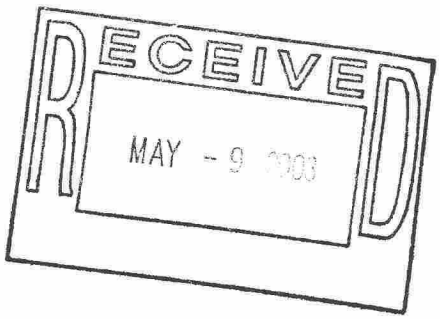
During the last month I have had an opportunity to review the plans for expanding the Museum at Morristown National Historical Park on two occasions. It is a most exciting and much needed undertaking.

As someone who has pursued a retirement career researching the role of Morristown's citizens in the American Revolution, the thought of improving public access to the collection available at the Museum is most welcome and I might say without fear of contradiction a long time in coming.

At a time when I find it appalling how little today's school children know of American History, your collection has a truly outstanding potential for raising the public's awareness of the important role Morristown played at the time of the American Revolution for generations to come!

Sincerely,

Scott



May 9, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Re: Draft General Management Plan and Environmental Impact Statement

Dear Superintendent Henderson,

I would like to support the adoption of Draft Alternative C of the Morristown National Historical Park's General Management Plan.

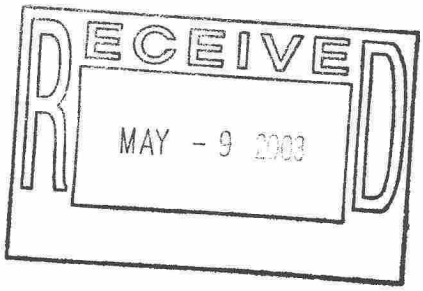
Jockey Hollow is a treasure for our community, as well as our country. I strongly support the protection of this historical and environmentally sensitive area, and feel that Draft Alternative C would help protect our valuable parkland and the tranquility of the surrounding community.

Sincerely,

Linda Coutts Snyder

Linda Coutts Snyder
541 Jockey Hollow Road
Morristown NJ 07960
(973) 993-9130

Dorothea K. Stillinger
216 Noe Avenue
Chatham, NJ 07928



May 6, 2003

Michael D. Henderson, Superintendent
Morristown National Historical Park
30 Washington Place
Morristown, NJ 07960-4299

Dear Mr. Henderson,

Thank you for your excellent presentation on April 16, 2003 at the Great Swamp Watershed Association's Land Use Committee on the proposed general management plan for the Morristown National Historical Park. All those attending appreciated your giving so generously of your time to explain the plan and answer questions. The Association is concerned about future directions of the park because of its proximity to the Great Swamp and the fact that it contains the headwaters of Primrose Brook.

Of the three plan alternatives, alternative C certainly seems the best choice. Even it contains only modest goals. If adopted, either of alternatives B or A would probably need to be amended fairly soon anyway since pressures on the park will only accelerate as the surrounding population increases and becomes more environmentally concerned.

Alternative C allows a figure for land acquisition that may almost be reasonable. As surrounding landowners find their property a burden to own because of increasingly strict environmental regulations, substantial land donations or bargain sales to the park can be foreseen. Alternative C is the most environmentally friendly, allowing management for environmental concerns. For example, removal of invasive species would be permitted as would conservation of forest areas. Alternative C combines the desire to maintain the character of the park with well-planned expansion of facilities and preservation of the park's unique environmental features.

The Great Swamp Watershed Association's Land Use Committee strongly supports the adoption of Alternative C.

Sincerely,

Dot

Dot Stillinger, Chair
Great Swamp Watershed Association Land Use Committee

APPENDIX V: ESTIMATED COSTS OF THE ALTERNATIVES

COSTS: ALTERNATIVE A

Operational costs are estimated at $2,350,000–$2,800,000 annually.
Research, planning, and construction costs are estimated at $2,800,000–$3,350,000.
Land acquisition costs are estimated at $1,500,000–$2,000,000.

The following table identifies the preliminary cost of elements of Alternative A.

Annual Operations

Description	Cost
Existing staff salaries and benefits	$2,025,000
Additional staff salaries and benefits:	
Coordinator (planner) for the proposed Crossroads heritage area (0.5 FTE)	35,000
Shuttle drivers (3.0 FTE)	180,000
Operate and maintain the Jockey Hollow shuttle vehicles	90,000
Total	**$2,330,000**

Research, Planning, and Construction

Description	Gross Cost
Make improvements to the interior of the museum	$1,000,000
Remove the Dick House and rehabilitate the site	50,000
Design and construct new orientation exhibits	25,000
Update existing waysides	250,000
Continue archeological research	30,000
Extend and enhance the restoration of the Mendham–Elizabethtown Road	250,000
Design and construct 4–6 interpretive huts at the Pennsylvania Line	100,000
Design and construct 2 fee collection booths at Jockey Hollow	40,000
Remove invasive vines in Jockey Hollow	90,000
Remove black locust stand in Jockey Hollow	25,000
Research the historic pattern of field and forest in Jockey Hollow	50,000
Plan and implement a summer season living-history program	100,000
Make functional improvements to the central utility area	200,000
Purchase Jockey Hollow shuttle vehicles (2)	500,000
Design and construct interpretive exhibits for New Jersey Brigade unit with Audubon	25,000
Clear vistas at Fort Nonsense	25,000
Stabilize archeological resources related to the historic Fort Nonsense	25,000
Total	**$2,785,000**

Land Acquisition

Description	Cost
Acquire the remaining 8.56 acres under the existing acreage ceiling	$1,600,000
Total	**$1,600,000**

COSTS: ALTERNATIVES B AND C

This table identifies the preliminary cost of elements common to both Alternative B and C. These costs are in addition to the estimated costs of elements unique to the action alternatives (B and C).

Annual Operations

Description	Cost
Existing staff salaries and benefits	$2,025,000
Additional staff salaries and benefits:	
Historian (0.5 FTE)	25,000
Archeologist (0.5 FTE)	25,000
Exhibit specialist (1.0 FTE)	45,000
Museum technician (1.0 FTE)	45,000
Education specialist (1.0 FTE)	45,000
Community planner (0.5 FTE)	30,000
Interpretive rangers for the Schuyler-Hamilton House (2.0 FTE)	90,000
One 5-person Seasonal field crew for forest management	110,000
Operate and maintain the Schuyler-Hamilton House	25,000
Operate and maintain the park–town shuttle vehicles	135,000
Total	**$2,600,000**

Research, Planning, and Construction

Description	Cost
Complete cultural landscape reports for all park units	$300,000
Develop a cultural landscape treatment plan to sustain park forests	150,000
Develop a comprehensive interpretive plan	50,000
Develop an archeological resource management plan	100,000
Establish archeological investigations at all units	100,000
Establish special management procedures for park watersheds	25,000
Purchase park–town shuttle vehicles (3)	750,000
Design and construct additional park signs along major highways	25,000
Design and construct park unit signs	75,000
Rehabilitate the museum, construct an addition, and make site improvements	7,000,000
Complete carrying capacity studies for the Ford Mansion, Wick House, and Jockey Hollow tour loop	90,000
Improve crosswalks and sidewalks at Washington's Headquarters and Jockey Hollow	80,000
Rehabilitate the Jockey Hollow visitor center	150,000
Relocate selected trails away from Jockey Hollow tour road and improve accessibility	50,000
Design and construct a fee-collection booth at Jockey Hollow	25,000
Construct an electronic gate at the Western Avenue entrance to Jockey Hollow	25,000
Make functional improvements to the central utility area	250,000
Provide technical assistance under the proposed Crossroads heritage area	50,000
Total	**$9,295,000**

Land Acquisition

Description	Cost
Acquire up to 500 acres adjacent to park units	$20,000,000
Total Costs Common to Alternatives B and C	**$20,000,000**

COSTS: ALTERNATIVE B

Operational costs are estimated at $2,750,000–$3,250,000 annually. Research, planning, and construction costs are estimated at $11,000,000–$13,250,000. Land acquisition costs are estimated at $0–$35,000,000.

The following table identifies the preliminary cost of elements of Alternative B.

Annual Operations

Description	Cost
Additional staff salaries and benefits:	
One 5-person seasonal field crew to maintain landscape vignettes	$110,000
Subtotal	$110,000
plus costs common to Alternatives B and C	*2,600,000*
Total	**$2,710,000**

Research, Planning, and Construction

Description	Cost
Design and construct new waysides and exhibits	$160,000
Remove the Caretaker's Cottage, garage, and the Dick House; rehabilitate the sites	130,000
Rehabilitate the immediate surroundings of the Ford Mansion	40,000
Construct a trail to the Ford Powder Mill archeological site	25,000
Research the Ford family lifestyle, farm, and site history under Washington and staff	50,000
Develop first phase of landscape vignettes in Jockey Hollow and Fort Nonsense	220,000
Extend and enhance the restoration of the Mendham–Elizabethtown Road	250,000
Restore the cider orchard and kitchen garden at the Wick Farm	60,000
Remove the flagstone walk and patio at the Wick Farm	25,000
Install vegetative screening around Quarters 35 and remove the adjacent parking area	25,000
Remove the satellite parking areas along the Jockey Hollow unit tour road	150,000
Restore Sugar Loaf Road from Grand Parade Road to Lewis Morris County Park entry	100,000
Restore the existing access road and parking at Fort Nonsense	250,000
Relocate access to the trailhead parking lot at the Cross Estate	25,000
Subtotal	$1,510,000
plus costs common to Alternatives B and C	*9,295,000*
Total	**$10,805,000**

Land Acquisition

Description	Cost
Costs common to Alternatives B and C	*$20,000,000*
Total	**$20,000,000**

COSTS: ALTERNATIVE C

Operational costs are estimated at $2,750,000–$3,250,000 annually. Research, planning, and construction costs are estimated at $10,000,000–$12,000,000. Land acquisition costs are estimated at $0–$35,000,000.

The following table identifies the preliminary cost of elements of Alternative C.

Annual Operations

Description	Cost
Additional staff salaries and benefits:	
Park guides for interpretive program (2.0 FTE)	$80,000
Subtotal	$80,000
plus costs common to Alternatives B and C	*2,600,000*
Total	**$2,680,000**

Research, Planning, and Construction

Description	Cost
Design and construct new waysides and exhibits	$240,000
Investigate and evaluate post-encampment archeological resources	50,000
Remove the Dick House and rehabilitate the site	50,000
Complete historical and archeological research on CCC activities in Jockey Hollow	50,000
Connect the Jockey Hollow tour road to paved bike paths in Lewis Morris County Park	25,000
Close Grand Parade Road to motor vehicles	25,000
Stabilize archeological evidence of the 1777 fortification at Fort Nonsense	50,000
Expand the parking area and create a bus turnaround at Fort Nonsense	50,000
Develop a larger picnic area with a comfort station at Fort Nonsense	25,000
Rehabilitate structures at the Cross Estate for administrative purposes	150,000
Subtotal	$715,000
plus costs common to Alternatives B and C	*9,295,000*
Total	**$10,010,000**

Land Acquisition

Description	Cost
Costs common to Alternatives B and C	*20,000,000*
Total	**$20,000,000**

APPENDIX VI: GLOSSARY

Accessibility – the provision of NPS programs, facilities, and services in ways that include individuals with disabilities, or make available to those individuals the same benefits available to persons without disabilities. See also "Universal design."

Accession – a transaction whereby a museum object or specimen is acquired for a museum collection. Accessions include gifts, exchanges, purchases, field collections, loans, and transfers.

Administrative record – the "paper trail" that documents an agency's decision-making process and the basis for the agency's decision. It includes all materials directly or indirectly considered by persons involved in the decision-making process. These are the documents that a judge will review to determine whether the process and the resulting agency decision were proper.

Archeological resource – any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. An archeological resource is capable of revealing scientific or humanistic information through archeological research.

Best management practices (BMPs) – practices that apply the most current means and technologies available to not only comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. See also "Sustainable practices/principles."

Cantonment area – a group of temporary quarters for troops.

Carrying capacity (visitor) – the type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions in a park.

Commemorative work – any statue, monument, sculpture, plaque, memorial, or other structure or landscape feature, including a garden or memorial grove, designed to perpetuate the memory of a person, group, event, or other significant element of history.

Consultation – a discussion, conference, or forum in which advice or information is sought or given, or information or ideas are exchanged. Consultation generally takes place on an informal basis; formal consultation requirements for compliance with section 106 of NHPA are published in 36 CFR Part 800.

Cooperating associations – private, nonprofit corporations established under state law which support the educational, scientific, historical, and interpretive activities of the NPS in a variety of ways, pursuant to formal agreements with the NPS.

Critical habitat – specific areas within a geographical area occupied by a threatened or endangered species which contain those physical or biological features essential to the conservation of the species, and which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time of its listing, upon a determination by the Secretary of the Interior that such areas are essential for the conservation of the species.

Cultural landscape – a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or esthetic values. There are four non–mutually exclusive types of cultural landscapes: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. See also "Landscape Treatments."

Cultural resource – an aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places, and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

Decision point – a fundamental question the plan needs to answer. For example, should the park achieve one set of resource conditions and experiences, or some other?

Developed area – an area managed to provide and maintain facilities (e.g., roads, campgrounds, housing) serving park managers and visitors. Includes areas where park development or intensive use may have substantially altered the natural environment or the setting for culturally significant resources.

Ecosystem – a system formed by the interaction of a community of organisms with their physical environment, considered as a unit.

Environmental assessment – a brief NEPA document that is prepared (a) to help determine whether the impact of a proposed action or its alternatives could be significant; (b) to aid the NPS in compliance with NEPA by evaluating a proposal that will have no significant impacts, but may have measurable adverse impacts; or (c) as an evaluation of a proposal that is either not described on the list of categorically excluded actions, or is on the list, but exceptional circumstances apply.

Environmental impact statement – a detailed NEPA analysis document that is prepared when a proposed action or alternatives has the potential for significant impact on the human environment.

Environmental leadership – advocating on a personal and organizational level best management practices and the principles of sustainability, and making decisions that demonstrate a commitment to those practices and principles.

Ethnographic landscape – an area containing a variety of natural and cultural resources that traditionally associated people define as heritage resources. The area may include plant and animal communities, structures, and geographic features, each with their own special local names.

Ethnographic resources – objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources eligible for the National Register of Historic Places are called traditional cultural properties.

Exotic species – those species that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities. Exotic species are also commonly referred to as nonnative, alien, or invasive species. Because an exotic species did not evolve in concert with the species native to the place, the exotic species is not a natural component of the natural ecosystem at that place.

General management plan (GMP) – a plan which clearly defines direction for resource preservation and visitor use in a park, and serves as the basic foundation for decision making. GMPs are developed with broad public involvement.

Heritage area – distinctive landscapes that do not necessarily meet the same standards of national significance as national park areas.

Historic property – a district, site, building, structure, or object significant in the history of American archeology, architecture, culture, engineering, or politics at the national, state, or local level.

Impact – the likely effects of an action or proposed action upon specific natural, cultural, or socioeconomic resources. Impacts may be direct, indirect, cumulative, beneficial, or adverse. Severe impacts that harm the integrity of park resources or values are known as "impairments."

Impairment – an impact so severe that, in the professional judgment of a responsible NPS manager, it would harm the integrity of park resources or values and violate the 1916 NPS Organic Act.

Implementation plan – a plan that focuses on how to implement an activity or project needed to achieve a long-term goal. An implementation plan may direct a specific project or an ongoing activity.

Integrated pest management – a decision-making process that coordinates knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage, by cost-effective means, while posing the least possible hazard to people, resources, and the environment.

Landscape treatments –

- *Preservation:* A cultural landscape will be preserved in its present condition if that condition allows for satisfactory protection, maintenance, use, and interpretation; or another treatment is warranted but cannot be accomplished until some future time.

- *Rehabilitation:* A cultural landscape may be rehabilitated for contemporary use if it cannot adequately serve an appropriate use in its present condition; and rehabilitation will retain its essential features, and will not alter its integrity and character or conflict with approved park management objectives.

- *Restoration:* A cultural landscape may be restored to an earlier appearance if all changes after the proposed restoration period have been professionally evaluated, and the significance of those changes has been fully considered; restoration is essential to public understanding of the park's cultural associations; sufficient data about that landscape's earlier appearance exist to enable its accurate restoration; and the disturbance or loss of significant archeological resources is minimized and mitigated by data recovery.

- *Reconstruction:* No matter how well conceived or executed, reconstructions of obliterated landscapes are contemporary interpretations of the past, rather than authentic survivals from it. The National Park Service will not reconstruct an obliterated cultural landscape, unless: there is no alternative that would accomplish the park's interpretive mission; sufficient data exist to enable its accurate reconstruction, based on the duplication of historic features substantiated by documentary or physical evidence, rather than on conjectural designs or features from other landscapes; reconstruction will occur in the original location; the disturbance or loss of significant archeological resources is minimized and mitigated by data recovery; and reconstruction is approved by the Director. A landscape will not be reconstructed to appear damaged or ruined. General representations of typical landscapes will not be attempted.

Lightscape (natural ambient) – the state of natural resources and values as they exist in the absence of human-caused light.

Management prescriptions – a planning term referring to statements about desired resource conditions and visitor experiences, along with appropriate kinds and levels of management, use, and development for each park area.

Mission-critical – something that is essential to the accomplishment of an organization's core responsibilities.

Mitigation – modification of a proposal to lessen the intensity of its impact on a particular resource.

National park system – the sum total of the land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational, or other purposes.

Native Americans – includes American Indians, Alaska natives, native peoples of the Caribbean, native Hawaiians, and other native Pacific islanders.

Native species – all species that have occurred or now occur as a result of natural processes. Native species in a place are evolving in concert with each other.

NEPA process – the objective analysis of a proposed action to determine the degree of its environmental impact on the natural and physical environment; alternatives and mitigation that reduce that impact; and the full and candid presentation of the analysis to, and involvement of, the interested and affected public. Required of federal agencies by the National Environmental Policy Act of 1969.

Organic Act (NPS) – the 1916 law (and subsequent amendments) that created the National Park Service and assigned it responsibility to manage the national parks.

Park – any one of the hundreds of areas of land and water administered as part of the national park system. The term is used interchangeably in this document with "unit," "park unit," and "park area."

Record of decision (ROD) – the document which is prepared to substantiate a decision based on an analysis (e.g., an EIS). When applicable, it includes a detailed discussion of rationale and reasons for not adopting all mitigation measures analyzed.

Sacred sites – certain natural and cultural resources treated by American Indian tribes and Alaska natives as sacred places having established religious meaning, and as locales of private ceremonial activities.

Soundscape (natural) – the aggregate of all the natural, non–human-caused sounds that occur in parks, together with the physical capacity for transmitting natural sounds.

Stakeholder – an individual, group, or other entity that has a strong interest in decisions concerning park resources and values. Stakeholders may include, for example, recreational user groups, permittees, and concessionaires. In the broadest sense, all Americans are stakeholders in the national parks.

Stewardship – the cultural and natural resource protection ethic of employing the most effective concepts, techniques, equipment, and technology to prevent, avoid, or mitigate impacts that would compromise the integrity of park resources.

Strategic plan – an NPS-wide, five-year plan required by GPRA (5 USC 306) in which the NPS states (1) how it plans to accomplish its mission during that time, and (2) the value it expects to produce for the tax dollars expended. Similarly, each park, program, or central office has its own strategic plan, which considers the NPS mission plus its own particular mission. Strategic plans serve as "performance agreements" with the American people.

Superintendent – the senior on-site NPS official in a park. Used interchangeably with "park superintendent" or "unit manager."

Sustainable design – design that applies the principles of ecology, economics, and ethics to the business of creating necessary and appropriate places for people to visit, live, and work. Development that has been sustainably designed sits lightly upon the land, demonstrates resource efficiency, and promotes ecological restoration and integrity, thus improving the environment, the economy, and society.

Sustainable practices/principles – those choices, decisions, actions, and ethics that will best achieve ecological/ biological integrity; protect qualities and functions of air, water, soil, vegetation, and other aspects of the natural environment; and preserve human cultures. Sustainable practices allow for use and enjoyment by the current generation, while ensuring that future generations will have the same opportunities. See also, "Environmental leadership" and "Best management practices."

Traditional – pertains to recognizable, but not necessarily identical, cultural patterns transmitted by a group across at least two generations. Also applies to sites, structures, objects, landscapes, and natural resources associated with those patterns. Popular synonyms include "ancestral" and "customary."

Traditional cultural property – a property associated with cultural practices, beliefs, the sense of purpose, or existence of a living community that is rooted in that community's history or is important in maintaining its cultural identity and development as an ethnically distinctive people. Traditional cultural properties are ethnographic resources eligible for listing in the National Register.

Universal design – the design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design.

Visitor – defined as anyone who uses a park's interpretive and educational services, regardless of where such use occurs (e.g., via Internet access, library, etc.).

Wayside – an outdoor interpretive exhibit, usually displaying text and visual information and mounted on a pedestal.

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VIII. PREPARERS

Morristown NHP

Brian Brodhead, Chief of Maintenance
Denise Colbert, Secretary
Joseph Green, Chief of Education and Interpretation
Matthew Grubel, Interpretive Ranger
Michael D. Henderson, Superintendent
Glenn Kendall, Management Support Advisor
Wouter Ketel, former Chief of Resource and Visitor Protection
Robert Masson, Chief of Natural Resources/Biologist
Eric Olson, Interpretation
Joni Rowe, Museum Specialist
Greg Smith, Chief of Resource and Visitor Protection
Heidi Sosinski, Natural Resource Technician
David Vecchioli, Chief of Cultural Resource Stewardship/Archivist
Thomas Winslow, Interpretation

NPS Boston Support Office

Christine Arato, Historian
Brian Aviles, GMP Team Captain, Landscape Architect
Justin Berthiaume, Landscape Architect
Daniel Boyd, Planner
Dave Clark, Environmental Compliance
Noelle Conrad, Education Specialist
Sandy Corbett, Superintendent
Larry Gall, Team Leader, Stewardship and Partnership
Jennifer Guentour, Administrative Assistant
Kevin Mendik, Environmental Compliance
Sarah Peskin, Team Leader for Planning and Legislation
Nigel Shaw, GIS Specialist
Marjorie Smith, Landscape Architect
Lena Vassilev, Planning Intern
Paul Weinbaum, Historian
Janet Wise, Natural Resource Specialist

NPS Consultants and Advisors

Richard Crisson, Historic Architect, Northeast Cultural Resource Center (NECRC)

Patrick Eeley, Historic Landscape Architect, Olmsted Center for Landscape Preservation (OCLP)

Chris Stevens, Historic Landscape Architect, OCLP

Eliot Foulds, Historic Landscape Architect, OCLP

Kate Hammond, Interpretive Planner, Harpers Ferry Center

Duncan Hay, Collections Management, Northeast Museum Services Center (NEMSC)

John Maounis, Deputy Associate Regional Director, Cultural Resources, Northeast Region (NER)

Bob McIntosh, Associate Regional Director, Planning, NER

Stephen Pendery, Archeologist, NECRC

David Uschold, Historic Landscape Architect, OCLP

Gay Vietzke, Collections Management, NEMSC

Sandy Walter, Deputy Regional Director, NER

Consultants

Jeff Bryan, Volpe Center, transportation planning

Jane Crosen, editorial services

Joan Ehrenfeld, Ph.D., ecology

Larry Lowenthal, Heritage Partners, planning and history

J. Tevere MacFadyen, Main Street Design, analysis of visitor experience

Carolyn Meeker, Adam 'n Eve Ink, graphic design of newsletters

Ann Moss, Shapins Associates; analysis and development of alternatives

Francie Randolph, Randolph Design / Heritage Partners, graphic design of Final GMP/EIS

Emily W. B. Russell, Ph.D., historical ecology and forest management

Jeff Rainwater, Shapins Associates, mapping

Ron Thompson, Compass, interpretive planning

Brian Underwood, Ph.D., wildlife biology

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical 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. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under the administration of the United States of America.

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

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National Park Service
Northeast Region
Boston Support Office
15 State Street
Boston, MA 02109-3572

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