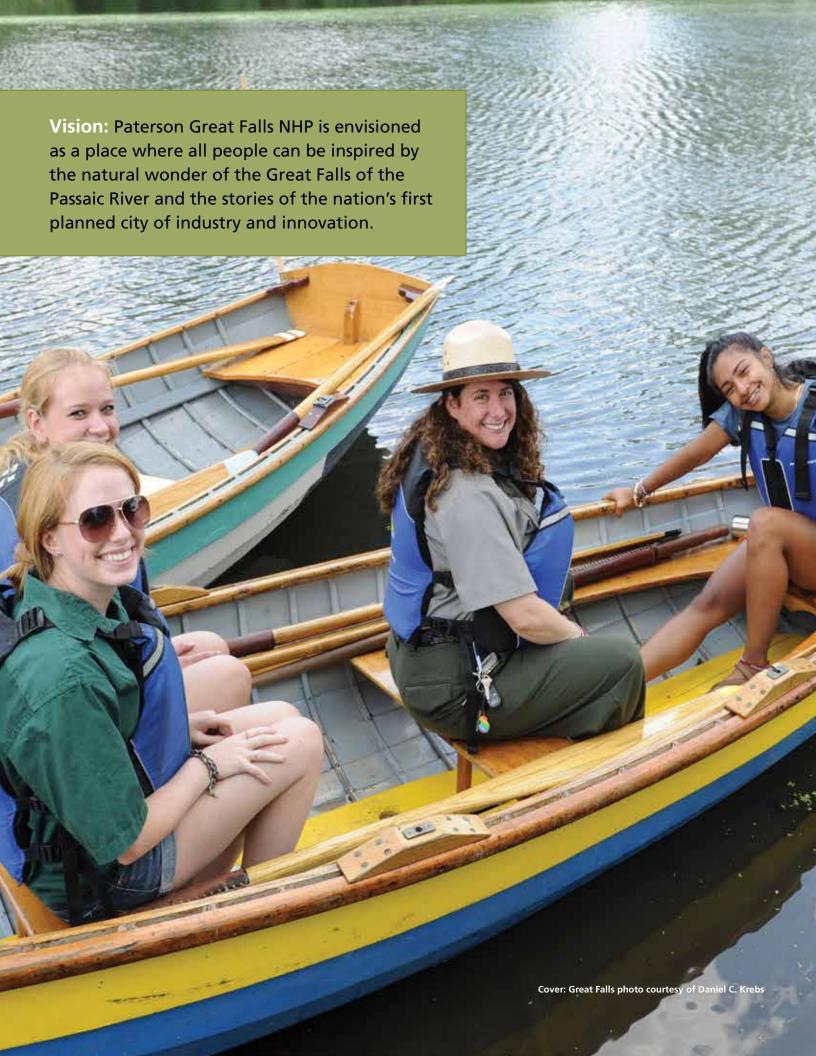
Paterson Great Falls National Historical Park

Draft General Management Plan and Environmental Assessment







EXECUTIVE SUMMARY

Introduction

Opportunity, innovation, immigration, the American Dream—the ideas and principles that formed the cornerstone of the United States are represented today at Paterson Great Falls National Historical Park (Paterson Great Falls NHP or the park.) The stories of our industrial heritage are the stories of America in the 21st century.

The park is located in and serves one of the most ethnically and socio-economically diverse communities in the country. There are over fifty ethnic groups represented in a population of some 160,000. Many of the descendants of older waves of ethnic immigrant groups live in nearby suburban communities which surround Paterson. Today there is a tremendous opportunity to introduce diverse communities to the National Park Service through outreach, on-site programs, youth work programs, and the enhancement of educational and recreational opportunities within the park's boundaries; and to do so in cooperation with both public and private partners.

Paterson Great Falls NHP consists of the natural, cultural, and historic resources that are associated with the Great Falls of the Passaic, the hydropower system it feeds, and a 220-year period of industrial history. The Great Falls is an outstanding example of the country's natural history, formed millions of years ago. The geologic formation created an extraordinary 77 foot fall into a naturally occurring 280 foot chasm that attracted Native Americans and later Colonial-era tourists. By the late 18th century, entrepreneurs, investors and government officials, led by Alexander Hamilton, sought to harness the power of the river through the Society for Establishing Useful Manufactures (S.U.M.). The resulting concentration of 19th and 20th century industrial buildings and structures, connected to a water power system of raceways fed by the

Passaic River just above the Great Falls, illustrates the growth and evolution in industrial planning, architecture and engineering in the nation from 1792-1914.

A Partnership Park for the 21st Century

Paterson Great Falls NHP is one of many "partnership parks" in the national park system. In a partnership park many parties cooperate to preserve the park's resources and provide experiences for visitors and to accomplish the vision for the park. The majority of land in most national park units is in ownership of the federal government and managed by the National Park Service. Paterson Great Falls NHP represents an evolving idea of a park in an urban setting that brings a national park experience "close to home" and whose ownership and management are shared by a group of partners. This approach has many advantages and brings great flexibility in responding to opportunities and challenges as technology and innovation are quickly moving forward. A description of the partnership framework is provided in Chapter 2, pages 30-35.

The NPS and partners have prepared the park's first general management plan. This plan presents different ways to reach a common vision of preserving resources, telling stories, and revitalizing and sustaining the park and adjacent neighborhoods. Together over the coming years, the NPS and partners would engage local residents, park visitors, and interested groups and organizations to make the plan's vision a reality.

The Park—Its Boundaries and Resources

On March 30, 2009, under the Omnibus Public Land Management Act, President Barack Obama signed the Paterson Great Falls National Historical Park Act (Public Law III-II) authorizing the national historical park (appendix A). Formal establishment of the park took place on November 7, 2011, when Secretary of the Interior Ken Salazar and National Park Service Director

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Jonathan Jarvis dedicated the park as the nation's 397th park system unit.

The Paterson Great Falls NHP encompasses approximately 52 acres adjacent to the Passaic River in the city of Paterson, west of the city's downtown center (figure 1.1). Paterson, located approximately 15 miles from Manhattan as well as downtown Newark, is within the greater New York-Northern New Jersey Metropolitan Area and is the county seat for Passaic County.

The park is within the Great Falls of the Passaic/
Society for Establishing Useful Manufactures National
Historic Landmark Historic District (NHL District) in
Paterson. The Hinchliffe Stadium National Historic
Landmark, significant for its role in the history of Negro
professional baseball in twentieth-century segregated
America, is within the park. The Great Falls is part of
the Great Falls of Paterson-Garret Mountain Natural
National Landmark. The landmark designations are
described in more detail in a later section, and their
relationships to the park boundary illustrated on
page 14.

What are "park resources"?

"Park resources" include all forms and types of naturally occurring and human modified or constructed geographical features, landscapes, ecosystems, species plants, fish and animals, places, structures and objects.

The park's key resources are:

- The Great Falls of the Passaic River—including the chasm, waterfall, and the Passaic River as it flows through the park
- Raceway System—including the Upper Raceway/ Park, Middle Raceway, Lower Raceway, Gatehouse, Ivanhoe Wheelhouse, and spillways
- · Former Mill Buildings—including the Rogers

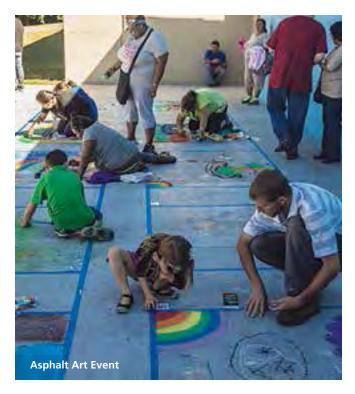
- Locomotive Building (Paterson Museum), the Colt Gun Mill Ruins, and the Allied Textile Printing (ATP) site ruins
- Overlook Park—the primary overlook of the Great Falls, also includes the S.U.M administration building (currently park headquarters) and steam plant foundation
- Valley of the Rocks—a natural area downstream of the Great Falls, along the northern bank of the Passaic River
- Mary Ellen Kramer Park—community parkland with viewing areas and trails at the top of the falls; also includes the Great Falls Development Corp. building and Pump House
- Hinchliffe Stadium—a historic sports stadium adjacent to Mary Ellen Kramer Park

Planning Challenges

The general public, NPS staff, and representatives from county, state, and city agencies, and various organizations helped to identify issues and concerns about management of the park during the scoping phase (early information gathering) for this GMP/EA (see Chapter 5, "Consultation and Coordination" for more information about the scoping efforts). Comments were solicited at public meetings, through planning newsletters, and at meetings with agencies and community stakeholders. An issue is defined as an opportunity, conflict or problem regarding the use or management of public lands. The GMP alternatives provide strategies for addressing these issues within the context of the park's purpose, significance, and special mandates.

Sustaining the Park's Fundamental Resources

Paterson Great Falls NHP's fundamental resources include historic structures and ruins, the raceway system, geologic formations, and hydrologic systems and features that contribute to the significance and character of this special place. Although many studies have been undertaken to address maintenance and preservation issues, there are no long-term resource management



strategies for NPS and partners. In addition, the NPS and partners do not have a formal role in the management of water quality or flow of the Passaic River.

The S.U.M. raceway system is the most significent extant historic resource of the park and its preservation and re-watering is of great interest to both Paterson residents and the broader historic preservation community. The complex raceway system incorporates dams, spillways, gate structures, headraces, tailraces, bypasses, among other structural components and stretches approximately one mile through the park and Great Falls NHL District. The conditions of the upper, middle and lower raceways vary; most of the spillway and raceway features are in poor condition, and are in danger of further deterioration. The upper raceway has been rehabilitated and the path along the raceway upgraded. The middle and lower raceways are generally dry and lack adjacent formalized pedestrian paths. When water enters the raceways, such as during flood events, leakage into adjacent buildings is a problem.

The Allied Textile Printing site (approximately 7 acres) contains portions of the S.U.M. raceways, the ruins of extensive textile dyeing and finishing operations that

occupied a large portion of the property from the 1910s to 1980s, and the ruins of at least five 19th-century mills. After industrial activity at the site ended, a series of fires at the ATP site damaged most of the 30 structures on the site.

The Passaic River flows through the park and the quantity and quality of its water influences the visitor experience. The river segment that flows through the park and the sub-watershed surrounding the park supports its designated uses for agricultural water supply and industrial water supply, but does not support its designated uses for aquatic life, fish consumption, primary contact recreation, or public water supply. Within the park, the river does not meet primary recreational standards due to elevated levels of bacteria. Debris and litter in the river contribute to the water pollution and frequently collect at the base of the falls, in view of from the park's primary overlook. An agreement is in place to ensure water flow over the falls in the summer months, but this agreement does not address water flow during the remainder of the year or "winter drought" issues.

The GMP will explore the best ways to manage the park's fundamental resources and landscapes to ensure their preservation and the role of partnerships to encourage the long-term protection of these places.

Experiencing the Park

Visitors new to the area and unfamiliar with the city of Paterson can sometimes be confused about how to move around the park, what activities there are to see and do, and are concerned about safety.

Although there are mass transit connections to downtown Paterson, access to Paterson Great Falls NHP is predominately automobile dependent. Major interstate and state roads provide vehicular connections to the park. Connections to these routes facilitate vehicular access; however, proximity to the interstate access ramps and other regional roadway connections creates a greater flow of traffic on narrow neighborhood streets that were not built to accommodate such volumes. Traffic congestion near the park, in particular during the three peak periods (morning and evening

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rush and after school) is a concern both for easy vehicular circulation and for pedestrian safety. Sidewalks are available on the streets surrounding the park but many segments are narrow, or in disrepair in some places. There are limited bicycle paths around and within the park as there are currently no designated bicycle lanes in Paterson.

Access to the river for recreational activities, both within and adjacent to the park, is limited. Access to the park on the river is not possible without a portage around the Great Falls; currently there is no formalized portage access around Great Falls and any informal access is dependent on water levels that allow for bridge clearances.

The GMP will explore ways to move and direct visitors to and throughout the park and the NHL District and address roles for NPS and partners in improving park experiences.

Improving Facilities and Infrastructure

Interest in the new national historical park is increasing visitation to the city and falls area. The city's former visitor contact station was recent rehabilitated as the park's Welcome Center and currently provides limited visitor amenities such as restrooms, or interpretive exhibits. The recently rehabilitated Mary Ellen Kramer Park will provide new opportunities to enjoy and view the falls, but most other park areas are in need of repair, maintenance and improvements to create safe and useable space for both new visitors and local residents. There is a need for more user comforts—benches, bike racks, picnic areas, water fountains, restrooms and space for large family groups or community events. The GMP will explore options for creating appropriate spaces for orientation, education, community gatherings and user comforts.

Overview of Management Alternatives

Alternative A—Establishing a New National Park (no action)

In alternative A, NPS and partners would continue working together to preserve resources, engage visitors and cooperatively manage park areas generally as they do today. The primary visitor experience would be through self-guided tours, independent park exploration and passive recreation. Mary Ellen Kramer Park, Overlook Park—with views of the Great Falls and the Passaic River—and the nearby Welcome Center and the Paterson Museum would continue to be the primary destinations in the park. Some visitors would explore the park on trails above the falls and in Raceway Park, using self-guided interpretive materials or on NPS and partner-guided tours. Some visitors would also explore the adjoining NHL district and participate in cultural events.

Interpretive and educational programming, facilities and staffing would generally continue at current levels. Collaboration with partners would facilitate ongoing programs and activities related to interpretation and education, visitor services, and protection of the park's cultural and natural resources. New projects would include those that are already approved and funded by the partners at Overlook Park, the S.U.M. Hydroelectric Plant, the ATP Site and Hinchliffe Stadium.

Alternative B—Landscape Exploration

In alternative B visitors would actively explore the entire park, enjoying its natural resources and cultural landscapes for contemporary recreational pursuits while learning about how those resources fueled America's early industrial development. A multisensory experience would highlight connections among the natural world, the power of the falls and the Passaic River, and Paterson's innovative role in the evolution of American industry and manufacturing. Natural and cultural landscapes would offer enhanced opportunities for scenic views, recreation, learning through interpretive and educational programs, and community building through special events.

Expanded visitor facilities and interpretive programming within the scenic falls and river area would encourage a wide range of visitor activities focused on actively exploring the Passaic River corridor. The park's primary visitor contact station would be located in a rehabilitated historic structure in Overlook Park. The setting and exteriors of historic structures associated with hydropower production would be preserved and maintained in good condition. Natural resource management would focus on water quality management, protection of geologic resources, preservation of the riparian forest, and protection of scenic views. Learning about the raceway system that delivered water from the Passaic River to power Paterson's industrial complex would be the focus of the visitor experience in the historic immersion area. The upper, middle and lower raceways would be preserved and re-watered for interpretation. Preservation of building exteriors and the historic district landscape would retain the historic character of the area.

The former ATP site would be rehabilitated as a community recreation area and provide greater access to the Passaic River for activities such as fishing. Green space, gardens, paths and innovative interpretive areas would be developed for fun, physical activity, relaxation and events. The Colt Gun Mill would be preserved and select features of remaining structures would be made safe and preserved as landscape features reflecting the site's industrial history.

Alternative C—Industrial Heritage Immersion

In alternative C visitors would be encouraged to start their experience in the national historic landmark district and then actively explore the entire park with a focus on learning about its industrial history.

The learning experience would highlight the national significance of Paterson's history beginning with the city's founding as part of Alexander Hamilton's vision for American economic independence and innovation, and continuing through today. Rehabilitated historic structures and cultural landscapes, together with the

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Great Falls and the Passaic River, would provide the setting for expanded interpretive experiences, educational programs, visitor services, and special events that celebrate history.

Interpretive programming in the scenic falls and river area would encourage visitors to explore the site in its historic context as a source of water power harnessed by technology to fuel American industry, beginning with the raceway technology to support Alexander Hamilton's vision for America's first planned industrial city and evolving to today's hydro-electric plant. Historic structures would be preserved and opportunities to tour interior spaces and explore the industrial setting would be expanded.

The raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city would be the focus of the visitor experience in the historic immersion area. NPS and partners would explore options to rehabilitate and re-water all elements of the raceway system as a functional historic raceway landscape, where feasible. Visitors would explore the raceway system via a new landscaped raceway walk, beginning at the upper raceway gatehouse intake on the Passaic River and continuing to the lower raceway tailrace discharge into the river. Natural areas in Upper Raceway Park and in areas adjacent to rehabilitated elements of the raceway system would be enhanced through removal of invasives and replanting with native plant species.

Collaborative efforts of NPS and partners would rehabilitate the former ATP site as an industrial history park—a destination for experiencing the continuum of industrial uses and Paterson innovation. The Colt Gun Mill would be rehabilitated and portions of select mill factories and ruins would be stabilized, where possible, for interpretive purposes and other visitor uses. New areas for picnicking, scenic viewing and other compatible recreation activities as well as visitor amenities such as a café, gathering space, and parking would be explored.



Next Steps in the Planning Process

The GMP/EA will be made available for a 60-day review and comment period to federal, state, and local agencies and all other interested parties, including organizations, businesses, interested individuals and stakeholders, and the general public. The availability of the GMP/EA will be announced to agencies and the public will be notified through local papers, the park's website and the NPS Planning, Environment and Public Comment (PEPC) website. Comments will be accepted electronically through the PEPC website or in the form of written letters that must be postmarked by the due date shown on the PEPC website. During the review period, the NPS will hold public meetings where the public will have additional opportunities to provide comments on the management alternatives and impact analysis presented in the GMP/EA.

Once the comment period has closed, the NPS will evaluate all comments received, after which a Finding of No Significant Impact (FONSI) will be prepared and released for a 30-day no action period. The FONSI will report on the results of agency and public comments on the draft GMP/EA and will identify the alternative that the NPS intends to select as the approved GMP for Paterson Great Falls NHP including any changes that

may have been made as a result of agency and public comment. The availability of the FONSI will be announced to agencies and the public through the same media used to announce the availability of the draft GMP/EA. No sooner than 30 days after circulation of the FONSI, the Northeast Regional Director may sign the FONSI, selecting an alternative for implementation as the approved GMP for Paterson Great Falls NHP. A copy of the GMP/EA will be transmitted to Congress as required by the park's enabling legislation. Regional Director signature of the FONSI will complete the planning and compliance process, after which the NPS will proceed to implement the approved GMP.

Implementation of the Plan

Once the GMP has been approved, implementation will begin immediately. Implementation of the approved plan will depend on funding. The approval of this plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the actions in the approved general management plan could be many years in the future. The implementation of the approved plan could also be affected by other factors, such as changes in NPS and partners staffing, visitor use patterns, and unanticipated environmental changes.

As actions in the approved GMP are implemented, additional feasibility studies and more detailed planning, environmental documentation, and consultations would be completed, as appropriate, before certain actions could be carried out. For example:

- Site-specific planning and environmental review may need to be completed.
- Appropriate permits may need to be obtained before implementing actions.
- Appropriate federal and state agencies may need to be consulted concerning actions that could affect threatened and endangered species.
- The New Jersey State Historic Preservation Officer (SHPO) may need to be consulted, as appropriate, on actions that could affect cultural resources.

How to Comment on This Plan

Comments on this GMP/EA are welcome and will be accepted during the 6o-day review and comment period. During this period, comments may be submitted using one of the methods noted below.

Online: http://parkplanning.nps.gov/pagr

We prefer that readers submit comments online through the park planning website identified above so the comments become incorporated into the NPS Planning, Environment, and Public Comment System. An electronic public comment form is provided through this website.

Mail

Superintendent
Paterson Great Falls National Historical Park
72 McBride Avenue
Paterson, NJ 07501

Hand Delivery

Comments may be dropped off at park headquarters (address above) or at public meetings, which will be announced in the media, following the release of this plan.

Note to Reviewers

Before including your address, telephone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time.

Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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	alternative transportation system	
	best management practices Council on Environmental Quality	
	Code of Federal Regulations	
	combined sewer outflow	
	director's order	
	Department of Interior	
	environmental assessment	
EO	executive order	
EOA	ethnographic overview and assessment	
	U.S. Environmental Protection Agency	
	Federal Advisory Committee Act	
	Federal Emergency Management Agency	
	Federal Flood Risk Management Standard	
	Federal Highway Administration	
	Federal Register full-time equivalent (staff positions)	
	U.S. Government Accountability Office	
	general management plan	
	Intergovernmental Panel on Climate Change	
	Lower Passaic and Saddle River Alliance	
	memorandum of agreement	
NEPA	National Environmental Policy Act	
	national historic landmark	
	national historical park	
	National Historic Preservation Act	
	New Jersey Community Development Corporation	
	New Jersey Department of Environmental Protection	
	New Jersey State Historic Preservation Officer New Jersey Transit	
	national natural landmark	
	notice of intent	
	National Parks Conservation Association	
	National Park Service	
ONPS	Operations of the National Park System	
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How to Read This Plan

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The National Park Service (NPS) has developed this Draft GMP/EA to guide management decision-making at Paterson Great Falls National Historical Park. The public and many local, state, and federal agencies have assisted the NPS with preparing the Draft GMP/EA. This Draft GMP/EA is divided into five chapters.

Chapter 1—Foundation for Planning describes the proposed action and reasons why the GMP/EA is being prepared. Chapter I presents the park's purpose and significance statements and describes the fundamental and other important resources and values that are critical to achieving the park's purpose and maintaining its significance. This section also describes the planning process and issues addressed in the Draft GMP/EA.

Chapter 2—Alternatives describes, evaluates, and compares the continuation of current management alternative and two action alternatives. The no action alternative provides a baseline from which the two action alternatives can be evaluated. Desired resource conditions, opportunities for visitor experience, as well as levels of development intensity necessary to accomplish each alternative are presented.

Chapter 3—Affected Environment describes the existing conditions of the natural, cultural, and socioeconomic resources that could be potentially affected by implementing either one of the alternatives.

Chapter 4—Environmental Consequences describes the potential impacts to the park's resource values that could result from implementing any of the alternatives and the relative importance of those impacts in the context of the affected resources.

Chapter 5—Consultation and Coordination describes the public involvement and agency consultation and coordination processes that occurred during the GMP/EA planning process.

References and Legal Citations are cited from which background and supporting documentation was obtained.

Appendices provide additional supporting technical data and relevant background material cited throughout the plan.

EXECUTIVE SUMMARY



1. FOUNDATION FOR PLANNING

Introduction—A Partnership Park for the 21st Century

Opportunity, innovation, immigration, the American Dream—the ideas and principles that formed the cornerstone of the United States are represented today at Paterson Great Falls National Historical Park (Paterson Great Falls NHP or the park.) The stories of our industrial heritage are the stories of America in the 21st century.

Paterson Great Falls NHP consists of the natural, cultural, and historic resources that are associated with the Great Falls of the Passaic, the hydropower system it feeds, and a 220-year period of industrial history. The Great Falls is an outstanding example of the country's natural history, formed millions of years ago. The geologic formation created an extraordinary 77 foot fall into a naturally occurring 280 foot chasm that attracted Native Americans and later Colonial-era tourists. By the late 18th century, entrepreneurs, investors and government officials, led by Alexander Hamilton, sought to harness the power of the river through the Society for Establishing Useful Manufactures. The resulting concentration of 19th and 20th century industrial buildings and structures, connected to a water power system of raceways fed by the Passaic River just above the Great Falls, illustrates the growth and evolution in industrial planning, architecture and engineering in the nation from 1792-1914.

The park is located in and serves one of the most ethnically and socio-economically diverse communities in the country. There are over fifty ethnic groups represented in a population of some 160,000. Many of the descendants of older waves of ethnic immigrant groups live in nearby suburban communities which surround Paterson. Today there is a tremendous opportunity to introduce diverse communities to the National Park Service through outreach, on-site programs, youth work programs, and the enhancement of educational and recreational opportunities within the park's

boundaries; and to do so in cooperation with both public and private partners.

Paterson Great Falls NHP is one of many "partnership parks" in the national park system. In a partnership park many parties cooperate to preserve the park's resources and provide experiences for visitors and to accomplish the vision for the park. The majority of land in most national park units is in ownership of the federal government and managed by the National Park Service. Paterson Great Falls NHP represents an evolving idea of a park in an urban setting that brings a national park experience "close to home" and whose

Vision: Paterson Great Falls NHP is envisioned as a place where all people can be inspired by the natural wonder of the Great Falls of the Passaic River and the stories of the nation's first planned city of industry and innovation.

ownership and management are shared by a group of partners. This approach has many advantages and brings great flexibility in responding to opportunities and challenges as technology and innovation are quickly moving forward.

In the park's enabling legislation, Congress identified several parties with whom the NPS will work cooperatively to accomplish the purposes for which the park was established. These are primarily the owners of the nationally significant properties within the boundary of the park. A description of the partnership framework is provided in chapter 2, pages 30-35.

The NPS and partners have prepared the park's first general management plan. This plan represents different ways to reach a common vision of preserving resources, telling stories, and revitalizing and sustaining the park and adjacent neighborhoods. Together over the coming years, the NPS and partners would engage local residents, park visitors and interested groups and organizations to make the plan's vision a reality.

FIGURE 1.1 The Park's Regional Context



The Park—Its Boundaries and Resources

On March 30, 2009, under the Omnibus Public Land Management Act, President Barack Obama signed the Paterson Great Falls National Historical Park Act (Public Law III-II) authorizing the national historical park (appendix A). Formal establishment of the park took place on November 7, 2011, when Secretary of the

Interior Ken Salazar and National Park Service Director Jon Jarvis dedicated the park as the nation's 397th park system unit.

The Paterson Great Falls NHP encompasses approximately 52 acres adjacent to the Passaic River in the city of Paterson, west of the city's downtown center (figure 1.1). Paterson, located approximately 15 miles from

Manhattan as well as downtown Newark, is within the greater New York- Northern New Jersey Metropolitan Area and is the county seat for Passaic County.

The park is within the Great Falls of the Passaic/
Society for Establishing Useful Manufactures National
Historic Landmark Historic District (NHL District)
in Paterson. The Hinchliffe Stadium National Historic
Landmark, significant for its role in the history of Negro
professional baseball in twentieth-century segregated
America, is within the park. The Great Falls is part of
the Great Falls of Paterson-Garret Mountain Natural
National Landmark. The landmark designations are
described in more detail in a later section, and their
relationships to the park boundary illustrated on
page 14.

What are "park resources"?

"Park resources" include all forms and types of naturally occurring and human modified or constructed geographical features, landscapes, ecosystems, species of plants, animals, places, structures and objects.

The park's key resources are:

- The Great Falls of the Passaic River—including the chasm, waterfall, and the Passaic River as it flows through the park
- Raceway System—including the Upper Raceway/ Park, Middle Raceway, Lower Raceway, Gatehouse, Ivanhoe Wheelhouse, and spillways
- Former Mill Buildings—including the Rogers
 Locomotive Building (Paterson Museum), the Colt
 Gun Mill Ruins, and the Allied Textile Printing
 (ATP) site ruins
- Overlook Park—the primary overlook of the Great Falls, also includes the S.U.M administration building (currently park headquarters) and steam plant foundation
- Valley of the Rocks—a natural area downstream of the Great Falls, along the northern bank of the Passaic River

- Mary Ellen Kramer Park—community parkland with viewing areas and trails at the top of the falls; also includes the Great Falls Development Corp. building and Pump House
- Hinchliffe Stadium—a historic sports stadium adjacent to Mary Ellen Kramer Park

A Brief History of Paterson

Pre-Contact to Contact

Initial human settlement of the New Jersey region dates to the Paleoindian period (12,000 to 10,000 years ago). Archeological sites in New Jersey were clustered around rivers such as the Delaware and Hudson, as well as coastal sites along the Atlantic Ocean, many of which are submerged. Artifacts from this period include fluted projectile points, endscrapers, sidescrapers and utilized flakes at sites that may have served as small, short-term camp sites, kill sites, or resource procurement and processing stations (FMG 2010). The Archaic Period (c. 10,000 to 3,000 years ago) was characterized by warmer, wetter weather and an increasingly sophisticated set of tools for hunting, fishing and particularly gathering. Village and camp sites still tended to be located near water bodies or wetlands. Archaic Period people's hunting, fishing and gathering practices took advantage of the rich biological diversity of plants and animals in the area. Changes during the Woodland Period (c. 3,000 years ago until European contact) include a tendency towards a more sedentary life for inhabitants of the New Jersey region, and a growing population. There is evidence of agriculture during this time period, as well as use of ceramic vessels.

Early History of the Region and the Diversifying American Economy

At the time of European contact, the Great Falls area was occupied by the Lenni Lenape. Early Dutch and other European settlers described the Woodland settlements as "villages, fortified towns, stockade settlements, bark lodges and wigwams" (FMG 2010). By 1684, several Dutch families had moved into the Passaic River area and divided a large parcel of land along the water into 100 acre lots; further subdivision of these properties occurred in 1714, and eventually helped shape the physical organization of the future city of

Paterson. The area, known then as the Acquackanonk region, remained rural in character through much of the 18th century, with large farms and the occasional grist mill comprising the main sources of economic activity in the area. Small towns such as Passaic, Harrison and Newark already dotted the landscape during this period; but Paterson—although not an official town at this time—was at the crux of larger plans for the region. The colonies at this time were rich in raw materials but poor in skilled labor, technology, capital and credit. When the American Revolution severed the colonies from England, lack of these resources created many new economic opportunities. In response, Alexander Hamilton suggested economic reforms including establishment of a national bank and credit system. Hamilton's contributions to the Federalist Papers and additional reports such as Report on Public Credit (1790) and the Report on the Subject of Manufactures (1791) provided some of the basis for the new nation's economy. Advocating manufacturing (rather than agriculture as suggested by Thomas Jefferson and other agrarians) as the basis for a robust economy, Hamilton believed that industry would attract new immigrants and would secure American independence through a secure and diverse economy. He proposed subsidies to industry, trade regulation, and tariffs to empower new American manufacturing. The report "announced that a society is forming with a capital which is expected to be extended to at least a million dollars on behalf of which measures are already in train for prosecuting on a large scale, the making and printing of cotton goods" (Hamilton 1913 [1791]:55).

Paterson's Industrial History

By the 1790s, ideas for Paterson as part of an industrial complex for the newly-independent country were imagined by Hamilton, then Secretary of the Treasury. Hamilton had visited the Great Falls area during the Revolutionary War, and had noted its abundant and fast-flowing water and other natural resources such as timber and mineral ores. Its location near Philadelphia and New York promised convenient trade. Hamilton received a letter in 1791 that described the Great Falls in glowing terms: "one of the finest situations in the world (we believe)...the quality of the water is good and in sufficient quantity to supply works of almost any extent" (NPS 2006a). Paterson and the Great Falls

were to become the cradle of America's new industrial independence.

Alexander Hamilton and Assistant Secretary of the Treasury, Tench Coxe, helped found the Society for Useful Manufactures (S.U.M.) through a prospectus written in 1791 in an effort to further secure industrial and financial independence from England. The S.U.M. was the nation's first planned manufacturing development and was located along the Passaic River to exploit the power of the Great Falls. The S.U.M., including financiers from New Jersey and New York, also helped found Paterson, which was named after Governor William Paterson who signed the 1792 charter establishing the town. The S.U.M., a private corporation, was granted liberal powers to develop manufacturing, was exempt from local taxes, and was enabled to undertake dramatic improvements to the local landscape.

The city planner for Washington, D.C., Pierre Charles L'Enfant, designed the initial engineering plan for the industrial district, incorporating a power-production scheme that forced the river's water through an elaborate raceway system. L'Enfant was a relatively young engineer but was one of the few professionals in the country at the time, and the complexity of the water power system required for the S.U.M. work likely would have stretched his capabilities (FMG 2010). His initial plan, including an aqueduct, reservoir and raceways to traverse the ridges and gullies on the site, was rejected by the S.U.M. leadership as too complicated. However, after the subsequent designs that relied on a reservoir system were not able to fulfill all of the requirements for the complicated power system, a version of the L'Enfant plan was later constructed. Development was not swift, and the Paterson site in 1793 included only two roads, three mills, a mine pit, log house, reservoir, canal (with gate) and a tail race (FMG 2010).

The S.U.M.'s weak finances thwarted the plans for advancement of many of the buildings planned for early Paterson. Financial difficulties left the new society with substantial debts and a lack of investors. Barely surviving a tumultuous financial period between 1792 and 1796, the S.U.M. ceased its own manufacturing operations and embarked on a long period of land leasing, infrastructure development and power supplying.

Beginning in 1794, a raceway system was constructed through Paterson, although it was augmented throughout the early 19th century. The Gazetteer of the State of New Jersey described the new dam and raceway system in 1834 as "41/2 feet high, strongly framed and bolted into the rock in the bed of the river above the falls, turns the stream through a canal excavated in the trap rock of the bank, into a basin; whence, through strong guard gates, it supplies in succession three canals on separate planes, each below the other; giving to the mills on each, a head and fall of about 22 feet. By means of the guard gate, the volume of water is regulated at pleasure, and uniform height preserved...The expense of maintaining the dam, canals, and main sluicegates, and of regulating the water, is borne by the company" (Gordon 1834).

The extension of the raceways enabled development of sites further down the Passaic River. Dozens of mill buildings lined the industrial district around the Great Falls. The mill buildings initially housed manufacturing facilities associated with textiles—the town's most important industry at the time. Textile work included production of cotton and linen duck, warp and filling, satinet and woolens, cotton flannel and the various spinning, bleaching, dyeing and printing that went along with production of these fabrics. Textile production was later augmented by other industries including silk, firearms, and railroad locomotive manufacturing. During the later 19th century, silk became Paterson's most prosperous industry, inspiring its name, "Silk City." By 1850, the Paterson's industrial area had expanded significantly, including over a dozen mill and manufacturing buildings.

At its peak, the raceway system could deliver water with force totaling over 2000 horsepower. Portions of the water were leased to mills to run their operations. By the 1880s, upstream diversion of water from the Passaic River for potable water and steam power resulted in a loss of some of the S.U.M.'s water power. With a less-reliable water power source, mills were forced to occasionally close and mill sites along the raceways were no longer considered desirable (NPS 2013). By 1915, the S.U.M. had constructed its hydroelectric generating plant and steam plant which would eventually overtake the raceways as the power supply for milling operations.

Additional financial challenges threatened the textile operations along the Passaic River. In order to counter these threats, over a dozen of Paterson's smaller silk and textile companies merged in 1938 into one management structure known as the Allied Textile Printers, Inc. (FMG 2010). The company streamlined the textile business and associated facilities along the Passaic River, eventually acquiring many of the mills. The ATP thrived through the 1950s and 1960s, and the buildings associated with the ATP enterprise remained largely intact through the 1970s when they were documented for a Historic American Engineering Record. In 1982, the company ceased operations, and a massive fire in 1983 destroyed many of the remaining buildings.

Paterson's Labor and Immigration

Fueling the immense production engendered by the industrial development of Paterson was a wave of immigration. A strong influx of Irish immigrants after the great famine of the 1840s increased the growing and diversifying community; other skilled laborers from western, eastern and southern Europe fed both the industry and the community. Paterson's population exploded with burgeoning mill operations, growing from about 500 people in 1790 to over 5,000 in 1820.

Concerns about working conditions spawned intense unrest between laborers and mill owners, eventually leading to worker strikes. The 1835 textile strike involved over 2,000 workers from almost two dozen of the city's textile mills. Perhaps the most famous of these was the Paterson Silk Strike of 1913, one of a series of textile worker strikes involving the entire east coast. The focus of this six month strike was demands for better working conditions including an eight-hour work day, elimination of child labor, and improved working conditions. Thousands of workers took part in the strike, but it ended in failure, and eventually many of the textile and silk manufacturers moved their facilities to other production locations.

Despite the strikes and loss of mills, the population of Paterson continued to diversify and grow throughout the 19th and 20th centuries. The Great Migration of African Americans moving from the south to northern industrial cities helped fuel the population of Paterson during the early 20th century as did many Syrian and

Lebanese immigrants who arrived as early as the 1890s. The burgeoning population in Paterson required not only jobs, but housing and other amenities within the city. Street markets, churches, banks and the city's stately Beaux Arts City Hall (1894) serviced the newly arrived residents of Paterson. These buildings formed the basis of a diverse residential and commercial core in the city that thrived in the late 19th and early 20th centuries. However, Paterson experienced a great fire in 1902, which necessitated the reconstruction of substantial parts of the downtown commercial area.

Hinchliffe Stadium— an Effort to Revitalize the Community

As a response to the recreational needs of the large labor population, the city built Hinchliffe Stadium in 1932, using funds from a bond issue and later, New Deal program funds. Planned during a multi-year stadium advocacy movement and the Jim Crow era of segregation, the large horseshoe-shaped stadium was constructed under the auspices of Mayor John Hinchliffe. From its opening in 1932 through the 1944 season, the sports scheduling successes and failures at Hinchliffe Stadium reflected the economic ups and downs experienced throughout the United States as the country passed through the Great Depression and World War II. The stadium hosted high quality play of Negro National League and Negro American League scheduled games from 1933 through 1944. Games featured the highest-quality players in Negro professional baseball, many of whom were later inducted into the National Baseball Hall of Fame. When Jackie Robinson signed with the Brooklyn Dodgers in 1945, Negro baseball began its decline as the major leagues began to become integrated. While a few other ballparks continued to host Negro teams as late as the 1960s, Negro baseball disappeared from Hinchliffe Stadium after the 1944 season. Stadium managers then turned their attention to hosting other types of events. In 1963, the Paterson Public Schools/ Board of Education acquired the stadium. The ensuing years brought improvements and efforts to promote its use for a variety of events. Unable to attract attendance needed to generate revenues for operations and maintenance, the Board of Education closed the facility in 1996.

Foundation for Planning

Every unit of the national park system is required to have a formal statement of its core mission to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of the foundation for planning and management include the park's purpose, significance, fundamental resources and values, related resources and values, and interpretive themes. Along with the core components, the foundation provides a focus for park planning activities and establishes a baseline from which all future planning documents are developed.

The foundation for planning and management for Paterson Great Falls NHP was initiated early in the planning process over the course of several workshops. Elements of the foundation were further refined throughout the GMP process, including consideration of public comments. The following foundation information is the result of those workshops and provides a shared understanding of what is most important about the park. A separate foundation document that summarizes the park's purpose, significance, interpretive themes, fundamental resources and values and other information will be produced as part of the GMP implementation.

Park Purpose

The purpose statement identifies the specific reason for establishment of a particular park. The purpose statement for Paterson Great Falls NHP is based on a careful analysis of its enabling legislation and the legislative history that influenced its development. The purpose statement lays the foundation for understanding what is most important about the park.

Paterson Great Falls NHP Purpose Statement:

Paterson Great Falls NHP preserves and interprets the natural beauty of the Great Falls of the Passaic River and the industrial, cultural and recreation landscape which formed around its endless source of power. The park and surrounding national historic landmark district illustrate the successful evolution of a manufacturing society which drew from the diversity and innovations of the American people for more than two centuries.







Top: Top of the Falls; Left: Paterson Museum Exhibit; Right: Historic Mill Building









Top: Chasm; Left center: Paterson Colt; Left bottom: Naturalization Ceremony; Right: Passaic River



Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Paterson Great Falls NHP and are supported by data, research and consensus. Statements of significance describe the distinct nature of the park and why an area is important within a global, national, regional and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

Paterson Great Falls NHP Significance Statements:

- The Great Falls of the Passaic River, with its natural chasm and 77 foot waterfall, provides an extraordinary scenic resource in the midst of an industrialized city and opportunities for relaxation, contemplation and inspiration.
- Paterson Great Falls NHP and the national historic landmark district provide one of the best opportunities to view a complete hydropower system from its source above the Great Falls of the Passaic to its transformation into power for the mills and the surrounding community. Alexander Hamilton's vision of a model manufacturing city, a central part of his economic strategy for the nation, is embedded in this industrial, cultural and natural landscape.
- Paterson's raceway system illustrates American ingenuity as the country grew to become a major

- industrial nation. The raceways offer an outstanding opportunity to interpret the city's industrial past and the Society for Useful Manufactures' role as a manufacturing incubator making it possible for immigrants to start businesses with limited resources and capital.
- The entrepreneurship and innovations of Paterson's industrialists and workers allowed the city to thrive and evolve over time in a long continuum of industrial use that continues today. Paterson's success can be attributed in large part to immigrants who brought their creativity and experience to the city seeking a better life; a trend which has continued throughout the city's history.
- Hinchliffe Stadium is one of the best examples of a professional Negro League baseball venue. The location of the stadium was specifically sited above the Great Falls so patrons could have a commanding view of Paterson's ever evolving industrial, social and natural landscape.

Fundamental Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to

a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

Paterson Great Falls NHP Fundamental Resources and Values:

- Geologic Formation and Features—The Great Falls of the Passaic were designated a National Natural Landmark in 1967; significant because of its creation by the Watchung basaltic lava flow. The geologic formation of the falls has created an extraordinary 77 foot fall into a naturally occurring chasm.
- Hydrologic Systems and Features—The Passaic River is the principal drainage of the Great Swamp area that cuts its way through northern New Jersey and eventually cascades over the Great Falls in Paterson. The flowing water was the backbone of industrial development as the City of Paterson was planned and still provides power today. The river also provides an ecological and recreational value to an otherwise industrial city.
- Historic Structures and Ruins—Paterson Great Falls NHP's historic structures, structural ruins, and associated archeological resources including the Society for Useful Manufactures' (S.U.M.) Building, Allied Textile Printing (ATP) site (including the Colt Gun Mill ruins), the hydroelectricity steam plant ruins/foundation, and the Ivanhoe Wheelhouse, convey the history of the park's industrial history.
- Raceway System—Paterson's system of raceways (gatehouses; wheelhouses; upper, middle, and lower raceways; spillways, outfalls and associated archeological resources) provides visitors with a complete vision and understanding of how the system functions as a whole and fits into the larger hydropower grid of the industrial landscape.

- Hinchliffe Stadium—The municipal stadium hosted Negro League baseball games, and served as the home field for the New York Black Yankees and New York Cubans. When segregation of major league baseball ended, the stadium enjoyed new life as a center for sports and entertainment that continued to bring the people of Paterson together.
- Natural Scenic and Industrial Landscape Views— The breathtaking views of the Great Falls and surrounding natural landscape allow a glimpse into the inherent beauty of nature in contrast to the manipulated landscape of the industrial city. The topography within the park provides visitors with panoramic views of the national historic landmark district's industrial landscape, reflecting settlement and industrial development patterns.
- Experiential Elements of the Falls—
 The experience of hearing the water thunder over the falls, feeling the spray from the water crashing into the chasm, and watching the water churn down the river help the visitor understand the power of the flowing water.

Related Resources and Values

Paterson Great Falls NHP contains related resources and values that are fundamental to the purpose of the park, but are outside the park's legislated boundary. These resources and values are related to its significance and are important to consider in planning processes because they are important in the management of the park.

Related Resources and Values identified for Paterson Great Falls NHP:

- Historic Mill Buildings—The numerous historic mill buildings located within the national historic landmark district were an integral part of the industrial development of the city. The densely constructed mills along the raceways and river illustrate the success of a 19th century industrial city.
- Milling Community—Paterson's success was built largely on the innovative, entrepreneurial spirit of its citizens, most of whom were immigrants. The mill housing, community centers, and recreational facilities provide the visitor with an understanding









Top Left: Mill Building, Top Right: Steam plant foundation Middle Left: Paterson Museum Exhibit, Middle Right: Spillway Bottom: Hinchliffe Stadium



of the typical lifestyle of 19th and 20th century mill workers.

Museum Collections—Items and artifacts show the inner-workings of manufacturing machinery used in Paterson, products produced in Paterson's mills, and personal artifacts of mill workers.

Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate

to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

Paterson Great Falls NHP has four interpretive themes:

- The Natural Beauty that Inspired and Powered a Revolution—The Great Falls in the heart of Paterson has drawn people and inspired them—both for its natural beauty and for the power and the energy that it promises.
- The Economic Vision that Shaped America— Paterson was founded on Alexander Hamilton's vision that freedom and independence for the United States would be based in a manufacturing economy that required a diversity of talents with promises of a better life for its people.
- Innovation and Opportunity—the Power of American Manufacturing—Through diversification of industries, technological innovation, and successive waves of industry and immigration, for more than two centuries Paterson continued to exemplify and reinvent Hamilton's vision of a planned manufacturing center.
- Race, Recreation, and Respite—While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

In appendix D, the stories and concepts associated with each theme are further described.

Establishing the National Historical Park

National parks do not just happen—they are the result of years of hard work and tireless efforts by local champions to have their special places preserved and recognized. Paterson Great Falls NHP is the result of efforts by passionate citizens, community organizations, city and state agencies and elected officials.

Establishment of the park came following decades of preservation work and advocacy to recognize Paterson as one of the nation's earliest industrial centers. Congressman Bill Pascrell, Jr. and Senator Frank Lautenberg, both Paterson natives, led the legislative effort to create the park, introducing The Paterson Great Falls National Park Act of 2006 and 2007 in Congress to establish the Paterson Great Falls National Park.

Recognition of the Park's Significance

Preservationist efforts clearly established the national significance of the resources associated with Alexander Hamilton's Society for Establishing Useful Manufactures (S.U.M.). Prior to establishment of the national historical park, three distinct historic district designations, one natural resource designation, and one engineering designation established the national significance of the Great Falls Historic District's cultural and natural resources, (figure 1.2):

- Great Falls of Paterson National Natural Landmark
 The Great Falls of Paterson is a national natural
 landmark (NNL), first recognized in 1967 and
 expanded in 1976 by addition of nearby Garrett
 Mountain. As such the falls is recognized as an
 outstanding example of the country's natural
 history. Together, the Great Falls of Paterson and
 Garrett Mountain provide an excellent illustration
 of the jointed basaltic lava flow which began
 a period of extrusion and intrusion throughout
 eastern North America in the early Mesozoic Era,
 influencing present day landforms in this region.
- Great Falls National Historic Landmark District
 The Great Falls National Historic Landmark
 District—largely coterminous with the Great Falls
 Historic District—is a national historic landmark
 district (Great Falls of the Passaic/Society for Useful Manufactures), designated in 1976. The landmark

FIGURE 1.2 Paterson Great Falls NHP

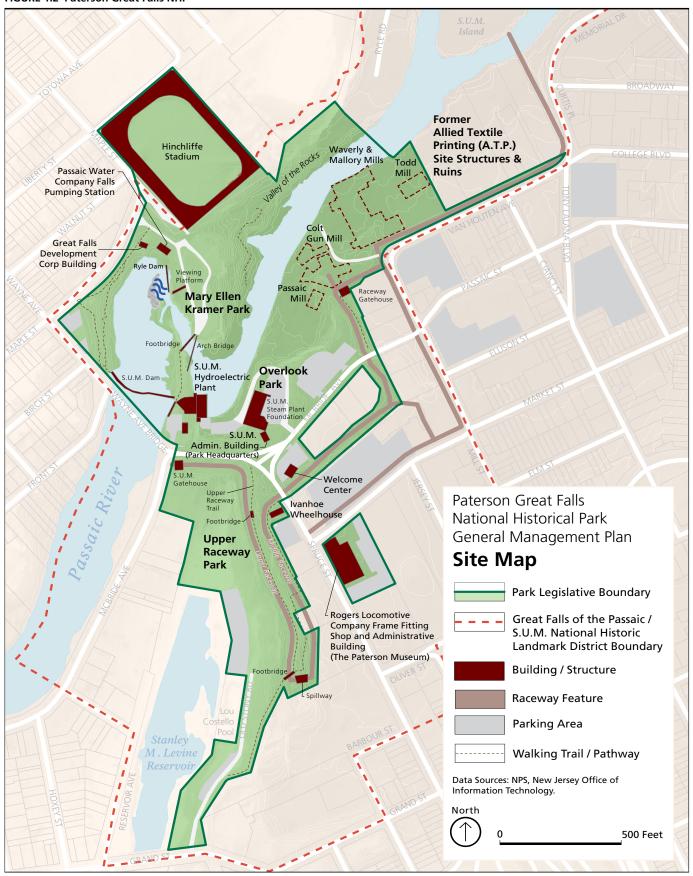
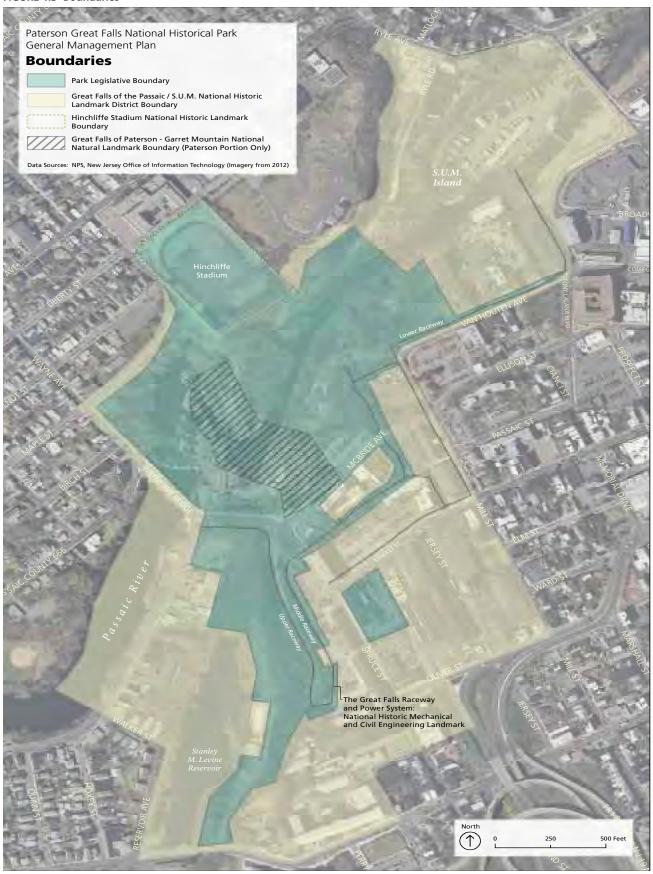


FIGURE 1.3 Boundaries



is nationally significant for engineering from 1750 to 1924, with significant events occurring in 1791, 1864 and 1914. Important engineers and others involved in design and development of related engineering features of the S.U.M. Raceway System included: Alexander Hamilton, Phillip Schuyler, Pierre L' Enfant, Peter Colt, John Colt and Thomas Marshall. The hydroelectric plant at the falls is significant as an element in the progression of development of the water-powered system and of American engineering over the district's entire period of significance.

Hinchliffe Stadium National Historic Landmark
Hinchliffe Stadium is a national historic landmark
that is significant for its role in the history of Negro
professional baseball in twentieth-century
segregated America. Built in 1931-32 by the city
of Paterson, the stadium was envisioned as a means
of providing its citizens—struggling from years
of economic depression—with an affordable venue
for sports and entertainment events. The notable
landscape architecture firm, Olmsted Brothers,
designed the overall plan for the stadium, which
commands a sweeping view of the historic
industrial mill buildings in the adjoining Paterson
Great Falls NHL District.

· Great Falls Historic District

The Great Falls Historic District (Great Falls of Paterson/Society for Useful Manufactures) is a nationally significant historic district, nominated in the National Register of Historic Places in 1970, and twice amended to expand its boundaries to include additional resources (1975 and 1986). The district has broad historic significance to the country, related to engineering, urban planning, architecture, industrial architecture, landscape architecture, invention, sciences, industry, commerce, conservation, and education.

• Great Falls Raceway and Power System National Historic Engineering Landmark In 1977, the American Society of Civil Engineers named the Great Falls Raceway and Power System a national historic engineering landmark. While not a federal designation, this recognized the raceway and power system as having made a significant contribution to the development of the United States.

Role of the NPS Leading up to Establishment of the Park

For 50 years, the NPS has been an advocate for Paterson's resources providing technical and preservation assistance through its programs including the National Register of Historic Places and the National Natural Landmark Program. These mutual efforts have led to national designations, funding and legislation that paved the way for today's national historical park in Paterson. Collaboration among the NPS and its partners in the city of Paterson included:

• Preservation Assistance

The NPS preservation assistance staff has worked in cooperation with the city of Paterson and others to identify and evaluate the resources within the historic district and to complete the nomination form for designation of the Great Falls Paterson NHL District and the Hinchliffe Stadium NHL. NPS has worked closely with partners and the New Jersey State Historic Preservation Officer (NJ SHPO) to carry out a cultural resource survey on the ATP site and on the Hinchliffe Stadium study authorized in the 2009 legislation.

• New Jersey Urban History Initiative

In 1992, the city of Paterson received more than \$4 million for projects in the Great Falls NHL District through the federally funded New Jersey Urban History Initiative (UHI), sponsored by New Jersey Senator Lautenberg. The NPS's role in Paterson expanded to include administration of the UHI, providing funding through a cooperative agreement with the city. A core advisory group, composed of city officials, the Paterson Historic Preservation Commission, the NJ SHPO, representatives of the business community, and interested citizens, advised the NPS on identification and administration of the UHI projects. Many of the projects were designed to raise public awareness of the historic district and, through this awareness, increase public interest and involvement in protecting the resources that tell the stories of Paterson. Development of design guidelines, assistance to the Historic Preservation Commission in combination with other actions taken under the UHI, and strong community





support for historic preservation led to considerable preservation and restoration of the district. This resulted in the NHL Program removing the Great Falls NHL District from its "Priority I—Threatened List" and placing it on the "Watch List" in 2002.

Great Falls Historic District Special Resource Study

In November 2001, Congress passed the Great Falls Historic District Study Act of 2001 (P.L. 107-59) authorizing the Secretary of the Interior to conduct a special resource study of the Great Falls Historic District to determine if its resources meet applicable criteria for designation as a unit of the national park system. The resulting Special Resource Study (NPS 2006a) was completed by NPS and proposed various management options for the Great Falls Historic District without NPS management.

Great Falls State Park

In October 2004, the Governor of New Jersey designated a portion of the Great Falls Historic District as Great Falls State Park—one of two new urban state parks. The newly designated state park encompassed the resources that are primary to the Paterson Great Falls NHL District designation. A design competition was held and a master plan for the new state park was completed.

Shortly after the master plan was completed, Congress passed legislation to create the new national historical park, including the Great Falls State Park area.

Hinchliffe Stadium Addition to the Park

On December 19, 2014, under The Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, President Barack Obama amended Section 7001 of the Omnibus Public Land Management Act establishing the Paterson Great Falls National Historical Park (appendix A).

The amendment added to the park approximately six acres of land containing Hinchliffe Stadium and mandated that the site be administered as part of the park, subject to several additional considerations. Addition of the stadium to the park followed designation of the stadium as a national historic landmark on February 25, 2013. The site is nationally significant for its role in the history of Negro professional baseball in twentieth century segregated America (NPS 2012c).

Paterson Great Falls NHP Advisory Commission

In March 2009, the Secretary of the Interior established the Paterson Great Falls NHP Advisory Commission to advise on development and implementation of the park's GMP. Established pursuant to section (e) of the park's enabling legislation, the commission is a feder-



al advisory commission and functions in accordance with provisions of the Federal Advisory Committee Act (FACA), as amended (5 U.S.C. App.2). Since its establishment, the commission has met quarterly to advise the NPS planning team on development of the GMP. Commission members have also participated in work sessions with the NPS planning team and others to develop GMP recommendations. The work of the advisory commission is anticipated to be complete approximately ten years from the date of its establishment (March 2009), at which time it will terminate.

Guiding Future Management of the Park

Purpose of the GMP

The NPS and partners have prepared this GMP/EA to ensure that future management of Paterson Great Falls NHP fulfills the purposes for which Congress established the park. This GMP is the park's first comprehensive plan and has been prepared as required in the park's enabling legislation and as generally required pursuant to NPS management policies for all units of the national park system.

This plan addresses the following:

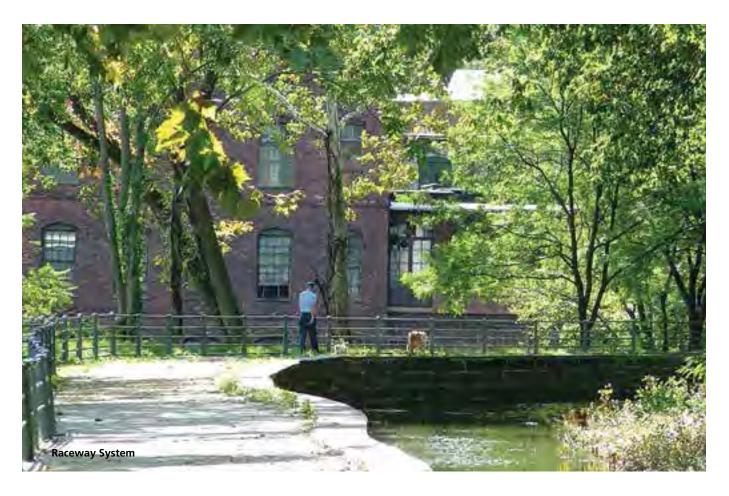
 the types of management actions required for the preservation of park resources



- the types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations and anticipated costs
- visitor carrying capacities and implementation commitments for all areas of the park
- a brief discussion of the need for a potential park boundary adjustment

The purposes of this GMP for Paterson Great Falls NHP are as follows:

- describe the purpose of the park, the significance of the park's resources, and special mandates that will influence management decisions
- clearly define resource conditions and visitor uses and experiences to be achieved in the national historical park
- provide a framework for managers to use when making decisions about how to best protect the park's resources, how to provide quality visitor uses and experiences, how to manage visitor use, and what kinds of facilities, if any, to develop in the national historical park



Need for the GMP

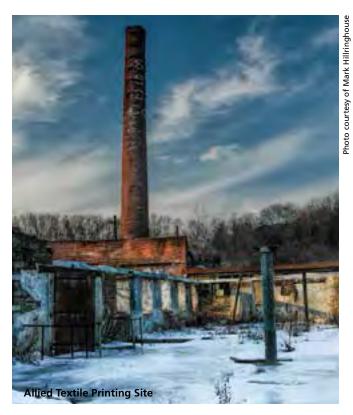
A GMP is needed to meet the requirements of Public Law III-II, which enabled the establishment of Paterson Great Falls NHP, the National Parks and Recreation Act of 1978, and NPS Management Policies (NPS 2006b). The enabling legislation directs that a general management plan be prepared in consultation with the Paterson Great Falls National Historical Park Advisory Commission, and be transmitted to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives. The GMP builds on this legislation, and on established resolutions, laws and policies to develop a vision for the park's future.

The Paterson Great Falls NHP GMP/EA complies with all applicable statutory requirements and polices, including the National Environmental Policy Act of 1969, as amended (NEPA) and its implementing regulations (40 CFR 1500-1508), the Department of the Interior's NEPA regulations (40 CFR Part 46), NPS

Director's Order #12, Conservation Planning, Environmental Impact Analysis, and Decision Making (DO-12, 2011), and accompanying DO-12 Handbook (2001).

Planning Issues and Challenges

The general public, NPS staff, and representatives from county, state, and city agencies, and various organizations helped to identify issues and concerns about management of the park during the scoping phase (early information gathering) for this GMPEA (see Chapter 5, "Consultation and Coordination" for more information about the scoping efforts). Comments were solicited at public meetings, through planning newsletters, and at meetings with agencies and community stakeholders. An issue is defined as an opportunity, conflict or problem regarding the use or management of public lands. The GMP alternatives provide strategies for addressing these issues within the context of the park's purpose, significance, and special mandates.



Sustaining the Park's Fundamental Resources

Paterson Great Falls NHP's fundamental resources include historic structures and ruins, the raceway system, geologic formations, and hydrologic systems and features that contribute to the significance and character of this special place. Although many studies have been undertaken to address maintenance and preservation issues, there are no long-term resource management strategies for NPS and partners.

In addition, the NPS and partners do not have a formal role in the management of water quality or flow of the Passaic River.

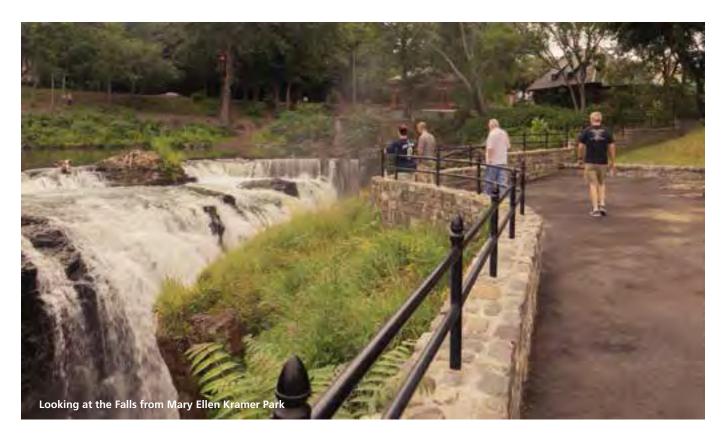
The S.U.M. raceway system is the most significant extant historic resource of the park and its preservation and re-watering is of great interest to both Paterson residents and the broader historic preservation community. The complex raceway system incorporates dams, spillways, gate structures, headraces, tailraces, bypasses, among other structural components and stretches approximately one mile through the park and Great Falls NHL District. The conditions of the upper, middle and lower raceways vary; most of the spillway and raceway features are in poor condition, and are in danger of

further deterioration. The upper raceway has been rehabilitated and the path along the raceway upgraded. The middle and lower raceways are generally dry and lack adjacent formalized pedestrian paths. When water enters the raceways, such as during flood events, leakage into adjacent buildings is a problem.

The Allied Textile Printing site (approximately 7 acres) contains portions of the S.U.M. raceways, the ruins of extensive textile dyeing and finishing operations that occupied a large portion of the property from the 1910s to 1980s, and the ruins of at least five 19th-century mills. After industrial activity at the site ended, a series of fires at the ATP site damaged most of the 30 structures on the site. Most of the buildings are fire damaged and only structural ruins and archeological resources remain. The extant buildings and structures do not have roofs and have incurred heavy damage over time due to the fires and exposure to the elements. Preservation efforts have been undertaken at the Colt Gun Mill to stabilize some of its remaining structural elements and a project is currently funded to stabilize the river wall. Today, the site is vacant and closed to the public.

The Passaic River flows through the park and the quantity and quality of its water influences the visitor experience. The river segment that flows through the park and the sub-watershed surrounding the park supports its designated uses for agricultural water supply and industrial water supply, but does not support its designated uses for aquatic life, fish consumption, primary contact recreation, or public water supply. Within the park, the river does not meet primary recreational standards due to elevated levels of bacteria. Debris and litter in the river contribute to the water pollution and frequently collect at the base of the falls, in view of from the park's primary overlook. An agreement is in place to ensure water flow over the falls in the summer months, but this agreement does not address water flow during the remainder of the year or "winter drought" issues.

The GMP will explore the best ways to manage the park's fundamental resources and landscapes to ensure their preservation and the role of partnerships to encourage the long-term protection of these places.



Experiencing the Park

Visitors new to the area and unfamiliar with the city of Paterson can sometimes be confused about how to move around the site, what activities there are to see and do, and concerned about safety.

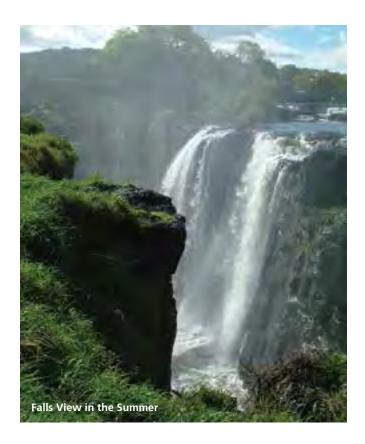
Although there are mass transit connections to downtown Paterson, access to Paterson Great Falls NHP is predominately automobile dependent. Major interstate and state roads provide vehicular connections to the park. Connections to these routes facilitate vehicular access; however, proximity to the interstate access ramps and other regional roadway connections creates a greater flow of traffic on narrow neighborhood streets that were not built to accommodate such volumes. Traffic congestion near the park, in particular during the three peak periods (morning and evening rush and after school) is a concern both for easy vehicular circulation and for pedestrian safety. Sidewalks are available on the streets surrounding the park but many segments are narrow, or missing in some places. There are limited bicycle paths around and within the park as there are currently no designated bicycle lanes in Paterson. Access to the river for

recreational activities, both within and adjacent to the park, is limited. Access to the park on the river is not possible without a portage around the Great Falls; currently there is no formalized portage access around Great Falls and any informal access is dependent on water levels that allow for bridge clearances.

The GMP will explore ways to move and direct visitors to and throughout the park and the NHL District and address roles for NPS and partners in improving park experiences.

Improving Facilities and Infrastructure

Interest in the new national historical park is increasing visitation to the city and falls area. The city's former visitor contact station was recent rehabilitated as the park's Welcome Center and currently provides limited visitor amenities such as restrooms, or interpretive exhibits. The recently rehabilitated Mary Ellen Kramer Park will provide new opportunities to enjoy and view the falls, but most other park areas are in need of repair, maintenance and improvements to create safe and useable space for both new visitors and local residents. There is a need for more user comforts—benches, bike



racks, picnic areas, water fountains, restrooms and space for large family groups or community events. The GMP will explore options for creating appropriate spaces for orientation, education, community gatherings and user comforts.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations and other entities.

Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes. Examples include easements, rights-of-way, arrangements for emergency service responses, etc.

Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Paterson Great Falls NHP.

Key provisions among the special mandates contained in the park's enabling legislation are presented below.

General Agreement to Establish and Preserve the Paterson Great Falls National Historical Park

As mandated by section (b)(I)(B) of the park's enabling legislation, the U.S. Department of the Interior (NPS) entered into a written agreement (appendix B) with the city of Paterson to establish and preserve the Paterson Great Falls NHP, focusing on actions required prior to establishment of the park:

· Manageable Unit.

The agreement addresses the requirement to acquire sufficient land or an interest in land within the boundary to constitute a manageable unit. It defines the federal land acquisition process and acquisition phase that will allow for progressive resource protection of core properties and other interests in land, as funding is available, and as due diligence requirements are satisfied. It also addresses responsibilities for maintenance and operations for lands and improvements within the park boundary, interpretation and education responsibilities, and law enforcement within the park.

• Resource Protection.

The agreement addresses the requirement for non-NPS lands within the Great Falls National Historic Landmark District to be managed consistent with the enabling legislation and that future uses of lands within the district will be compatible with the park designation. It describes how the city will coordinate with the NPS on all major work on properties within the district. The city has further committed to several actions in support of the park, such as strengthening and enforcing its land use ordinances and design standards to protect the historic and natural resources of the district



and working with NPS to foster appropriate and compatible uses and building treatments within the district.

Land Acquisition

Congress established the park's boundary through the enabling legislation and provided direction for federal acquisition of property within the boundary. Section (b)(4) states that at Paterson Great Falls NHP, the NPS is authorized to acquire additional land or interests in land within the boundary of the park by donation, purchase from a willing seller with donated or appropriated funds, or exchange. Lands or interest in land owned by the state of New Jersey or any political subdivision of the state may only be acquired by donation.

Paterson Great Falls National Historical Park Advisory Commission

Section (e) of the park's enabling legislation requires that NPS establish an advisory commission to advise on development and implementation of the park's GMP.

In accordance with this mandate, the Secretary of the Interior created the nine-member Paterson Great Falls National Historical Park Advisory Commission, to include representatives appointed by the Secretary after consideration of recommendations submitted by the governor of the state of New Jersey (4), the Board of Chosen Freeholders of Passaic County (1), and the City Council of Paterson (2), as well as individuals who are experienced with national parks and historic preservation (2). The work of the advisory commission is anticipated to be complete approximately ten years from the date of its establishment (March 2019), at which time it will terminate.

Hinchliffe Stadium Study

Section (f) of the park's enabling legislation requires that NPS complete a study regarding Hinchliffe Stadium for purposes of assessing (I) its potential for listing as a national historic landmark and (2) options for maintaining the stadium's historic integrity. In accordance with this mandate, the NPS completed the Hinchliffe Stadium National Historic Landmark Nomination (NPS

2012c) and on February 25, 2013 the Secretary of the Interior designated the site as a national historic landmark. The subsequent Hinchliffe Stadium—Structural Condition Assessment Report (NPS 2014a) provides a comprehensive physical condition assessment of the stadium and associated structures, identifying issues and recommending management actions.

Hinchliffe Stadium Heritage Act

Public Law 113-291, The Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015, expanded the park's legislative boundary to include Hinchliffe Stadium. The law stated that the NHP shall include the approximately 6 acres of land containing Hinchliffe Stadium and shall be administered as part of the park in accordance with subsection (c)(1) and section 3 of the Hinchliffe Stadium Heritage Act (appendix A). Restrictions were placed on acquisition so that the Secretary may not acquire fee title to Hinchliffe Stadium, but may acquire a preservation easement in Hinchliffe Stadium if the Secretary determines that doing so will facilitate resource protection of the stadium. The law stated that the fact that activities can be seen or heard from within the approximately 6 acres of land described in paragraph (1) shall not preclude such activities outside the boundary of the park. In administering the approximately 6 acres of land containing Hinchliffe Stadium...the Secretary of the Interior-(A) may not include non-Federal property within the approximately 6 acres of land as part of PGFNHP without the written consent of the owner; (B) may not acquire by condemnation any land or interests in land within the approximately 6 acres of land; and (C) shall not construe the inclusion of Hinchliffe Stadium made by this section to create buffer zones outside the boundaries of PGFNHP.

Administrative commitments for the park are included as part of the partnership framework description in chapter 2 on pages 29-35.

NPS Legislative and Policy Requirements

Many existing laws and NPS policies guide management of all units of the national park system.

NPS currently adheres to these laws and policies in its management of Paterson Great Falls NHP and will continue to do so following approval of the GMP/EA.

Some federal laws and policies pertain to the nation as a whole, including-for example-those governing management of natural resources, such as the Clean Air Act, Endangered Species Act, and Executive Order 11990, "Protection of Wetlands"; those governing the preservation of cultural resources such as the National Historic Preservation Act of 1966, as amended (NHPA), and the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA); and those addressing accessibility, such as the Americans with Disabilities Act of 1990, as amended (ADA). Other state laws and policies apply similarly to the entire state of New Jersey. The NPS will continue to strive to implement these requirements with or without a new general management plan. However, the general management plan will provide guidance as to how park managers comply with these laws and policies.

Other laws and policies are applicable solely or primarily to units of the national park system. Primary among these are:

- The NPS Organic Act (16 United States Code [USC], §1) provides the fundamental management direction for all units of the national park system, stating that NPS will "[P]romote and regulate the use of the federal areas known as national parks, monuments, and reservations... by such means and measures as conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife 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."
- The NPS General Authorities Act (16 USC §1a-1 et seq.) affirms that while all national park system units remain "distinct in character," they are "united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage." The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the national park system. Further, amendments state that NPS management of park units should not "derogat[e] . . . the purposes and values for which these various areas have been established."

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The Redwoods Act of 1978 reasserted the systemwide standard of protection established by Congress in the original Organic Act. It states that "Congress further reaffirms, declares, and directs the promotion and regulation of the various areas of the national park system . . . shall be consistent with and founded in the purpose established by the first section of the Act of August 25, 1916, to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress."

The NPS has also established policies for all units under its stewardship. NPS Management Policies (NPS 2006b) is the guidance manual that states these policies and provides guidance for their implementation. The alternatives considered in this document incorporate and comply with the provisions of these mandates and policies.



Related Plans and Projects

Several plans have influenced or would be influenced by the approved GMP for Paterson Great Falls NHP. These plans have been prepared by the NPS and other state and local entities. Some of these plans are described briefly here, along with their relationship to this GMP.

NPS Plans and Projects

Archeological Overview and Assessment

This draft report (NPS 2015a) describes the results of research on the history and pre-contact and historical archeology of property within the park boundary in the context of the greater Paterson area. The report also evaluates the potential archeological significance of the resources within the NHL district and the potential condition of documented archeological resources within the park.

Paterson Raceways Preliminary Documentation Report

A project of the NPS Historic Structures Research and Documentation Branch, the preliminary documentation report (NPS 2013) identifies and documents through archival research, the historic construction methods and materials, and the evolution of the Paterson raceways, tailraces, and associated waterworks. The current research and documentation will inform the future conditions report.

City, State and Other Plans and Projects

City of Paterson Master Plan

The city's recent master plan (Paterson 2014) provides a guiding vision for development and growth of the city. The plan identifies regulations for land development, design, and zoning, as well as goals for economic development. A general goal of the plan is "making recommendations regarding revisions to the City's current policies and ordinances regarding land use, housing, transportation, economic development, parks, and sustainability measures." A related strategy for this goal is to "coordinate the City's development to capitalize on the Paterson Great Falls National Historical Park."

The master plan lays out a vision for the development of the national historical park as it relates to the overall development of the city. The plan identifies opportunities for the national historical park to connect with other landmarks, parks, and historical sites throughout the city and discusses opportunities for improved modes of public transportation to assist in making those connections.

Cultural Resource Investigation of the Allied Textile Printing Site

The Cultural Resources Investigation of the Allied Textile Printing Site (FMG 2010) is a four volume document which researches and investigates the history, existing conditions, and potential for archeological findings within the ATP site. Volume four of this investigation provides preservation and treatment recommendations for the ATP site which served as a strategy for development of management actions for the site within the context of this GMP/EA.

Great Falls State Park Plan

The Great Falls State Park Master Plan (NJ DEP 2008) is the result of a design competition initiated by the state of New Jersey when the area now known as Paterson Great Falls NHP was a state park. The plan provides a general overview of the resources located within the park and outlines opportunities for redevelopment of the state park. Some of the ideas developed as part of the state park planning process were mentioned during scoping for this GMP/EA and have been incorporated into the GMP/EA alternatives.

Greater Spruce Street Neighborhood Plan

The Greater Spruce Street Neighborhood Plan (NJC-DC 2009) is a plan commissioned by the New Jersey Community Development Corporation (NJCDC) to investigate opportunities and potential for revitalizing the neighborhood surrounding Spruce Street, which includes the Paterson Great Falls NHP. The plan defines transportation and connectivity improvements as well as additional opportunities for community involvement and education programs.

Lower Passaic Canoe and Kayak Trail Action Plan

The Trail Action Plan (LPSRA 2008) identifies a 32 mile water trail which runs along the Passaic River through Paterson, highlighting spots such as the national park and Hinchliffe Stadium. The plan identifies sites to visit along the trail, existing launch and emergency takeout locations, and recommendations for future development along the trail.

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New Jersey's Long-Range Transportation Plan Urban Supplement Report: City of Paterson

A number of roadway improvements within the City of Paterson and Passaic County are identified in the plan (NJDOT and NJT 2008). Many of these projects are designed to improve travel on and through the main thoroughfares including Interstate 80. The plan also envisions improvements to public transportation routes and bicycle routes throughout the city.

Passaic County Master Plan: Heritage Tourism Element

The Heritage Tourism Element of the Passaic County Master Plan (Passaic County 2013) identifies actions needed for preservation, transportation, education, interpretive, and recreational planning to connect historically significant sites throughout the county. The plan proposes using Paterson Great Falls NHP as an anchor for regional tourism and lays out a plan for coordination among sites around the region.

Passaic County Parks, Recreation and Open Space Master Plan

The Parks, Recreation and Open Space Master Plan (Passaic County 2014) presents recommendations for the improvement of the Passaic County Park System, and a vision for its future. It includes detailed information on the county-owned park, recreation, and open spaces and presents technical findings. The plan provides the foundation for management, maintenance, improvement, and expansion strategies.

Paterson Research Initiative

The Paterson Research Initiative (NJIT 2007) analyzed the city of Paterson and created a series of ideas to build upon its history and unique position at the base of the Appalachians and within the Boston-Washington metropolitan corridor. The plan identified site specific development strategies as well as ideas to improve signage and awareness of the City's past and present. One of the plan's key recommendations is to situate Paterson as the gateway to a regional open space trail that extends from the Appalachians through Paterson. The connection would necessitate a "land bridge" over Interstate 80 to seamlessly connect open space along the Passaic with Garret Mountain.

Waterfront Development Strategy

The Waterfront Development Strategy (Strategy 5 2005) is a physical and economic development strategy. Focused on the Great Falls, the plan proposed the reuse of the Colt Gun Factory with an adjacent new hotel and conference center along the river on the ATP site. Overlooking the Falls, the plan proposed an amphitheater (which is echoed in the Field Operations plan), restored Great Falls Park, and integrated a visitor center, restaurant, and new mixed use development. Areas north of the Passaic River adjacent to Hinchliffe Stadium were designated for new condominium development, and mill buildings along Ryle Street were proposed for residential reuse. Hinchliffe is shown as a restored stadium, integrated with a new parking garage and an indoor sports complex. South of the Great Falls, the strategy advocates for the reuse of the New Jersey Transit (NJT) bus garage for a food market and a new family center located along the reservoir near the Lou Costello pool.

Levine Reservoir Containment Project

The Passaic Valley Water Commission, owners of the Stanley M. Levine Reservoir, plans to contain the currently open reservoir as part of Environmental Protection Agency's Safe Drinking Water Act. The Levine Reservoir (circa 1885) is considered a contributing feature of the NHL District and is located outside of the park boundary, but adjacent to Upper Raceway Park. The project calls for draining the existing open reservoir and installing two above-ground concrete containers to house the city's drinking water.

Morris Canal Greenway Project

The Morris Canal Greenway Project is a planned greenway along the former Morris Canal and Pompton Feeder in Passaic County. According to the Morris Canal Greenway Feasibility Study (Passaic County 2011), a portion of the planned greenway will run adjacent to the Paterson Great Falls NHP's southernmost legislative boundary, where Upper Raceway Park intersects Grand Street. This planned portion of the greenway will connect, via the New Street Bridge over I-80, to a completed portion of the greenway within the Garret Mountain Reservation.

Partial Rehabilitation of Hinchliffe Stadium

The city of Paterson approved plans for a stabilization project for Hinchliffe Stadium. The stadium is located



directly adjacent to the park boundary, north of the Passaic River alongside Mary Ellen Kramer Park. The project would include stabilization of the stadium walls and rehabilitation of two of the ticket booths.

Next Steps in the Planning Process

The GMP/EA will be made available for a 60-day review and comment period to federal, state, and local agencies and all other interested parties, including organizations, businesses, interested individuals and stakeholders, and the general public. The availability of the GMP/EA will be announced to agencies and the public will be notified through local papers, the park's website and the NPS Planning, Environment and Public Comment (PEPC) website. Comments will be accepted electronically through the PEPC website or in the form of written letters that must be postmarked by the due date shown on the PEPC website. During the review period, the NPS will hold public meetings where the public will have additional opportunities to provide comments on the management alternatives and impact analysis presented in the GMP/EA.

Once the comment period has closed, the NPS will evaluate all comments received, after which a Finding of No Significant Impact (FONSI) will be prepared and released for a 30-day no action period. The FONSI will report on the results of agency and public comments on the draft GMP/EA and will identify the alternative that

the NPS intends to select as the approved GMP for Paterson Great Falls NHP including any changes that may have been made as a result of agency and public comment. The availability of the FONSI will be announced to agencies and the public through the same media used to announce the availability of the draft GMP/EA. No sooner than 30 days after circulation of the FONSI, the Northeast Regional Director may sign the FONSI, selecting an alternative for implementation as the approved GMP for Paterson Great Falls NHP. A copy of the GMP/EA will be transmitted to Congress as required by the park's enabling legislation. Regional Director signature of the FONSI will complete the planning and compliance process, after which the NPS will proceed to implement the approved GMP.

Implementation of the Plan

Once the GMP has been approved, implementation will begin immediately. Implementation of the approved plan will depend on funding. The approval of this plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the actions in the approved general management plan could be many years in the future. The implementation of the approved plan could also be affected by other factors, such as changes in NPS and partners staffing, visitor use patterns, and unanticipated environmental changes.

As actions in the approved GMP are implemented, additional feasibility studies and more detailed planning, environmental documentation, and consultations would be completed, as appropriate, before certain actions could be carried out. For example:

- Site-specific planning and environmental review may need to be completed.
- Appropriate permits may need to be obtained before implementing actions.
- Appropriate federal and state agencies may need to be consulted concerning actions that could affect threatened and endangered species.
- The New Jersey State Historic Preservation Officer (SHPO) may need to be consulted, as appropriate, on actions that could affect cultural resources.

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2. ALTERNATIVES

Introduction

For more than two hundred years, Paterson has been a place of transformation. Today, there is great potential to create a vibrant, fun and relevant urban national park in Paterson where citizens and visitors understand, care for, and preserve their national history and natural heritage; a place where families and visitors have fun and compelling experiences; and a place that is a vital and valued part of the community and nation. In this GMP, the different options to achieve a new vision for the park are called alternatives. Alternatives provide reasonable and achievable ways to describe what the park could become under management scenarios with different priorities. They offer different ways of sharing Paterson's stories, providing educational experiences at the park and within the surrounding NHL district, and for managing the park's natural and cultural resources. These choices enable the NPS, partners, and others to assess the positive and negative aspects of each alternative.

How the Alternatives Were Developed

The combined efforts and contributions from many partners and stakeholders have led to development of three management alternatives for the park, described in this section of the GMP. The NPS planning team led the effort to develop the alternatives with involvement from the city of Paterson, the park's federal advisory commission, government agencies, academic institutions, stakeholder groups, local residents, park users, interested individuals and NPS staff. The process involved a series of planning steps and many collaborative meetings with the partners and stakeholders, as well as with the public during a formal scoping process that began in fall 2011 (see chapter 5). Preliminary concepts for the alternatives were presented to the park's federal advisory commission in winter 2013 and were discussed and debated during public commission meetings over the ensuing year. NPS consulted with representatives of city agencies, the PVWC and NJDEP on the draft management alternatives.

Crafting the alternatives involved study and analysis of the park's resources and significance, the ways visitors use the park, and the needs of the community. The NPS planning team also considered findings of relevant plans, such as the Great Falls State Park Master Plan (NJDEP 2008), the Greater Spruce Street Neighborhood Plan (Paterson 2012) and the Paterson Master Plan (Paterson 2014). Many good ideas and suggestions were heard during the planning process, but were not included in the alternatives because they were too specific for a GMP that is more general in character. The NPS and partners would reconsider these good ideas and suggestions in subsequent implementation of the approved GMP.



Common Management Framework for a Partnership Park

Most national parks have partners, and at Paterson Great Falls NHP, partnerships are essential. Today the park has numerous partners who support a variety of park activities and operations, several with agreements with the NPS and many that are collaborative with less formal arrangements.

These partnerships benefit the park and the community. In years to come, existing partnerships—both formal and informal—would continue and new partnerships would emerge as the NPS and partners build relationships with others to implement management actions in the approved GMP. Common to the alternatives is a partnership management framework that will guide collaboration between NPS and partners.

Role of the National Park Service

The NPS has management responsibilities for Paterson Great Falls NHP under the authorities of the park's enabling legislation (appendix A). As the primary park manager, the NPS would:

- implement the GMP—oversee implementation of the approved GMP in conjunction with others through partnerships
- facilitate communications—facilitate communications among partners to maintain a comprehensive and collaborative approach to park management
- develop and maintain park facilities—coordinate efforts by the partners to co-develop and comaintain facilities, visitor services, and interpretive media and programming in the park that enhance the visitor experience and appreciation of Paterson's historic significance; responsible for visitor facility development, landscape improvements and maintenance of facilities on lands owned by NPS
- implement the park's interpretive framework coordinate interpretive and education programs with partners; develop and provide visitor programming throughout the park
- coordinate natural and cultural resource management—collaborate with partners to protect and preserve the natural and cultural resources in the park and the NHL district
- provide technical assistance—work with NPS programs to provide staff time on projects such as historic preservation, natural resource monitoring, and interpretive planning
- support community revitalization efforts—
 work with the city of Paterson and regional, state,
 and federal agencies to accomplish community
 revitalization efforts that would benefit the park and
 the NHL district, such as those related to enhancing
 visitor safety, community character, and access, and
 promoting compatible economic development
- support community promotion and marketing efforts—work with the city of Paterson and county and state tourism groups to promote and market heritage tourism in Passaic County

- seek funding—identify sources of financial assistance for projects in the park consistent with the GMP management framework
- consult with the advisory commission—consult with the Paterson Great Falls Advisory Commission, as appropriate, on matters related to implementation of the GMP and park management up until its termination in March 2019.

As a partnership park, the NPS would facilitate and maintain partnership opportunities by incorporating partnership development into every aspect of meeting its overall management responsibilities. This would include specifically recruiting and training for partnering skills, organizing park staff in a way that facilitates partnerships, and actively seeking partners in the search for solutions to park management issues. Park managers would seek to evolve the partnership concept and explore practices from other partnership parks and partnership models to gather innovative ideas and best practices.

Partnership solutions would be actively considered when addressing all park management needs. Needs that tie to and support the park's purpose and significance, and which are best fulfilled or strengthened with park partners, would guide decisions to establish partnerships. NPS would first define the management need and objectives; then it would ask if a partner could assist in meeting those objectives, or if working with a partner would improve park management's capabilities, the process or the level of community engagement. NPS would seek out partners who are the most qualified and capable of meeting the objectives.

Technical Assistance

In all alternatives, NPS would provide technical assistance in the park and in the NHL district, as mandated in the park's enabling legislation (appendix A). Within this technical assistance area, NPS would assist public and private landowners with design and implementation of interpretive media and programs that enhance public understanding of the cultural and natural resources of the NHL district. NPS would also assist with design and implementation of appropriate treatments for historic properties such as preservation (stabilization), rehabilitation (with or without adaptive

reuse) and restoration. As budget and staffing allow, technical assistance would generally include professional staff time, research, grant writing and assistance with obtaining funding for projects.

Role of the Partners

Partners would be encouraged to participate in all aspects of park planning, development and management. Paterson Great Falls NHP has already effectively created and maintained partnerships that are addressing management needs while engaging more people and growing support and enthusiasm for the park. In the future the numbers of partners would increase as the NPS seeks assistance with addressing park management needs and as NPS provides technical assistance and support for a variety of initiatives of mutual benefit to the park and the Paterson community. Both NPS and new partners would bring their resources, skills and energy to specific management challenges. For each effort the partners would agree on the desired outcomes and the work to be accomplished through the partnership to achieve those outcomes. Partnerships would vary in terms of the need for a formal written agreement. Some would require an agreement, with work plans that define mutual interests and expectations, the roles and responsibilities of each partner, and clear accountability for the work to be performed.

City of Paterson. The city of Paterson recognizes that the establishment of Great Falls NHP is a significant opportunity to transform the Great Falls district of the city and is working with the NPS to implement plans for the park. As the primary owner of property within the park boundary and as the community within which the park is located, the city is the park's key partner. The city has assumed this role through numerous actions leading up to and since establishment of the park in 2011. Many varied opportunities exist for the city to partner with the NPS to protect historic properties in the park and in the NHL district and to enhance the opportunities that visitors have in the park. Potential beneficial outcomes to the city from such collaboration include enhanced community character, new and safer learning and recreational opportunities for city residents, and increased tourism with associated beneficial economic impacts to the city.

Fig. 2.1 Park Partners



The city has entered into a general agreement with the NPS to define the process by which most city-owned lands within the park boundary will be transferred to the NPS and to preserve the surrounding NHL district (appendix B). The agreement identifies the land within the park boundary that will be transferred to the NPS as well as how the transfers will occur. Additional agreement provisions state the mutually supportive actions that the NPS and the city will take to complete the GMP, maintain and operate lands within the park boundary, provide visitor services and law enforcement within the park, and protect historic properties within the NHL district. The city of Paterson would manage their properties and future uses of their lands within the park boundary in a manner that is consistent and compatible with the park's purpose.

Passaic Valley Water Commission (PVWC).

The Passaic Valley Water Commission (PVWC) is a publicly owned regional water purveyor in the northern New Jersey water supply region that currently owns the S.U.M. Dam, Pump House, the Great Falls Development Corporation Building, Arch Bridge, pedestrian bridge, and portions of Mary Ellen Kramer Park. In the future the NPS and PVWC would likely seek to enter into an agreement outlining potential land transfers to NPS, provision of interpretive and educational programming by NPS on PVWC property, provision of technical assistance by NPS for treatment of historic properties owned by PVWC, and access by

PVWC for maintenance and development and maintenance of visitor facilities on PVWC property. The PVWC would manage their properties and future uses of their lands within the park boundary in a manner that is consistent and compatible with the park's purpose.

Paterson Public Schools. Hinchliffe Stadium, encompassing approximately six acres within the park boundary, is owned by the Paterson Public Schools. In the future the NPS and the Paterson Public Schools would likely seek to enter into an agreement outlining technical assistance for treatment of the historic property and provision of interpretive and educational programming by NPS and partners at the site. This property will not be transferred to the NPS, in accordance with the park's enabling legislation (appendix A).

State of New Jersey. The state of New Jersey owns a small parcel within the park boundary on the corner of Wayne Avenue and Maple Street. The site consists of a closed single-story structure and paved lot that will be demolished in the future. The NPS Olmsted Center for Landscape Preservation provided technical assistance with the rehabilitation design of the site to ensure its consistency with design guidelines for the NHL district. A future agreement would address how the rehabilitated pocket park would be maintained either by the city and/or NPS. The state of New Jersey would manage their property and future uses of their land within the park boundary in a manner that is consistent and compatible with the park's purpose.

County of Passaic. The county government, through the County Open Space program, has contributed grants to the city for the rehabilitation of Mary Ellen Kramer Park and Overlook Park, studies of the raceway system, and for other projects. The county is also working with partners, to include the NPS, on developing its heritage tourism capacity, undertaking capital projects on roads and bridges within the NHL district, developing plans for bikeways and greenways, and studying ways to mitigate traffic and enhance pedestrian safety.

Friends Groups, Interpretation, Education and Programming Partners

Many organizations would support the park by providing resource management, fundraising, interpretation, education, and programming functions. In most cases these activities would be formalized through an agreement with the NPS.

Friends groups are nonprofit organizations that assist or benefit parks and other places in various ways, such as by providing volunteer services, assisting with resource management and preservation, conducting fundraising efforts and publicizing important issues. Funding to support the activities of friends groups come from donations, and often to a lesser extent, earned income.

Hamilton Partnership for Paterson.

The Hamilton Partnership for Paterson is the park's official friends group. The group's mission is "...to enhance the educational, social, and economic benefits of the new Paterson Great Falls National Historical Park for the city, the state, and the nation." The friends recognize the park as "the most important public strategic initiative for Paterson in generations" and that through education, collaboration and advocacy visible change will occur in the park more quickly.

Friends of Hinchliffe Stadium. The Friends of Hinchliffe Stadium is the stadium's friends group. The group's mission is "to preserve and revitalize Hinchliffe Stadium as a great sports venue and centerpiece of a great and thriving city." The friends' goal is "to be a community partner in helping restore [the stadium] as a working, linchpin piece of a vital North Jersey urban community ...keep[ing] this great place alive by keeping its history alive and by helping revision its future in the larger setting of the city and the region."

Eastern National. Eastern National is a nonprofit cooperating association that supports NPS's interpretive and educational mission at over 150 units of the national park system. Eastern National provides various services, primarily by procuring, distributing and selling educational material in retail outlets located in the park units. It also can provide an assortment of services including supplemental funding for land and artifact acquisitions, special events, educational and interpretive programs, and research grants. At Paterson



Great Falls NHP, Eastern National has a cooperative agreement to operate an educational museum store at the park's primary visitor contact station.

Paterson Museum. The Paterson Free Public Library within the Paterson Department of Community Affairs operates the Paterson Museum, currently located in the Rogers Locomotive building. The museum provides interpretive exhibits and programming and orientation to the park and NHL district. The museum staff also operates the park's primary visitor contact station in partnership with national park staff.

New Jersey Community Development Corporation.

The New Jersey Community Development Corporation (NJCDC) is a private nonprofit community development and social service agency founded in 1994, focused in the city of Paterson, with a mission "to create opportunities to transform lives." NJCDC has entered into an agreement with the NPS to facilitate public access to the park and to foster knowledge of the core mission of the NPS. Through educational programs, the NPS works with the NJCDC to develop conservation-based educational programs for Paterson youth. In partnership with the national park, the NJCDC manages the Great Falls Youth Corps, a summer program for local high school students which works

on projects to improve the appearance of the park and provide visitor services including guided tours and general park information.

William Paterson University. William Paterson University and Paterson Great Falls NHP are working together to generate greater use of the park's historical, cultural and natural resources for educational purposes. Under a general agreement, the park provides internship opportunities for William Paterson students and hosts university presentations, lectures, courses, and events in the park. In addition, William Paterson University seeks to involve highly qualified faculty and students in collaborative programs with the park, especially those designed to promote and make accessible to the public a deeper understanding of the interpretive themes of the park and its surroundings.

Other Partners. Numerous other partnerships have resulted in special interpretive programs and events in the park developed by Montclair State University, the Passaic River Institute, Passaic Valley Sewerage Commission, Passaic County Community College, the Student Conservation Association, and others. NPS would continue to enter into agreements for these kinds of projects, as suitable opportunities arise.

Cultural Resource Management Partners

City of Paterson. The city, working with their Historic Preservation Commission, is the park's primary cultural resource management partner. The general agreement between the NPS and the city of Paterson commits the city to several actions to protect cultural resources and strengthen its land use ordinances and design standards to protect historic and natural resources of the NHL district. As NPS's partner the city will:

- manage the lands within the park boundary and the NHL district that are to remain under the ownership of the city in a manner consistent and compatible with the purpose of the park and to protect the historic properties that contribute to the significance of the NHL district
- seek NPS advice and concurrence on major work on the properties it owns within the park and NHL district
- amend its land use and subdivision ordinance to strengthen the role of historic preservation in the community
- complete management plans to be approved by NPS for lands to be conveyed out of public ownership within the NHL district
- notify the NPS of any proposed land use development or proposed alterations that may affect historic properties within the NHL district
- work with NPS to foster appropriate and compatible uses and treatments for buildings within the NHL district

New Jersey State Historic Preservation Office (NJ SHPO). The NJ SHPO also has a major consultation role at the park and in the NHL district. In the past twenty years, NPS and partners have entered into a programmatic agreement with the NJ SHPO regarding how the city, the Advisory Council on Historic Preservation, and the state of New Jersey acting through the NJ SHPO, will carry out responsibilities under section 106 of the National Historic Preservation Act of 1966, as amended, required for management actions affecting the NHL District's cultural resources.



Natural Resource Management Partners

Many partners would assist the NPS with managing the park's natural resources. These partners would bring skills, experience and funding to support a variety of projects affecting land and water resources within the park or within the larger Passaic River watershed. These projects would address needs for natural resource protection, restoration, remediation, and flood hazard and risk reduction. The NPS and partners' level of involvement would take many forms, such as a partnership role, technical advisor role, or general stakeholder role. Agreements would be used, as appropriate, depending upon the scope of the project and involvement of resources on lands within the park or NHL district. Potential partners would include the state of New Jersey (through various programs within the NJDEP), the city of Paterson, the federal government (through the U.S. Geological Survey, the EPA, FEMA or the U.S. Army Corps of Engineers), regional commissions (such as the Passaic Valley Water Commission and the Passaic Valley Sewerage Commission), and local nonprofit organizations.

Partners to Enhance Visitor Safety

Providing a safe visitor experience would, in one way or another, involve most of the park's partners, focusing on three areas: daily law enforcement to ensure visitor safety; mitigating existing situations in the park where visitor safety issues exist; and designing new experiences that are safe. The city of Paterson would retain jurisdiction within the park, including lands owned by



the federal government, for its police department and emergency services to respond to emergencies, conduct law enforcement investigations, and enforce the law. The NPS, the city, NJ DEP, and appropriate federal agencies would collaborate to identify, monitor, and remediate hazardous conditions on lands within the park.

Partners to Enhance Community Character and Access to the Park

A major focus of NPS partnership efforts would be working collaboratively with others to enhance community character in the park vicinity and to enhance access to the park. These collaborations would be large-scale efforts involving many partners, all with an interest in revitalizing city neighborhoods in the vicinity of the park and NHL district. Many are identified in the adopted City of Paterson Master Plan (Paterson 2014) and other economic development plans, transportation plans, and park and open space plans for the city and Passaic County. The NPS and partner level of involvement would take many forms, such as a partnership role, technical advisor role, or general stakeholder role. Potential partners would include the city of Paterson, Passaic County, state of New Jersey, the private development community, and nonprofit organizations with an interest in community revitalization, such as the NJCDC and the Hamilton Partnership for Paterson.

Partners in Promoting and Marketing the Park Growing park audiences and attracting new visitors to the park would be a focus of future partnership relationships with local, county and state tourism organizations. These collaborations would also be large-scale efforts involving many partners all with an interest in developing and implementing a long-term marketing framework to attract visitors from the local community, cultural heritage travelers, and outdoor recreation enthusiasts. Potential partners would include the city of Paterson, the Passaic County History and Tourism Board, Visit NJ (the NJ Division of Travel and Tourism), and the region's future destination marketing organization, as recommended in the recently completed Heritage Tourism Element of the Passaic County Master Plan (Passaic County 2013).

Private Landowners and Businesses within the NHL

District. Private landowners and businesses within the NHL district are important partners because the investments they make or do not make in their properties have the potential to greatly impact historic properties and the experiences that visitors have. NPS would work closely with landowners and businesses to identify and encourage appropriate uses and treatments for properties within the NHL district. In addition, the NPS and partners would encourage businesses to engage with the park in providing services such as food, beverages, lodging and retail.

Volunteers. The park would further develop its Volunteers In Parks (VIP) program to coordinate voluntary help and services from the public. Volunteers would help with a variety of park functions, such as visitor orientation, educational programs, resource management projects, and facilities maintenance.

Role of the Federal Advisory Commission

The Paterson Great Falls NHP Advisory Commission would assist the NPS with overall implementation of the park's GMP. Commission membership would evolve to broadly represent the primary areas of management needs in the park. Subcommittees would form to provide advice on particular park needs. As established in the park's enabling legislation (appendix A), the work of the advisory commission is anticipated to be complete approximately ten years from the date of its establishment (March 2019), at which time, the Commission will terminate.

The Alternatives

The alternatives include a "no action alternative" and two "action alternatives". The "no action alternative", alternative A, assumes continuation of current management direction and provides the baseline for comparing the impacts of implementing the action alternatives. The "action alternatives", alternatives B and C, reflect how the NPS and partners would manage the park to achieve different visions for its future. The concepts for the three alternatives are summarized in table 2.1.

Alternative	Concept
Alternative A Establishing a New National Park (no action alternative)	Visitors experience the park primarily through independent park exploration and passive recreation. Primary destinations are Mary Ellen Kramer and Overlook Park—with views of the Great Falls and the Passaic River— the Paterson Great Falls NHP Welcome Center, and the Paterson Museum. Some visitors explore the park on trails above the falls and in Upper Raceway Park.
Alternative B Landscape Exploration	Concept: Through a multisensory experience, visitors explore the park, learning about the resources that fueled America's early industrial development and enjoying contemporary recreational pursuits amid the landscape setting.
	Visitors actively explore the entire park, enjoying its natural resources and cultural landscapes for contemporary recreational pursuits while learning about how those resources fuelled America's early industrial development.
	A multisensory experience highlights connections among the natural world, the power of the falls and the Passaic River, and Paterson's innovative role in the evolution of American industry and manufacturing.
	Natural and cultural landscapes offer enhanced opportunities for scenic views, recreation, learning through interpretive and educational programs, and community building through arts and cultural celebrations.
Alternative C Industrial Heritage Immersion	Concept: Through interpretive programming and rehabilitation of historic resources, visitors are immersed in the historical setting, and explore the park with a focus on learning about its industrial heritage. Visitors actively explore the entire park with a focus on learning about its industrial history.
	A learning experience highlights the national significance of Paterson's history beginning with the city's founding as part of Alexander Hamilton's vision for American economic independence and innovation, and continuing through today.
	Rehabilitated historic sites, historic structures, and cultural landscapes, together with the NHL District, Great Falls and the Passaic River chasm, provide the setting for more interpretive experiences, educational programs, visitor services, and special events that celebrate history.

Alternative A: Establishing a New National Park (no action alternative)

Overview

In alternative A, NPS and partners would continue working together to preserve resources, engage visitors and cooperatively manage park areas generally as they do today. The primary visitor experience would be through self-guided tours, independent park exploration and passive recreation. Mary Ellen Kramer Park, Overlook Park—with views of the Great Falls and the Passaic River—and the nearby Welcome Center and the Paterson Museum would continue to be the primary destinations in the park. Some visitors would explore the park on trails above the falls and in Raceway Park, using self-guided interpretive materials or on NPS and partner-guided tours. Some visitors would also explore the adjoining NHL district and participate in cultural events.

Interpretive and educational programming, facilities and staffing would generally continue at current levels. Collaboration with partners would facilitate ongoing programs and activities related to interpretation and education, visitor services, and protection of the park's cultural and natural resources. New projects would include those that are already approved and funded by the partners at, Overlook Park, the S.U.M. Hydroelectric Plant, the ATP Site and Hinchliffe Stadium.

Visitor Experience

Before arriving, visitors would likely obtain information about the park's history, trip planning, and available tours from the park and partners websites. Once at the park, visitors would receive additional information at the Paterson Great Falls NHP Welcome Center and the Paterson Museum. Staff from the NPS and the city would help visitors plan their visit to the park and NHL district, providing brochures, information about organized tours, and self-guided tour information. Exhibits would introduce visitors to Paterson's industrial and cultural history. Restrooms would be located at the Welcome Center and the Paterson Museum. Parking would be available at the Welcome Center, the Paterson Museum and Overlook Park.

Visitors would continue to tour the park using self-guiding brochures, or on NPS and partner guided tours, following the network of existing sidewalks and park trails, generally exploring two areas of the park:

- Great Falls Area. The primary visitor experience would focus on the park's scenic river and falls views. In the Great Falls area, visitors to Overlook Park and Mary Ellen Kramer Park would enjoy views of the Great Falls, the Passaic River, and ruins of historic mill structures at the former ATP site. Landscape and facility improvements at Mary Ellen Kramer Park and Overlook Park would enhance the visitor experience by improving trails, providing restrooms, and rehabilitating parking areas.
- Raceway Area/Paterson Museum. Visitors would be encouraged to visit Upper Raceway Park and the Paterson Museum. They would explore the upper raceway area via a trail running along the raceway, learning about the raceway system engineering components and adjoining historic mill structures from several small waysides. From the park they would easily follow city sidewalks to the Paterson Museum where exhibits, interpretive programs, and educational programs tell Paterson's stories, focused on historical events that occurred in the park and the NHL district.

Many visitors, particularly those who reside in local neighborhoods and who are frequent visitors to the park, would continue to use the park for recreation activities, such as hiking, biking, picnicking, and fishing. Most recreational use would occur within the Great Falls area.

Interpretive programs would continue at current levels. Visitors would be encouraged to learn about Paterson's history at the Paterson Museum, as well as through the use of digital and printed media and self-guided tours. Through its signature publications and brochures, the NPS would bring the story of America's first planned industrial city from Paterson to an expanded national audience. The park would also offer some interpretive programming online, through park partners, and by scheduled appointment. New wayside exhibits and other interpretive media would continue to be



developed and installed at major viewpoints and along trails, as funding becomes available.

The NPS would maintain a high focus on educational outreach programs in the park through partnerships with local school systems and others. Park staff would continue to engage in educational activities with school groups on-site and in classrooms. Youth related special events, focusing on areas such as industrial history, water science and river recreation, would continue to occur at the park or with park staff.

Partners—such as NJCDC, William Paterson University, and the Hamilton Partnership for Paterson—would continue to assist with providing interpretive and educational programming in the park and the NHL district. The NPS would provide technical assistance with development of programs.

Cultural Resource Management

Cultural resource management actions within the park would focus on stabilizing historic structures and protecting views of the park's historic structures. At the ATP site historic structures would continue to be closed to the public.

The city of Paterson, NJ DEP, and PVWC would continue to manage their properties within the park boundary in accordance with their own organizational mission and existing agreements with the NPS. Ground disturbing activities potentially affecting cultural land-scapes, historic structures, and archeological resources would occur in compliance with applicable local, state and federal historic preservation laws. The NPS would continue to work with and provide technical assistance to the city, NJDEP, and PVWC regarding project design, emergency maintenance, and stabilization pertaining to cultural resources within the park boundary.

NPS would manage the cultural resources on the lands it owns in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995, as amended), *NPS Management Policies* (NPS 2006b), and *NPS-28: Cultural Resource Management Guideline* (NPS 2002). Ground-disturbing activities on NPS owned land would be monitored for

archeological disturbance and NPS protocols and policies for archeological resources would be followed. Privately owned collections of cultural and natural artifacts and archival materials related to the park would continue to remain in private ownership or be deposited with organizations or institutions at the discretion of property owners. The park would continue to coordinate with the NPS Northeast Region Museum Services Center or nearby units of the national park system units for assistance with management records and items that are found on NPS land during compliance and construction activities.

Completion of an ethnographic overview and assessment would provide the park with an initial comprehensive background study of the types, uses, and users of the park's resources that are known to be or thought to be traditionally associated with contemporary groups of people in the city of Paterson or elsewhere. The city of Paterson, with support from the NPS, would continue to implement measures to ensure that the future uses of land within the NHL district are managed to preserve and interpret the district's historic, cultural and natural resources, pursuant to the park's enabling legislation, and as required in section 5(B) of the general agreement (appendix B).

Natural Resource Management

Natural resources in the park would continue to be minimally managed by NPS and partners. Natural resource surveys and studies by partner public agencies and educational organizations would continue to provide baseline data on resources. NPS and partners would continue to work towards developing partnerships with state, regional, and local watershed and water quality agencies to protect and preserve the water quality in the Passaic River watershed. Agreements and permits related to Passaic River flow regulation would remain in place. Recent soil remediation efforts would continue at the ATP site. As a result of storm events, minor flooding associated with defects in the integrity of the raceways would continue. Along the length of the former ATP site shoreline, reconstruction of the river wall and construction of the adjoining river walk would stabilize the shoreline.



Maintenance and Operations

The primary focus for NPS staff would continue to be developing visitor facilities and programs, providing technical assistance to partners for projects within the park boundary and NHL district, establishing new partnerships, and coordinating with local school systems and educational institutions to strengthen and expand educational opportunities. Park administrative offices would continue to be located in the S.U.M. Administration Building. NPS park staff would rely on administrative and maintenance support from professionals at other nearby units of the national park system and the NPS Northeast Region office, park partners, volunteers or contractors, as needed.

The city of Paterson and PVWC would continue to maintain park facilities and landscaped areas on their properties. The city of Paterson would continue to provide law enforcement and emergency services in the park. Safety checks and law enforcement patrols would remain at existing levels. The Great Falls Youth Corps would continue to assist with beautification, landscaping, and general maintenance.

The Action Alternatives Elements Common to Alternatives B and C

Some common elements related to interpretation, visitor experience, and natural and cultural resource management would be incorporated into both alternatives. While these elements are common to alternatives B and C, how they are implemented and the emphasis placed on certain actions would differ based upon the vision and overall concept for the alternative.

- Interpretive and Thematic Framework. A new interpretive framework would guide development of the park's visitor experience in alternatives B and C. Stories would be told in the park's primary and secondary interpretive focus areas, based on a new set of interpretive themes and reflecting a new set of desired conditions and interpretation philosophy.
- Management Goals and Examples of Future Actions.
 Management goals in four areas—visitor experience,
 natural and cultural resource management, and
 climate change would guide how NPS and partners
 accomplish the park's purpose and protect
 the park's fundamental and other important
 resources and values. For each goal, examples
 of future actions inform how the goal would be
 accomplished.
- Management Areas for the Action Alternatives.
 Future park management would focus on achieving
 desired conditions in four management areas: the
 Scenic Falls and River Area, the Historic Immersion
 Area, the Evolved Industrial Landscape Area and
 the Community Cultural Heritage Area.

The following four sections of the GMP provide more specific management direction for each of the above elements that are common to alternatives B and C.

Interpretive and Thematic Framework

A new interpretive and thematic framework would guide the visitor experience at the park. The framework provides objectives for the interpretive/visitor experience, an interpretive philosophy for the park, considerations for developing the experience, the core themes upon which the experience should be based, and the sites that are most important to telling the stories at Paterson Great Falls NHP. NPS would have

the overall responsibility for implementing the park's interpretive framework.

Interpretation/Visitor Experience Desired Conditions

Visitors gain more than just information through the messages the NPS and partners present in programs, facilities, exhibits, and publications. "Interpretation" helps people formulate meaning behind messages. It helps people make sense of the facts they learn and the resources they see. It helps people make connections to intangible concepts and ideas the park represents. It helps people understand, appreciate, enjoy and care for their natural and cultural history and resources.

The NPS and partners want to ensure that Paterson Great Falls NHP meets its goal of providing visitors with a worthwhile and memorable experience. When that goal is achieved, the park will also achieve its goal for visitors to understand and value the park and to become motivated to participate in its preservation. The interpretive and visitor experience objectives describe the learning, experiential, and behavioral experiences the park and its partners would like to be available to visitors. These objectives form the framework for interpretive planning.

Interpretation—Visitors to Paterson Great Falls NHP should have the opportunity to:

- understand the history and significance of America's first planned industrial city
- understand Alexander Hamilton's vision for Paterson and the roles played by other key figures in the establishment, and reinvention, of the city
- understand the history, significance, and contemporary connections of the park's cultural and natural resources
- become intrigued to learn more though return visits, visits to related resource sites, or continued reading, viewing and participation on their own
- make intellectual and emotional connections to their own lives and times through experiences and critical thinking
- appreciate that the understanding of cultural and natural history is dynamic, and that each generatio reinterprets the meaning of history



 understand the value of both individual and collective action through stewardship of the cultural and natural resources of the park

Visitor Experience—Visitors to Paterson Great Falls NHP should have experiences that help them:

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

Interpretive Philosophy

As part of developing this GMP, NPS staff reached out to visitors, scholars, educators, and partners to imagine and plan for a meaningful interpretive experience at the park. From these conversations evolved the following guidelines for interpretation at the park:

- History First. Paterson Great Falls NHP is a historical park. As such, history is the park's most fundamental resource and the core foundation that underlies and supports everything else.
- The Past is Connected to the Present.
 Interpretation should not only address historical events; it should also consider the impacts and consequences of historical events. Visitors should encounter and understand both the specific history of Paterson and its cultural and natural legacy.
 Interpretation should provide links between the past and present.
- Rooted in Reality. Authenticity is the park's greatest interpretive asset: real things (artifacts) and real places (sites) where real events happened. The artifacts and the places are the foundation for telling the stories.

- Diversity of Opportunities. Visitors should be able to access the park's core themes and stories at multiple locations and in many different ways, depending upon their own interests and preferences.
- Multiple Audiences. Interpretation should engage visitors of all ages and backgrounds who come to the park with very different motivations, from historians and naturalists to tourists and local recreational users.
- Complementary Experiences. Different forms
 of interpretation offered in the park should be
 mutually enhancing so that each individual
 experience is informed and enriched by others,
 creating a whole that is more than the sum
 of its parts.
- Engagement and Empowerment. Visitors should have the opportunity to become active participants in the interpretive process, making choices, asking questions, and directing their own inquiry into the past. Visitors learn through experiences.
- Dynamic Context. Interpretation should explicitly acknowledge the fact that we live in a constantly changing world. Exhibits, programs, and publications should incorporate advances in historical and natural research and scholarship and also should acknowledge the continuing evolution of the park's landscapes and natural resources.
- The Tradition of Stewardship. The citizens
 of Paterson have taken pride in caring for the
 resources of the park. That ongoing history should
 be both an interpretive story and a clear opportunity
 for participation.

Considerations for Developing the Interpretive/Visitor Experience

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

- Audience Characteristics. This GMP assumes as a core value that all of the park's different audiences would be served by interpretive and educational exhibits and programs: different types of visitors would encounter and engage the park's resources in very different ways. For example, destination visitors would almost certainly visit the Welcome Center and participate in one of the park tours. By contrast, recreational users, who typically visit the park frequently, would rarely seek an interpretive overview and might encounter site-based interpretive experiences in a random fashion. School groups generally need a tailored experience and schedule, and they greatly benefit from advance educational information.
- Pre-visit and Visit Planning. The park offers up-to-date park orientation information to the public via the Internet and other media. Partners would utilize technological innovations in communications such as smartphone applications to help people learn about and locate the park prior to arrival. The park would continue to pursue improved mapping capabilities to enable visitor trip planning, integrated interpretive information and route planning, and other interactive tools. These ongoing improvements would be both online and at park and gateway sites. These website improvements would facilitate a broader understanding of park resources and the full array of transportation modes available to access them. Online trip planning would be linked or integrated with existing regional trip planning systems and other new technology encouraging use of alternative modes of access where available.
- Experience Selection and Sequence. Depending upon their personal preferences or circumstances, visitors may structure their visits to the park in many different ways. Their experience selection and park resource usage patterns have important ramifications for the character and quality of visitor experiences at the park and must be carefully considered as new interpretive features are developed.

Interpretive Themes

Interpretive themes can be thought of as compelling stories. They are the fundamental ideas represented by the history and resources of a park and provide the foundation for an interpretive program, both inside and outside the park boundary. Interpretive themes for Paterson Great Falls NHP were created as part of the GMP foundation for planning process (described in chapter 1). The themes accommodate a range of stories, perspectives, and ongoing scholarship. The primary themes are presented below, along with examples of the types of stories that would illustrate each theme. The examples are not all inclusive. In appendix D, the stories and concepts associated with each theme are further described.

The Natural Beauty that Inspired and Powered a Revolution—The Great Falls in the heart of Paterson has drawn people and inspired them—both for its natural beauty and for the power and the energy that it promises.

Component Stories/Concepts:

- The unique geology, size, and scale of falls create an unusual natural feature within an urban city.
- The Passaic River and falls have served as a center for energy production—waterpower, steam power, hydroelectric power—and provided a place to understand the role of energy production and consumption in American society: the limits of growth; the environmental consequences; the changing technologies, and the ongoing demand for energy in the modern global economy.
- The aesthetics of the falls have been a continual source of inspiration and solitude.

The Economic Vision that Shaped America— Paterson was founded on Alexander Hamilton's vision that freedom and independence for the United States would be based in a manufacturing economy that required a diversity of talents with promises of a better life

for its people.

Component Stories/Concepts:

 Paterson's landscape was a planned manufacturing city and center for the major concentration of industry as well as the physical embodiment of Hamilton's vision.

- Opportunity, problem-solving, and innovation characterized a series of technology improvements and inventions associated with Paterson.
- Paterson's cycles of industrial diversification led to waves of immigration flows as changes in technology brought different groups of European skilled labor to Paterson.
- Tensions between exploitation and progress fed the civil unrest that came with the labor movement.

Innovation and Opportunity—the Power of American Manufacturing—Through diversification of industries, technological innovation, and successive waves of industry and immigration, for more than two centuries Paterson continued to exemplify and reinvent Hamilton's vision of a planned manufacturing center.

Component Stories/Concepts:

- Industry and manufacturing promised a better life for Americans and immigrants and drew skilled laborers from all over the world to Paterson.
- Paterson's cycle of industrial change and c ontemporary decisions about its restoration are illustrations of city's cycle of reinventing its economic base.

Race, Recreation and Respite—While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

Component Stories/Concepts:

- Hinchliffe Stadium served as a social outlet freeing its users from the constraints of daily life.
- For African and Latino Americans, the stadium provided an opportunity to play professional level sports

Focus Areas for Interpretation

Six places within the park lend themselves to special treatment as the focus for programming and activities. In the future the NPS and partners would develop these places as interpretive focus areas to support program-



ming, including them as stops on guided and self-guided tours of the park. Each focus area would adopt a specific interpretive message. Repeated information among the sites would be minimized, and there would be complementary uses among and between each site, the NHL district and the broader regional community.

Primary Focus Areas for Interpretation

Primary focus areas for interpretation are the sites that illustrate the most fundamental aspects of the park and would be part of every tour.

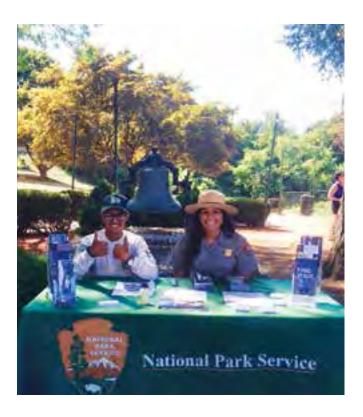
- The Great Falls of the Passaic—The falls are the heart of Paterson and the reason why the city exists. The sites immediately surrounding the falls (including Mary Ellen Kramer Park and Overlook Park) offer extraordinary opportunities to interpret the park's most significant natural feature, its history as a source of artistic inspiration, and the evolution of its use as a power source for the city.
- The Raceways—The system of raceways that thread through the NHL district connect the Passaic River to Paterson's historic mill buildings. The entire raceway system provides opportunities for visitors to visualize how the system functioned and how it powered the

- mills. Trails currently run alongside many sections of the raceway system and provide additional opportunities for recreational experiences.
- The Allied Textile Printing (ATP) Site—Although the ATP site currently holds little likeness to its historic appearance, elements of the site provide opportunities to tell the story of Paterson's evolution as an industrial city. The site is rich in archeological resources and the structural ruins of the historic mills provide an excellent venue for exhibits, outdoor classrooms, and passive recreation along the Passaic River.

Secondary Focus Areas for Interpretation

Secondary focus areas for interpretation are the sites that illustrate additional interpretive themes and would be part of extended programs which visitors would be encouraged to explore through self-guided means or during special park programming events.

• Great Falls NHL District—The Great Falls NHL district which includes and surrounds the park is home to many of the historic mill buildings which were once powered by the raceway system. Some of the historic structures, such as the Rogers Locomotive Building, are owned by park partners and offer



opportunities for collaborative exhibits and programming.

- Valley of the Rocks—Areas along the north side of the Passaic River, including Valley of the Rocks, offer a unique experience within an otherwise urban park. Paths which run down to the river's bank offer the potential for visitors to explore nature and decompress. Away from the noises of the city, this area provides opportunities for solitude, recreation, or exploratory educational programs.
- Hinchliffe Stadium—The historic stadium including the track, stands, ticket booths and other remnants of Negro League baseball would provide visitors with a unique opportunity to learn about the NHL and its role in community heritage.
- Related Resource Sites—Related resource sites include Garrett Mountain Reservation, Lambert Castle, Botto House, and other sites within the region where the park's stories can be told. These sites offer opportunities to expand upon interpretive themes and to provide visitors with options to learn about related topics.

Management Goals and Examples of Future Actions

Management goals and examples of related actions in four areas would guide how NPS and park partners can accomplish the park's purpose and protect the park's fundamental and other important resources and values:

- visitor experience
- cultural resource management
- · natural resource management
- climate change

The NPS has extensive technical and professional resources which will either directly lead or provide significant contributions to the accomplishment of those goals having a partnership lead role. Lead or supporting roles for some of the individual goals or actions would be identified during GMP implementation and as work plan elements are more completely formalized and initiated.

For each goal, a set of examples of future actions informs how the goal could be accomplished by NPS or by NPS working jointly with partners.

Visitor Experience

Visitor Experience Management Goal 1— Interpretive and Educational Programs

Interpretive and educational programs increase visitor understanding and appreciation of the park's resources.

The park's four interpretive themes would guide interpretive and educational programming—defining the most important ideas or concepts to be communicated to visitors about the park. These themes would help the partners establish a rich context for the stories surrounding Paterson's period of significance.

A majority of the park's permanent and seasonal staff would be dedicated to interpretation and educational programming. Many visitors, however, would use a variety of self-guided interpretive products as they explore the park and the NHL district. Materials could include web-based maps, cell phone tours, podcasts, downloadable materials, site-specific brochures, GPS-enabled technology, mobile web applications, or

tours via mobile web applications, radio, CD, or printed material. These products would provide orientation and link visitor experience opportunities across multiple programs within the park, within the NHL district, and at related resource sites. Media would be multilingual, with an emphasis on native languages spoken by large segments of the Paterson non-English speaking population.

Interpretive programming and services would assist visitors in understanding the relevance of the park and the NHL district within the context of the interpretive themes. Site-based educational programs and services would be developed for specific places within the park and the NHL district that are of cultural, historical, and natural interest.

Educational programming already exists within the park, the NHL district, and at related resource sites in the form of lesson plans and teacher resources related to the park's natural history and the role Paterson and the Passaic River played in America's industrial development. Existing and newly created educational resources would be introduced to teachers in partnership with state and local school systems through teacher professional development. Creating an effective web-based educational component is crucial as student and teachers increasingly rely on technology for research and for the classroom.

Research would help broaden the scope of subjects available for interpretation and would bolster the overall interpretive effort for the trail. Partners would augment existing research through data gathering and developing new and scientific research. Various means of presenting research could be employed including symposia and publications.

Examples of Future NPS Actions

- Implement a training program for partners and volunteers to give programs within the park, the NHL district, and at related resource sites.
- Expand the park Junior Ranger program.
- Continue to coordinate and/or manage volunteer and youth programs, in cooperation with groups

- including the Paterson Public Schools in order to specifically engage local youth in the park.
- Make available online new materials for teachers, students, researchers and visitor to expand lesson plans, primary source documents, maps, images, field trips, tours and event information related to the park and the NHL district.
- Implement a recruitment program for partners to recruit, train, share and recognize volunteers.
- Provide training materials and workshops for partners on a range of projects and programs, such as park orientation, fostering collaboration among the partners, interpretation, funding and sustainability.
- Maintain a calendar to inform partners and visitors of scheduled events at the park, the NHL district, and related resource sites.

Examples of Future Joint NPS / Partner Actions

- Develop a variety of self-guided multi-lingual interpretive products, uniform in character that enable visitors to explore the park.
- Host special events related to the park's themes, special summer or seasonal programs, or periodic commemorative events.
- Expand field trips, research, mentoring and service learning opportunities for students (K to college) at the park and within the NHL district.
- Provide teacher training that orients teachers to the park and the NHL district and that includes introduction of new resources and relevant content.
- Develop additional curricula to fill gaps related to interpretive themes, with new materials available online and through teaching training sessions.
- Develop educational materials for non-traditional educational settings (home school, scouts, etc.).
- Host periodic scholarly symposia to enhance knowledge of the resources and historical significance of the park and NHL district and to expand audiences.

 Encourage visitors to visit sites with resources related to Paterson's industrial history that are located outside the park and the NHL district.

Visitor Experience Management Goal 2— Recreation

Appropriate recreational use provides an opportunity to explore, the park and enhances interpretive and education activities while respecting the natural and cultural resources.

Recreational opportunities in the park and the NHL district offer an alternative means of exploring the places that are significant to understanding the people, events and ideas associated with Paterson Great Falls and the manufacturing community that grew up around it. A network of parks and open spaces with formal and informal paths offer visitors from local communities and from areas beyond Paterson opportunities to walk, bike, sightsee, picnic, and generally enjoy the outdoors. In the future the partners would collaborate to enhance existing recreation opportunities and to add new ones. Hinchliffe Stadium would be rehabilitated for adaptive reuse for a variety of recreation activities and special events. Along the riverfront, new public access to the water and rehabilitation of the riparian corridor would offer new opportunities for exploring the river by canoe or kayak and on foot via new trails along the river's edge.

The City of Paterson Master Plan (Paterson 2014) and the Passaic County Open Space and Recreation Master Plan (Passaic County 2014) address needs for trail connections and development of a recreational greenway along the Passaic River. The partners would work with the city and county to further evaluate, plan for, and implement these actions, as appropriate.

Examples of Future NPS Actions

- Work with the city of Paterson and Passaic County to develop and implement an integrated trail plan that expands recreation opportunities in the park and NHL district and that connects the park and NHL district to recreation sites in downtown Paterson and to Garrett Mountain.
- Identify and develop new recreational opportunities in the park and NHL district, with an emphasis

of water-based recreation, such as components of the Passaic River Canoe and Kayak Trail Plan (LPSRA 2008).

Examples of Future Joint NPS / Partner Actions

- Work with the Board of Education to study and implement appropriate adaptive reuse of Hinchliffe Stadium to potentially support a variety of recreation activities and special events.
- Support efforts by Passaic County to develop the Morris Canal Greenway.
- Provide technical assistance to partners for design and development of recreation facilities.

Visitor Experience Management Goal 3— Community Cultural Heritage

A variety of activities promotes understanding and appreciation of Paterson's cultural heritage and stimulates the community culturally, artistically and economically.

NPS and partners would join together to promote experiences in the park that promote understanding and support for the community's cultural heritage and appreciation of the arts. The partners and others would host exhibits, events, festivals, and other special events. New programs and activities would emphasize community participation, particularly youth, and would embrace fine, literary, and performing arts that support the park's purpose and interpretive themes.

Examples of Future Joint NPS/Partner Actions

- Involve local organizations in the development of special events and programs.
- Connect visitors to the diverse ethnic food offerings in the NHL district.
- Continue to offer fun and educational activities that attract community residents to the park, particularly youth.
- Invite local authors and artists to exhibitions and performances.

Visitor Experience Management Goal 4— Orientation

Orientation helps visitors understand the variety of learning and recreation opportunities at the park and to plan their visit to better satisfy their interests.

Orientation to the park and the NHL district would occur online and at visitor contact facilities. Orientation would help visitors understand that the Paterson experience includes exploring both Paterson Great Falls NHP and the surrounding NHL district. Orientation would also help visitors understand that they would find a variety of opportunities for learning and for recreation. As visitors begin their exploration of the park and the NHL district they would anticipate learning about the park's natural history and the role Paterson and the Passaic River played in America's industrial development.

The NPS website would provide background information, tips on ways to experience the park, sample itineraries, and events calendar, and more. Detailed information on the website, as well as links to partner websites, would focus on the three interpretive themes. Partners would provide additional descriptive information on their site's resources, themes, and operations for inclusion in the NPS website.

A network of partner and/or community visitor contact facilities in the park and the NHL district would provide information and orientation for visitors on programs and activities for learning and recreation. Some facilities would also host park exhibits and special events and offer programming and learning activities. One facility would be developed as the principal welcome center for the park. Exhibits, graphics, media programming, and personal interpretation would provide first-time visitors with a complete and easily comprehensible overview of the park's many different interpretive resources and recreational opportunities. It would help them match their own needs and interests with available resources and activities and enable them to more effectively plan their visits. For repeat visitors, orientation would offer current information on programs, events, and temporary or traveling exhibits. To enhance its value as both a hub and a gateway for visitors to the park, orientation might be planned to

incorporate changing displays that highlight features of park and/or partner collections or shed light on archeology, research, or restoration efforts underway within the park.

Examples of Future NPS Actions

- Maintain and update the NPS park website on a regular basis with periodic redesigns.
- Incorporate partner descriptive information on the NPS park website and provide links to partner websites.
- Provide technical assistance to partners for website content development to enhance visitor orientation to the park and the NHL district.

Examples of Future Joint NPS/Partner Actions

- Offer visitor orientation to the park and NHL district at partner sites, including exhibits as appropriate.
- Develop, distribute, and promote a new guides for the park and NHL district.

Visitor Experience Management Goal 5— Visitor Facilities and Services

Visitor facilities and services serve visitors needs and facilitate enjoyable and educational visits to the park, are designed and located with minimal impact on park resources, and are aesthetically pleasing and functional.

The NPS and partners would provide facilities and services for visitors at their sites, as appropriate, such as parking, interpretive media, restrooms, trails, picnic facilities, observation points, etc.

Structures, landscapes, and facilities open to visitors at the park and in the NHL district would be made universally accessible to the greatest degree possible. In the event that creating universal access is infeasible, other means (e.g., use of interpretive media) would be used to accommodate visitors with disabilities.

Examples of Future Joint NPS/Partner Actions

- Provide a primary visitor contact station, staffed jointly by NPS and partners, where visitors would be oriented to the park.
- Provide additional visitor contact stations (information kiosks) in other areas of the park,

as appropriate, that orient people to the park and that direct them to the primary visitor contact station for additional information and interpretive experiences.

- Provide restrooms at the primary visitor contact station and in the vicinity of information kiosks in other areas of the park, as appropriate.
- Rehabilitate structures, landscapes, and facilities at the park and in the NHL Historic district that are open to visitors universally accessible to the greatest degree possible.

Visitor Experience Management Goal 6— Wayfinding and Interpretive Signage

Wayfinding and interpretive signage guides visitors as they explore the park and the NHL district.

Visitors traveling to the park and the NHL district would experience well-marked routes with good directional signage. They would have a clear sense of arrival upon entering and a clear sense of departure upon leaving the park and the NHL district. Once in the park and the NHL district, a wayfinding system composed of maps, signage and other materials would enable visitors to easily find visitor contact facilities and sites of interest. Signage would provide clear but separate graphic identities for the park and the NHL district.

The existing proliferation of signs that makes wayfinding challenging for visitors would be reduced through a cooperative effort of the partners, city and state transportation agencies, and public and private landowners within the park and the NHL district.

New interpretive waysides would provide specific information related to the park's four interpretive themes and help visitors understand the relevance and significance of the natural features and historic properties within view or nearby.

Examples of Future Joint NPS/Partner Actions

- Develop and implement a signage plan for marking and interpreting the park and the NHL district that:
 - establishes appropriate independent and shared graphic identities for the park and the NHL district

- addresses signage placement, such as highway information and directional signs, entrance signs at parking areas, regulatory signs, directional indications, interpretive panels, wayside exhibits, private property signs, destination signs, and partner signs
- provides unified graphic design and layout standards, templates, and fabrication specifications for signage
- outlines the roles and responsibilities of the partners related to developing and maintaining park and NHL district signage
- Improve wayfinding signage to direct visitors to the park and the NHL district.
- Work with city and state transportation agencies and public and private landowners to identify and remove extraneous signage of all kinds within the park and NHL district.

Visitor Experience Management Goal 7— Access and Circulation

Visitors access the park by many travel modes—driving private vehicles, riding bicycles, walking, and riding public transportation.

The disparate collection of paths and trails within the park and the NHL district would be organized, completed, and managed as a system. The system would be composed of existing trails and limited new trails to provide a variety of visitor experiences related to the history and natural resources of the park and the NHL district. Effective signage would be installed at key locations. Trailheads with adequate yet unobtrusive parking, restrooms, and information would be added. Some authorized trails that are unmaintainable and any personal trails that damage resources would be eliminated. Connections to planned regional trails would be made.

Working with state and city transportation agencies and special interest groups, the partners would seek to address several other important transportation needs:

 enhancing bus routes, bike trails, and walking trails from local neighborhoods and downtown Paterson, making it easier for local residents to access the



park—particularly for those who do not own a vehicle

- enhancing the visitor experience by reducing traffic congestion on city streets within the park and the NHL district
- enhancing visitor safety by reducing travel speeds on city streets within the park and the NHL district
- providing adequate and safe parking to meet visitor demand within acceptable walking distance of the park and NHL district
- providing safe sidewalks and crosswalks along streets within the park and NHL district *The City of Paterson Master Plan* (Paterson 2014) and the *Passaic County Open Space and RecreationMaster Plan* (Passaic County 2014) address many of these needs, proposing actions to facilitate connections to the park and the NHL district.

Examples of Future Joint NPS/Partner Actions

- Develop and implement an integrated trail plan for the park and the NHL district.
- Work with the city of Paterson to develop and implement plans for additional bike and trail access from local neighborhoods and from city destinations as recommended in the city's master plan, such as Westside Park, Pennington Park,

- Paterson Museum, Main Street, Market Street/City Hall, Ward Street Train Station and Garrett Mountain (Paterson 2014).
- Support city efforts to implement a "complete streets" policy for streets leading to park entrances, as recommended in the city's master plan (Paterson 2014).
- Support city efforts to provide a tourism shuttle or trolley that would link cultural destinations in the city, including the park and NHL district, and existing mass transit centers such as the Ward Street Station or the Broadway Bus terminal as recommended in the city's master plan (Paterson 2014).
- Support city efforts to provide adequate parking for visitors to the park and NHL district that is unobtrusive and does not distract from the historic character, as recommended in the city's master plan (Paterson 2014).
- Support Passaic County efforts to provide enhanced bus service connecting the park and NHL district with points in Bergen County along Market Street.
- Conduct a study of sidewalks and pedestrian crossings in the park and NHL district and make improvements to address safety issues for pedestrians.



Visitor Experience Management Goal 8— Visitor Safety

Visitors enjoy safe and secure experiences at the park.

Visitors would feel safe as they explore the park. The places where visitors go in the park would be free of known hazards. Emergency services would be available to meet needs for law enforcement, fire protection, and emergency medical care. Outdoor spaces would be designed to reduce visitor conflicts and to reduce potential for the physical environment to contribute to a perception of personal safety. Landscape areas would convey a sense of "natural surveillance" that serves as a deterrent to inappropriate behavior. Maintenance of facilities and the landscape would support public perception that the park is owned and controlled by NPS and partners and that inappropriate behavior is not permissible.

Examples of Future Joint NPS/Partner Actions

- Work with partners, concessioners, contractors, and cooperators seek to provide a safe environment for visitors and employees.
- Reduce or remove known hazards and apply other appropriate measures, including closures, artificial lighting, guarding, signing, or other forms of education, as appropriate.

- Maintain a general agreement with the city
 of Paterson for its Police Department and emergency
 services to respond to emergencies, enforce laws
 and conduct law enforcement investigations,
 as stated in the general agreement signed by the
 NPS and the city; establish appropriate protocols
 for the Paterson Police Department, and any
 additional law enforcement services needed
 on lands owned or administered by the NPS.
- Support efforts by the city of Paterson to design recreational spaces in the park and NHL district with Crime Prevention Through Environmental Design (CPTED) standards in mind and retrofit existing parks to CPTED standards where feasible.

Visitor Experience Management Goal 9— Promotion and Marketing

Promotion and marketing of the park attracts visitors from the local community, cultural heritage travelers, and outdoor recreation enthusiasts.

The partners along with a variety of state and local entities would collectively market and promote visitation to the park and the NHL district. Almost 23 million people live less than two hours by car from the park, including several distinct key audiences: heritage travelers, recreational users, educational visitors, area residents and their guests, accidental tourists and virtual visitors. Opportunities to market and promote the park and NHL district to these audiences would come from local city and county efforts as well as from state and federal initiatives with national and even international reach. A variety of promotional products and activities would be used, such as arts and cultural celebrations and organized tours for commercial operators. Visitor facilities and services would seek to provide for the needs of target audiences, such as those traveling on tour buses, school groups, and non-English speaking visitors.

Examples of Joint NPS/Partner Future Actions

- Work with the city of Paterson to develop special promotional events to attract visitors.
- Work with partners to create a marketing team to discuss, share, plan and coordinate heritage tourism marketing efforts for sites in the Paterson

- area; if appropriate, develop and implement an integrated promotion and marketing plan to support the Paterson area's heritage tourism experiences.
- Work with partners to ensure that the park and NHL district can accommodate the needs of group tours, such as tour bus parking and restrooms.
- Support efforts by city of Paterson to develop retail and commercial activity outside the park that would help attract visitors by offering experiences that complement what visitors do in the park and that offer additional visitor services.
- Support efforts by Passaic County to develop a destination marketing organization for countywide marketing and promotion.

Cultural Resource Management

Cultural Resource Management Goal 1— Cultural Resource Baseline Information

Paterson Great Falls NHP is engaged in the continuing study and assessment of the park's cultural resources, including it cultural landscape, historic structures, archeological, collections and ethnographic resources.

In the future, much of the day-to-day work of park staff and partners and a large portion of funding would be dedicated to better understanding and protecting the park's cultural resources. To guide this work, and ensure that funding and staff are programmed to take care of the park's most significant resources, decisions would be based on professional studies and adequate planning that are consistent with applicable policies and regulations.

Through ongoing investigation, study, and scholarly research, Paterson Great Falls NHP would expand and improve the understanding of its cultural resources so as to have the best possible information available to guide management decisions. Research and documentation of the park's cultural resources would be aligned with its purpose, significance and fundamental resources and values. Since Paterson Great Falls NHP is only part of the larger NHL district, staff would look beyond the park's borders, encouraging scholarly research into related resources outside the park and the park's ties to the region.

Examples of Future NPS Actions

- Conduct scholarly research and use the best available scientific information and technology for making decisions about management of park cultural resources.
- Build academic partnerships focused on the preservation, maintenance, and interpretation of fundamental cultural resources.

Examples of Joint NPS/Partner Future Actions

- Continue to collect information to fill gaps in the knowledge and understanding of the national historical park's cultural resources, to assess status and trends, and to effectively protect and manage cultural resources.
- Prepare inventories and reports for cultural resources, such as cultural landscape reports and historic structures reports, and implement treatment actions as appropriate.

Cultural Resource Management Goal 2— Treatment of Historic Properties

The partners collaborate to preserve the park's historic properties by seeking viable contemporary uses for its cultural landscapes and historic structures.

Paterson Great Falls NHP contains many historic structures within the overall cultural landscape. These resources exhibit a wide range of conditions, from well-maintained and functional to ruinous. Their future management requires treatments in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (NPS 1995, as amended). As part of the planning process, a number of different concepts were evaluated and refined to identify the most appropriate treatments for the park's cultural resources. Of the four types of treatment—preservation, rehabilitation, restoration and reconstruction—only three apply at Paterson Great Falls NHP: preservation, rehabilitation and restoration.

 Preservation is the process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work includes stabilizing the property and focuses on the ongoing maintenance and repair of historic materials and



features. Preservation maintains the existing character of the resource. Most of the activity that would take place in the park is preservation: as funds are available, buildings and landscapes are maintained and repaired so that they retain their existing character. An example of a preservation activity in the park would be repairing existing windows in a building, rather than replacing with a new window.

Rehabilitation makes possible compatible uses for properties through additional repair, alterations, or additions, while preserving those significant historic features that remain that convey historical values. Rehabilitation starts with identifying, protecting, retaining, and preserving historic features. Changes to a property that have acquired significance in their own right are retained and preserved. Historic features that have deteriorated or changed may be repaired. For example, such work could stabilize a building deteriorating due to a poorly engineered roof. Rehabilitation also allows replacement of missing historic features, such as fences. Finally, rehabilitation permits alterations and additions for new uses; an example in a historic structure would be the updating of utilities to meet current life-safety codes, allowing the building to be used by visitors or for park operations.

• Restoration is the process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. This can include removing features from other periods in its history and replacing missing features that can be substantiated by documentary and physical evidence. Care must be taken to ensure that features that are merely conjectural are not introduced, because that could create a false sense of history. For example, the stone walls of the historic raceways would be repaired and replaced to contain and convey water.

Examples of Joint NPS/Partner Future Actions

 Pursue public-private partnerships to assist with preservation and adaptive reuse of the park's cultural landscapes and historic structures for a wide variety of uses, including visitor services, administrative and partner needs or recreational opportunities.

Cultural Resource Management Goal 3— Archeological Resource Protection

The archeological resources associated with the people and history of the park are monitored and protected.

The park's recent archeological overview and assessment (NPS 2012a) revealed that a significant number of archeological investigations have been undertaken in

the city of Paterson, primarily since the early 1970s. Review of these reports identified 20 sites of archeological potential related to specific industrial activities within the park boundary. These sites provide a framework for directing research efforts and for assessing archeological resources within the park boundary for their eligibility for listing on the National Register of Historic Places. NPS and partners would undertake required archeological study and monitoring to protect subsurface resources in the park and surrounding areas. Continued research would emphasize topics and areas of the park about which relatively little is known. Fieldwork would seek to confirm research findings and to develop additional information, and would be an important interpretive and educational activity in the park.

In the future, the partners would continue to preserve and protect archeological resources in accordance with historic preservation laws, NPS Management Policies (NPS 2006b) and professional standards. Archeological resources would remain in situ and undisturbed, unless removal of artifacts or intervention into cultural material is justified by preservation treatment, protection, research, interpretation, compliance or development and public safety requirements. During development of new facilities and maintenance of existing facilities and resources the partners would be sensitive to archeological resources. NPS cultural resources staff would be directly involved in the planning stages of all projects involving cultural resources within the park boundary. Significant archeological and other scientific data threatened with loss from the effects of natural processes, human activities, preservation treatments, park operations, or development activities would be recovered, recorded, or otherwise preserved. Artifacts and other cultural data would be protected and may be acquired during compliance activities and curated for museum collections. Archeological collections from NPS land would be curated in the park museum collection. The public would be informed about the importance of archeological resources and the need for their protection.

Examples of Future Joint NPS/Partner Actions

- Conduct sufficient research to identify and evaluate park archeological resources and assess condition and potential threats.
- Continue long-term monitoring of archeological sites to measure deterioration from natural and human sources and to evaluate the effectiveness of management actions to protect resources and mitigate impacts.
- Preserve and protect archeological resources by eliminating and avoiding natural and human impacts, stabilizing sites and structures, monitoring conditions, and enforcing protective laws and regulations.
- Carry out required consultation and legal compliance and consider any concerns that are raised.
- Include information about archeological resources, as appropriate, in interpretive and educational programs for the public.

Cultural Resource Management Goal 4— Collections Management

Collections and archives associated with the sites and stories of the park are preserved and available to the public.

To date, NPS has not acquired any objects, artifacts, or archival collections relating to Paterson Great Falls NHP. However, the partners currently have collections of cultural resource objects, artifacts, and archives that have been compiled as a result of various archeological, historical, and architectural studies.

In the future, NPS would not directly acquire or store collection items, other than acquiring those collections from NPS lands that are collected due to compliance activities. NPS and partners would work together with universities or museum organizations to document, preserve, manage and store any geologic, ethnographic, industrial or architectural artifacts recovered as a result of archeological investigations on park lands. Wherever they are located, NPS and partners would strive to manage the collections in conformity with NPS records and

catalog systems. Provisions would allow for appropriate access to the collections by NPS staff and the public for their use in exhibits, interpretation, resource management and research. NPS would assist partners with identifying and assembling items and materials related to the park's interpretive themes.

NPS Management Policies (NPS 2006b) would guide management of documentation associated with natural and cultural resource studies and other resource management actions. Paterson Great Falls NHP would retain notes or copies of records significant to their administrative histories and managing park resources over time. NPS would work with partner universities, agencies or organizations to manage, preserve and store these records. The collections data would be cataloged in the Interior Collections Management System.

Examples of Future Joint NPS/Partner Actions

- Work collaboratively with partners to identify objects, artifacts and archives in museum facilities, and government, university or private collections associated with park sites and stories.
- Research, document, and catalog the collections which serve as an interpretive and management resource for the park and the public.
- Develop a strategy for partners to acquire, develop, and preserve museum collections that document the history, resources, and significance of the park.
- During future rehabilitation of the park's historic sites and structures, evaluate remaining industrial objects to determine which could be removed for off-site preservation; relocate objects to partners' collections storage facility, as appropriate.
- Develop and implement a scope of collections statement and management plan.
- Assist partners with maintaining high standards for collection conservation practices and ensure accountability for these collections.
- Develop traditional and web-based exhibits to make collections more accessible.
- Use existing and emergent technologies for collection access and management.

Cultural Resource Management Goal 5— Ethnographic Resource Protection

Ethnographic resources having cultural importance for traditionally associated people and tribes are identified and protected.

Over 50 ethnic groups live in Paterson today. To better understand the relationship of these ethnic groups to the park, the NPS has commissioned an ethnographic overview and assessment study (EOA), ongoing concurrently with the development of the GMP. An EOA is programmed when park resources are known or thought to be culturally and historically associated with park neighbors, a contemporary ethnic group or groups, or entire communities located in or near a park. This study focuses on those resources that have traditional and ongoing significance or importance to peoples and groups and develops understanding of the people who have formed such attachments and the nature of the connections themselves.

Preliminary findings indicate that Indian tribes and other traditionally associated groups attach significance to many of the natural and cultural features within the boundaries of Paterson Great Falls NHP. The Lenape are a viable and important part of the contemporary social landscape and seek to educate others about the importance of preserving key ritual sites within the boundaries of the Paterson Great Falls that support of their way of life. Lenape elders and their descendants visit the site of the Great Falls to engage in rituals of worship and honor and continually reinforce the traditional practices of their ancestors. By doing so, the Lenape elders protect their homeland and pass cultural, linguistic, and ritual traditions onto future generations. In the future, findings of the EOA would be used to inform park management and interpretation and to assist park managers in consulting with the appropriate peoples and groups when particular resources are the subject of management considerations and decision-making. The EOA research would contribute to park public involvement strategies, community collaboration, interpretation, planning and research. The park would ensure that opportunities remain for tribal members and traditionally associated people to access culturally important places in the park.

Examples of Future NPS Actions

- Conduct park programs and activities in a way that respects the beliefs, traditions, and other cultural values of those who have ancestral or historic ties to park lands.
- Identify and document, through studies and consultations, traditional cultural properties and other ethnographic resources, traditionally associated people and other affected groups, and such groups' cultural affiliations to park resources.
- Recognize the sensitivity of ethnographic resources and associated data and provide confidentiality as possible under the law.
- Consult with the culturally associated Delaware Nation, Delaware Tribe, Stockbridge-Munsee Community and Sand Hill Indians (modern day representatives of the Lenape) on program and resource management planning.

Cultural Resource Management Goal 6— Resource Management in the NHL District

Future uses of land within the Paterson Great Falls National Historic Landmark District are managed to preserve and interpret the district's historic, cultural and natural resources.

The park's enabling legislation mandates that the NHL district be managed consistent with the park's purpose. Many of the actions to accomplish this mandate are described above under cultural resource management goals I through 5. Additional actions to protect resources within the NHL district are addressed in the general agreement between the NPS and the city of Paterson. The agreement outlines how the city and the NPS will on all major work on properties within the NHL district. As an interested party, the NPS would engage in the review of projects occurring within or adjacent to the park boundary that are proposed by the city or partners and that would have an effect on park resources or the visitor experience. The NPS would seek appointment as a voting member of the Paterson Historical Commission through the office of the mayor of Paterson and the city council.

Examples of Joint NPS/Partner Future Actions

- Foster appropriate and compatible uses and treatments within the NHL district that will serve the objectives of preservation, education, and visitor accommodations.
- Include NPS on the Paterson Historical Commission in order to provide consistency with the park purpose.
- Continue to strengthen the role of historic preservation in the community by amending city ordinances, as appropriate, to implement recommended historic preservation strategies in the City of Paterson Master Plan (Paterson 2014).
- Enforce city of Paterson land use ordinances within the NHL district.
- Actively seek and hold façade and preservation easements.
- Include a management plan, reviewed and approved by the NPS, as a condition of conveyance of any publicly owned real estate asset out of public ownership, within or adjacent to the NHL district, whose redevelopment might impact the park
- Notify the NPS of any proposed land use development or proposed alteration to any historic resource, land, building, or structure that may affect the NHL district.

Natural Resource Management

Natural Resource Management Goal 1— Maintaining a Healthy Ecosystem

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

Natural resource management would seek to balance maintaining a healthy ecosystem in the park with protecting cultural resources and providing desired visitor experiences. In some cases, cultural resource management objectives might not allow natural processes such as tree growth to continue unimpeded. Similarly, interpretive/visitor experience objectives could require modifying resource management strategies to achieve a desired visitor experience.

Natural resource management would promote new scientific understanding and information on park

resources. The NPS and partners would expand and improve the inventory, monitoring, and understanding of its natural resources so as to have the best possible science-based information available to guide management decisions. Over the next few years, the NPS would conduct natural resource inventories and studies, in partnership with state and local governmental agencies, and universities, such as Montclair State University. This information baseline would document existing natural resource conditions in the park. This could support establishing vegetation strategies to eradicate invasive and exotic species, developing conservation partnerships with agencies to maximize species and habitat diversity, and cooperating with agencies to monitor and protect resources.

Examples of Future NPS Actions

- Promote research to increase understanding of the park's resources, natural processes and human interactions with the environment, with an emphasis on fundamental resources.
- Continue to participate in and encourage ongoing partnerships with local, state and federal agencies, as well as nongovernmental organizations in natural resource programs that have importance within and beyond park boundaries.
- Monitor internal and external human impacts on park resources and, in coordination with partners, seek to minimize, mitigate or eliminate harmful human impacts.
- Conduct a visual resource inventory to identify scenic quality and visitor values at key scenic views.
- Provide education and outreach programs
 to highlight conservation and management issues
 facing the park and related lands and encourage
 partners who are able to assist with ecosystem
 stewardship.

Natural Resource Management Objective 2— Protecting Geologic Resources

Natural geologic process/features persist largely unimpeded by human-induced impacts.

The Great Falls of Paterson is designated a National Natural Landmark. The basalt columns that compose the chasm of the Great Falls are a dramatic feature and fundamental resource of the park. In the future, the NPS and partners would more actively manage these resources within the park, and would develop a detailed plan to monitor and preserve them and to interpret them to the public.

Examples of Joint NPS/Partner Future Actions

- Prepare a geologic inventory, including identification
 of significant geologic processes, human influences
 on those geologic processes, and excellent examples
 of rock types or geologic processes, as well
 as identification of such resources warranting
 special protection or interpretive efforts.
- Seek to mitigate human impacts on geologic processes (e.g. accelerated soil erosion).
- Partner with the U.S. Geological Survey and others to identify, address, and monitor geologic processes and hazards.

Natural Resource Management Objective 3— Protecting Plant and Animal Populations

Native plant and animal populations are protected.

Trees, plants and wildlife occur in the riparian habitat along the Passaic River and in wooded areas such as Upper Raceway Park. Further research and planning is needed to determine best management practices to protect these areas so that riparian and wooded habitats function in as natural a condition as possible and support native plant and other species.

In the future, the park would develop a natural resource management strategy that identifies issues and offers approaches to address them. Critical management principles include: maintenance and protection of varied habitat, maintenance of the riparian habitat integrity, and limited expansion of invasive species.

Examples of Joint NPS/Partner Future Actions

- · Restore degraded habitat areas.
- Minimize human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.
- Develop and implement a strategic plan for managing invasive exotic vegetation.

Natural Resource Management Objective 4— Protecting Threatened and Endangered Species

Threatened and endangered species and habitat are protected to the greatest extent possible and other particularly sensitive species are closely monitored and protected.

Special status species known to occur in the park vicinity include four bat species: Indiana bat (Myotis sodalis), an endangered species; northern long-eared bat (Myotis septentrionalis), a threatened species; little brown bat (Myotis lucifugus); and the tri-colored bat (Pipistrellus subflavus). The little brown bat and tri-colored bat are both currently under review for listing as threatened or endangered.

Park staff would cooperate to inventory, monitor, protect and perpetuate the natural distribution and abundance of all special status species and their essential habitats in the park. The NPS and its partners would support research that contributes to management knowledge of federal- and state-listed species and their habitat. Periodic inventories would be conducted for special status species. These species and their habitats would be specifically considered in ongoing planning and management activities. If they occur in areas that would be affected by construction, visitor use, or preservation activities proposed under any of the alternatives in this plan, the NPS would consult with the United States Fish and Wildlife Service (USFWS) to avoid or mitigate any potential adverse impacts.

Examples of NPS Future Actions

- Continue to collect baseline data regarding potential impacts to threatened and endangered species, such as data on disturbance levels from authorized activities, unauthorized intrusions, visitation levels, staffing levels and conservation measures for threatened and endangered species, such as closures, buffer zones, or prohibition of certain recreational activities during breeding season.
- Continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservations measure as conditions change.
- Continue to consult with USFWS on conservation measures for threatened and endangered species



for site specific planning efforts and natural resource management plans.

Natural Resource Management Objective 5— Protecting Water Resources

Physical, chemical, and hydrological properties and dynamics of water reflect natural water quality conditions (water quality is improving).

The hydrological systems and features of the park are influenced by land uses and activities occurring within the larger Passaic River watershed outside the park. Currently, water quality in the park is degraded and does not meet standards for primary recreational contact.

NPS and partners would work together to address threats to water quality both inside and outside the park. Natural hydrologic flows in the park would be preserved and restored where possible. The partners would focus on management of stormwater discharge to the Passaic River originating within the park and would actively participate in regional stormwater management initiatives.

Examples of Joint NPS / Partner Future Actions

- Continue to monitor water quality and quantity within a local and regional context, and expand monitoring as needed to more fully understand the status and trends of ground and surface water.
- Participate in local, state and national water quality remediation and watershed planning programs.
- Update strategies for water resources management as needed to reflect changing resources and management issues.
- Continue to assess human-related threats to water quality and quantity.
- Use a whole-watershed management strategy to protect the park's water resources with the goal of minimizing threats to water quality from sources both inside and outside the park.
- Conduct water and sediment sampling upstream and downstream in the park.
- Conduct ecological risk assessment to plants and animals using results from sampling.
- If dangerous levels of contaminants are found, conduct systematic sampling to find source area and mitigate, as appropriate.
- Continue to work with NJDEP, local communities, public service districts, and other appropriate groups to protect and enhance the water quality of the Passaic River.
- Implement a program to provide public education and technical assistance to landowners within and adjoining the park regarding water quality.

Responding to Climate Change

Over the last decade, the NPS has consulted with the scientific community, federal agencies, non-profit organizations and other informed parties to gather data and explore strategies to prepare the national park system for potential future impacts of a changing climate. In the future, river flooding, extreme precipitation events, heat waves and increases in severe winds or other phenomena related to climate change will alter how natural and cultural resources are managed, and the types of activities, facilities and infrastructure the NPS can support.

Climate change is expected to result in many changes to the Atlantic coast, including the northeastern coast of the United States. Both historical trends and future projections suggest increases in temperature, precipitation levels and intensity of weather events, such as storms, should be expected. Climate change is expected to affect the park's weather and resources (e.g., riparian shoreline, historic sites, and archeological resources). These changes will have direct implications on resource management, recreational facilities, park operations, and visitor use and experience. Some of these impacts are already occurring or are expected at the park within the timeframe of this plan. Temperature shocks may cause significant damage to historic buildings and paved surfaces such as sidewalks. Increased precipitation, particularly heavy rainfall events, may result in increased occurrences of flooding, which may damage building foundations. Further, more humid conditions caused by increased precipitation and warmer temperatures will likely accelerate damage to any wooden structures (i.e. raceway features).

Climate Change Management Goal 1— Addressing Climate Change Challenges

The challenges of climate change and its effects on park resources are addressed through innovation, adaptation best management practices and partnerships.

Many opportunities exist for the park to incorporate climate change adaptation into long-term planning across the park. Specific options to protect the park's resources include integrating long-term planning into park operations, monitoring observed and projected climate trends, conducting climate-related vulnerability assessments for fundamental resources and values, monitoring climate sensitive species and implementing a range of adaptive management actions.

In the future, NPS staff and partners would proactively monitor, plan, and adapt to the effects of climate change on natural and cultural resources and visitor amenities by using the best information as it becomes available. The park would coordinate with other agencies in developing tools and strategies to help identify and manage climate change impacts. Collectively, these actions would position the park to respond quickly and appropriately to the local effects of climate change.

Examples of Joint NPS/Partner Future Actions

- Use up-to-date policy guidance to respond to changing conditions.
- Inventory and monitor attributes of the natural systems, cultural resources and visitor experience likely to be affected by climate change.
- Give highest priority to preserving cultural resources and artifacts in situ, coupled with sustainable efforts (intervention techniques) to mitigate and reduce any stressors that might adversely affect the resource.
- Reduce current and future stressors to key ecosystem features to increase their resiliency to climate change.
- Seek to restore and protect key ecosystem features and processes, and protect key cultural resources to increase their resiliency to climate change.

Climate Change Management Goal 2— Park Contributions to Global Warming

Contributions to global warming at Paterson Great Falls NHP are minimized, providing a model for others for reducing energy and resource consumption.

Opportunities would be pursued in park operations and visitor services to use and promote "green" technologies and products and reduce overall energy and resource consumption. To reduce greenhouse gas emissions, the park would increase its use of renewable energy and other sustainable practices with the goal of becoming a carbon neutral park. Because emissions from visitor driving are estimated to contribute the highest percentage of the park's emissions, park staff and partners would seek to provide opportunities for alternative transportation options. Park education and interpretive efforts would engage park employees, partners, visitors and the public on climate change, providing the latest park research and monitoring data and trends, informing the public about what responses are being taken at the park and inspiring visitors to reduce their carbon footprint.

Examples of Joint NPS/Partner Future Actions

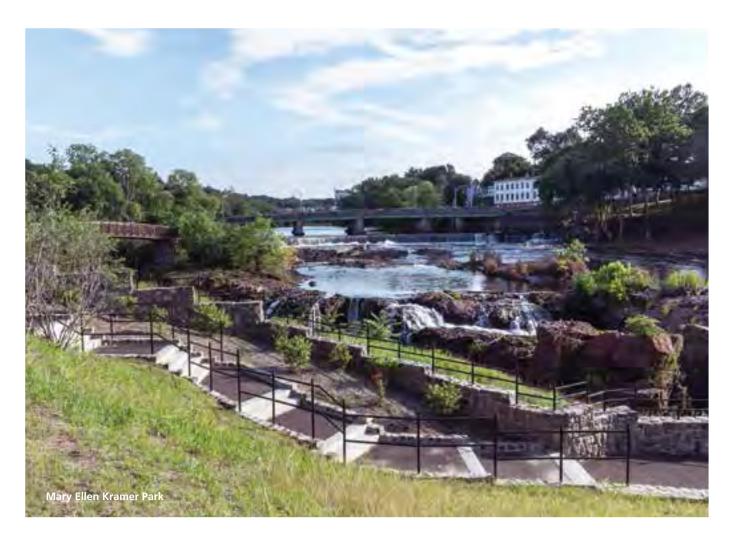
 Test, use and promote carbon-neutral energy, innovations and infrastructure for NPS and partner operations.

- Consolidate park operations to reduce energy consumption.
- Construct and operate visitor facilities with the highest sustainability standards possible.
- Use biodegradable/recycled resources and zero waste options.
- Reduce vehicle miles traveled by park staff and visitors who work in and use the park. Use low-emission vehicles for park operations whenever possible.
- Integrate climate change mitigation into all park business, operations, and management.
- Keep utilities and critical systems and infrastructure out of flood zones.
- Avoid or minimize additions of new infrastructure, construction of high value assets or major investments in facility renovations within riparian flood zones.

Management Areas (common to alternatives B and C)

Visitors to Paterson Great Falls NHP would experience the park by exploring four areas of the park (figure 2.1). What visitors see and do and what they learn in each area would emphasize the cultural and natural resources that are found there and the historic events that occurred there. Management areas would include:

- Scenic Falls and River Area—encompassing the Great Falls, the Passaic River and chasm, the Valley of the Rocks, the S.U.M. Dam, the S.U.M. Hydroelectric Plant, the S.U.M. Steam Plant Foundation, and adjoining park lands (including Overlook Park, Mary Ellen Kramer Park, and the Landing)
- Historic Immersion Area—encompassing the historic raceway network (within the park boundary), the Ivanhoe Wheelhouse, Raceway Park and Paterson Great Falls NHP Welcome Center
- Evolved Industrial Landscape Area encompassing the former ATP site (including the quarry and ruins of the Colt Mill, Waverly Mill,



Todd Mill, and two ATP site structures)

• Community Cultural Heritage Area encompassing the Hinchliffe Stadium site

NPS and partners would manage each area to achieve a certain vision and set of desired future conditions for the visitor experience, cultural and natural resources, and park facilities (table 2.2). Exclusive of the community cultural heritage area, the management actions by the partners would differ in each management area, reflecting the underlying concept for the alternative (table 2.1).

Community Cultural Heritage Area (common to alternatives B and C)

The community cultural heritage area encompasses the six-acre tract occupied by Hinchliffe Stadium. The Paterson Public Schools would retain ownership of the property and would be responsible for its management. Resource conditions and use of the Hinchliffe Stadium site would evolve over time as the Board of Education implements treatments to stabilize and rehabilitate the site's historic structures. Future uses would likely include variety of educational programs, athletic programs, community activities, and special events. NPS and partners would offer interpretive programs and tours of the site and establish physical and programmatic connections to cultural and special events in the park. NPS would offer technical assistance regarding treatment of the stadium's historic structures and development of interpretive media and programs to enhance public understanding of the stadium's historic significance. As budget and staffing allow, technical assistance would generally include professional staff time, research, grant writing and assistance with obtaining funding for projects.

FIGURE 2.2 Management Areas

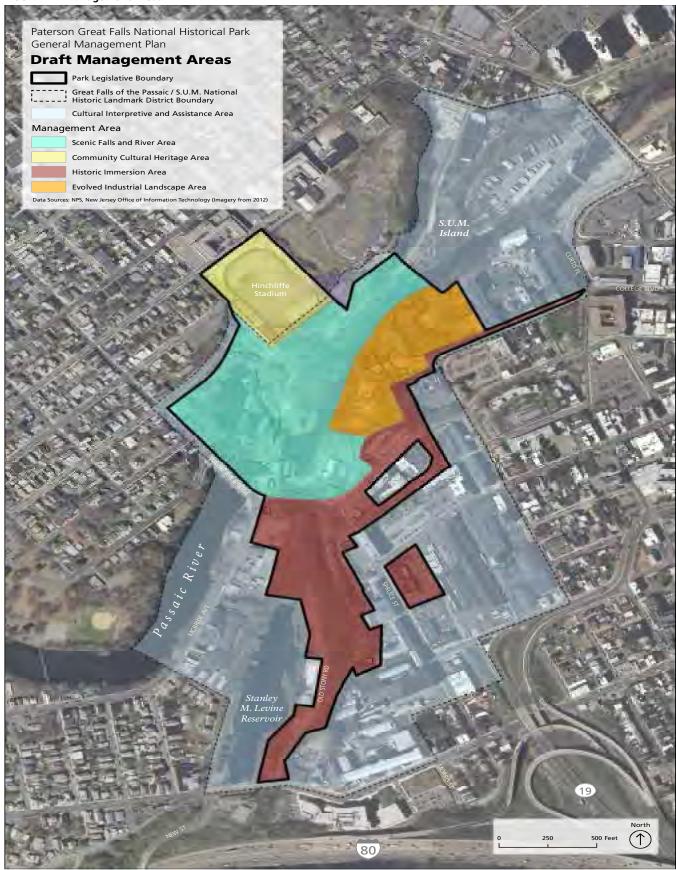


Table 2.2 Management Areas (common to alternatives B and C)

Scenic Falls and River Area

Vision for this park area

Public open spaces overlooking the Passaic River enable visitors to experience dramatic views of the Great Falls, Passaic River chasm, and downstream riparian forest. Visitors feel the power of the river that helped fuel America's early manufacturing economy as they explore the overlook area and the river corridor, engaged in a variety of activities.

Natural Resource Conditions

Natural resources are the focus of distinct visitor opportunities and experiences in a variety of natural and designed park settings. Natural suitability of park settings guides decisions as to where visitor opportunities, services and facilities are located. Some natural areas are preserved and protected from visitor use impacts.

Native vegetation is preserved where possible. Visitor use areas are managed to minimize potential impacts to adjacent native vegetation. Native wildlife and wildlife habitat are protected from visitor use impacts. Species tolerating high levels of visitor use may be desired in developed areas.

Complete/green street design concepts are implemented to help manage stormwater runoff and reduce impervious surface coverage.

Green stormwater infrastructure is explored to reduce runoff and help mitigate impacts from storm events.

Cultural Resource Conditions

Historic structures, sites and cultural landscapes are preserved or rehabilitated to protect their scenic qualities and historic characteristics.

Historic structures are preserved or rehabilitated for adaptive reuse for park operations and administration purposes.

Cultural landscapes are managed to preserve their physical attributes. Some elements of the cultural landscape are rehabilitated for visitor use/education or park and partner administration while preserving features that convey historical, cultural or architectural values.

Visitor Experience/ Opportunties

A wide variety of interpretive, education and recreation opportunities appeal to diverse visitors—including first time visitors, repeat visitors, and local residents who routinely visit the park.

Visitors enjoy outstanding scenic views of natural and cultural resources. Other activities include picnicking, walking, hiking, biking, fishing, sightseeing, photography, artistic endeavors, bird and wildlife viewing, nature study, research and stewardship activities, and others.

Visitors have opportunities to explore the Great Falls, the Passaic River chasm, and riparian forest through guided and self-guided tours.

NPS and Partners offer educational programs for visitors of all ages, on a variety of subjects related to the park's interpretive themes, with a focus on stories related to the Great Falls.

Stewardship programs offer opportunities for visitors and community members, particularly youth, to gain an understanding of the importance of the park's resources and their stewardship needs.

Outdoor special events, hosted by the NPS partners and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events.

Historic Immersion Area

Vision for this park area

Historic structures and cultural landscapes reflect their historic appearance and use. Visitors see examples of technological innovation that supported Paterson's industry and manufacturing, and learn about the economic vision that shaped America through interpretive media and educational programs.

Cultural Resource Conditions

Historic structures, sites and landscapes are preserved or rehabilitated to reflect their period of significance. New uses are compatible with historic character, allowing people to experience these resources firsthand and learn about their associated stories and events.

Historic structures are preserved or rehabilitated based on their historic significance, condition, interpretive value and potential for adaptive reuse.

Cultural landscapes are rehabilitated for contemporary use while preserving features that convey historical, cultural or architectural values

Natural Resource Conditions

Preservation of cultural resources predominates over preservation of natural resource values.

The natural elements of cultural landscapes and historic settings are managed to maintain the historic scene and to protect and preserve cultural resources and their associated values and characteristics.

Native vegetation is preserved in conjunction with cultural resource management. Existing designed vegetation communities may be maintained to support cultural resource characteristics. Other existing vegetation may be maintained if it tolerates high levels of visitor use. Visitor use areas are managed to minimize potential impacts to adjacent native vegetation.

Selective vegetation management maintains views that contribute to cultural landscapes.

Native plants are used for new landscaping, to the maximum extent possible.

Complete/green street design concepts are implemented to help manage stormwater runoff and reduce impervious surface coverage.

Green stormwater infrastructure is explored to reduce runoff and help mitigate impacts from storm events.

Visitor Experience/ Opportunties

Visitors explore the park's history immersed in its historic setting, having direct contact with historic buildings, sites and cultural landscapes that are evocative of the park's period of significance.

Visitors learn about the park's history through guided and self-guided tours of the park's historic sites and structures, programs, special events, architecture study, photography, and artistic endeavors.

NPS and Partners offer educational programs for visitors of all ages on a variety of subjects related to the park's interpretive themes, with a focus on stories related to the raceways, and the NHL district.

Special events, hosted by the NPS, partners and others, include lectures, presentations, exhibits, performances and other events held at the park's historic sites and structures.

Development of visitor facilities includes sensitive rehabilitation of historic sites and structures and may include contemporary visitor facilities if they are blended into the historic fabric of the site.

Table 2.2 Management Areas (common to alternatives B and C) continued

Evolved Industrial Landscape Area

Vision for this park area

The industrial landscape and historic structures supports contemporary uses. Visitors participate in a variety of activities and special events while they explore places where Americans worked in the planned manufacturing city.

Cultural Resource Conditions

Historic structures are stabilized, preserved or rehabilitated for adaptive reuse based on whether they are fundamental park resources, their historic significance, condition, interpretive value and potential for adaptive reuse. Historic structures in ruinous condition may be documented and removed if determined unsafe, or if their interpretive value does not support preservation.

The industrial landscape is rehabilitated for contemporary use while preserving features that convey historical, cultural or architectural values.

Natural Resource Conditions

Water quality in the Passaic River is improving in accordance with water quality management goals for the Passaic River watershed.

Hazardous soil conditions are remediated to support safe use of historic structures for adaptive reuse by partners and others, and to enable safe public use for outdoor passive recreation.

Complete/green street design concepts are implemented to help manage stormwater runoff and reduce impervious surface coverage.

Green stormwater infrastructure is explored to reduce runoff and help mitigate impacts from storm events.

Native plants are used for new landscaping, to the maximum extent possible

Exotic plants are removed.

Visitor Experience/ Opportunties

Visitors enjoy passive recreation opportunities within a rehabilitated industrial landscape. Activities include picnicking, walking, hiking, biking, sightseeing, and others.

Visitors have opportunities for guided and self-guided tours.

Outdoor and indoor special events, hosted by the partners and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events.

A variety of commercial services may be available including food and beverage services, recreation instruction, tours, retail stores, and overnight accommodations.

Visitor facilities include a blend of historic and compatible contemporary structures to support visitor uses and services.

Stewardship programs offer opportunities for visitors and community members, particularly youth, to gain an understanding of the importance of the park's resources and their stewardship needs.

Outdoor special events, hosted by the NPS, partners and others, offer visitors opportunities to experience the park during themed activities, community celebrations, and family events.

Table 2.2 Management Areas (common to alternatives B and C) continued

Community Cultural Heritage Area

Vision for this park area

Rehabilitated historic structures and cultural landscapes associated with Hinchliffe Stadium support a variety of educational programs, athletic programs, community activities, and events celebrating Paterson's history and the diverse cultural heritage and interests of its residents.

Cultural Resource Conditions

Historic structures are rehabilitated for historic uses or adaptive reuse to support contemporary uses.

Cultural landscapes are rehabilitated for contemporary use while preserving features that convey historical, cultural or architectural values.

Visitor Experience/ Opportunties

Outdoor special events and programs, hosted by NPS, the partners and others, offer visitors opportunities to experience a variety of themed activities, community celebrations, and athletic events.

NPS, partners and others offer a variety of educational and athletic programs, with a focus on youth.

Visitors have opportunities for guided and self-guided tours of the Hinchliffe Stadium site.

A variety of commercial services may be available including food and beverage services, recreation instruction, tours, and retail stores.

Alternative B: Landscape Exploration

Overview

Alternative B is comprised of four parts: the management and interpretive framework; management goals and actions common to both alternatives B and C; management area descriptions; and the alternative B description on the following pages. The information presented in these four sections form the entire alternative B.

In alternative B visitors would actively explore the entire park, enjoying its natural resources and cultural landscapes for contemporary recreational pursuits while learning about how those resources fueled America's early industrial development. A multisensory experience would highlight connections among the natural world, the power of the falls and the Passaic River, and Paterson's innovative role in the evolution of American industry and manufacturing. Natural and cultural landscapes would offer enhanced opportunities for scenic views, recreation, learning through interpretive and educational programs, and community building through special events.

Expanded visitor facilities and interpretive programming within the scenic falls and river area would encourage a wide range of visitor activities focused on actively exploring the Passaic River corridor. The park's primary visitor contact station would be located in a rehabilitated historic structure in Overlook Park. The setting and exteriors of historic structures associated with hydropower production would be preserved and maintained in good condition. Natural resource management would focus on water quality management, protection of geologic resources, preservation of the riparian forest, and protection of scenic views.

Learning about the raceway system that delivered water from the Passaic River to power Paterson's industrial complex would be the focus of the visitor experience in the historic immersion area. The upper, middle and lower raceways would be preserved and re-watered for interpretation. Preservation of building exteriors and the historic district landscape would retain the historic character of the area.

The former ATP site would be rehabilitated as a community recreation area and provide greater access

to the Passaic River for activities such as fishing. Green space, gardens, paths and innovative interpretive areas would be developed for fun, physical activity, relaxation

and events. The Colt Gun Mill would be preserved and select features of remaining structures would be made safe and preserved as landscape features reflecting the site's industrial history.

Table 2.3 Alternatives B: Landscape Exploration

Scenic Falls and River Area
Overlook Park, The Landing, Mary Ellen Kramer Park, Maple Avenue Parkland and Valley of the Rocks

Key Ideas

- promotes multi-sensory experience—see/hear/feel power of river
- creates more access—into chasm, cliff top views, edge of river, base of cliffs
- expands community gathering space and viewing areas
- improves paths and circulation up, down and across the river
- provides visitor contact, services, and park offices near Falls area

Visitor Experience

Access to the Great Falls and River

Sites near the waterfall and chasm rim would be improved and serve as a gateway to the river, offering scenic views and sounds of the falls and flowing water.

The pedestrian bridge over the waterfall and chasm would enable visitors to feel the river spray, hear the roaring water and observe the geologic features up close.

A network of improved rim trails, rim-to-river trails, and riverside trails would be developed and invite visitors to experience the river and the Great Falls from different perspectives.

Improved walking routes into portions of the Valley of the Rocks would provide visitors with a natural experience and access to the riverbank. Physical linkages across the river to ATP or other sites would be explored.

New areas for river access would be explored including a new put-in for canoes/kayaks below Mary Ellen Kramer Park and a portage trail around the Great Falls for paddlers coming off the river above the falls at the proposed McBride Avenue take-out.

Activities and Recreation

A variety of activities would be encouraged including picnicking, walking, hiking, biking, fishing, sightseeing, photography, artistic endeavors, bird and wildlife viewing, nature study, research and stewardship activities.

The park setting would be enhanced to provide opportunities for quiet, relaxation and contemplation of the falls and river.

Park sites would accommodate special activities, events, recreational programs and community celebrations that complement park themes and purpose.

Circulation Between Park sites

Improved sidewalks, signage, and landscaping along city streets and in the park would enhance the walking environment between sites.

New physical connections between park sites would be created to promote a seamless walking experience from neighborhoods, the historic district and opposite sides of the river.

Bicycle and pedestrian linkages to adjoining city neighborhoods, to Garrett Mountain, and to the Morris Canal Greenway would be developed.

Scenic Falls and River Area Overlook Park, The Landing, Mary Ellen Kramer Park, Maple Avenue Parkland and Valley of the Rocks

Interpretive and Education Programs

Interpretive and educational programming would emphasize protection of the natural resources associated with the Great Falls and Passaic River—the river corridor's geologic formations, vegetation, hydrology and wildlife, as well as man's evolving use of the Passaic River, from its historical use by American Indians through its industrial use today.

Public education programs would focus on the outdoor classroom and encourage self-directed learning opportunities, making use of new outdoor classroom spaces created throughout the area.

Orientation

As the most heavily used point of arrival for new visitors and the most heavily visited area by local users, a new visitor contact area would be developed in Overlook Park and offer indoor program space, outdoor gathering site, new exhibits, and visitor amenities.

A variety of activities would be encouraged including picnicking, walking, hiking, biking, fishing, sightseeing, photography, artistic endeavors, bird and wildlife viewing, nature study, research and stewardship activities.

The park setting would be enhanced to provide opportunities for quiet, relaxation and contemplation of the falls and river.

Park sites would accommodate special activities, events, recreational programs and community celebrations that complement park themes and purpose.

Viewing Areas

Throughout the falls area, enhanced viewing areas and small program spaces would be created for better views of the Great Falls, historic arch bridge and structures.

Selected trimming of vegetation would maintain views of the Great Falls, the Passaic River chasm, downstream riparian forest, and adjoining cultural landscapes within the park and the NHL district.

Cultural Resource Management

Historic Structures and Setting

The setting and exteriors of the area's historic structures including hydropower plant, Great Falls Development Corp building, the Passaic Water Company Falls pumping station and historic arch bridge, would be preserved and maintained in good condition.

The S.U.M. dam and Ryle dam would be stabilized and their functional relationship to water flow of the Great Falls maintained.

Historically compatible fencing such as wood and iron fences, and appropriate lighting would be used to improve visibility, safety, and security.

Adaptive Reuse

The S.U.M. administration building would be rehabilitated for visitor services or additional park administrative offices. Options for new uses would be explored for the S.U.M. steam plant foundation, such as a visitor contact center.

Table 2.3 Alternatives B: Landscape Exploration continued

Historic Immersion Area Raceway System, Rogers Locomotive Building and Historic Landscape

Key Ideas

- preserves raceways in park boundary (with water
- improves and interprets Upper Raceway Park landscape
- promotes self-exploration of middle and lower raceways
- improves paths and walking experience
- preserves Ivanhoe Wheelhouse, Gatehouse, Rogers Locomotive and Historic District

Visitor Experience

Access to the Historic District

A new trail adjacent to the raceways and city streets through the historic district would be developed to provide opportunities to view and access the historic features and structures of the raceway system.

Activities and Recreation

Visitors learn about the park's history through guided and self-guided tours of the park's historic sites and structures, programs, special events, architecture study, photography, and artistic endeavors.

Special events, hosted by the NPS, partners and others, include lectures, presentations, exhibits, performances and other events held at the park's historic sites and structures.

A visit to the Paterson Museum to see the objects and artifacts associated with Paterson's manufacturing history and innovations would be encouraged for visitors. Information on the museum would be included on visitor itineraries of the park, with signage directing park visitors between the museum and other park areas.

Interpretation and Education

Learning about the raceway system that delivered water from the Passaic River to power Paterson's industrial complex would be the focus of the visitor experience in the historic immersion area.

The park offers educational programs for visitors of all ages on a variety of subjects related to the park's interpretive themes, with a focus on stories related to the raceways, and the NHL district.

Wayside exhibits, signage and other interpretive media would help visitors understand the history and function of the raceway system.

Cultural Resource Management

Historic Structures and Setting

The Rogers Locomotive building and the Ivanhoe Wheelhouse would be preserved or rehabilitated to accommodate additional exhibit space or programs, as needed. The exterior of both buildings would be maintained as key elements of the surrounding historic district. Other historic buildings in disrepair, such as the gatehouse, would be stabilized as interpreted features.

Raceways

The upper, middle and lower raceways would be preserved and re-watered and used for interpretation. Prior to re-watering, studies would be completed to ensure the raceways could function properly.

Hydrologic studies would identify whether Passaic River water levels, adjacent stormwater volume, etc., are of sufficient volume to support re-watering, and to mitigate the potential for standing water.

The upper tailrace/upper raceway and the Ivanhoe Wheelhouse, would provide an example of a largely intact section of the raceway system which visitors would view while walking existing trails in the city's Upper Raceway Park.

Table 2.3 Alternatives B: Landscape Exploration continued

Evolving Industrial Landscape Area Allied Textile Printing Site

Key Ideas

- transforms ATP site into community recreation area
- stabilizes select ATP ruins and structures as a backdrop for recreation, interpretation, visitor services
- protects views of industrial landscape at ATP site and Historic District

Visitor Experience

Access

The former ATP site would be rehabilitated as a recreation area where local residents and visitors could participate in a variety of activities and special events and have greater access to the Passaic River

Structures and ruin foundations would function as major interpretive features, providing visitors with a basic understanding of the size and scale of the historic industrial scene within a new park context. They would be interpreted from the exterior, with no interior visitor access.

An information kiosk would provide orientation to the park. Visitors would explore the area on their own or participate in tours led by rangers or docents. Waysides would provide site interpretation.

Activities and Recreation

Green space, gardens, parking area, and restrooms, as well as areas for informal gatherings, interpretive programs, outdoor classrooms, and special events would be developed and offer visitors opportunities to experience the park during themed activities and community celebrations

Visitors would enjoy recreation opportunities such as picnicking, walking, hiking, biking, sightseeing, and fishing. New visitor services, such as equipment rentals, food and beverage, and guided tours, would be developed to complement recreation activities.

Circulation between Park Sites

New outdoor spaces would be located adjacent to the Passaic River, tying into the River Walk and enabling visitors who so desire to hike to Overlook Park.

New sidewalk connections would enable visitors and residents to walk to the park from the adjoining city neighborhoods and historic district.

Interpretation and Education

Interpretive and education programs would explore the continuum of industrial use at the ATP site and its transformation into a community recreation space. Visitors would learn about the historic structures and their stories, especially the Colt Gun Mill.

Cultural Resource Management

Historic Structures and Setting

The Colt Gun Mill would be preserved and select features of remaining structures would be made safe and preserved as landscape features reflecting the site's industrial history.

Foundations that retain structural integrity would remain; structural remains would be easily maintained and resilient to intense storm events, and would allow for visitor use.

Historic structures in ruinous condition would be documented and removed. This would generally include removal of deteriorated, unstable and hazardous components of the existing mill ruins to facilitate movement of visitors through the site.



Alternative C: Industrial Heritage Immersion

Overview

Alternative C is comprised of four parts: the management and interpretive framework; management goals and actions common to both alternatives B and C; management area descriptions; and the alternative C description on the following pages. The information presented in these four sections form the entire alternative C.

In alternative C visitors would be encouraged to start their experience in the national historic landmark district and then actively explore the entire park with a focus on learning about its industrial history. The learning experience would highlight the national significance of Paterson's history beginning with the city's founding as part of Alexander Hamilton's vision for American economic independence and innovation, and continuing through today. Rehabilitated historic structures and cultural landscapes, together with the Great Falls and the Passaic River, would provide the setting for expanded interpretive experiences, educational programs, visitor services, and special events that celebrate history.

Interpretive programming in the scenic falls and river area would encourage visitors to explore the site in its historic context as a source of water power harnessed by technology to fuel American industry, beginning with the raceway technology to support Alexander Hamilton's vision for America's first planned industrial

and evolving to today's hydro-electric plant. Historic structures would be preserved and opportunities to tour interior spaces and explore the industrial setting would be expanded.

The raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city would be the focus of the visitor experience in the historic immersion area. NPS and partners would explore options to rehabilitate and re-water all elements of the raceway system as a functional historic raceway landscape, where feasible. Visitors would explore the raceway system via a new landscaped raceway walk, beginning at the upper raceway gatehouse intake on the Passaic River and continuing to the lower raceway tailrace discharge into the river. Natural areas in Upper Raceway Park and in areas adjacent to rehabilitated elements of the raceway system would be enhanced through removal of invasives and replanting with native plant species.

Collaborative efforts of NPS and partners would rehabilitate the former ATP site as an industrial history park—a destination for experiencing the continuum of industrial uses and Paterson innovation. The Colt Gun Mill would be rehabilitated and portions of select mill factories and ruins would be stabilized, where possible, for interpretive purposes and other visitor uses. New areas for picnicking, scenic viewing and other compatible recreation activities as well as visitor amenities such as a café, gathering space, and parking would be explored.

Table 2.4 Alternative C: Industrial Heritage Immersion

Scenic Falls and River Area

Overlook Park, The Landing, Mary Ellen Kramer Park, Maple Avenue Parkland and Valley of the Rocks

Key Ideas

- improves existing viewing areas at Falls
- protects unobstructed industrial views from vistas and within park areas
- improves circulation between Falls and Historic District
- provides limited visitor services near the Falls area

Visitor Experience

Access to the great Falls and river

The pedestrian bridge over the waterfall and chasm would remain as the primary access point to enable visitors to observe the falls and geologic features.

Existing walking paths into portions of the Valley of the Rocks would continue to provide local users with a natural experience and access to the riverbank.

Activities and Recreation

The current park setting would remain and continue to provide opportunities for quiet, relaxation and contemplation of the falls and river.

Many of the traditional park activities such as picnicking, walking, fishing, sightseeing, photography, artistic endeavors, and bird and wildlife viewing, would continue to attract both local users and new visitors.

Special activities and events that showcase the historic setting and complement park themes would continue including hands-on educational programs, art shows, and cultural celebrations in the Great Falls area.

Circulation between Park Sites

Improved physical connections between falls area, historic district and related industrial history sites would be created to enhance the visitor's understanding of the cultural and industrial landscape.

Interpretation and Education Programs

Interpretive and educational programming would emphasize the evolution of industrial hydropower using tangible remaining historic resources related to Paterson's industrial history, including buildings, building remnants and other cultural landscape features.

Expanded interpretive programming in the scenic falls and river area would encourage visitors to explore the site in its historic context as a source of water power harnessed by technology to fuel American industry, beginning with the raceway technology to support Alexander Hamilton's vision for America's first planned industrial and evolving to today's hydroelectric plant

Viewing Areas

Sites near the waterfall and chasm rim would be continue as the primary observation area, offering scenic views and sounds of the falls and flowing water.

New observation areas would provide unobstructed views from vistas within the park to the falls, mill buildings within the Historic District, and to other sites, such as Hinchliffe Stadium, and enhance the visitor experience.

Table 2.4 Alternative C: Industrial Heritage Immersion continued

Scenic Falls and River Area

Overlook Park, The Landing, Mary Ellen Kramer Park, Maple Avenue Parkland and Valley of the Rocks

Cultural Resource Management

Historic Structures and Setting

The setting and both interiors and exteriors of the area's historic structures including hydropower plant, Great Falls Development Corp building, the Passaic Water Company Falls pumping station and historic arch bridge, would be preserved and maintained in good condition. Expanded access by special tours would enable visitors to observe the functioning hydroelectric and water distribution systems.

The S.U.M. dam and Ryle dam would be stabilized and their functional relationship to water flow of the Great Falls maintained.

Adaptive Reuse Views

Options for use of the S.U.M. administration building and steam plant foundation would explored to support partner needs, provide limited visitor amenities such as bathrooms, or other park needs such as storage. The structures would continue to be stabilized, preserved, or rehabilitated depending on future uses.

Views

Unobstructed views to mill buildings within the park and NHL district would be preserved to enhance visitor understanding of the connections between the natural and cultural components of the industrial system.

Selected trimming of vegetation would maintain views of adjoining cultural landscapes within the park and the NHL district

Historic Immersion Area

Raceway System, Rogers Lomotive Building and Historic Landscape

Key Ideas

- rehabilitates raceway system (includes all structures/water) throughout the Historic District
- provides visitor orientation, services and park offices in Historic District
- dedicated raceway trail established along its length (beginning to end) with improved landscaping, interpretive signage and other media, programs along entire length with formal access points

Visitor Experience

Access to the Historic District

Visitors would use the raceway system via a new landscaped raceway trail to access sites throughout the NHL district beginning at the upper raceway gatehouse intake on the Passaic River and continuing to the lower raceway tailrace discharge into the river.

Many of the public and private historic buildings are open and accessible to visitors for special events, programs and educational activities.

Activities and Recreation

Visitors learn about the park's history through expanded tours of the NHL's historic sites and structures, programs, special events, architecture study, photography, activities, research hands-on stewardship and preservation and artistic endeavors.

Presentations, exhibits, performances and other events focus on Paterson's industrial heritage and innovations.

Table 2.4 Alternative C: Industrial Heritage Immersion continued

Historic Immersion Area Raceway System, Rogers Lomotive Building and Historic Landscape

Interpretive and Education

The raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city would be the focus of the visitor experience in the historic immersion area.

Visitors would learn about stories and events from Paterson's industrial past, from Hamilton's vision for the establishment an industrial city to the immigrant mill workers who made Paterson their home. Visitors would engage with an array of interpretive exhibits, demonstrations of industrial life, and models of industrial production.

The Paterson Museum would be rehabilitated to accommodate additional exhibits. featuring the park's themes and stories..

Orientation

Visitors are directed to the historic district to begin their park experience. The park's primary visitor contact station would be shared with partners in a rehabilitated historic structure in the NHL district. At the contact station visitors would be oriented to the park and exhibits would offer an introduction to the park's history and significance.

Cultural Resource Management

Historic Structures and Setting

The Rogers Locomotive building and the Ivanhoe Wheelhouse would be preserved or rehabilitated to accommodate additional exhibit space or programs, as needed. The exterior of both buildings would be maintained as key elements of the surrounding historic district. Options to adaptively reuse a building within the historic district for park administrative space would be explored.

Raceways

NPS and partners would explore options to rehabilitate and re-water all elements of the raceway system as a functional historic raceway landscape, where feasible, including the upper raceway, middle raceway, lower raceway, middle tailrace, dams, gates, wheelhouses, and other elements. Restoration of some missing system elements would be considered, such as the north gates, waste way timber sluice and gatehouse, and the middle raceway gatehouse.

Rehabilitation would likely involve replacement, removal and/or repair of historic materials, and would require a focused approach to accommodate the flow of water in and out of sections of the raceway system. Investigations would more fully determine the condition of the raceways in some areas and provide understanding as to how to move water through individual mill race and water power components.

Table 2.4 Alternative C: Industrial Heritage Immersion continued

Evolving Industrial Landscape Area Allied Textile Printing Site

Key Ideas

- develops ATP site as an industrial history park
- stabilizes/preserves/rehabilitates ATP site including river wall, Colt Gun Mill, ruins, smokestack, foundations, landscapes

Visitor Experience

Access

The former ATP site would be rehabilitated as an industrial history park and serve as a destination for experiencing the continuum of industrial uses and Paterson innovation.

New accessible circulation features would enable safe access for visitors close to and within the stabilized ruins and rehabilitated buildings.

Activities and Recreation

Art installations, exhibits and innovative media would showcase new and emerging technology and innovations.

New areas for picnicking, scenic viewing and other compatible recreation activities as well as visitor amenities such as a café, gathering space, and parking would be explored

Circulation between Park Sites

Existing historic circulation systems would be stabilized, repaired or replaced as necessary for visitors to experience the buildings, structures and views, as well as to access viewpoints along the Passaic River and the Passaic River Walk. New physical connections would link visitors to the NHL district.

Interpretive and education programs would explore the continuum of industrial use at the ATP site and its transformation into a community recreation space. Visitors would learn about the historic structures and their stories, especially the Colt Gun Mill.

Interpretation and Education

Interpretive signage, publications and programs would provide an understanding of a typical mill facility on site. Exhibits would be both outdoors and indoors.

Historic structures in ruinous condition would be documented and removed. This would generally include removal of deteriorated, unstable and hazardous components of the existing mill ruins to facilitate movement of visitors through the site.

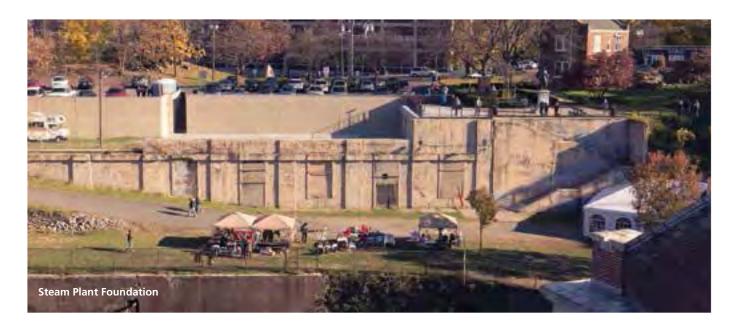
Cultural Resource Management

Historic Structures and Setting

The Colt Gun Mill would be rehabilitated and portions of select mill factories and ruins would be stabilized, where possible, for interpretive purposes and other visitor uses.

Historic structures in ruinous condition would be documented and demolished if determined unsafe, or if their interpretive value would not support stabilization.

The industrial landscape would be rehabilitated and portions of the mill structures and foundations used for interpretative purposes.



Consideration of Boundary Adjustments

Federal law directs the NPS to evaluate the need to adjust a park's boundary when a GMP is undertaken. The criteria for potential boundary adjustments state that boundary adjustments may be recommended for the following purposes, namely to:

- Protect significant resources and values, or enhance opportunities for public enjoyment related to park purposes.
- 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.
- Otherwise protect park resources that are critical to fulfilling park purposes.

All recommendations for boundary changes must be feasible to administer, considering their size, configuration, and ownership; costs; the views of and impacts on local communities and surrounding jurisdictions; and other factors such as the presence of hazardous substances. Other alternatives for management and resource protection must have been assessed and judged to be not adequate.

Boundary adjustments can only be made by law with the approval of Congress. In the 2009 authorizing legislation for Paterson Great Falls NHP, Congress specified the boundary of the park and identified specific properties to be included within the boundary (appendix A). During the GMP process, NPS and the federal advisory commission discussed the potential for Hinchliffe Stadium and other properties in the NHL district to be analyzed as an addition to the park's legislative boundary. The Hinchliffe Stadium Heritage Act was introduced in Congress in 2013 and the law amending the park's legislative boundary to include the stadium site was signed in December 2014. Other properties in the NHL district would not be feasible to administer and were dismissed from consideration. Therefore, the GMP does not identify a need for a boundary adjustment.

Alternatives Considered but Dismissed

Alternative D Cultural Connections

In January 2013, NPS presented three action alternatives to the federal advisory commission for discussion and recommendations. The planning team decided to eliminate what had been alternative D titled "Cultural Connections" described in the chart on page 77. The decision to dismiss alternative D stemmed from a lack of interest/support in the alternative and redundancy in key elements. Although the alternative was dismissed, it should be noted that certain ideas from alternative D were incorporated into both alternatives B and C.

Alternative D: Cultural Connections

Concept

The diversity of talents, experience, and of creativity of Paterson's immigrants and industrial leaders are the focus of this alternative. Visitors would learn about Paterson's people and their influence on America's industrial and labor history through direct experience, exploration, and immersion in the Paterson Great Falls National Historic Landmark District, city neighborhoods and adjacent county areas.

This alternative looks beyond the immediate park boundary with thematic linkages to other sites in the region to help tell the broader Paterson story and stimulate heritage tourism.

Overview

The Great Falls area would serve as the centerpiece for a larger regional initiative to promote the natural, historical, and cultural resources and stories of Paterson and Passaic County. A variety of opportunities to view and experience the Great Falls would be developed with additional thematic and physical connections along the Passaic River and other places in Paterson. Information about the range of activities offered throughout the park, NHL district, city and county would be provided in shared visitor facilities with partners.

Key efforts would include connecting park sites to nearby communities through various information, outreach, and volunteer programs. The addition of new signs, trailhead parking, and trails will help visitors find their way to various sites.

The raceway system would be preserved and a formal walking trail established along its length, where feasible. Wayside exhibits, signage and other interpretive media would be developed to help visitors understand the history of the system.

The ATP site would be an area centered on natural, historical and cultural interpretation, activities and celebration. Select ruins and structures would be stabilized for interpretive purposes or used for visitor services. A trail system throughout the site connects with Overlook Park, Valley of the Rocks, the historic district and other city and regional trail networks. New areas for picnicking, gardens, viewing areas, boating and other recreational activities as well as visitor amenities such as a café, gathering space, parking, and benches would be developed.

This alternative relies upon partnerships with others to offer a full range of resources to benefit the public. Visitor services, such as classroom space and restrooms, would be provided through partnerships. Public education programs would be site based within and outside of the park boundary.

NPS would be primarily responsible for landscape improvements and maintenance, interpretive programs/ media and education programs in the Great Falls area. The NPS would work with partners to provide interpretive and educational material, exhibits, and web-based programming. In addition, the park would be highly involved in developing promotional materials, tours, and participating in events and heritage tourism planning initiatives with partners.

User Capacity

User capacity is one statutory requirement for the GMP established in the 1978 National Parks and Recreation Act. The act called for the identification and implementation of commitments for visitor carrying capacities. The NPS General Management Plan

Sourcebook (2008a) explains that planners have found that "user capacity" is a more appropriate term than visitor carrying capacity because it conveys the concept that capacity is applicable to all park users, including local residents. The NPS defines user capacity as the type and level of use that can be accommodated while

sustaining the desired resource conditions, social conditions, and visitor experiences consistent with the purposes of the park. The approach to user capacity is now focused on measuring the success at achieving and maintaining desired resource conditions and visitor experiences as affected by people's use of the parks. The NPS does not solely track and control user num-

bers, but instead manages the levels, types, behaviors, and patterns of visitor use and other public uses as needed to control the condition of the resources and the quality of visitor experiences.

The GMP planning process requires the development of a monitoring system to test the effectiveness of the management actions taken by identifying indicators and

Table 2.6 User Capacity Indicators and Standards

Indicators	Standards
Evidence of persistent and/or prohibited use of closed and/or restricted areas.	The condition of key recreation sites will be maintained in "good condition" Site condition assessment- rating of good, fair, poor based on site size, ground cover loss, damaged trees, amount of litter/ waste.
Water quality	Bacteria and pollutant density does not exceed NJ standards for secondary contact.
Deterioration in the condition of existing trails (e.g., widening, increased erosion, trampling) and/or development of new, non-designated informal or "social" trails	The condition of key trails will be maintained in good condition, zero tolerance for new, undesignated "social trails" measured by the square feet of undesignated or damaged trail
Documented changes in condition of cultural resources (including historic structures and cultural landscapes) from visitors and park management activities	All properties will be managed in "good condition" Change in site condition/integrity (measured through List of Classified Structures, Cultural Landscape Inventory, and ASMIS protocols) rating is good, fair, poor, considering factors such as vandalism, vehicle disturbance, commercial activities, and new developments
Degradation of natural resource conditions below baseline conditions	All properties will be managed in "good condition"
Crowding or congestion at visitor programming sites	Visitors greater than 90 percent of the time will report the number of encounters with other visitors as "low" to "moderate"

standards that gauge when or if the desired conditions have been achieved.

The foundations for making user capacity decisions in this GMP are the purpose, significance, special mandates, and management areas associated with the park. The purpose, significance, and special mandates define why the park was established and identify the most important resources and values—including visitor opportunities—that are to be protected and provided. The management areas in each alternative describe the desired resource conditions and visitor experiences, including appropriate types of activities and general use levels, for different locations throughout Paterson Great Falls. The areas, as applied in the alternatives, are consistent with, and help achieve, the specific purpose, significance, and special mandates for the park. As part of the NPS commitment to the implementation of user capacity, park staff would use these directives to guide the types and levels of visitor use that would be accommodated while sustaining the quality of park resources and visitor experience consistent with the purposes of the park.

Park staff will continue general monitoring of use levels and patterns throughout the park. In addition, park staff will monitor these user capacity indicators. The rigor of monitoring the indicators (e.g., frequency of monitoring cycles, amount of geographic area monitored) may vary considerably depending on how close existing conditions are to the standards. If the existing conditions are far from exceeding the standard, the rigor of monitoring may be less than if the existing conditions are close to or trending toward the standard.

The initial application of the indicators and standards will determine whether the indicators are accurately measuring the conditions of concern and if the standards truly represent the minimally acceptable condition of the indicator. Park staff may decide to modify the indicators or standards and revise the monitoring program if better ways are found to measure changes caused by visitor use. If use levels and patterns change appreciably, the park may need to initiate additional monitoring of new indicators to ensure that desired conditions are protected. This iterative learning and refining process is the strength

of the NPS user capacity management program, in that it can be adapted and improved as knowledge grows.

Mitigation Measures and Best Management Practices included in the Alternatives

As a part of the analysis of the GMP/EA alternatives, mitigation measures and best management practices that could further improve alternatives in protecting resources have been identified and would be Incorporated into the alternative selected as the approved GMP. Although each alternative in the GMP/ EA was designed in part to offer this protection, mitigation measures can further reduce impacts or offer greater protection of resources or values. As is true of all NPS actions, implementing the selected GMP/EA alternative must be done in a way that protects unimpaired the park's natural and cultural resources and the quality of the visitor experience under the NPS Organic Act. Mitigation can be helpful or even instrumental in ensuring that this happens. In addition, once the GMP has been approved, actions that are generally described in this draft GMP/EA may require more site-specific environmental review under NEPA and other laws before they can be implemented.

The mitigation measures described in the following table are a starting point in developing design options for these actions.



Topic Mitigation Measure and Best Management Practices

Cultural Resources

Continue to develop inventories for and oversee research about archeological, historic, and ethnographic resources to better understand and manage the resources, including historic and ethnographic cultural landscapes. Conduct any needed archeological or other resource specific surveys in compliance with NHPA Section 106, prepare national register evaluations, and identify recommended treatments. Incorporate the results of these efforts into the park's resource stewardship strategy and site-specific planning and compliance documents. Continue to manage cultural resources following federal regulations and NPS guidelines and Director's Order 24, "Museum Collections Management", Director's Order 28 "Cultural Resource Management", and NPS 28A "Archeology". Inventory the partner's museum collection related to the park and assist with keeping museum collections in a manner that would meet NPS curatorial standards and in compliance with 36 CFR 79 Curation of Federally-Owned and Administered Archeological Collections.

Follow site-specific planning and compliance procedures, in accordance with the Secretary of the Interior's Standards for Archeology and Historic Preservation. Locate projects in previously disturbed or existing developed areas to avoid or minimize adverse impacts to archeological resources. Use screening and/or sensitive design that would be compatible with historic resources and cultural landscapes and avoid development adjacent to ethnographic resources. If adverse impacts could not be avoided, these impacts would be mitigated by strategies determined through a consultation process with all interested parties.

Conduct archeological site monitoring and routine protection. Conduct data recovery excavations at archeological sites threatened with destruction, where protection or site avoidance during design and construction is infeasible. Strictly adhere to NPS standards and guidelines on the display and care of artifacts. This would include artifacts used in exhibits in the visitor center. Irreplaceable items would be kept above the 500-year floodplain.

Mitigating measures for structures and landscapes include documentation according to standards of the Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) and in accordance with the Secretary's Standards and Guidelines for Historical and Archeological Documentation. The level of this documentation, which includes photography, archeological data recovery, and/or a narrative history, would depend on significance (national, state, or local) and individual attributes (an individually significant structure, individual elements of a cultural landscape, etc.) and be determined in consultation with the state historic preservation officer, tribal historic preservation officer(s), local community (ies), and/or other interested parties. When demolition of a historic structure is proposed, and following thorough documentation, architectural elements, and objects may be salvaged for reuse in rehabilitating similar structures, or they may be added to the partners' museum collection providing the structures are not from park lands. Such structures and architectural elements will be handled as federal property consistent with NPS policy. In addition, the historical alteration of the human environment and reasons for that alteration would be interpreted to national park visitors.

Continue ongoing consultations with culturally associated groups and American Indian tribes. Protect sensitive traditional use areas as feasible by avoiding or mitigating impacts on the ethnographic resources and continuing to provide access to traditional use and spiritual areas. Mitigation could include identification of and assistance in accessing alternative resource gathering areas and screening new development from traditional use areas.

Encourage visitors through the park's interpretive programs to respect and leave undisturbed any inadvertently encountered archeological resources.

Topic Mitigation Measure and Best Management Practices

Natural Resources

To prevent water pollution during construction, use erosion control measures, minimize discharge to water bodies, and regularly inspect construction equipment for leaks of petroleum and other chemicals. Minimize use of heavy equipment in a waterway.

Build a runoff filtration system to minimize water pollution form larger parking areas.

Delineate wetlands by qualified NPS staff or certified wetland specialists and clearly mark the wetlands before construction work

Perform construction activities in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc.

Build any new facilities on soils suitable for development.

Minimize soil erosion by limiting the time that soil is left exposed and by applying other erosion control measures, such as erosion matting, silt fencing, and sedimentation basins in construction areas to reduce erosion, surface scouring, and discharge to water bodies.

Once work is completed, revegetate construction areas with native plants in a timely period.

Implement a noxious weed control program. Standard measures could include the following elements: ensure construction-related equipment arrives on-site free of mud or seed bearing material; certify all seeds and straw material are weed-free; identify areas of noxious weeds pre-construction; treat noxious weeds or noxious weed topsoil before construction (e.g., topsoil segregation, storage, herbicide treatment); revegetate with appropriate native species

Monitor areas used by visitors (e.g., trails) for signs of native vegetation disturbance – use public education, native plants to revegetate disturbed areas, erosion control measures, and barriers to control potential impacts on plants from trail erosion or social trailing.

Designate river access/crossing points, and use barriers and closures to prevent trampling and loss of riparian vegetation.

Develop revegetation plans for the disturbed are and require the use of native species – revegetation plans should specify seed/plant source, seed/plant mixes, soil preparation, etc. Salvage vegetation should be used as possible.

Employ techniques to reduce impacts on wildlife, including visitor education programs, restrictions on visitor activities, and park ranger patrols.

Implement a natural resource protection program. Standard measures would include construction scheduling, biological monitoring, erosion and sediment control, the use of fencing or other means to protect sensitive resources adjacent to construction, the removal of all food-related items or rubbish, topsoil salvage, and revegetation. This could include specific construction monitoring by resource specialists as well as treatment and reporting procedures.

Implement a dust abatement program. Standard dust abatement measures could include the following elements: water or otherwise stabilize soils, cover haul trucks, employ speed limits on unpaved roads, minimize vegetation clearing, and revegetate after construction.

Table 2.7 Mitigation Measures and Best Management Practices Included in the Alternatives continued

Topic

Mitigation Measure and Best Management Practice

Natural Resources

Mitigation actions specific to rare, threatened, and endangered species would include the following: conduct surveys for rare, threatened, and endangered species as warranted; locate and design facilities/actions to avoid adverse effects on rare, threatened, and endangered species—if avoidance is infeasible, minimize and compensate for adverse effects on rare, threatened, and endangered species as appropriate and in consultation with the appropriate resource agencies—conduct work outside of critical periods for the specific species; develop and implement restoration and/or monitoring plans as warranted – plans should include methods for implementation, performance standards, monitoring criteria, and adaptive management techniques; implement measures to reduce adverse effects of non-native plants and wildlife on rare, threatened, and endangered species.

Mitigation actions would occur during normal park operations as well as before, during, and after construction to minimize immediate and long-term impacts on rare, threatened, and endangered species. These actions would vary be specific project and area of the park affected, and additional mitigation would be added depending on the specific action and location. Many of the measures listed above for vegetation and wildlife would also benefit rare, threatened, and endangered species by helping to preserve habitat.

Visitor Use, Experience

Implement a traffic control plan, as warranted. Standard measures include strategies to maintain safe and efficient traffic flow during the construction period.

Visitor safety concerns would be integrated into interpretive and educational programs. Directional signs would continue to orient visitors, and education programs would continue to promote understanding among visitors.

Implement measures to reduce adverse effects of construction on visitor safety and experience.

Implement an interpretation and education program. Continue directional signs and education programs to promote understanding among park visitors.

Conduct an accessibility study to understand barriers to park programs and facilities—based on this study, implement a strategy to provide the maximum level of accessibility.

Transportation and Access

When the parking lots, or other park sites, where space is often inadequate fill, redirect traffic elsewhere to avoid exceeding the site's carrying capacity, as directed by NPS Management Policies 2006 (NPS 2006a).

Socioeconomics

During the future planning and implementation of the approved management plan for the park, NPS and partners would work with local communities to further identify potential impacts and mitigation measures that would best serve the interests and concerns of both the park and the local communities.

Partnerships would be pursued to improve the quality and diversity of community amenities and services.

Cost Comparison of Proposed Alternatives

Overview

Cost Share Provision

As described in section (d)(2) of the park's enabling legislation (appendix A), the general management plan will include provisions that identify costs to be shared by the Federal Government, the State, and the City, and other public or private entities or individuals for necessary capital improvements to, and maintenance and operations of, Paterson Great Falls NHP.

The future costs of implementing each of the alternatives were considered as part of the planning process, and are based on a collaborative partnership vision for supporting the park's future. Future costs would encompass the planning, design, construction, rehabilitation, or adaptive use of historic structures and landscapes, natural areas, visitor orientation, recreation and education facilities, parking areas, and other visitor services. In estimating the costs of the alternatives, different types of costs are taken into account, including one-time and capital costs and annual operating programs, technical assistance and maintenance costs.

Conceptual costs of the alternatives are presented to illustrate the order of magnitude of costs, allowing the comparison of the value of ideas with the cost to implement. NPS and industry cost estimating guidelines were used to develop the costs (in 2014 dollars) as well as partner plans and studies to the extent possible. These conceptual cost estimates are presented in tables 2-8 to 2-II. These estimates are not used for budgeting purposes. Once a plan has been approved, specific costs would be determined in subsequent more detailed planning and design exercises. More specific estimates would also consider the design of facilities, the identification of detailed resource protection needs, and changing visitor expectations. Actual costs to the NPS and partners will vary depending on if and when the actions are implemented, and on contributions by NPS, partners and volunteers.

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

Annual Operating Costs of Programs, Technical Assistance and Maintenance

Annual Operating Costs are shown for the NPS share of park operations only. Partner operating costs are not shown because of the many current unknowns about the scope, extent and costs of partner operations. Annual Operating Costs are defined as the total costs per year for various park programs, technical assistance, resource management, facility operations and maintenance/repair of the park, including fixed costs, utilities, supplies, staff salaries and benefits, contracted services, and emergency repairs. This is an annual average cost derived from a twenty (20) year life cycle projection of requirements.

For purposes of this GMP, NPS estimated average annual costs for alternative A in greater detail than the other two alternatives because more detailed operational and condition information was available. This cost estimate is common to and incorporated into all other alternative cost estimates. These specific areas include the Welcome Center, Overlook Park, the Landing, Mary Ellen Kramer Park and the Maple Street/Wayne Avenue parkland and trails where the NPS has completed the total cost of facility ownership for the buildings, structures and landscapes of these areas.

The annual NPS operating costs for alternatives B and C will be greater than those of alternative A based on the expanding programs inclusive of each alternative. For alternative A, the annual operating costs are estimated to average approximately \$562,000 (annually). Alterative B is estimated to be \$1.8 million (annually) and alternative C is estimated to be \$2.25 million (annually). NPS staffing levels will vary among the alternatives. The staffing figure (total number of FTE employees) is the number of person-years of staff required to provide visitor services, protect resources, provide technical assistance, maintain the assets of the park, and generally support park operations. The FTE number indicates NPS staff only, not volunteer and seasonal positions or positions funded by partners. FTE salaries and benefits

are included in the annual operating costs. The types and numbers of positions based upon specific park functions and programming may vary by alternative as well.

For alternative A, there are currently 3 full-time equivalent (FTE) positions authorized for the NPS. The staffing levels for alternatives B and C would be greater than alternative A and are estimated over a 20-year period to be 12 FTE for alternative B and 15 FTE for alternative C.

One-time and Capital Costs—Shared by the Federal Government, the State, and the City, and other public or private entities or individuals

This plan presents estimated one-time and capital costs for the alternatives at a range of magnitude of approximately \$4.7 million for alternative A, \$32 million for alternative B and \$48 million for alternative C. The presentation of one-time and capital costs in a general management plan is intended for alternatives comparison purposes only. Due to the degree of variation in the details required for developing the estimates, the costs are not appropriate for budgeting purposes, although they do indicate the level of investment by all entities that would be needed to implement the alternatives, and to allow comparison of the costs for each alternative.

The partnership management concept represented in this plan supports the larger partnership shared cost vision and collaborative development of future partnerships for Paterson Great Falls NHP. It acknowledges limited NPS ownership and liabilities that we are challenged with in today's constrained fiscal climate and operating realities. Developing and sustaining successful external partnerships will be key to achieving the wide ranging goals and objectives presented in Alternatives B and C, and will rely on the relative success of external partnerships and support of NPS partners to identify opportunities for implementation.

Projects are identified under two priorities. Priority I projects are considered essential: this category includes cultural resource/historic preservation studies, reports and treatments that are necessary to ensure the long-term integrity of NHL-contributing structures; as well as life, health, and safety-related projects; infrastructure and access maintenance. Priority 2 includes projects that support the visitor experience: implementation of the interpretive framework; development of signage, materials, orientation and recreation facilities; and landscape improvements for views and access.

A summary of the projects and costs by alternative are provided in tables 2-9 to 2-II.

Table 2.8 NPS Annual Operating Costs of Program Services, Technical Assistance, Maintenance and Staffing by Alternative

	Alternative A:	Alternative B:	Alternative C:
NPS Annual Costs of Operating Programs, Technical Assistance, and Maintenance Costs	\$562,000	\$1.8 million	\$2.25 million
Anticipated NPS Contributions over 20 year life cycle	\$11.2 million	\$36 million	\$45 million
Staffing (FTEs)			
Management and Administration	1	3	3
Resource Management		3	5
Interpretation and Education	2	4	5
Facilities and Maintenance		2	2
Total FTEs	3	12	15

Table 2.9 Alternative A—Summary of Projects and One-time and Capital Partnership Shared Costs

Alternative A—Summary of Projects and One-time and Capital Partnership Shared Costs	Visitor Experience & Recreation Enhancements	Resource Management	Access, Circulation & Safety Improvements
Priority 1— projects that emphasize resource protection, threats, and v	isitor safety		
Allied Textile Printing Site: stabilize river wall and create path for site access Hinchliffe Stadium: stabilize stadium Park-wide: develop an ethnographic resources overview and assessment	\$100,000	\$3,800,000	
Priority 2— projects that primarily address visitor opportunities and ex	perience		
Overlook Park: improve viewing area and access Park-wide: develop wayfinding and signage plan	\$70,000		\$750,000
OVERALL TOTAL for PRIORITIES 1 and 2—\$4,720,000	\$170,000	\$3,800,000	\$750,000

Table 2.10 Alternative B—Summary of Projects and One-time and Capital Partnership Shared Costs

Alternative B— Summary of Projects and One-time and Capital Partnership Shared Costs	Visitor Experience & Recreation Enhancements	Resource Management	Access, Circulation & Safety Improvements
Priority 1— projects that emphasize resource protection, threats, and vi	sitor safety		
Scenic Falls and River Area: c onduct research on geologic formation; develop chasm stabilization plan; conduct water quality assessment; rehabilitate steam plant foundation		\$24,200,000	\$300,000
Historic Immersion Area: develop historic structure reports; stabilize, preserve, and rehabilitate raceways and buildings			
Evolved Landscape Area: preserve Colt Gun Mill, stabilize river wall and foundations; remove mill ruins			
Community Cultural Heritage Area: stabilize Hinchliffe Stadium			
Park-wide: improve paths sidewalks and visual corridors throughout park; develop inventories and reports for archeological resources, cultural landscapes and historic structures			
Priority 2— projects that primarily address visitor opportunities and exp	periences		
Scenic Falls and River Area: develop new interpretive center; create new viewing areas and river recreation access: improve trails	\$6,600,000		\$1,200,000
Historic Immersion Area: enhance Upper Raceway Park, develop raceway trail			
Evolved Landscape Area: improve landscape for recreation, community celebrations and interpretation; create trails and river access; develop visitor services such as tours, rentals and retail			
Community Cultural Heritage Area: create interpretive and education programs and materials, design and install wayside exhibits; improve access paths from park to stadium			
Park-wide : implement wayfinding and signage plan; create long-range interpretive plan; conduct visitor use survey and study; inventory scenic resources			
OVERALL TOTAL for PRIORITIES 1 and 2—\$32,300,000	\$6,600,000	\$24,200,000	\$1,500,000

Table 2.11 Alternative C—Summary of Projects and One-time and Capital Partnership Shared Costs

Alternative C—Summary of Projects and One- time and Capital Partnership Shared Costs	Visitor Experience & Recreation Enhancements	Resource Management	Access, Circulation & Safety Improvements
Priority 1— projects that emphasize resource protection, threats,	and visitor safety		
Scenic Falls and River Area: conduct research on geologic formation; develop chasm stabilization plan; conduct water quality assessment		\$39,400,000	\$160,000
Historic Immersion Area: restore raceway system; rehabilitate Rogers Locomotive Building			
Evolved Landscape Area: rehabilitate Colt Gun Mill, preserve river wall and foundations; stabilize select mill ruins			
Community Cultural Heritage Area: stabilize Hinchliffe Stadium			
Park-wide: develop inventories and reports for archeological resources, cultural landscapes and historic structures; improve connections to Historic District;			
Priority 2— projects that primarily address visitor opportunities a	nd experiences		
Scenic Falls and River Area: rehabilitate structures for visitor services or partner uses; improve views into Historic District	\$7,125,000		\$1,200,000
Historic Immersion Area: develop trail and access for interpretation/programs along entire raceway system			
Evolved Landscape Area: transform landscape/mill ruins into industrial history park			
Community Cultural Heritage Area: create interpretive and education programs and materials, design and install wayside exhibits; improve access paths from park to stadium			
Park-wide: rehabilitate building in Historic District for visitor contact station and park offices; implement wayfinding and signage plan; create long-range interpretive plan; conduct visitor use survey and study			
OVERALL TOTAL for PRIORITIES 1 and 2—\$47,885,000			

Comparison of Alternatives

Table 2.12

Alternative A: Establishing the New National Park

Alternative B: Landscape Exploration Alternative C: Industrial Heritage Immersion

CONCEPT -

Visitors experience the park primarily through independent park exploration and passive recreation.

Primary destinations are
Overlook Park—with views
of the Great Falls and the
Passaic River—Paterson Great
Falls NHP Welcome Center, and
the Paterson Museum. Some
visitors explore the park on

trails above the falls and in

Raceway Park.

Visitors actively explore the entire park, enjoying its natural resources and cultural landscapes for contemporary recreational pursuits while learning about how those resources fueled America's early industrial development.

A multisensory experience highlights connections among the natural world, the power of the falls and the Passaic River, and Paterson's innovative role in the evolution of American industry and manufacturing.

Natural and cultural landscapes offer enhanced opportunities for scenic views, recreation, learning through interpretive and educational programs, and community building through arts and cultural celebrations. Visitors actively explore the entire park with a focus on learning about its industrial history.

A learning experience highlights the national significance of Paterson's history beginning with the city's founding as part of Alexander Hamilton's vision for American economic independence and innovation, and continuing through today.

Rehabilitated historic structures and cultural landscapes, together with the Great Falls and the Passaic River, offer expanded interpretive experiences, educational programs, visitor services, and special events that celebrate history.

VISITOR EXPERIENCE -

Scenic Falls and River Area Visitor experience focused on Passaic River and views of the Great Falls and walking tour of Upper Raceway Park

Interpretive and educational programming emphasizes Paterson's industrial and environmental history

Primary park visitor contact at Welcome Center

Enhanced visitor facilities and interpretive programming encourages a wide range of visitor activities focused on actively exploring the Passaic River corridor.

Interpretation and educational programming emphasizes protection of natural resources associated with the Great Falls and Passaic River through history.

Primary park visitor contact station at the Welcome Center or a new visitor contact station located in a rehabilitated historic structure in Overlook Park. Expanded visitor facilities and, interpretive programming encourages visitors to explore the area in its historic context as a source of water power harnessed by technology to fuel American industry.

Interpretation and educational programming emphasizes evolution of industrial hydropower using tangible remaining historic resources.

Table 2.12: Comparison of the Alternatives continued

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
Historic Immersion Area	Visitor experience focused on Paterson Museum and walking tour of Upper Raceway Park.	Preservation and re-watering the upper, middle and lower raceways, along with development of a raceway trail along the raceway, encourages visitors to explore the park.	Rehabilitation and re-watering the upper, middle and lower raceways, as well as all other elements of the raceway system, along with development of a raceway trail along the length of the raceway system, encourages visitors to explore the NHL district.
	Interpretation and educational programming emphasizes the raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city focused on the upper raceway.	Interpretation and educational programming emphasizes the raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city focused on the upper, middle and lower raceways.	Interpretation and educational programming emphasizes the raceway technology that supported Alexander Hamilton's vision for America's first planned industrial city focused on the upper, middle and lower raceways, as well as all other elements of the raceway system.
	Primary park visitor contact at Welcome Center.		Primary park visitor contact station located in a rehabilitat- ed historic structure in the NHL district.
Evolved Industrial Landscape Area	Former ATP site closed to public use.	Former ATP site rehabilitated as a recreation area offering a variety of recreation activities and as a site for special events; select structures and features preserved.	Former ATP site rehabilitated as an industrial history park; select structures and features preserved; industrial landscape rehabilitated for interpretive purposes and other visitor uses
	Former ATP site close to public use; off-site interpretation only at Welcome Center and Paterson Museum.	Interpretation focused on under- standing of the size and scale of the historic industrial scene within a new park context structure in Overlook Park.	Interpretation focused on the site as a former site of new and emerging technology and innovations.
Community Cultural Heritage Area	Hinchliffe Stadium closed to public use.	Hinchliffe Stadium rehabilitated for adaptive reuse for visitor use, such as educational programs, athletic programs, community activities and special events.	Same as alternative B.

Alternative A: Establishing the New National Park

Alternative B: Landscape Exploration Alternative C: Industrial Heritage Immersion

CULTURAL RESOURCE MANAGEMENT

	CULTURAL RES	SOURCE MANAGEMENT ——	
Scenic Falls and River Area	Cultural resource management actions stabilize historic structures.	Settings and exteriors of historic structures associated with hydropower production preserved and maintained in good condition. Steam Plant Foundation and S.U.M. Administration Building rehabilitated for park offices and visitor use, potentially including	Settings, interiors and exteriors of historic structures associated with industrial history preserved and maintained in good condition. Steam Plant Foundation and S.U.M. Administration Building preserved for partner or visitor use.
		the park's primary visitor center.	
Historic Immersion Area	Cultural resource management actions stabilize historic structures.	Upper, middle, and lower raceways preserved and re-watered for interpretation. Important historic structures managed to enhance historic character.	Upper, middle, and lower raceways, as well as all other elements of the raceway system rehabilitated and re-watered for interpretation. Same as alternative B.
Evolved Industrial Landscape Area	Cultural resource management actions stabilize historic structures.	Colt Gun Mill preserved and select features of remaining structures made safe and preserved as landscape features reflecting the site's industrial history.	Colt Gun Mill rehabilitated and portions of select mill factories and ruins stabilized, where possible, for interpretive purposes and other visitor uses.
	No management action to document historic structures in ruinous condition.	Historic structures in ruinous condition documented and demolished if determined unsafe or interpretive value does not support interpretation.	Same as alternative B.
Community Cultural Heritage Area	Hinchliffe Stadium stabilized.	Hinchliffe Stadium rehabilitated for adaptive reuse for visitor use.	Same as alternative B.

Table 2.12: Comparison of the Alternatives continued

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
	———— NATURAL RES	OURCE MANAGEMENT ——	
Scenic Falls and River	Riparian forest minimally managed.	Passaic River riparian forest rehabilitated.	Same as alternative B.
Area	No action to maintain scenic view by vegetation trimming.	Selected vegetation trimming to protect scenic views.	Same as alternative B.
	Many park partners not focused on water quality management issues.	Increasing partner focus on protecting water resources.	Same as alternative B.
		Through watershed planning and implementation of recommended management actions.	
	No action to monitor and protect geologic resources.	Geologic resources monitored and protected.	Same as alternative B.
Historic Immersion Area	Natural areas in Upper Raceway Park minimally managed.	Natural areas in Upper Raceway Park enhanced through removal of inva- sives and areas replanted with native species.	Same as alternative B.
	No action to remove invasive plants along middle and lower raceways.	Invasive plants removed along middle and lower raceways and areas replanted with native species.	Same as alternative B.
Evolved Industrial Landscape Area	Some actions to remove contaminated soils.	Contaminated soil conditions remediated; impacts to water quality associated with leaching of contaminants mitigated.	Same as alternative B.
	Some action to remove invasive plants from open spaces and wooded areas.	Invasive plants removed from ruins and open spaces and areas replanted with native species in landscaped areas.	
Parkwide	Limited implementation of "Green Streets" enhancements in the park and NHL distric.t	Focused effort of partners to implement "Green Streets" enhancements throughout park.	Focused effort of partners to implement "Green Streets" enhancements throughout park and NHL district.

Table 2.12: Comparison of the Alternatives continued

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
	PAR	OPERATIONS —	
Park Administrative Offices	Park administrative offices in S.U.M. Administration Building.	Same as alternative A, with possible expansion of park offices to new visitor contact station.	Park administrative offices shared with partners in rehabilitated historic structure in NHL district.
Law Enforcement	Law enforcement provided by city of Paterson.	Same as alternative A.	Same as alternative A.
Maintenance	Maintenance for park lands provided by city of Paterson through agreement.	Same as alternative A over the short-term; plus contracted services for landscaping and other assistance.	Same as alternative A.

Comparison of Impacts of the Alternatives Table 2.13

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
CULTURAL RESOUR	CES		
Archeological Resources	Adverse impacts to the archeological resources due to a lack of comprehensive planning. Adverse impacts due to potential effects from natural processes. Adverse impacts from ground disturbing construction projects. Beneficial impacts due to resource protection and mitigation.	Beneficial impacts from archeological resource protection activities. Adverse impacts from ground disturbance related to construction. Adverse impacts due to removal of archeological resources at ATP, but mitigated through adherence to Secretary of Interior Standards.	Same as for alternative B except that more resources would be managed throughout the park and NHL district
Historic Structures	Beneficial impacts from stabilization of River Wall for wall and adjacent structures. Adverse impacts to the historic structures due to a lack of comprehensive planning.	Beneficial impacts to the archeological resources due to comprehensive planning. Beneficial impacts to historic structures when treated according to Sec. of the Interior's Standards.	Same as for alternative B, except that more historic structures would be rehabilitated throughout the park and NHL district.

Table 2.13 Comparison of Impacts of the Alternatives continued

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
	Adverse impacts due to potential long-term deterioration of historic structures.	Adverse impacts to historic structures (ruins) identified for demolition, especially at ATP site.	
	Beneficial impacts due to resource protection and mitigation.	Beneficial impacts due to resource protection and mitigation.	
		Adaptive reuse for visitor use.	
Cultural Structures	Adverse impacts resulting from the lack of a cultural landscape management plan and ongoing deterioration of elements of the cultural landscape.	Adverse impacts from hazardous materials mitigation, demolition of ruins, and addition of non-historic features to the landscape.	
	Beneficial impacts from stabilization of the river wall along the former ATP site and partial rehabilitation of Hinchliffe Stadium.	Beneficial impacts due to the opening up to visitors of currently closed areas and views following remediation, stabilization and rehabilitation of fundamental landscape resources, and improved maintenance of resources over the long term.	
	Overall adverse cumulative impact.	Overall beneficial cumulative impact.	
NATURAL R	FSOURCES		

NATURAL RI	ESOURCES		
Water Resources	Beneficial impacts from stabilization of river wall and its associated erosion protection.	Beneficial impacts from remediation of adjacent soil contamination and associated water runoff.	Beneficial impacts from remediation of adjacent soil contamination and associated water runoff.
	Potential adverse impacts from drought and flooding.	Short term adverse impacts on soils from construction activities mitigated by appropriate construction plans.	Short term adverse impacts on soils from construction activities mitigated by appropriate construction plans.
	Adverse impacts from increased sedimentation and contaminated water runoff.	Potential benefits from improved storm water management.	Potential benefits from improved storm water management.
	Potential adverse impacts from climate change effects.	Potential benefits from comprehensive water quality management planning for the Passaic River.	
Floodplains	Minimal impacts to floodplains.	Same as for alternative A.	Same as for alternative A.

	Alternative A: Establishing the New National Park	Alternative B: Landscape Exploration	Alternative C: Industrial Heritage Immersion
VISITOR U	SE & EXPERIENCE		
	Beneficial impacts primarily from expanded programming and stabilization of ATP River Wall/ River Walk.	Beneficial impacts from improvements to the cultural landscape, stabilization and rehabilitation of historic resources including ATP River Wall/River Walk and Hinchliffe Stadium, and improvements to trails and visitor services.	Same as for alternative B, plus additional beneficial impacts due to expanded interpretation and education opportunities as well as additional rehabilitation of park resources.
	Adverse impacts resulting from disrepair of some park resources and lack of exhibits and waysides.	Adverse impacts resulting from construction activity.	
	Overall adverse cumulative impact.	Overall beneficial cumulative impact.	
TRANSPOR	RTATION AND ACCESS		
	Beneficial impacts resulting from establishing regional highway signage, improving public trans- portation access, development of new regional trail linkages, and	Adverse impacts resulting from possible increases in visitation leading to additional congestion and parking shortages.	Beneficial impacts from remediation of adjacent soil contamination and associated water runoff.
	access to the ATP site.		Short term adverse impacts on soils from construction
	Adverse impacts from existing traffic congestion issues, undersized sidewalks and walkways, and hazardous crossing areas would all contribute to adverse impacts.	Beneficial impacts from access to additional areas of the park, improved public transportation systems, and improved directional signage.	activities mitigated by appropriate construction plans. Potential benefits from improved storm water
	No cumulative impacts.	No cumulative impacts.	management.
SOCIOECOI		P. C.	
	Beneficial impacts construction spending by the park and partners, continued opportunities to access visitor opportunities and experience the natural,	Beneficial impacts to community character, land use, and development, construction spending, increased employment opportunities, and increase visitor and operational spending.	Same as for alternative A.
	historic, and scenic qualities of the park, and community character improvements.	Adverse impacts from increased visitation in the form of congestion, crowding, are potential for increased public service rates.	nd
	Overall cumulative impact would be beneficial.	Overall cumulative impact would be beneficial.	
PARK OPER	ATIONS		
	Adverse impact due to minimal park staffing.	Beneficial impacts due to increased park staffing and continued partner support.	Same as for alternative B.

Environmentally Preferable Alternative

In accordance with the DO-12 Handbook, the NPS identifies the environmentally preferable alternative in its NEPA documents for public review and comment [Sect.4.5 E(9)]. The environmentally preferable alterna-tive is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the responsible official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one envi-ronmentally preferable alternative (43 CFR 46.30).

The NPS has determined that the environmentally preferable alternative is alternative C. This conclusion is based on careful review of potential impacts as a result of implementing the management alternatives and assessing proposed mitigation for cultural and natural resource impacts. Alternative C best protects, preserves, and enhances the park's natural, cultural, and recreational resources. Both of the action alternatives B and C would provide the same level of protection

of natural resources. Alternative C provides a higher level of cultural resource preservation and rehabilitation than alternative B. In addition, alternative C provides a wider range of visitor opportunities than alternative B, and more educational and research opportunities to foster better understanding of the park's resources.

Alternative C best satisfies the national environmental goals by providing the highest level of protection of natural and cultural resources while concurrently pro-viding for a wide range of neutral and beneficial uses of the environment. This alternative maintains an environ-ment that supports a diversity and variety of individual choices, and it integrates resource protection with an appropriate range of visitor uses and understanding.

Future Studies and Implementation Plans

The need for additional studies and implementation plans was identified during the planning process. The studies and plans identified in the table below are the highest priority for implementation of the preferred alternative. The NPS would develop these plans and studies in coordination with stakeholders, academic institutions, and local governments, and state and other federal agencies.



Table 2.14 Summary of Future Implementation Planning Needs

Future Planning Need	Plan Description
Archeological resources study	Inventory and document threatened archeological resources and develop a management strategy for responding to impacts.
Cultural landscape inventory	linventory cultural landscapes and provide information on their location as well as to record information about the cultural landscape resources related to their identification, description, historical development, landscape characteristics and features and management.
Cultural landscape report	Document, analyze, and prepare detailed treatment recommendations for park cultural landscapes.
Historic structures management plan	Develop a management strategy for the rehabilitation of historic structures throughout the historic district.
Historic structure reuse plan	Investigate and identify adaptive reuse alternatives for historic structures including an evaluation, cost analysis, and selection of effective strategies that protect resources and meet legal requirements.
Invasive species plan	Describe the current best practices for prevention, early detection, rapid response, control, and containment of one or more invasive species, and identifies activities and approaches to minimize the introduction and spread with optimal use of staff and funding.
Park sustainability plan	Develop a park-specific sustainability plan that supports the park purpose, integrates with park strategic documents, ensures that appropriate documentation is completed, and contributes to the overall regional sustainable buildings targets and objectives
Resource stewardship strategy	Identify and track indicators of desired conditions, recommending comprehensive strategies to achieve and maintain desired conditions over time, and assessing and updating these strategies periodically based on new information and the results of completed activities.
Visitor use survey and study	Conduct assessments of visitor characteristics, visitor preferences and motivations, and baseline conditions relating to use levels and patterns to determine the best path for addressing visitor use issues.
Visual resource inventory and management plan	Inventory scenic resources and key critical view points and identify strategies and recommendations for preservation.

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3. AFFECTED ENVIRONMENT

Introduction

This chapter describes the existing conditions at Paterson Great Falls NHP that could be affected by future park management actions proposed in the three GMP alternatives. The information provides the baseline for the evaluation of impacts of the alternatives in "Chapter 4: Environmental Consequences" of this Draft GMP/EA.

The GMP project area is the area that will be directly influenced by proposed park management actions. It generally includes the area within the park boundary. For some topics, the study area also includes areas outside the park boundary that could be indirectly influenced by the proposed actions. The NPS has used the best available information to describe existing conditions within the study area.

Impact Topics

The description of existing conditions is organized by "impact topic" which are the resources and park values that could be affected by implementing any of the proposed management alternatives. Impact topics analyzed in detail were identified based on the context of the park's environment, applicable laws, and public comment received during the GMP planning process public and agency scoping. A number of other impact topics were initially considered but then dismissed from detailed analysis. Those topics are listed below with the reason(s) for dismissal.

Impact Topics Analyzed

Cultural Landscapes

All of Paterson Great Falls NHP forms a man-made cultural landscape that could be affected by management alternatives for the park. Improvements to park grounds and trails, restoration of the raceway system, and stabilization of the ATP site would all affect significant cultural landscape features and characteristics (natural systems and features, spatial organization, cir-

culation, vegetation, buildings and structures, small-scale features, constructed water features, views and vistas, and archeological sites).

Historic Structures

A large collection of historic structures occurs within Paterson Great Falls NHP, many of which could be affected by management alternatives for the park. Many of these structures are listed on or determined eligible listing on the National Register of Historic Places.



Archeological Resources

Within Paterson Great Falls NHP there are a number of archeological resources and areas of archaeological potential related to specific industrial activities (NPS 2012a). Management actions in the park involving ground disturbance, such as treatments of historic structures or development of visitor use facilities, would have the potential to disturb these resources.

Water Resources (includes Surface Water and Water Quality)

Restoration and/or repairs of the raceway system, dams, and river wall would require construction activities within and along the banks of the Passaic River. These actions would have the potential to impact surface water and water quality.

Floodplains

Paterson Great Falls NHP encompasses areas within both the 100-year and 500-year floodplains including some locations around the falls and portions of the raceway system. Impacts on floodplains and their functionality could occur from some of the proposed management actions. Repairs and rehabilitation of some structures within the floodplains, such as the dams, raceways, and pedestrian bridges, could displace floodwaters or otherwise alter existing floodplains.

Visitor Use and Experience

Visitor use and experience could be affected by one or more of the actions in the alternatives, such as the provision of new recreational opportunities, the development of new visitor facilities and amenities, and the establishment of new partnerships. New facilities such as trails and interpretive media would change the way visitors use and experience the park. All the alternatives could have an impact on overall visitor understanding, including interpretive and educational opportunities.

Socioeconomics

NPS Management Policies (NPS 2006b) states under section 1.6, "Cooperative Conservation beyond Park Boundaries," "Cooperative conservation beyond park boundaries is necessary as the National Park Service strives to fulfill its mandate to preserve the natural and cultural resources of parks unimpaired for future generations." Included under this policy guidance is the recognition that "NPS activities may have impacts outside park boundaries. Recognizing that parks are integral parts of larger regional environments, and to support its primary concern of protecting park resources and values, the NPS will work cooperatively with others to:

- anticipate, avoid, and resolve potential conflicts
- · protect park resources and values
- provide for visitor enjoyment
- address mutual interests in the quality of life of community residents, including matters such as compatible economic development and resource and environmental protection"

An increase in tourism and park visitation is likely to occur as a result of implementing any of the alternatives. This visitation could result in increased spending in the local area. Although the economy of the city is diversified and may not be substantially affected by the park, some businesses and individuals in the local area could be beneficially impacted by increased spending.

Park Operations

As a new park, Paterson Great Falls NHP currently has limited staff and operational capacity. One purpose of this plan is to determine appropriate levels and types of staff needed to effectively manage the park. Proposed improvements and additions to visitor facilities, amenities, and infrastructure would strain existing staff and budgets as visitation increases. Additionally, as the NPS moves forward with plans to acquire property within the boundary of the park, additional staffing will be needed to facilitate maintenance of those properties.

Impacts Topics Dismissed from Detailed Analysis Ethnographic Resources

Ethnographic resources are defined as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it" (NPS 1998b). As part of the actions common to all alternatives in this GMP, the park intends to complete an ethnographic overview and assessment to determine whether or not ethnographic resources are associated with the park. At this time, however, there are no known ethnographic resources associated with the park; therefore, the impact topic of ethnographic resources was dismissed from detailed analysis.

Museum Collections

NPS Management Policies 2006, Director's Order 24: NPS Museum Collections Management, the NPS Museum Handbook, and cultural resources laws identify the need to evaluate effects on museum collections, if applicable. The park does not currently own any objects, artifacts, or archival collections and will not directly acquire or store collection items under any of the proposed alternatives. Since the park does not plan to acquire museum collections in the future



under these alternatives, the impact topic of museum collections was dismissed.

Geologic Resources

According to NPS management policies, the NPS will: assess the impacts of natural processes and human-related events on geologic resources; maintain and restore the integrity of existing geologic resources; integrate geologic resource management into NPS operations and planning; and interpret geologic resources for park visitors.

Geologic resources within Paterson Great Falls NHP include the cliffs and chasm of the Great Falls of the Passaic which are listed as fundamental resources for the park. The park's fundamental resources would receive primary management consideration because they are essential in achieving the park's purpose and maintaining its significance. Under all alternatives, the park's geologic features would be preserved and protected as integral components of the park's natural systems. Proposed management actions related to the park's geologic resources would not differ among the alternatives and actions are not expected to impact geologic resources.

Soils

According to its management policies, the NPS actively seeks to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.

Paterson Great Falls NHP comprises lands that are classified by the Natural Resource Conservation Service as urban lands. Urban land is nonagricultural land comprising soil material that was disturbed and manipulated by human activities in an urban environment. Urban soils are extensively disturbed, displaced, and compacted, which creates a soil material unlike its natural counterpart. This can be due to (1) the mixing of soil material when soil is scraped away, stockpiled, and re-spread, or transported to another location and spread; (2) the dumping and spreading of soil material from diverse sources over existing surfaces; and (3) the contamination resulting from deposition, mixing, and filling of materials not found in the natural soil, or found at concentrations greater than those usually found in natural soils. Such disturbance and manipulation results in changes to the physical, chemical, and

biological properties of these soils; these changes make them generally less favorable as a rooting medium than soils in a natural landscape.

The manipulation of earth that was necessary to construct the river wall along the south bank of the Passaic River, the raceway system through the park, and the hydropower plant and ATP sites, permanently altered the topography of the land and natural soil regimes which once existed. Possible construction associated with implementation of management actions would primarily involve rehabilitation or stabilization of those structures or sites. Because the soils in those areas were so extensively disturbed in the past, any short- or longterm adverse impacts on soils associated with excavation, grading, and resurfacing would be negligible. Existing topography and elevations would not be altered and erosion and sedimentation control measures would minimize soil exposure, control soil losses, trap sediment, and prevent sediment transport into adjoining waterways during construction.

Other ground-disturbing actions proposed under the alternatives for areas on the north side of the Passaic River would include trail restoration and/or construction. As with other construction activities, erosion and sedimentation control measures would be employed to reduce sediment from entering the river. Any potential adverse impacts would be primary due to soil compaction, however, this action is similar across all action alternatives and the total footprint of trails would be relatively small.

Because the topography and natural soil regimes were permanently altered by previous construction, as well as by decades of industrialization and urbanization, any new construction associated with implementation of the alternatives would only be expected to contribute negligible impacts on soils. Therefore, the topic of soils was dismissed from further analysis.

Prime and Unique Farmlands

The Farmland Protection Policy Act (7 USC § 4201 et seq.) was passed to address the effects of federal programs on the conversion of farmland to nonagricultural uses. In support of this legislation, the Department of the Interior issued several memoranda to guide its agencies in addressing prime and unique farmlands in

the NEPA process. Prime farmlands are those lands that have the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fertilizer, pesticides, and labor, and without intolerant soil erosion. Unique farmlands are those that are used for the production of specific high-value food and fiber crops.

There are no prime or unique farmlands located within the park.

Federally Listed Threatened or Endangered Species

Section 7 of the Endangered Species Act of 1973, as amended, directs all federal agencies to use their existing authorities to conserve federally listed threatened and endangered species and to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species, or result in the destruction or adverse modification of designated critical habitats. Throughout the planning process, informal consultation with the New Jersey Field Office of the U.S. Fish and Wildlife Service (USFWS) has been conducted to identify any potential species thought to be present within the area of Paterson Great Falls NHP. USFWS identified four bat species thought to occur in the area: Indiana bat (Myotis sodalis), an endangered species; northern long-eared bat (Myotis septentrionalis), a threatened species; little brown bat (Myotis lucifugus); and the tri-colored bat (Pipistrellus subflavus). The little brown bat and tri-colored bat are both currently under review for listing as threatened or endangered.

The primary threat to all four bat species is white-nosed syndrome, but other man-made threats also play a role in bat population loss including disturbance, loss of forested summer habitats, and environmental contaminants. In general, bats hibernate from late October to April in caves and abandoned mine shafts, then emerge in spring to roost in wooded areas near streams and rivers as well as in man-made structures such as buildings or ruins. According to USFWS, actions which may affect these species of bats include clearing trees over 3 inches in diameter at breast height (dbh) between April 1 and September 30; clearing greater than 0.5 acre of trees at any time of year; and removal, modification, or disturbance of known roost trees.

Actions proposed as part of the alternatives included in this plan which could impact bat species include rehabilitation, preservation, and stabilization of select historic structures and ruins, and tree removal to maintain viewsheds and improve trails. To reduce the likelihood of impacting these bat species, the NPS would employ mitigation measures such as conducting field surveys for the presence of bats and restricting tree clearing from April 1 to September 30. The NPS would also encourage other landowners within the boundary of the park to consider the impacts their actions could have on bat species and employ similar mitigation measures.

As a result of mitigation measures and continued consultation with USFWS and the state, no adverse impacts to Indiana bat (Myotis sodalis), northern long-eared bat (Myotis septentrionalis), little brown bat (Myotis lucifugus), or tri-colored bat (Pipistrellus subflavus) are expected as a result of the proposed alternatives in this plan. As part of the Section 7 consultation process, a letter was submitted to the USFWS for review and concurrence with the NPS determination of "may affect, not likely to adversely affect." (See chapter 5 for additional Section 7 consultation information)

Air Quality

Section II8 of the I963 Clean Air Act (42 USC 7401 et seq.) requires park units to meet all federal, state, and local air pollution standards. Further, the Clean Air Act provides that the federal land manager has an affirmative responsibility to protect air quality related values (including visibility, plants, animals, soils, water quality, cultural resources, and visitor health) from adverse pollution impacts. NPS Management Policies 2006 also requires parks to perpetuate the best possible air quality in parks.

Passaic County is located in a densely populated area of New Jersey within the metropolitan areas surrounding Newark, NJ and New York, NY. The whole of the region contributes to Passaic County's non-attainment status for ozone which the state addresses in the 2007 state implementation plan for attainment. Paterson Great Falls NHP is not a federal Class I area afforded additional protection for air quality related values such as visibility. Instead, the park is a Class II area, which

allows for a less stringent level of air quality protection than Class I areas. In addition, Passaic County is designated as non-attainment for the 1997 eight-hour National Ambient Air Quality Standards for ozone. Proposed management actions would have some negligible, short-term impacts on air quality during construction activities including the operation of equipment and construction vehicles. Under all alternatives, the park would pursue opportunities to use and promote "green" technologies which would serve to reduce greenhouse gases where possible. Any potential increases in vehicle emissions, fugitive dust, or airborne particulates created during construction, however, would be temporary in nature and would rapidly dissipate. On a regional level, the amount of criteria pollutants emitted would not be substantial. Overall, there would be negligible impacts on local air quality; however, such impacts would be short-term, lasting only as long as construction. Therefore, the topic of air quality was dismissed from further analysis.

Tribal Resources (including Sacred Sites and Indian Trust Resources)

According to Executive Order 13007, "Indian Sacred Sites," the NPS will accommodate, to the extent practicable, access to and ceremonial use of Indian sacred sites by religious practitioners from recognized American Indian and Alaska Native tribes and would avoid adversely affecting the integrity of such sacred sites. Paterson Great Falls NHP is associated with three federally-recognized tribes: Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community. The park consulted with those tribes early in the planning process and no sacred sites were identified within the park's boundary. Copies of this GMP/EA will be forwarded to each affiliated tribe. If the tribes subsequently identify the presence of sacred sites within park boundaries, further planning would be undertaken in consultation with the tribes and appropriate mitigation measures developed as necessary. The location of any sacred sites would not be made public. Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable



fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes. There are no Indian trust resources in Paterson Great Falls NHP or its general vicinity. The lands composing the park are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians.

Energy Resources and Conservation Potential

Alternatives in the general management plan could result in new facilities with inherent energy needs. In the proposed alternatives, new facilities would be designed with long term sustainability in mind. The NPS has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to design facilities to

minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to require the least amount of nonrenewable fuels/energy.

Management actions could result in an increased energy need, but this need is expected to be negligible when seen in a regional context. Paterson Great Falls NHP would also operate under the wise energy—use guidelines and requirements stated in NPS Management Policies 2006; Executive Order 13123, "Greening the Government through Effective Energy Management"; Executive Order 13031, "Federal Alternative Fueled Vehicle Leadership"; Executive Order 13149, "Greening the Government through Federal Fleet and Transportation Efficiency;" and the 1993 NPS Guiding Principles of Sustainable Design. Therefore, this resource topic is eliminated from further analysis.

Public Health and Safety

During scoping, the public expressed concerns over safety within the boundaries of the national historical park. The general agreement signed between the NPS and the city of Paterson states that the city will "retain jurisdiction for its police department and emergency services to respond to emergencies, conduct law enforcement investigations and enforce the law as permitted by federal and state law." Additionally, actions and developments proposed in the alternatives would not result in any identifiable adverse impacts to human health or safety.

Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires federal agencies to make achieving environmental justice part of their mission. Specifically, each agency must identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

The potentially affected community does contain minority and low income populations; however, environmental justice is dismissed as an impact topic for the following reasons:

- NPS staff and the planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the proposed alternative would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse effects on any minority or low income population.
- The impacts associated with the preferred alternative would not result in any identified effects that would be specific to any minority or low income population community.

In conclusion, no disproportionately high or adverse impacts on low income or minority population are expected. Based on the above information and the requirements of Executive Order 12898, environmental justice was ruled out as an impact topic to be further evaluated in this document.

Overview of Resource Information

Climate Change

Climate change refers to any significant changes in average climatic conditions or variability for an extended period. Recent reports by the US Climate Change Science Program, the National Academy of Sciences, and the United Nations Intergovernmental Panel on Climate Change provide evidence that climate change is occurring and will accelerate in the coming decades. While climate change is a global phenomenon, it manifests differently depending on regional and local factors.

Over the last decade, the NPS has consulted with the scientific community, federal agencies, non-profit organizations, and other informed parties to gather data and explore strategies to prepare the national park system for potential future impacts of a changing climate. Sea level rise, extreme precipitation events, heat waves, and increases in severe winds or other phenomena related to climate change will alter how natural and cultural resources are managed, and the types of activities, facilities and infrastructure the NPS can support.

There are a number of executive orders, policies and plans that guide the response to climate change for Paterson Great Falls National Historical Park as a unit of the national park system:

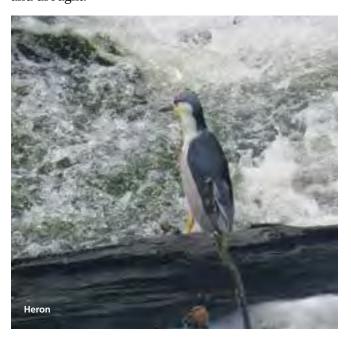
- Executive Order 11988 (1977) requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development.
- Executive Order 13653 (2013) directs federal agencies to prepare for the impacts of climate change by undertaking actions to enhance climate change preparedness and resilience.
- Executive Order 13514 (2009) establishes an integrated strategy for sustainability in the federal

- government and makes reduction of greenhouse gas emissions a priority for federal agencies.
- 2013 President's Climate Action Plan (U.S. Executive Office of the President 2013) advises that agencies will be directed to ensure that climate risk management considerations are fully integrated in federal infrastructure and natural resource management planning.
- Secretarial Order 3289, Amendment I (2010) directs each office of the Department of the Interior to consider and analyze potential climate change impacts when undertaking long-range planning.
- Department of the Interior Climate Change Adaptation Policy (523 DM1) outlines a set of principles and provides guidance for integrating climate change adaptation strategies into policies, planning, programs, and operations.
- NPS Management Policies 2006 (NPS 2006b) §4.7.2 instructs NPS units to collect and maintain baseline climatological data for reference and encourages reduction of greenhouse gas emissions in park operations.
- NPS Management Policies 2006 (NPS 2006b) §9.1.1 guides sustainable facility planning and development.
- NPS Climate Change Response Strategy (NPS 2010d) outlines a four-pronged approach to addressing climate change: science, adaptation, mitigation, and communication.
- NPS Climate Change Action Plan 2012-2014
 (NPS 2012b) details actions and recommendations to implement the climate change response strategy.
- NPS Green Parks Plan (NPS 2012d) defines
 a collective vision and a long-term strategic plan
 for sustainable management of NPS operations
 including reducing greenhouse gas emissions and
 adapting facilities at risk from climate change.
- NPS Policy Memorandum 12-03: Applying
 National Park Service Management Policies
 in the Context of Climate Change (NPS 2012e)
 addresses emergent questions regarding the
 influence of climate change on the guiding principles
 of park natural resource management.

- NPS Policy Memorandum 14-02: Climate Change and Stewardship of Cultural Resources (NPS 2014b) provides guidance and direction regarding stewardship of cultural resources in relation to climate change.
- NPS Policy Memorandum 15-01: Addressing Climate Change and Natural Hazards for Facilities (NPS 2015) provides guidance on the design of facilities to incorporate impacts of climate change adaptation and natural hazards when making decisions in national parks.

New Jersey Climate Change Trends and Projections Summary

Past climate trends verify that the climate in New Jersey is already changing (table 3.1). Records show that spring is arriving earlier, summers are growing hotter, and winters are becoming warmer and less snowy. Research shows that if global warming emissions continue to grow unabated, New Jersey can expect dramatic changes in climate over the course of this century (UCS 2007). If the rate of emissions is lowered, however, projections show that many of the changes will be far less dramatic (UCS 2007). Understanding these trends and how they are predicted to continue to change provides a basis for taking management actions that would address the specific local impacts that climate change poses for the park, such as extreme heat, severe storms, flooding and drought.



Climate Change Trend

Projection Summary

Temperature Temperatures in the Northeast U.S. have increased 1.5 degrees Fahrenheit (°F) on average since 1900. Most of this warming has occurred since 1970. New Jersey has observed an increase in average annual temperatures of 1.2 °F from 1971-2000 and the most recent decade of 2001-2010. Winter temperatures across the Northeast have been rising even faster than annual average temperatures, up 4 °F since 1970.

> Heat Waves: In New Jersey, the total number of days over 90 °F has increased by roughly 36 percent since 1949. On average, based on historical data from 16 weather station locations spread across the state, days over 90 °F have increased from about 17 a year to 23, although there is considerable range between north and south, coastal and inland, and urban and rural parts of New Jersey.

By the 2020s, the mean annual temperature in New Jersey will have increased 1.5 to 3 °F above the state-wide baseline (1971-2000) average of 52.7°F degrees. By the 2050s it will be up 3 to 5 °F, and by the 2080s it will be 4 to 7.5°F warmer than today.

Extreme Heat: Extreme heat events are expected to increase in intensity and duration. Currently, the area experiences on average two heat waves a year (where temperatures exceed 900F) of about four days in duration. By the 2020s, it is projected to be three to four events of four to five days; by the 2050s, four to six events of about five days; and by the 2080s, summers could have five to eight heat waves of five to seven days each on average. Annual days over 90°F will rise from an average of 14 in 2000 to 23 to 29 by the 2020s, 29 to 45 by the 2050s, and 37 to 64 by the 2080s.

Precipitation New Jersey has become wetter over the past century. Northern New Jersey's 1971-2000 precipitation average was over 5" (12%) greater than the average from 1895-1970. Autumn (Sept-Nov) has seen the greatest increases, with summer having the least.

> **Extreme Precipitation:** Extreme precipitation, defined as precipitation above 1, 2 or 4 inches at daily timescales, is highly variable both spatially and temporally. There has been a small, but not statistically significant trend, towards more extreme precipitation events in the region during the last three decades.

Drought: New Jersey has experienced one severe water-supply drought (2001-2002) and three minor ones (2005, 2006 and 2010) in the last decade. Even so, there is no significant long-term trend visible in the frequency or severity of droughts in New Jersey, going as far back as 1895.

Average annual precipitation is expected to increase in the region by up to 5% by the 2020s and up to 10% by the 2050s. Most of this additional precipitation will come in the winter, where a 20-30% increase in precipitation (mostly rain) is projected by the late century.

Extreme Precipitation: While models suggest that the percentage increase in annual precipitation across the mid-Atlantic region is expected to be on the order of 10% or less by mid-century, a perhaps more significant concern is that this precipitation is more likely to fall during extreme events causing inland flooding. Analyses performed for New York City indicate a 10 to 25% increase in the frequency of intense precipitation events by the 2080s. These projections would be broadly applicable on average across most of New Jersey.

Drought: Even though overall precipitation is likely to increase under climate change, most of this increase is expected to occur in the winter months. Summer precipitation is not forecasted to increase much, if at all, and is not likely to be evenly distributed throughout the season. This is likely to lead to more frequent occurrences of short-term soil moisture droughts across the Northeast. However, given the likelihood of heavier cool-season precipitation, current modeling indicates that water-supply droughts will be no more or less frequent or severe than under existing climate conditions.

Ice Storms and Snowfall: Snowfall events are likely to become less frequent and the snow season will decrease in length. Possible changes in the intensity of snowfall per storm are highly uncertain.

Table 3.1 Northeast U.S. and New Jersey—Historic Trends and Projected Climate Change Impacts continued

Climate Change Trend

Projection Summary

Sea Level Rise

Globally, sea level rose roughly 8 inches over the past 100 years. Along the coast of New Jersey, sea level has risen an additional 4 to 8 inches during the past 100 years due to subsidence in the mid-Atlantic region. Total relative sea level rise (the combination of rising seas and subsidence) in New Jersey over the past 100 years is therefore approximately 12 to 16 inches.

Projections suggest that mean sea level would rise two to five inches by 2020, seven to 12 inches by 2050, and 12 to 23 inches by the end of the century. By incorporating ice sheet melting patterns, sea level is projected to rise from 0.5 to 1.8 meters (20 to 71 inches) by 2100 over 1990 levels. The upper limit for the end of the 20th century is constrained by melting ice to be less than 2m (79 inches). Because we are currently tracking on an 80 cm (31 inch) global rise by 2100 New Jersey should plan for at least 1 m (39 inches) of rise, including the effects of subsidence, by the end of the 21st century.

Source: Sustainable New Jersey and NJ Department of Environmental Protection, New Jersey Climate Change Trends and Projections Summary, 2011.

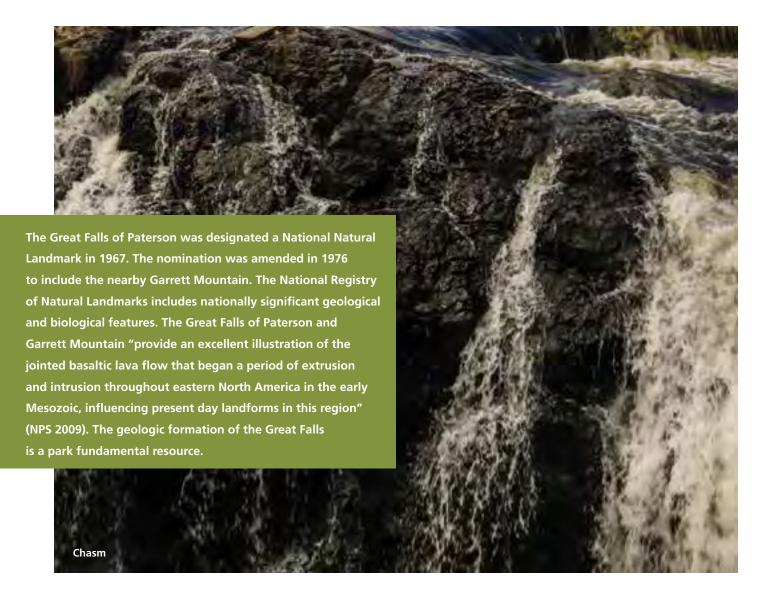
Geologic Resources

The park is located in the Piedmont Physiographic Province. The bedrock geology of the area includes Orange Mountain Basalt and Passaic Formation. Orange Mountain Basalt is composed of dark greenish gray to black, fine-grained, dense, hard basalt associated with three major lava flows. The Passaic Formation is composed of conglomeratic sandstone. It is an interbedded sequence of reddish brown, and less often maroon or purple, fine to coarse grained sandstone and a pebbly sandstone, pebble conglomerate, siltstone, shaly siltstone, silty shale, and shale (USGS 2006).

Garrett Mountain is part of the First Watchung Mountain, one of three generally north-trending ridges in the region named the First, Second, and Third Watchung Mountains (USGS 2006). The ridges are composed of basalt, formed from cooled volcanic lava. The Passaic River crosses the First Watchung Mountain through a water gap over a resistant ridge and into a basalt chasm carved in the lower flow of the Orange Mountain Basalt, forming the Great Falls. The Great Falls chasm is 280 feet wide and has a vertical drop of 77 feet (USGS 2006; USGS 2013a).

The gorge leading to the Great Falls was formed due to collapse and erosion along weak rock zones because of closely spaced joints. The Great Falls formed within the gorge due to undermining of a hard rock layer caused by erosion of an underlying softer rock layer; the underlying soft sandstone was eroded, leaving the overlying hard, basaltic rock of the First Watchung ridge projecting without support. Erosion that continues at the base of the Great Falls now occurs in weakened basalt, instead of sandstone (Harper 1977).

The two bedrock formations (basalt and sandstone) run generally north south and the seam between the two splits the park, generally at the Great Falls, where the basalt formation is visible. Further to the east, the sandstone layer can be seen at the base of the cliff near Ryle Road. Columnar joints are visible in the basalt cliffs, which formed from cooling lava. Tectonic joints are also visible at the Great Falls. They are typically planar, well formed, smooth to slightly irregular, and variably spaced (2 to 10 feet apart). Movement along these joints has created gaps in the basalt, known as faults, which can be seen on the cliff forming the back wall of the S.U.M. Hydroelectric Plant (NJDEP 2008). The basalt is likely to lose small to large sections periodically due to expansion of water in the basalt rock joints and fractures caused by freezing and thawing, particularly during the early winter and spring (NJDEP 2008). The area around the park includes abandoned sandstone and basalt quarries. Quarry activity changed the topography of the area over time due to excavation.



Mount Morris, which at one point stood in the location of today's Overlook Park, was quarried heavily during 19th and 20th centuries as mills in the former ATP site grew. Additional quarrying took place as the S.U.M. began to develop its hydroelectric and steam facilities. Additional sandstone and basalt quarrying occurred in the Valley of the Rocks (Rutsch et al 1973).

Soils

Soils types occurring in the park consist primarily of Holyoke-rock outcrop complex, Rock outcrop-Holyoke complex, and Urban land-Riverhead complex, as well as some Dunellen-Urban land complex (USDA, NRCS 2008).

The Holyoke-rock outcrop complex (HomC) has slopes of 3 to 15 percent. The Rock outcrop-Holyoke complex (RNHE) has slopes of 15 to 45 percent. Both complexes include rock outcrops that consist of exposures of bare, hard bedrock. These outcrops are mainly unweathered volcanic and metamorphic rock, but also include some sedimentary rock such as consolidated limestone and conglomerate (USDA, NCRS 2008). These rock outcrops are located directly around the falls and along the banks of the river near the falls. The Holyoke component is comprised of a thin layer of till derived mainly from basalt and red sandstone, conglomerate, and shale. They are nearly level to very steep soils on bedrock controlled ridges and hills that were modified by glacial action (USDA, NCRS 2013).

The Urban land-Riverhead complex (USRHVB) has slopes of 3 to 8 percent. The urban land complex is mostly covered by streets, parking lots, buildings, and other structures of urban areas and is underlain by disturbed and natural soil material (USDA, NRCS 2008). The Riverhead component consists of very deep well drained soils formed in glacial outwash deposits derived primarily from granitic materials (USDA, NCRS 2013).

The Dunellen-Urban land complex (DuUb) has slopes of 3 to 8 percent. The Urban land, Dunnellen Substratum soils are areas with some type of disturbance, such as from construction, grading, or the addition of fill material. The surface is generally covered by pavement,

A brownfield is defined as any former or current commercial or industrial site, currently vacant or underutilized and on which there has been, or there is spected to have been, a discharge of a contaminant.

(Source: Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et seq.)

concrete, buildings, and other structures and is underlain by disturbed and natural soil material consisting of sandy loam and loamy sand (USDA, NRCS 2008). Soils in some areas of the park may contain contamination from the previous industrial uses that encompassed much of the park at various points throughout the site's history. Several contaminated sites within and adjacent to the park have been documented, including the former ATP site, which is classified as a brownfield.

Cultural Resources

Paterson Great Falls NHP encompasses a wide array of cultural resources, including cultural landscapes, historic structures, archeological resources, and museum objects.

 Cultural landscapes are geographic areas (including both cultural and natural resources and the wildlife and domestic animals therein) associated with a historic event, activity or person or exhibiting other

- cultural or aesthetic values. There are four types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.
- Historic structures are constructed works
 consciously created to serve human activity.
 They are usually immovable, although some have been relocated and others are mobile by design.
 They include buildings and monuments, dams, millraces and canals, nautical vessels, bridges, tunnels and roads, railroad locomotives, rolling and track, stockades and fences, defensive works, temple mounds and kivas, ruins of all structural types, and outdoor sculpture.
- Archeological resources are the physical evidences of past human activity, including evidences of the effect of that activity on the environment. What makes archeological resources significant are their identity, age, location, and context in conjunction with their capacity to reveal information through the investigatory research designs, methods, and techniques used by archeologists.

Archeological resources represent both prehistoric and historic time periods. They are found above and below ground and under water. Examples of prehistoric archeological resources include clifferent dwellings, Indian mounds, petroglyphs, surface scatters of pottery fragments and chipped stone, campsites, and villages. Examples of historic archeological resources include archeological components of historic structures, battlefields, mining camps, forts, shipwrecks, and similar historic properties. A historic period house, for example, may have a broad variety of material culture associated with it (e.g., in construction trenches and trash pits) that can be effectively examined using archeological techniques. The remains of historic properties or resource types not typically included in the historical record will have archeological value when they can reveal significant information. Examples of submerged archeological resources include dams and raceways, sunken ships (including submarines) and aircraft, and inundated prehistoric campsites and historic forts.

 Museum collections are assemblages of objects, specimens, and archival and manuscript collections that are valuable for the information they provide about processes, events, and interactions among people and the environment. Natural and cultural objects and their associated records provide baseline data, serving as scientific and historical documentation of the park's resources and purpose.

Cultural Landscapes

The cultural landscape of Paterson Great Falls includes the natural and built features that together make up the NHL District which comprises approximately 129 acres including a section of the Passaic River, the Great Falls, Valley of the Rocks, S.U.M. Island, the raceway system, a dam, and a number of historic structures. Together, the Passaic River and the raceway system provided the framework for the development of Paterson, physically linking the city's natural systems to its industrial enterprise.

Wooded areas occur along the southern end of Upper Raceway Park and within the Valley of the Rocks area on the north side of the Passaic River. Upland temperate forest species with an herbaceous understory compose these wooded areas, including a mix of native, non-native and invasive species (NJDEP 2008).

Open areas of lawn with ornamental trees and shrubs are maintained at Overlook Park, Mary Ellen Kramer Park, and the approach to the pedestrian footbridge behind the S.U.M. Hydroelectric Plant. The path edge along the Upper Raceways includes herbaceous species and lawn cover that is mowed. The ATP site includes open areas that have been colonized by a variety of native, non-native and invasive species typically found in abandoned urban settings. A ribbon of riverine forest borders the Passaic River below the Valley of the Rocks.

According to the NHL nomination, the primary historic period for the cultural landscape is 1793 to 1912. The historic significance during this period was its role as the first planned industrial development in the United States and variety of industrial architecture. Additional layers of history and development have accumulated in the landscape over time, however, extending the period of significance beyond its early industrial beginnings.

Industrial Landscape

The Passaic River and Great Falls form the core of the industrial landscape becoming the focus of S.U.M.'s development. The historic raceway system took advantage of the topographic change in the area of the Great Falls and was linked to the Passaic River through intakes and outfalls. The location and alignment of the raceway system was guided by the topography of the land surrounding the river which, in turn, strongly influenced the location of the mill buildings and alignment of Paterson's roadways. The industrial landscape within the park boundary is encased within the larger urban industrial historic district made up of narrow, geometrically organized streets and mid-height predominantly brick industrial, commercial and civic buildings.

The industrial landscape was characterized by the alteration and "hardening" of the natural landscape features. Some river banks were reinforced with walls while others were quarried; permanently altering the topography of the city and stripping the landscape of its hillsides, cliffs, and vegetation.

Industrial complexes concentrated along the south bank of the Passaic River, created a discernable land-scape of historic industrial buildings and associated structures including the Colt Gun Mill and the S.U.M. Hydroelectric Plant. Soils in some areas of the park may contain contamination from the previous industrial uses that encompassed much of the park at various points throughout the site's history. Several contaminated sites within and adjacent to the park have been documented, including the former ATP site, which is classified as a brownfield.

Recreational Landscape

The mid-twentieth century saw a gradual transformation of the industrial landscape into a landscape that blended new recreational uses into the industrial environment. This transformation represents a layer of recreational use and design overlaid on the industrial components of Paterson Great Falls NHP's overall cultural landscape.

The area currently known as Overlook Park is the result of years of human manipulation and quarrying of Mount Morris. The area underwent substantial transformation in the 19th century as Mount Morris

was quarried to build new mills which would eventually be constructed within the quarried site. In 1912, the construction of the S.U.M. Hydroelectric Plant again transformed the area and construction of new buildings and retaining walls created the terraced spaces that still remain at the park.

Most of the auxiliary power plant had been removed by this time, and the old building foundations were transformed into small terraces. A statue of Alexander Hamilton was moved to the park from Paterson City Hall, and modest landscape design was undertaken to include a small hedge, trees, and lighting. Visitor parking, a view to the Great Falls, and the Alexander Hamilton statue are still located at Overlook Park. Visitors can access an area with picnic tables below the parking lot and closer to the river via a stairwell at Overlook Park along the S.U.M. Steam Plant foundation. The S.U.M. Hydroelectric Plant is an active power generation plant and in accordance with the NPS's general agreement with the city (appendix B) is open to the public for reserved tours. From Overlook Park, the Plant is a visible part of the viewshed that encompasses the Great Falls. Although the parking lot is in poor condition, it provides a popular view of the Great Falls. Landscape improvements are planned for Overlook Park and the Alexander Hamilton statue was cleaned and waxed in the summer of 2012.

The designed landscape at Mary Ellen Kramer Park does not fall within the period of significance for the historic district, but the area was used historically for recreation. A garden and refreshment pavilion occupied the site during the mid-nineteenth century. The site deteriorated substantially for the next several decades. Mary Ellen Kramer worked tirelessly in the 1970s to preserve and protect the historic district of Paterson, and the former Great Falls Park was renamed in her honor. The park is located on the north side of the Passaic River and connected by a footbridge and south of Hinchliffe Stadium. The green open space of Mary Ellen Kramer Park provides picnic and recreational space and affords views of the top of the waterfall as it descends into the chasm. Landscape improvements and environmental site remediation began at Mary Ellen Kramer Park in November 2013 and were completed in spring 2015. These improvements include provisions to

address existing soil contamination; removal of selected trees, paving, fencing; salvage of selected stone paving and curbing; retention of stone walls, structures, selected trees, and stone outcrops; and reconfiguration of the viewing area.

The Landing is the promontory of land south of the Great Falls. It is linked to Mary Ellen Kramer Park by the historic Arch Bridge and a second concrete footbridge built after 1980. The Landing is enclosed with fencing and includes a small parking area for the S.U.M. Hydroelectric Plan and a lawn area with trees. Upper Raceway Park is located near the center of the historic district between McBride Avenue and the

Upper Raceway and it abuts the Stanley M. Levine Reservoir and Lou Costello Pool. After significant water leaked from the Upper Raceway into adjacent industrial buildings, the raceway was repaired in the early 1980s as part of the Upper Raceway Park rehabilitation. The rehabilitation included setting brownstone at the raceway walls, and installing a new clay floor for the raceway. However, the raceway within the park continues to suffer from a debris collection, excessive volunteer/invasive vegetation, and a lack of water management system maintenance, and was last operated by the city of Paterson in 2009.

The Valley of the Rocks is a basalt entablature and colonnade cliff on the north side of the Passaic Rover across from the ATP site. An informal social trail near Hinchliffe Stadium leads to a rocky "beach" area along the north side of the Passaic River. The informal trail to the rocky area near the Passaic River is an unmarked footpath that has not been formally marked as a visitor access point. There is an asphalt footpath and a wooden staircase that lead to the informal trail, both of which are in need of repairs.

Landscape Views

Views within the park and to surrounding landscapes are identified as park fundamental resources, including both industrial landscape views and natural scenic views. Views are an important element of the visitor experience. The topography within the park provides visitors with panoramic views of the industrial landscape, reflecting settlement and industrial development patterns. The breathtaking views of the Great Falls and

surrounding natural landscape allow a glimpse into the inherent beauty of nature in contrast to the manipulated landscape of the industrial city.

- Overlook Park provides views to the Great Falls, the chasm, the pedestrian bridge, the Arch Bridge, the S.U.M. Hydroelectric Plant, and the Passaic River.
- The area adjacent to the S.U.M. Hydroelectric Plant provides views to the lower Passaic River.
- The pedestrian footbridge provides views to the upper and lower Passaic River, Overlook Park, to the Great Falls from above, and to Garrett Mountain.
- The approach to the pedestrian footbridge behind the S.U.M. Hydroelectric Plant provides views to the upper Passaic River, the top of the Great Falls, the S.U.M. Hydroelectric Plant, and the lower Passaic River.
- The northern entrance to Mary Ellen Kramer Park near Maple Street provides views of the historic dam and the upper Passaic River.
- Mary Ellen Kramer Park provides views to the upper and lower Passaic River, Overlook Park, the S.U.M. Hydroelectric Plant, Hinchliffe Stadium, the Great Falls, the Allied Textile Printing site, and Garrett Mountain.
- Mary Ellen Kramer Park Great Falls Viewing Platform provides views of the Great Falls, the chasm, and the upper Passaic River.
- Newly rehabilitated parkland at the intersection of Wayne Avenue and Maple Street provides views across the upper Passaic River to Mary Ellen Kramer Park.
- Upper Raceway Park provides views to the Great Falls NHL District, the Upper Raceway, and Garrett Mountain.

Historic Structures

The NHL District cultural landscape includes many structures within and outside the park's boundary. The inventory below identifies historic structures within the boundary.

S.U.M. Hydroelectric Plant

The hydroelectric plant was built after a 1912 decision by S.U.M. to switch from water-generated power to a more economical form of power: electricity. The modest plant was designed and built by the Thomas Edison Electric Company and was operable by 1914. Initially intended to provide power to the mills, the plant also supplied a great deal of power to the city's grid and continues to supply power to the city today. Construction of the hydroelectric plant changed milling operations in Paterson as manufacturing facilities began to switch to electricity instead of water-powered wheels. The plant was purchased by the city of Paterson in 1986. The S.U.M. Hydroelectric Plant is an active power generation plant and in accordance with the general agreement between the NPS and city(appendix B) is open to the public by reserved tour only. From Overlook Park, it is a visible part of the viewshed that encompasses the Great Falls.

S.U.M. Steam Plant Foundation

Located in the area which was previously occupied by Mount Morris, the steam plant was built in 1915 to supplement power beyond the output of the hydroelectric plant during times of low water flow in the Passaic River. The plant relied on steam produced from coal-fired ovens and was piped to several mills at the former ATP site for energy (FMG 2010). The steam plant, built in a similar design to the S.U.M. Hydroelectric Plant was supported by a concrete platform with spaces containing equipment below.

The plant was shut down in 1958 and demolished in 1960. The only remnants of the plant today are its concrete foundation, including the exterior terrace, the lower façade, and lower level foundation features. The remaining structure consists of concrete exterior walls that are below grade with the exception of the north facade. The foundation has been filled and capped with a series of flat roofs. The upper level is a small terrace where most visitors go to view the Great Falls. The terrace also includes the Alexander Hamilton statue and other smaller monuments. The lower level of the foundation is currently unused but at one time, contained working public restrooms.

S.U.M. Administration Building

The S.U.M. Administration Building was constructed in 1920. The building is a rectangular two-story brick structure which is in good overall condition and is structurally sound. It contains office and storage space.

S.U.M. Gatehouse (for Upper Raceway)

The S.U.M. Gatehouse was built in c. 1846 and was designed to regulate the amount of water flowing through the raceway system from the Passaic River. It is a narrow rectangular gable roofed building located at the top of the Upper Raceway near the McBride Avenue Bridge, and is underpinned by a brown sandstone wall and a concrete pier. Approximately fifteen feet below the gatehouse is a poured concrete dam. The gatehouse is in poor condition.

S.U.M. Dam

The S.U.M. Dam is over 200 feet long and between eight and thirteen feet high. Constructed of reinforced masonry in 1838-1840, the dam replaced an earlier wooden structure and was intended to raise the level of the river at the Upper Raceway (NPS 1970). The dam enabled the S.U.M. to store water in order to moderate the flow through the raceway system during months of low water levels in the river. Enlarged in 1864, the dam provided an ample pond of water that was released through the raceway system every morning in time for the mills to start operations.

Ryle Dam

Ryle Dam was built around 1860 by John Ryle to impound water for Paterson's first water system (Fries 2008). The breached dam is just above the chasm of the falls under the upper Passaic River.

Arch Bridge

The Arch Bridge carries a water pipe over the falls, while framing views of the falls from below. The Arch Bridge, constructed circa 1888 as a "deck truss" type footbridge, is in good condition. The bridge connects Mary Ellen Kramer Park to the south side of the Passaic River above the S.U.M. Hydroelectric Plant.

Great Falls Development Corp Building

The Great Falls Development Corp Building is a rectangular brick single story structure, located in Mary Ellen Kramer Park, likely constructed before 1900. Although



currently not used, it originally served as a pump room and then provided office and storage space. It is in poor condition, with a failing roof.

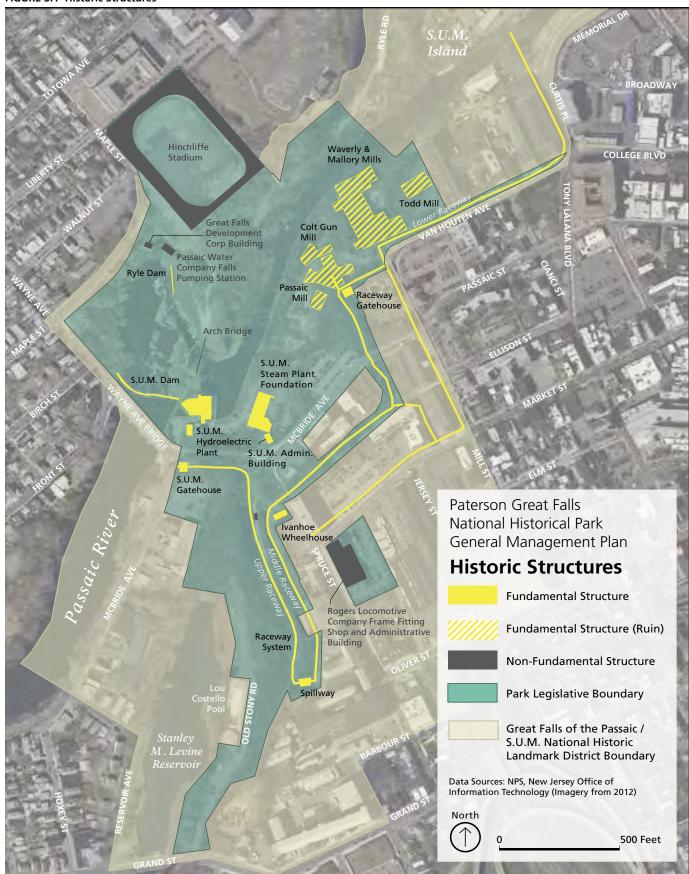
Passaic Water Company Falls Pumping Station

The Passaic Water Company began pumping water directly into the city mains in the mid-1800s. Around 1857, the company built a pumping station below the falls, which included multiple pump houses, a machine shop, and a boiler house. These were located near the present-day Mary Ellen Kramer Park. Remaining structures include the foundation of a pump house, a screen house, a chimney, and a machine shop. The Passaic Valley Water Commission currently operates a pump house on the property.

Ivanhoe Wheelhouse

The Ivanhoe Manufacturing Company was established by Henry Butler after several years working in paper manufacturing at the Passaic Mill. The Ivanhoe Paper Mill was built in 1850, and its wheelhouse (1865) is the last remaining structure of the ten building complex. The mill produced tissue and writing paper for publishing companies and the government, and was famous for its writing paper. The wheelhouse is located below the Upper Raceway and historically housed a large water turbine that powered the mill. The wheelhouse was restored in 1981, but without the water wheel and turbine. It now serves as a museum that exhibits work from regional artists.

FIGURE 3.1 Historic Structures





Rogers Locomotive Company Frame Fitting Shop and Administration Building

The Rogers Locomotive Company Frame Fitting Shop and Administration Building (Rogers Locomotive Building) is the former erecting shop of the Rogers Locomotive and Machine Works manufacturing firm. Thomas Rogers started a firm—then known as Rogers, Ketchum & Grosvenor—that designed and built machinery for Paterson's textile industry in 1832. They diversified to include the production of railroad locomotives and associated small parts for the railway industry. The most famous of the locomotives to be designed and built by Rogers Locomotive and Machine Works (renamed in 1856) was The General, created in 1855. The former erecting shop is the oldest of the remaining buildings from the complex owned and operated by the Rogers Locomotive and Machine Works. The building was constructed in the 1830s after the development of the Upper Raceway. A multi-story building, the exterior architecture of the Erecting Shop is intact although the upper-story machinery was removed. The double bay doors at the lower level of the building served as the portal for newly built locomotives. Today, the building is owned by the city of Paterson and houses the Paterson Museum and city-leased office space.

Raceway System

Primarily constructed of stone masonry, the raceways have been repaired with newer materials, such as concrete, over time. They incorporate sections of earthen embankment and rock outcropping.

The raceways stretch approximately one mile through the Great Falls NHL District, dropping about 22 feet in elevation for each level and incorporating three small waterfalls. The raceway system incorporates dams, spillways, mechanisms for raising and lowering the level of the spillway, gate structures, headraces, tailraces, bypasses, among other structural components.

The raceway system was actively used to power Paterson's mills until the S.U.M. decided to move to electric power in the early 1900s. Since then, much of the raceway has no longer been used. Leaks throughout the raceway system, along with the potential of flooding from the raceways into nearby streets, have caused concerned and prevented re-watering of the raceway system. The city of Paterson last operated the raceway in 2009.

Upper Raceway. The Upper Raceway is defined as the portion of the raceway system leading from the Passaic

River to the southern weir and spillway near the Dolphin Mill complex; the upper tailrace extends from the southern spillway to the Ivanhoe Basin (NPS 2013b). The raceway was laid out in order to supply water to new mill lots developed by S.U.M. along Spruce Street. Construction of the Upper Raceway required additional elevation modifications for the entire raceway system in order to gain greater water pressure for the new mills. Construction efforts for the Upper Raceway included excavation into a nearby hillside, and the development of an embankment between the Upper Raceway and tailrace (NPS 2013b). In 1830, the addition of lock gates made the Upper Raceway navigable from the river. However, by 1846, a new channel was cut from the river to the Upper Raceway, bypassing the reservoir, which was eventually filled in, and making the Upper Raceway un-navigable. Today a pedestrian path runs along the Upper Raceway in an area known as Upper Raceway Park. This portion of the raceway was rehabilitated between 1977 and 1982 and again in 2004.

Some components of the Upper Raceway include: gatehouses (such as the 1846 Gatehouse) raceway-gate dam, sluice, Ivanhoe check dam, head race, tail race, other water control structures and flumes, catch basin, Ivanhoe flume, and the Ivanhoe pedestrian bridge. The materials that make up the raceway include a bridge of concrete and brick vaults with brown sandstone abutments; brown sandstone walls; brown sandstone walls with bluestone caps; concrete piers, poured concrete walls; natural stone walls; poured concrete dam with control gates; and a bottom of mud, clay, or concrete. Elements of the raceway system such as the sluice and spillway at the Ivanhoe basin have been extensively rehabilitated with the replacement of wooden flashboards, and regrading of the bottom to direct flow into the sluice. Other major changes include the addition of a geosynthetic clay liner with bentonite at the seams between the liner and walls; the filling in of concrete and log flumes near the Wheelhouse; and the addition of concrete baffles to slow water in the spillway near the southern weir.

The upper tailrace runs parallel to the Upper Raceway, with a steep embankment between the two structures. The tailrace is constructed of sandstone and concrete with a bottom of concrete, geosynthetic clay liner, and

natural materials. Some of the walls for the tailrace were likely the foundations of mill buildings. Repair along the tailrace has included stone wall replacement with concrete walls; wall seam patching; the replacement of the natural bottom with concrete or geosynthetic clay liner; and the addition of a new check dam near the Ivanhoe basic. Leaking occurs along the tailrace in the elevator shafts of adjacent buildings; flow over the southern spillway may also contribute to flooding.

Middle Raceway. The construction for the middle raceway began in 1793 and extended S.U.M.'s mill operations to the northern edge of the ATP site c. 1800. The middle raceway extended from the Ivanhoe Basin to the Essex Spillway and then to the lower raceway near the north end of Mill Street; the middle tailrace ran underground along Market Street and then along Mill Street (NPS 2013). The middle raceway ended at the north gates waste way, which was in service until c. 1916-1917. The middle tailrace connected the mills along the middle raceway to the river and carried away their waste water. Flumes, such as the Rosen Mill flume, provided an outlet for the tailrace system. The flume and gatehouse at the north gates waste way historically released excess water from the raceway into the river, as the S.U.M. had a contractual obligation to maintain a sounding depth of three feet for the water supply for power (FMG 2010). A section of the raceway between Spruce Street and the Hamilton Mill may date to the original construction of the entire system (NPS 2013b).

The materials that make up the middle raceway include sandstone, natural embankment, and concrete; originally, the bottom was made up of soil and mud over a sand base. Covered sections of the tailrace include brown sandstone or brick walls with vaulted ceilings. Sand lined the bottoms of the tailrace historically. Some elements of the middle raceway system include the Essex Spillway; concrete sluices and flashboards; control gates to regulate the flow at the diverters for different mills; and gatehouses.

The spillway from the Ivanhoe basin was rehabilitated and repaired between 1978 and 2006, with replacements of the brown sandstone walls, mortar, and bluestone caps. Contaminated soil was found in the basin near the Ivanhoe Wheelhouse in 2005; the soil was partially



removed and the area was sealed and bermed to prevent water from crossing the contaminated material. Some of the middle raceways walls have been created from the foundation walls for adjacent buildings and other retaining walls not intended for use as raceway embankments. The south wall of the raceway is lined with sandstone, concrete, and natural embankment and is in poor condition. Sluices with steel gates and flash-boards that were part of the head races at the Hamil and Cooke Mill now divert water to holding tanks, where it is later released to the tailrace. Loose riprap lines the embankment and bed of the raceway beneath the Mc-Bride Avenue Extension Bridge, which was replaced in 1999; this area of the raceway leaks water into adjacent buildings.

Sections of the middle raceway are in poor condition and in some cases the raceway walls are bulging, collapsed, or deteriorating (FMG 2010). The SUM spillway and raceway features are in poor condition, and are in danger of further deterioration.

Lower Raceway. The lower raceway was built several years after the middle raceway, beginning around 1807. It runs parallel to Van Houten Street near the former ATP site. The lower raceway was fed from the tail races on the mills located along the middle raceway and from

a 22-feet high spillway near the Essex Mill. It extends from the Essex Spillway, along Van Houten Street and then along Curtis Place to the river (NPS 2013b). The lower raceway coincided with the development of mills along Boudinot Street (NPS 2013b).

The materials that make up the lower raceway are similar to what has been found in other sections of the raceway system: brown sandstone walls; concrete wall caps; concrete and masonry walls; riprap embankments; concrete diverter with steel gates; and soil and mud bottoms. The walls lining the raceway were occasionally created from the foundation walls of adjacent mills, such as the Phoenix Mill and the Congdon Mill. A portion of the lower raceway has been filled in. Sections of the lower raceway are in poor condition (FMG 2010).

Former Allied Textile Printing (ATP) Site Structures and Ruins

Historically, the former ATP site included a complex of over 30 buildings and structures with significant land-scape features such as the quarry and raceways. Today, many of those buildings are ruined or missing entirely. Invasive and volunteer vegetation has overwhelmed much of the site. The ATP ruins—comprised of remnants of the former industrial mills housed on the site, its industrial landscape, and industrial artifacts—are



currently gated off, closed to the public, and the site is classified as a brownfield. Various contaminants at the ATP site include metals and volatile organic compounds which are located along the former industrial sewers, underground storage tanks, coal burning areas, and other locations. The remaining buildings and structures lack roofs and are heavily damaged. The site lacks direct utility supply, but city utilities run through the property. A cultural resource investigation for the former ATP site was completed in 2010 which included an assessment of the condition of the structures and ruins as well as treatment options for the site. Table 3-2 documents structures and ruins, their historical uses, and their condition as determined by the cultural resource investigation. The following terms, defined by the report, were used in describing the condition of the resources:

- Fair: Element overall performs its intended function, with minor areas of failure. Material exhibits deterioration in limited areas. Material requires moderate level repairs, aggressive cleaning, patching and finishing to obtain serviceable condition.
 Represents average material condition.
- Poor: Element marginally performs its intended function, with large areas of failure or loss. Material exhibits significant deteriorated areas and may

require re-anchoring or re-attachment to substrate. Material requires significant repairs, reinforcement, extensive patching, cleaning and finishing to obtain serviceable condition. Represents below average material condition.

- Very Poor: Element does not perform its intended function. Material has significant deterioration or loss, and/or separation from substrate materials over substantial area. Material may be salvageable with widespread patching or reinforcement, but may require partial replacement. Material requires removal and replacement, significant repairs and/or patching, and extensive cleaning to return to serviceable condition. Finish cannot be returned to use, and must be stripped and re-applied. Represents marginal material condition.
- Total Loss: Element does not perform its intended function. Damage to material and/ or finish is extensive and widespread, and cannot be reversed. Material or finish is not salvageable for repair and must be removed and replaced. Represents a state of advanced loss and failure.
- Missing: Material and/or element is missing, no longer extant (FMG 2010).

Table 3.2 Structures and Ruins of the Former ATP Site

General Location	Historic Name	Historic Building Use	Assessed Condition
Passaic Mill Lot	Passaic Mill (Front)	dyeing	poor
Passaic Mill Lot	Regal Boiler House	boiler house	poor
Passaic Mill Lot	Passaic Mill (Rear)	dye house	total loss (no visible remains)
Passaic Mill Lot	Dry Box House	folding	total loss (structural failure)
Passaic Mill Lot	Washing/Bleaching; Printing	washing bleaching (1st floor) printing (2nd floor)	very poor
Todd Mill Lot	Copper Storage	copper storage	missing (no visible remains)
Todd Mill Lot	Office/Lab	office, labs	missing (no visible remains)
Todd Mill Lot	N/A	cloth washing	missing (no visible remains)
Todd Mill Lot	Todd Mill	storage	very poor
Waverly & Mallory Mill Lot	Drying/Makeup Building	drying, make-up (rear section)	very poor
Passaic Mill Lot	Drying/Makeup Building	drying, make-up (sump house)	very poor
Waverly & Mallory Mill Lot	Drying/Makeup Building	drying, make-up (front section)	very poor
Waverly & Mallory Mill Lot	Waverly Mill (Rear)	storage	total loss
Waverly & Mallory Mill Lot	Storage Building	storage	total loss
Waverly & Mallory Mill Lot	Mallory Mill East	color room, dying, finishing	total loss
Waverly & Mallory Mill Lot	Mallory Mill West	printing, drying, finishing	total loss
Waverly & Mallory Mill Lot	Waverly Mill	curing and tubing, frames and drying	very poor
Colt Gun Mill Lot	John Ryle Dye House East	drying and finishing	very poor
Mount Morris Quarry	Wash Room	wash room	very poor
Mount Morris Quarry	Standard Silk Dyeing Co. Boiler House	boiler house	fair
Mount Morris Quarry	John Ryle Dye House West	drying and finishing	total loss
Colt Gun Mill Lot	Filter Room		poor
Mount Morris Quarry	Knipscher & Maas Dye House	dyeing and finishing	poor
Mount Morris Quarry	Office and Silk Storage		total loss
Mount Morris Quarry	Finishing and Shipping	finishing and shipping (standard)	total loss (no walls remain)
Mount Morris Quarry	Washing Room (standard)	jig dyeing room	fair

General Location	Historic Name	Historic Building Use	Assessed Condition
Mount Morris Quarry	Dye House	dye house (standard)	very poor
Colt Gun Mill Lot	Colt Gun Mill	colt gun mill	fair
Mount Morris Quarry	Washing Room	washing (standard)	total loss
Mount Morris Quarry	Storage Room	storage (standard)	total loss
Mount Morris Quarry	Finishing Room	finishing building,	total loss (no walls remain)
Colt Gun Mill Lot	Machine Shop	machine shop drying (standard)	missing(no visible remains)
Todd Mill Lot	Storage Building	make up	total loss(no visible remains)
Todd Mill Lot	N/A	bleaching washing	total loss (no visible remains)
Waverly & Mallory Mill Lot	Storage Building		total loss
Mount Morris Quarry	South Outbuilding		very poor
Mount Morris Quarry	North Outbuilding		poor
Waverly & Mallory Mill Lot	Gate House	gatehouse	missing (no visible remains)
throughout site	Middle raceway Spillway, Lower Raceway, North Gates Wasteway	S.U.M. Raceway System	poor

Colt Gun Mill

The Colt Gun Mill was constructed by the Patent Arms Manufacturing Company on the former location of John Colt's nail factory near the Passaic River. Led by Samuel Colt, the Colt Gun Mill was under construction in 1836 and commenced manufacturing in 1837. The factory was a large, five-story stone building with a bell tower and measured approximately 135 feet long by 44 feet wide. Initially, the factory is thought to have produced cutlery as well as the first Colt revolvers. The building's size ensured it dominated the skyline of Paterson and was an icon for the city (FMG 2010). Due to poor sales and financial stability, the Patent Arms Manufacturing Company sold the factory in 1840. At the time of its sale, it housed a variety of machinery and tools: drilling machines, lathes, cutting engines, polishers, punches, filers, forges, and others.

After the failure of the gun manufacturing, the mill served as a silk manufactory with the addition of new spindles for the generation of silk thread, becoming the "true birth place of Paterson's silk industry" under the leadership of John Ryle (FMG 2010). Ryle expanded the mill complex with auxiliary buildings beginning in 1850.

The mill continued in use for textile production through the management of the Standard Dyeing and Finishing Company in the 1980s. The building burned in 1983 but was later stabilized in the 2002. Sections of the former Colt Gun Mill are in very poor condition, with some areas of the mill a total loss (FMG 2010). The remaining (extant) walls have been partially stabilized and preserved and remain reasonably intact. Stabilization measures included the disassembly of the surviving, unstable portions of the mill's second floor, stockpiling the salvaged masonry, installation of steel framing to stabilize the east and west walls, and adding concrete caps to further stabilize and preserve the walls. There is significant remaining fabric which offers opportunity for additional stabilization, preservation, and interpretation. The site is sensitive for archeological resources because intact features and deposits were found in similar contexts in close proximity to the Gun Mill, and because resources associated with the Gun

Mill may document changes in the way in which power was supplied to the mills through time.

Waverly & Mallory Mills

Built c. 1865, the Waverly Mill was reconfigured for silk production in the 1890s, run by Gallant Brothers Silk Manufacturers. A large brick building, the Waverly Mill originally housed cotton fabric dyeing, finishing, and storage facilities. Some of sections of the Waverly Mill are in very poor condition, with other areas of the mill complex a total loss (FMG 2010). While material loss is significant, portions remain that could be stabilized and preserved (FMG 2010).

The Mallory or "Mallary" Mill began as a cotton processing enterprise, but was transformed into a silk spinning factory around the Colt Gun Mill complex as a response to the increasingly important silk industry in Paterson. Probably constructed around 1870 or a little later, the Mallory Mill was reconfigured for silk processing around 1890. The Mallory Mill was a rectangular brick building that originally housed engraving and calico-printing facilities. It was expanded to include a waterwheel house by 1900. Sections of the Mallory Mill are in very poor condition, with some areas of the mill a total loss (FMG 2010). The Mallory Mill ruins include foundations and wall remnants that define the mill's footprint. There is little remaining building fabric in debris piles. Material loss is extensive and there is no potential for preservation. The site is archeologically sensitive due to the possibility of waterpower remnants.

Todd Mill

The Todd Mill had been fully constructed by 1875 and was located north east of the Colt Gun, Mallory, and Waverly Mills. It was an L-shaped brick building that contained an engine building, a carpenter's shop, and tuning and fitting facilities, run by the Todd and Rafferty Machine Works. The Todd Mill was responsible for the fabrication of the mechanical systems and engine construction for an early submarine designed by John Holland, and for steam engines. By 1900, the mill had adapted to the silk industry and housed a machine shop and broad silk and silk ribbon manufacturing facilities. Archaeological investigations have identified two head races and tail races, with wheel pits in between. Sections of the former mill has been assessed as completely miss-

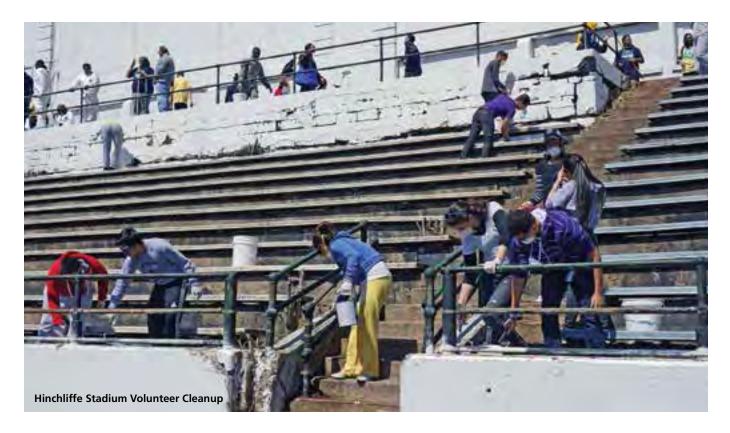
ing with no visible remains, but one standing portion of the former mill remains and is considered to be in very poor condition. These portions are considered unstable and in need of intervention to slow deterioration.

Passaic Mill

The Passaic Mill was constructed around 1813-1814 in an L-shaped plan and was used initially for the production of wire. The building had a masonry bearing wall structure with a saw tooth roof. In 1817, manufacturing at the brick mill was updated to include the production of duck cloth. The transformation of the duck cloth from flax to cotton transformed the industry, and owner John Colt sold his cotton duck to the U.S. government for sailcloth. Throughout the 1850s and 1860s, production at the Passaic Mill diversified to include printing calicoes and manufacturing silk thread and ribbons. Between the years 1899 and 1915, The Standard Silk Dyeing Company majorly expanded the Passaic Mill to the north. The fires of 1983 destroyed the mill. Sections of the former mill are in very poor condition, with some areas of the mill a total loss (FMG2010). The boiler house, with its prominent smoke stack is in fair/poor condition. A second portion of the Passaic Mill is one of the most intact of the ruined dye houses remaining on the former ATP site. The sidewalls and roof framing still express the sawtooth design. While in overall poor condition, these portions of the mill have the potential to be preserved as a ruin. The foundation, walls, and steel framing appear to be stable. The timber sawtooth roof requires immediate attention if it is to be saved. The archeological sensitivity of this area is largely unknown.

Hinchliffe Stadium

Hinchliffe Stadium is a national historic landmark that is nationally significant for its role in the history of Negro professional baseball in twentieth-century segregated America. Built in 1931-32 by the city of Paterson, the stadium was envisioned as a means of providing its citizens—struggling from years of economic depression—with an affordable venue for sports and entertainment events. The notable landscape architecture firm, Olmsted Brothers, designed the overall plan for the stadium, which commands a sweeping view of the historic industrial mill buildings in the adjoining Paterson Great Falls NHL District. John Shaw, principal architect of the



Paterson architectural firm Fanning & Shaw, designed the blended Spanish Colonial Revival and Art Deco/ Moderne styled stadium. Constructed into a hillside, the open-air stadium presents three exterior walls that accommodate interior stepped bleacher seating decks, forming a bowl open at the lower (southeast) end in a U shape. The entire building is fabricated of reinforced poured concrete with an applied skim coat. Major character-defining alterations to the stadium came early, in the 1930s, and predominantly in 1934 with the addition of a restroom building, a concession stand, seating along the southeast wall, and widening of the track. The changes reflect the use of the stadium as an entertainment venue that was subject to the needs of shifting business models.

Today, although the stadium is in deteriorated condition and is closed, it still clearly portrays the description of its as-build condition as written and photographed in 1932 (NPS 2104a). The stadium's design, materials and workmanship survive intact and clearly impart the original and historic appearance and construction of the building (NPS 2014a). Although years of vacancy and vandalism have damaged the building, it remains

as one of the most intact, if not the most intact of the few remaining stadiums that retain important historical integrity, associated with Negro baseball. Hinchliffe is distinctive, not only because of its unique design, but because it retains its entire physical plant, rather than just a field or lot where games were played (NPS 2014a). The stadium's period of significance is 1932 to 1944, covering the years when it served as a venue for segregated Negro professional baseball (NPS 2014a). Built as the Great Depression deepened and used during the era of "Jim Crow" segregation, Hinchliffe Stadium is an outstanding example of an athletic facility that served as a Negro professional baseball venue and home field for an extended period of time (NPS 2014a). Additionally, Hinchliffe Stadium hosted numerous Negro National League (NNL) games, considered by baseball scholars to be the premier Negro major league from the second half of the 1930s through the 1940s, including NNL season opening games in 1936 and 1937 (NPS 2014a). It is through the strong association of Hinchliffe Stadium with Negro professional baseball as it operated within the context of institutionalized segregation of African-Americans in the United States by which the stadium gains national significance (NPS 2014a).

Archeological Resources

Known archeological resources within Paterson Great Falls NHP include a variety of features and deposits related to historic features of the Paterson industrial era.

Pre-contact and Post-contact Native American Occupation

Three major cultural periods are evident in the Paterson area and have been documented through archaeological investigations: Paleoindian, Archaic, and Woodland traditions. The Paleoindian period is characterized by the presence of fluted projectile points and other related tools; and site types that include quarries, base camps (often located near waterways), maintenance stations, and hunting sites. The Archaic period emerged during the warming Holocene climate and resulted in a more diverse array of site types and the presence of new tool such as stone axes, chisels, and gouges, stone vessels, and the small stemmed point tradition. Settlement was largely focused on waterways. The Woodland period is characterized by the presence of ceramics, increasing sedentism, and extensive agriculture (NPS 2012a).

Several nearby sites are known, these include at least 20 pre-contact fords and weirs between Passaic Park and Two Bridges, a rock shelter and a stone blade cache. No known Native American period occupation sites or artifacts are present within the current park boundaries.

Historic Period

Numerous studies focused on the industrial development of Paterson have been conducted in the city's industrial core. These have investigated the location of dozens of features associated with the initial industrial development of the city, including the S.U.M. raceways and various associated structures, Stoney Road, and the Spillway at L'Enfant's Gap. Many of these features have been abandoned or lost to development. More than 20 archeological projects have been undertaken in or near the NHL District and Paterson Great Falls NHP. During the 1970s, the Paterson Archaeology Project studied the Upper Raceway, the Rogers Locomotive Works, and other sections of Paterson. More recently, testing and excavation done as part of National Historic Preservation Act Section 106 compliance has identified other resources related to Paterson's early

industrial periods. Recent investigations done for a general cultural resources assessment of the ATP site has provided more detailed archeological data related to the development of the mills that were once present within the park boundaries.

Some of the many archeological resources identified during these extensive investigations include:

- · additional sections of the raceway system
- · waste weirs, sluices, and flume locations
- · abandoned S.U.M. reservoir and intake gatehouse
- Ivanhoe Paper Mill rag and waste storage building
- Rogers Locomotive and Machine Works oil and paint storage building
- · Rogers blacksmith shop
- · two intact brick locomotive erecting bays

These archeological studies share several general outcomes. Most have resulted in the identification of intact features and deposits that can yield new information important in documenting the industrial development of Paterson. Many have also revealed the presence of large amounts of demolition debris and fill soils, pointing to some of the challenges urban archeologists will face in conducting additional research in the Paterson Great Falls NHP. Finally, earlier work has indicated that most of the intact features and deposits in the park are related to the period of industrial development, While it is possible that earlier resources are present, it is not likely they will be extensive.

Natural Resources

The park's natural resources generally described in the following section include the following:

- Water resources are the hydrological systems and features of the park, including streamflow characteristics, water quality, and floodplains.
- Floodplains are areas of land that are subject to natural flooding from an adjoining waterway.

Water resources and floodplains are analyzed further in "Chapter 4: Environmental Consequences."

Water Resources

The Passaic River flows from its headwaters in Morris County to Newark Bay. In the city of Paterson, the river flows northeast forming the northern and eastern boundaries of Paterson. The river is the principal hydrologic feature in the park and is a park fundamental resource.

Streamflow Characteristics

The Passaic River feeds a raceway system above the Great Falls. The city of Paterson holds a NJDEP water allocation permit to divert water into the raceway system. During the summer months, the amount of water flowing over the falls, and subsequently into the raceway system, is controlled by a flow regulation agreement for between North Jersey Water Supply and the city of Paterson. The agreement states that there should be a "passing flow" at all times and no pumping upriver from the falls. Passing flow requirements set a rate of water flow which either must be maintained downstream or must be allowed to pass a specified point in a stream. This agreement does not address water flow during the remainder of the year or "winter drought" issues.

Water is also diverted into the S.U.M. Hydroelectric Plant above the falls. The plant's license from the Federal Energy Regulatory Commission and the lease with the PMUA requires that the plant operator, currently Eagle Creek Renewable Energy, provide "continuous flows to the existing power canal network." The PMUA holds a Bureau of Water allocation permit from the Division of Water Supply and Geosciences and NJDEP, and must meet passing flow requirements over the Great Falls. The permit requirements state that diversions from the PMUA intake shall not cause the Passaic River flow over the Great Falls to be less than 200 cubic feet per second (NJDEP 2013a).

Water Quality

Water Quality Management in the Passaic River Basin. The water quality in the Passaic River and its tributaries is affected by the activities that take place in the watershed. Water pollution is generated from stormwater runoff and point source pollutants such as wastewater treatment discharges, industrial discharges and combined sewer overflows. Under the Clean Water

Act of 1977, the EPA is responsible for developing water quality standards that define goals for U.S. waterbodies by designating uses, setting criteria to protect those uses, and establishing provisions to protect water quality from pollution. To assess water quality conditions, the EPA monitors criteria related to aquatic life, biological condition, nutrients, human health, microbiology (pathogens), and recreation (US EPA 2013).

The park is located within Watershed Management Area 4, Lower Passaic River and Saddle River (WMA 4) in the Passaic River Lower (Saddle to Pompton) watershed, sub-watershed Passaic River Lower (Goffle Bk to Pompton River). WMA 4 includes many older cities and industrial centers such as Paterson, Newark, Clifton, and East Orange and its water quality is affected by its industrial past as well as current point sources of pollution and stormwater runoff. There are several ongoing restoration initiatives in WMA 4 that are focused on the 17-mile tidal stretch of the lower Passaic River south of the park, from the Dundee Dam to Newark Bay. The portion of the lower Passaic River south of the park is included in the Urban Waters Federal Partnership. The partnership is a collaborative effort to restore waterways and their environments. It is composed of 13 federal agencies, including the U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers, along with supporting agencies including the NPS.

Passaic River Designated Uses. The Passaic River segment that flows through the park and the subwatershed surrounding the park supports its designated uses for agricultural water supply and industrial water supply, but does not support its designated uses for aquatic life, fish consumption, primary contact recreation, or public water supply (NJDEP 2012a). Within the park, the river does not meet primary recreational standards due to elevated levels of E. coli (NJDEP 2012a).

According to the 2008 *Draft Passaic River Canoe Kayak Trail Plan* (LPSRA 2008), it is safe to paddle on the Passaic River as long as paddlers take the proper precautions associated with paddling on a "post-industrial, urban river with combined sewer overflow outlets,"

especially after a large rainfall in the watershed when pathogen counts increase". Activities such as boating are considered secondary contact recreation.

Passaic River Impaired Waters. The portion of the Passaic River that flows through the park is listed on New Jersey's Section 303(d) list of impaired waters. The Section 303(d) list is one of two basic approaches the Clean Water Act uses to protect and restore waterbodies. Under Section 303(d), the Clean Water Act requires states to identify waters that do not or are not expected to meet applicable water quality standards and report their findings to the EPA every two years.

Primary contact recreation refers to water- related recreational activities that involve significant ingestion risks, including but not limited to, wading, swimming, diving, surfing, and water skiing.

Secondary contact recreation refers to water-related recreational activities with minimal probability of water ingestion, including but not limited to, boating and fishing (NJDEP 2012b).

Once a waterbody has been identified on the Section 303(d) list, a total maximum daily load (TMDL) must be developed for each pollutant that is impairing the waterbody. The TMDL is a written plan and analysis that calculates the maximum amount of a pollutant allowed to enter a waterbody to ensure the waterbody will meet and continue to meet the water quality standards for each pollutant (USEPA 2012). The Clean Water Act requires states to rank and prioritize the development of TMDL to focus available resources on developing TM-DLs in an effective and efficient manner, while taking into account environmental, social, and political factors. NJDEP has a set of criteria that are used to prioritize TMDL development. Those TMDLs ranked low priority are not expected to be complete in the immediate or near future. Table 3.3 summarizes the water quality attainment, causes of non-attainment, and the TMDL status for each pollutant for the Passaic River that flows through the park.

Combined Sewer Overflows. Rainfall at the park that is not absorbed by the ground runs off the site as stormwater. While some stormwater runs directly into the Passaic River, much of it collected in storm drains and enters Paterson's combined sewer system. Under regular conditions, all flows within Paterson's sewer system are conveyed to the Passaic Valley Sewerage Commission's wastewater treatment plant downstream in Newark, where wastewater is treated and discharged into the Passaic River. During extreme stormwater events such as heavy rainfall or snowmelt, combined sewer overflows (CSOs) can exceed capacities of the



lines to convey flows and/or the capacity of the downstream plant for treatment; at such times the combined stormwater and sanitary sewer flows may be released directly into the Passaic River, impacting water quality. These CSOs contain pollutants that affect the health of the river and its uses.

There is one CSO outlet located within the park on the north side of the Passaic River, just below the southeastern corner of Hinchliffe Stadium. There are several other CSO outlets located downstream of the park, near S.U.M Island (NJDEP 2013a). According to New Jersey Pollutant Discharge Elimination System, the permits for these CSO locations expired in 2009 and are not believed to be actively used (NJDEP 2011).

Debris and Litter

Debris and litter are another source of water pollution. Commission's River Restoration Program was created to

Table 3.3 Water Quality Attainment and TMDL Status

Use	Attainment	Cause	TMDL Development
Agricultural water supply	Fully supporting	N/A	N/A
Aquatic life	Not supporting	Cyanide	Low priority
	Oxygen, dissolved	Completed	
	Phosphorus (total)	Completed	
Fish consumption	Not supporting	Pesticides: chlordane in fish tissue, DDD, DDE, DDT	Low priority
	Mercury in fish tissue	Low priority	
	PCB in fish tissue	Low priority	
Industrial water supply	Fully supporting	N/A	N/A
Primary contact recreation	Not supporting	Escherichia coli (E. coli)	Completed
Public water supply	Not supporting	Arsenic	Low priority

address this issue along the Passaic River and within Newark Bay. The program removes litter and debris from the Passaic River, including within the park boundaries. The program is composed of three elements: volunteer shoreline clean-ups, skimmer vessel floatables removal, and community or municipality requested clean-ups (PVSC 2013).

Floodplains

Flooding is a recurring problem in the city of Paterson. The most severe flood, the "flood of record ", occurred in 1903, and more recent floods in 1968, 1971, 1972, 1973, two in 1975, 1984, 1992, 1999, 2005, 2007, 2010, 2011 (Hurricane Irene) and 2012 (Hurricane Sandy) were sufficiently devastating to warrant federal disaster declarations (USACE 2013). Hurricane Irene in August 2011 was the most destructive flood that the Passaic River Basin has experienced with an estimated \$1 billion in damages (USACE 2013).

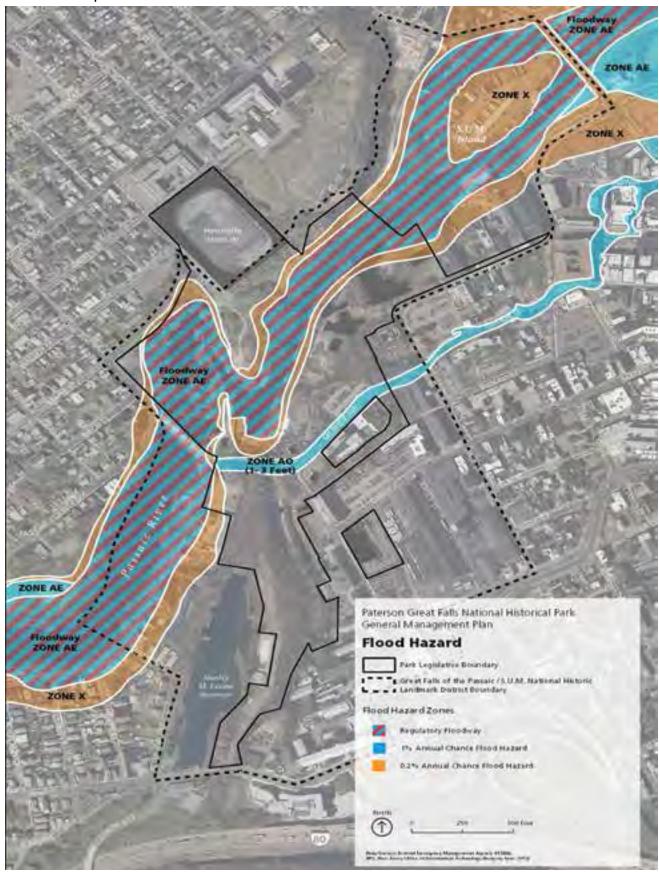
Within Paterson Great Falls NHP, construction of river walls, raceway systems and dams has altered the

natural flow of river, changing the location and size of the adjacent floodplain and creating floodplains along the upper, middle and lower raceways. Today, the regulatory floodway along the river in the park varies from 200 to 500 feet in width. The regulatory floodway is defined as follows:

A "regulatory floodway" means the channel
of a river or other watercourse and the adjacent land
areas that must be reserved in order to discharge the
base flood without cumulatively increasing the water
surface elevation more than a designated height.
Communities must regulate development in these
floodways to ensure that there are no increases in
upstream flood elevations.

Adjoining the regulatory floodway is a narrow 500-year floodplain. Other areas of 100-year floodplains in the park include and adjoin the upper, middle and lower raceways (Zone AO), where average flooding depths are between one and three feet.

FIGURE 3.2 Floodprone Areas



Visitor Use and Experience

Visitor Experience

Visitors to Paterson Great Falls NHP come to the park for many reasons— to explore its historic sites and hear its stories through the interpretive media and programs, to enjoy the park's outdoor spaces engaged in a variety of recreation activities, and to pursue research into America's industrial heritage. Some visitors actually never visit the park – rather they are virtual visitors who explore the park remotely, via the internet or utilizing new technologies.

The park is open to the public during daylight hours and does not charge an entrance fee. Current visitor experiences center around the Great Falls and Paterson's industrial history. Visitor activities include both passive and active recreational activities, such as: visiting the Welcome Center and the Paterson Museum, touring the park and the adjoining historic district, viewing the Great Falls, and exploring trails along the raceway system.

History of the Great Falls

Visitors observe and appreciate the natural geologic formations, read about their formation, and learn about the raceway systems and the historic mill structures they powered. These experiences all tie into understanding the history of the Great Falls and Paterson as one of the nation's earliest industrial centers, a project of Alexander Hamilton and the S.U.M., and the development of water power systems for industrial use. The experiences also connect to the related stories of immigrants who worked in the mills, factory owners and operators, and laborers who worked for better working conditions and pay.

Discovering Historic Resources

Learning about the area's history is an important part of the Paterson Great Falls NHP visitor experience tied to the park's scenic and preserved historic settings. Cultural resource-based recreation opportunities include self-guided exploration and discovery of historic mill buildings and the raceway system along pedestrian paths and sidewalks, as well as guided tours and programming. There are multiple opportunities for visitors to explore the historic sites and structures associated

with the park and the city of Paterson, including the historic raceway landscape and mill buildings. The wayside at Overlook Park and the partner-led tours facilitate visitors' exploration of historic sites.

Upper Raceway Park, including the Ivanhoe Wheelhouse and the S.U.M. Gatehouse, provide access to the raceway system. The exterior of the Ivanhoe Wheelhouse provides an example of a wheelhouse. While walking through Upper Raceway Park, visitors see the beginning of the raceway systems and some of the many mills that utilized the raceways to generate power. The middle and lower raceways run through the city and portions of the park, including through the former ATP site. The portions of the raceways located adjacent to the former ATP site are not accessible to the public. The middle and lower raceways lack adjacent formalized pedestrian paths.

The former ATP site is currently closed to the public. The ATP ruins are composed of remnants of the former industrial mills housed on the site, such as the Colt Mill ruins, Mallory Mill ruins, Waverly Mill ruins, and Todd Mill ruins. Visitors can see the ruins from Mary Ellen Kramer Park.

Recreational Uses

Paterson Great Falls NHP is a popular destination for neighborhood residents who come to walk, run, and relax overlooking the Passaic River and Great Falls. Other passive recreational uses include special events and picnicking.

Access to the river for water-based recreational activities is limited to fishing, both within the park and upstream and downstream of the park. Near Hinchliffe Stadium, an informal footpath leads to a rocky beach on the north shore of the Passaic River. River access is available upstream at Pennington Park and at West Side Park, both via stairs down a concrete bulkhead that lead to a natural shoreline; however, given the location upriver, access to the park on the river is not possible without a portage around the Great Falls. There is currently no formalized portage access around Great Falls and any informal access is dependent on water levels that allow for bridge clearances.

Special Events and Related Regional Attractions

The park's location within the city of Paterson provides opportunities for visitors to incorporate visits to nearby cultural and historic venues, activities, and events into visits to the park, and for the community to incorporate local events and activities into the park. Some examples of these connected activities and experiences include:

- Resources within the Great Falls NHL District—
 located outside of the park's legislative boundary—
 provide additional opportunities to explore and
 experience the collection of predominately 19th
 century mills and other structures that contribute
 to the NHL District. A walk through the NHL
 District provides an opportunity to observe the
 buildings' architecture and consider their previous
 uses as active industrial mills.
- The Great Falls Summer Jazz Series held in Overlook Park and sponsored by the city is a five-concert series that occurs every Saturday in August, with two bands playing each Saturday evening. Each free concert also features food and beverage vendors.
- The Great Falls Festival takes place on Labor Day weekend. It honors Paterson's industrial heritage and its role in labor and manufacturing. The festival features vendors, activities, booths for civic and charitable organizations and music. It is part of Labor Day celebrations that also include a parade that starts in Haledon and finishes at the Great Falls NHL District.
- The Paterson Falls Film Festival takes place in the Paterson Museum and the Ivanhoe Building.
- The Annual Art Walk is a walk through the historic district and the Great Falls National Historical Park that includes both music and art.
- Lambert Castle, located on Garret Mountain, was constructed in 1892-39 as the private residence of an English immigrant who made his fortune in the silk industry and today is operated by the Passaic County historical Society as a museum and library.
- The American Labor Museum is a restored 1908 home of immigrants that was a meeting place for silk mill workers during the 1913 Paterson Silk Strike.
 The museum includes restored period rooms,

- a permanent exhibit on the 1913 Paterson Silk Strike, changing exhibits, a store, gardens, a library, and educational programs and special events.
- The Ivanhoe Artists Mosaic is located within walking distance of the park and hosts events in the Ivanhoe Wheelhouse, including art classes, an open mike night, and other lectures and events.

Current Visitation

The park currently attracts many visitors who are local residents, using the park as their neighborhood outdoor and recreational space, focused on the Great Falls area. The park also attracts out-of-town visitors seeking a heritage tourism experience, who are interested in the Great Falls and the events that occurred in Paterson that the park interprets.

Because the park is new to the national park system, data traditionally collected, such as the number of yearly visitors, is limited. Currently, NPS and partners count visitors as participants in tours, school groups, specials events and people who visit the Paterson Museum and Welcome Center. In addition, NPS and partners have estimated through observation and informal counting that approximately 50,625 visitors enjoyed activities in Mary Ellen Kramer Park, Overlook Park and Upper Raceway Park and participated in partner-sponsored events in adjacent areas in 2014. The total number of actual and estimated visitors in the national historical park during 2013/2014 is 104,500.

Pre-Arrival Information and Orientation

The NPS park website provides a variety of information for visitors to use for planning a trip to the park. The "plan your visit" pull-down menu offers information on how to get to the park, operating hours and seasons, things to do, fees and reservations, things to know before visiting, accessibility, and park closures (if any). Links are provided to the Paterson Museum website for additional information on things to do in the park. The Paterson Museum website provides information on how to get to the museum, operating hours, fees, and guided tours, images of the exhibit floor, and articles providing an overview of the Great Falls' history and some of the industries that grew up around the falls.

Table 3.4 Current Visitation Estimates

Year	2013/2014
Paterson Museum (3,526 school children)	26,452
Welcome Center (previously the Great Falls Historic District Cultural Center)	3,106
Ivanhoe Artists Mosaic, Inc.	4,754
NPS programming	9,564
Actual number of visitors participating in tours, programs and museum visits	53,876

Visitor Facilities and Amenities

Visitor Contact Stations and Visitor Services

The Welcome Center, formerly known as the Great Falls Historic District Cultural Center, provides orientation for visitors once they arrive in the park. The center includes exhibits for visitor to learn about the park, a gift shop operated by Eastern National (the park's cooperating association), a community conferencing area, restrooms, staff offices, and free parking. NPS and the Paterson Museum staff the facility, which is generally open 4 to 5 days per week from late fall through winter and 6 to 7 days per week during spring and summer months.

Partner organizations, such as the Paterson Museum, provide independent interpretive activities, information, and other visitor services such as restrooms. The Paterson Museum, operated by the city of Paterson, includes exhibits on Paterson history, local archeology, and mineralogy. The museum is open Tuesday through Sunday and charges a \$2 admission fee for adults.

Trails

The park's trails, open spaces, and pedestrian connections to the park encourage self-guided exploration, provide opportunities for relaxing away from the more congested urban environs surrounding the park, and provide space for recreational activities and picnicking. The park currently contains a number of pedestrian paths which provide visitors with a pedestrian network to explore the park and its resources:

 A pedestrian path runs along Upper Raceway Park providing visitors opportunities to view the raceway

- system, experience solitude within a more naturalized setting, and sit and enjoy the park on park benches.
- Stoney Road, extends from the ridge top above the Upper Raceway and ends at the Stanley M. Levine Reservoir.
- The pedestrian footbridge that spans the river near the falls provides access between Overlook Park and Mary Ellen Kramer Park and connects the two sides of the river.
- An informal social trail near Hinchliffe Stadium leads to a rocky "beach" area along the north side of the Passaic River. This social trail near the Passaic River is an unmarked footpath that has not been formalized as a visitor access point.
- There is an asphalt footpath and a wooden staircase that lead to the informal trail, both of which are in need of repairs.
- There are also trails running through Mary Ellen Kramer Park and into the adjacent parkland at the intersection of Wayne Avenue and Maple Street.

Education, Interpretation and Understanding

The park offers visitors varied experiences through interpretation, education, and stewardship programs. Educational and interpretive programs are developed to encourage more enjoyment of park resources and facilitate a greater appreciation of the cultural and historical significance of the park as well as the historic structures located within the adjoining Great Falls NHL District. Programs offered by the park, its partners, and

neighbors include self-guided walking tours, guided walking tours, educational programming, concert series, and art and film festivals.

Interpretative and Educational Programming

Park Guided Tours. During the summer and fall, guided tours of the park are given twice a day on weekdays. During the winter and spring seasons, reservations are required to schedule a guided tour. These one-mile walking tours are led by a member of the Great Falls Youth Corps, an NPS Ranger, or a park volunteer. The tour covers the story of Paterson and the Great Falls, and helps visitors discover the natural and cultural diversity of the area the nation's first industrial city. The tour route travels through parts of the NHL District, and includes stops at partner visitor facilities such as the Paterson Museum.

Educational Programs with Schools. The park provides educational programs to school groups, including an introduction to the park during field trips given by a park ranger and visits to local schools by a park ranger. There are several teaching aids and curriculum guides available on the park's website that help teachers link subjects such as history, social studies, and geography to the natural and cultural stories of Paterson and the Great Falls. In addition to the ranger-led introductions to the park for field trips, the park provides classroom programs to local schools in the Paterson area.

Paterson Public School #7 Partnership. In 2012, the park "adopted" Paterson Public School #7's 5th grade elementary school class. The educational partnership works to achieve shared goals of educators and the park and revolves around a 40-year spiraling curriculum taking advantage of all park resources and themes. The partnership will culminate during NPS's Centennial celebration in 2016 when that year's graduating class, then in the 8th grade, will unveil their capstone service project to enhance the visitor experience at the park.

Junior Ranger Program. The park has a Junior Park Ranger and a Web Ranger program. The Junior Ranger Program allows participants to learn more about their national parks and earn official badges and certificates upon completion. The Web Ranger Program provides participants with an opportunity to learn about our national parks through the internet.



Volunteer Stewardship

Volunteer programs offer opportunities for visitors to become involved in stewardship of the park. Volunteer programs typically involve cleanups, defined landscaping projects, or providing tours of the park. Annual volunteer clean-up days occur in April and in August. The event in April is an Earth Day clean-up sponsored by the Passaic Valley Sewerage Commission, NPS, and the Paterson Department of Public Works. The Earth Day clean-up targets the banks of the Passaic River and the Great Falls Reservoir. The August cleanup is sponsored by the Great Falls Youth Corps, NPS, NJCDC, and city. The Earth Day clean ups attract hundreds of volunteers. In spring 2014, more than 450 volunteers registered to clean up and paint the interior of Hinchliffe Stadium on the day it was officially designated as a national historic landmark.

Partner Involvement, Special Events, and Adjacent Activities

Partners play a role in promoting understanding, education, and interpretation. Currently the park has working relationships with various groups and organizations, and will continue to build on these partnerships. The park is committed to strengthening relationships with universities, schools, institutes, and organizations as well as local, state, and federal agencies to accomplish a variety of operational needs.



Hamilton Partnership for Paterson Sponsored Programs. The Hamilton Partnership for Paterson is the park's official Friends Group. It helps promote the park and secure funding to help maintain historic structures, fund programs, and develop new initiatives. This non-profit partner is working to enhance the benefits of the national park for the city, state and nation, helped initiate development of the Mill Mile, a self-guided walking tour, accessed on-line or via brochure, of key locations within the park.

Great Falls Youth Corps. In partnership with NPS, the NJCDC organizes the Great Falls Youth Corps, a summer program for local high school students which works on projects at the park. The Corps' strategy seeks to improve the properties around the park, and develop momentum for additional projects. The Great Falls Youth Corps provides walking tours within the park. Paterson Education Fund Programs and Outreach. A cooperative agreement between the park and the Paterson Education Fund (PEF) is introducing new youth programs and education outreach. For example, with PEF, the YMCA and the STEM Academy in Paterson, the park brought the non-profit "Rocking the Boat" to the city in the summer of 2012 to get school kids out onto the Passaic River and developed a workshop for teachers to show them how to use the park as a classroom. The park is also working closely with the city of Paterson to create future youth programming.

William Paterson University Oral History Program.

In 2013, the NPS signed a general agreement with William Paterson University. The agreement is designed to generate greater use of the park's historical, cultural, and natural resources for educational purposes. The university provided the park its first interns and developed its oral history program.

Other Partner Sponsored Programs and Events.

New cooperative agreements completed in 2014 include those with Montclair State University (Eco-Explorer Program through the Passaic River Institute, MSU), Passaic County Community College (Exploring Paterson Great Falls NHP through the visual and literary arts), and the Student Conservation Association (hired a trained crew leader to oversee the Great Falls Youth Corps landscape team).

The park held its third Annual Asphalt Art competition in summer 2014. The art event, conducted in partnership with a local artist and sponsors, attracted more than 500 people, including 75 amateur and profession artists who interpreted the park's themes through chalk on asphalt canvasses laid out within the park.

Health and Safety

Paterson Great Falls NHP experiences safety issues similar to those found in any unit of the national park system, as well as additional visitor safety challenges due to its urban location. Issues focus on visitor personal safety, visitor conflicts, and vandalism. Conflicts between users can sometimes pose safety problems, such as those between vehicles and pedestrians and between vehicles and bicyclists. Areas of the park with narrow sidewalks or high vehicular traffic can be particular areas where conflicts may occur. Closed or unmaintained cultural resources and facilities pose risks to visitors who explore them. Many of the former ATP site structures are in very poor and unsafe condition. They present climbing hazards with unstable surfaces and sharp objects. Although the former ATP site is not open to public access, it is inadequately fenced, or the fence has been breached, in some locations. Additional surveillance and lighting is needed to address these issues. Law enforcement throughout the park is currently

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handled by the city of Paterson police department. In addition to law enforcement, this park is dependent on the city for dispatch and emergency medical services. Without dedicated park rangers to make routine park visitor contacts, ensuring that park regulations are understood and being met is difficult, as is checking for safety and resource violations, and responding to or directing visitor inquiries to appropriate park staff.

Transportation and Access

Visitors access Paterson Great Fall NHP using all modes of transportation. Area residents walk and bike to the park, while visitors from other parts of the city, the region and beyond rely primarily on private vehicles to get to the park. Some visitors access the park on private bus tours or on public transportation.

Vehicular Access

Interstate 80 (I-80), running east-west from Teaneck, New Jersey to San Francisco, California, is adjacent to the southern boundary of the park. This freeway serves as a primary means of access for visitors arriving to the park from places beyond the city of Paterson. Ramps from the Market Street Exit ramp provide direct access to Oliver Street, just one block from the park.

Two other roadways—State Route 4 and State Route 19—provide regional vehicular connections to the park. Both are typically congested due to proximity to interstate highway access ramps and other regional roadways.

Streets adjacent to and running through the park include McBride Avenue, Wayne Avenue, Spruce Street, Mill Street, Van Houten Street and Maple Street. Informal traffic volume information indicates that Ward, Market, Spruce, Wayne, Main, Broadway, and Totowa Streets carry the most traffic in the park vicinity and that there are generally three peak periods for vehicular traffic: the morning and evening rush hours and after school (City of Paterson 2008). Traffic congestion and associated threats to pedestrian safety are common complaints of Greater Spruce Street residents (City of Paterson 2008).

Parking

Several surface parking facilities within the park offer free parking for visitors. These include lots at Overlook Park, the Welcome Center, the Paterson Museum, and the Lou Costello Pool (off Old Story Road).

The Paterson Parking Authority owns and operates a 212-space surface lot on Lower Market Street, across from the Paterson Museum and adjacent to the Middle Raceway. This lot is currently utilized by private permit holders. The parking authority has developed a conceptual plan for a parking garage on the site with up to 1,000 spaces.

On-street parking within the park is generally prohibited, with the exception of several metered spaces on the south side of Van Houten Street and some free on-street spaces along the southern portion of Spruce Street near the Paterson Museum.

The Paterson Parking Authority operates additional surface lots and parking structures in the vicinity of the park and in downtown Paterson. These facilities charge an hourly usage rate of \$3 to \$4 for the first hour, \$2 for the second hour and \$1 for each additional hour. The closest parking authority facilities to the park that offer hourly parking are at 80 Prospect Street (172 surface parking spaces) and 65 Ellison and Prospect Streets (parking garage with 836 spaces).

Public Transportation

The park is accessible by several modes of public transportation including New Jersey Transit rail and bus lines, city-run trolley service, and charter bus lines.

Rail Service

The New Jersey Transit (NJT) Main Line provides commuter rail service to Paterson. It runs from Port Jervis to Hoboken, with connections available to New York City and other NJT lines by transferring at the Secaucus Junction Station. The closest station to the park is located in downtown Paterson, approximately one mile (a 20-minute walk) away.

Bus Service

NJT provides bus service within the city of Paterson. Fourteen bus lines run within one-half mile of the park. Service is provided to Newark, Paramus Park, Wayne, Hackensack, and East Rutherford in New Jersey and the George Washington Bridge and Port Authority Bus Terminals in New York. NJT also provides bus service

FIGURE 3.3 Transportation System



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in surrounding counties including Passaic, Bergen, Essex, and Hudson Counties.

NJT operates the Broadway Bus Depot on Broadway Street, just east of Curtis Place, approximately one block from the Lower Raceway. The depot, renovated in 2010, serves as the termination point for bus lines 72, 74, 161, 171, 190, 703, 746, 748, and 770.

NJT also operates the Market Street Garage, a bus maintenance facility and office space, adjacent to the Paterson Museum, on Market Street. NJT has a \$17 million capital project scheduled to rehabilitate the facility, including renovation of interior offices, a new customer lobby and ticket office, and other mechanical and structural improvements. This location is convenient to the ramps on and off of I-80 and the Garden State Parkway.

Private bus carriers also provide service in the park vicinity, mostly for commuting, between Paterson and regional destinations. The largest of these, Spanish Transportation Company, operates as Express Service and provides frequent and competitively priced service with passenger pick-ups along Main Street and Market Street.

Other Public Transportation

The Paterson Parking Authority runs the free Paterson Trolley Monday through Friday from 7:00 AM to 6:00 PM. The trolley line serves Paterson City Hall, Passaic County offices and courts, the Federal Plaza, Passaic County Community College, downtown merchant and center city areas, and the farmers market.

Pedestrian and Bicycle Circulation

Pedestrian circulation within the park includes sidewalks along streets and a network of paths/trails. Sidewalks are available on the streets surrounding the park; however, there is a break in the sidewalk in front of the ATP site on Van Houten Street and curb cuts interrupt the sidewalk in various places surrounding the park. The sidewalks on McBride Avenue are separated from the roadway by a metal barrier between Spruce Street and Wayne Avenue. The sidewalks on the Wayne Avenue Bridge are narrow and do not provide a lot of space for pedestrians.

Pathways are located along the Upper Raceway and in Mary Ellen Kramer Park. From the southern end of the Upper Raceway Trail, a trail leads up the hill towards the Lou Costello Pool parking area, off of Old Stony Road.

McBride Avenue and the pedestrian footbridge over the Passaic River in the vicinity of the Great Falls provide pedestrian connections for park visitors and local residents between the two sides of the park. The footbridge is accessed from McBride Avenue near its intersection with Wayne Avenue on the south side of the river and from Maple Street through Mary Ellen Kramer Park on the north side of the river.

There are limited bicycle paths around and within the park. There are currently no designated bicycle lanes in the city of Paterson. There is one signed bicycle route on the west side of the Passaic River between Great Falls and Overlook Park. Dedicated bike lanes are proposed along McBride Avenue, Ellison Street, Spruce Street and Market Street. In addition, shared bikes lanes are proposed for Van Houten Avenue adjacent to the park.

Socioeconomics

Park and open space areas in and around an urban area are key contributors to the quality of life in the community. This becomes even more significant in very large metropolitan areas, where population densities and travel distances to open public lands are greater. Paterson Great Falls NHP is located within the largest metropolitan area in the United States, where along with other parks and open space, it plays an important role in sustaining and enhancing the quality of life for the residents of the city of Paterson and Passaic County.

Population and Community Trends

Historically, the city of Paterson has held the majority of Passaic County's population; however, Paterson's share of the county's population has been in decline, and went from a peak of over 40% to currently under 30% of the county's total population (City of Paterson 2014). Since 2000, the city's population has declined. After peaking in 2000, with 149,222 people, it declined by 2.7% to 145,2109 in 2012 (USDOC 2012).

Passaic County experienced an increase of 2.8% in population between 2000 and 2012, from 489,049 to 502,885. In all areas of Passaic County, population grew much more slowly than the rest of New Jersey, which increased in population by 5.4 percent between 2000 and 2012 (City of Paterson 2014).

In 2012 the population of the city of Paterson represented 2% of the population of the total population for the New York-Newark-NY-NJ-CT-PA Combined Metropolitan Statistical Area (estimated at 23,362,099) (US-DOC 2012).

People and Households

Median Age and Household Size

In 2012, the median age for the city of Paterson was 32.2 and the average household size was 3.29 (USDOC 2012). The average Paterson resident is getting older, with an increase in the median age of approximately one year over each of the past three decennial censuses (City of Paterson 2014). While people are living longer and the median age continues to rise, the population of the city overall is relatively young and proportionally distributed across age groups (City of Paterson 2014).

Population growth projections for 2020 indicate that the population aged 65 and older will increase the most in Passaic County (NJDLWD 2013a). Over the same period, the 0 to 14 age group is projected to have the greatest decline in the county, with smaller declines in

the 15 to 24 and 24 to 44 age groups (NJDLWD 2013a). This is consistent with the projected increase in median age for the city of Paterson.

Race and Ethnicity

From a park management standpoint, understanding the racial makeup of the community can help understand ways to make the park more inviting, develop better outreach with the community, and improve park program relevance.

The demographics of the city of Paterson reflect its history as a city where immigrants settled. Though the industrial job base which originally propelled the city to become a significant portal for immigrants is significantly eroded, the city continues to be home to large number of immigrants and their children. The percent of foreign born population in the city is 29.7%, significantly higher than the percentages for New Jersey (20.8%) and United States (12.9%) (USDOC 2012). Passaic County has a similarly high 27.5% foreign born population. Within the city, 62.5% of the population age 5 years or older speaks a language other than English at home, compared to 46.9% in Passaic County, 29.6% in New Jersey and 20.5% nationwide.

As a "minority majority" city, 28.6% of the city of Paterson is African American (compared to 12.8% statewide), and 56.7% is Hispanic or Latino (compared to 17.7% statewide) (USDOC 2012).

Table 3.5 Race and Ethnicity as a Percentage of the Population

Hispanic or Latino and Race*	City of Paterson	Passaic County	New Jersey
Hispanic or Latino (of any race)	56.7%	37.1%	17.7%
White alone	10.0%	45.2%	59.2%
Black or African American alone	28.6%	11.2%	12.8%
American Indian and Alaska Native alone	0.0%	0.1%	0.1%
Asian alone	3.5%	5.1%	8.3%
Native Hawaiian and Other Pacific Islander alone	0.0%	0.0%	0.0%
Some other race alone	0.3%	0.5%	0.4%
Two or more races	0.8%	0.8%	1.4%

Note: The methods that the 2008 to 2012 American Community Survey (USDOC 2012) used for identifying race/ethnicity allows for a dual reporting of ethnicity. As such, the total percentages can be greater than 100 percent. Source: USDOC 2012

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The white (not Hispanic or Latino) population is 10%, compared to 59.2% statewide (USDOC 2012).

Income, Poverty, and Education

Other factors that play a role in park management and visitation trends are the income levels and poverty levels of residents who live near the park. In 2012 the city of Paterson per capita income was \$15,529, compared with \$27,122 in Passaic County and \$35,928 statewide (USDOC 2012). The median household income in the city of Paterson was \$33,585, compared with \$37,540 in Passaic County and \$71,637 statewide (USDOC 2012). 27.6% of persons in the city of Paterson live below the poverty level, compared with 15.8% in Passaic County and 9.9% statewide (USDOC 2012).

Table 3.6 Educational Attainment by Population Percentage

Educational attainment typically correlates with income and poverty characteristics. In 2012, the city of Paterson had the lowest percentage of population with high school degrees or higher (71.3%) or college degrees or higher (10.3%) than either Passaic County (81.6% and 25.8%, respectively) or New Jersey (87.9% and 35.4%, respectively) (USDOC 2012).

Employment Trends

Employment opportunities typically correlate to educational background and impact household income. In the city of Paterson, the largest industry employer is production, transportation, and material moving occupations. In contrast, in Passaic County the largest industry employer is management, business, science, and arts occupations.

Educational Attainment	City of Paterson	Passaic County	New Jersey
Less than 9th grade	15.7%	10.1%	5.5%
9th to 12th grade, no diploma	13.0%	8.3%	6.6%
High school graduate (includes equivalency)	41.4%	34.6%	29.2%
Some college, no degree	14.7%	15.7%	17.1%
Associate's degree	4.9%	5.5%	6.2%
Bachelor's degree	7.5%	17.4%	22.0%
Graduate or professional degree	2.7%	8.4%	13.4%
Percent high school graduate or higher	71.3%	81.6%	87.9%
Percent bachelor's degree or higher	10.3%	25.8%	35.4%

Source: USDOC 2012

Table 3.7 Employment by Occupation

Occupation (civilian employed population 16 years and over)	City of Paterson	Passaic County	New Jersey
Management, business, science, and arts occupations	17.0%	31.6%	40.1%
Service occupations	23.8%	17.4%	16.4%
sales and office occupations	22.5%	25.7%	25.7%
Natural resources, construction, and maintenance occupations	8.7%	7.8%	7.5%
Production, transportation, and material moving occupations	28.0%	17.5%	10.4%

Source: USDOC 2012

Table 3.8 Housing Characteristics

Housing Characteristics	City of Paterson	Passaic County	New Jersey
Median home value	\$302,400	\$361,000	\$337,900
Median rent	\$1,085	\$1,136	\$1,154
Owner-occupied units	22.5%	55.0%	66.2%
Renter-occupied units	71.3%	45.0%	33.8%
Single-family detached units	28.0%	17.5%	10.4%
Multi-family and attached units	84.0%	57.65%	45.1%

Source: USDOC 2012

Housing and Urban Development

Housing values and rents do not differ greatly among the city of Paterson, Passaic County and the state. Housing costs are high when compared to median incomes. When more than 30% of household income is spent on housing expenses, those households are considered to be facing a cost burden. In 2012, households spending more than 30% of their income on housing costs in Passaic County included approximately 48.8% of homeowners and 62.4% of renters (USDOC 2012). Median incomes in the city were lower than in the county and the state, and many Paterson residents spent more than 30% of household income on housing. In the city of Paterson, approximately 66% of homeowners and 66% of renters spent more than 30% of their income on housing costs (USDOC 2012).

In 2012, the city of Paterson had a higher percentage of rental units than either Passaic County or New Jersey, and in fact the majority of Paterson residents (71%) reside in rental properties (USDOC 2012).

The city of Paterson also has one of the highest densities of any city in the nation. With a land area of 8.43 square miles, population per square mile in 2012 was 17,226 (USDOC 2012). While the city is dense and composed of a number of attached and/or multifamily units (2 or more units), the city's housing stock is made up mostly of many small units rather than larger scale housing developments. Over 50% of the city's housing stock is composed of either single- or two-unit



structures. Given the population density in the city of Paterson, the open space and supporting recreation areas is an important value provided by Paterson Great Falls NHP.

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Economic Effects of the Park on the Community

Just as population growth and community demographics have effects on the management and use of Paterson Great Falls NHP, the park also has effects on the economy of the community around it. Units of the national park system have many direct and indirect positive effects on their regional economy. This impact can be traced to several sources and attributes, such as money spent by visitors at local businesses, jobs created at these local businesses due to visitor demand, NPS jobs created at the park, NPS contracts with local businesses, and other area tourism generated by the park.

Economic Contributions of the Park to the Local Economy

In 2013, approximately 60,125 people visited Paterson Great Falls NHP. The majority of these visitors are presumably from the local area and are primarily day visitors. In the future, the recent designation of the park as a unit of the national park system is likely to attract more visitors and different types of visitors from farther away in the region and beyond the region. As new visitors travel to the area, they provide an economic stimulus through their local spending at local stores and restaurants. This economic contribution centers primarily on the city of Paterson. Money spent by visitors in the local area can also have other indirect, or secondary, effects. For example, money spent that supports local businesses and jobs recirculates into the local economy and beyond. This recirculation happens when the local businesses buy products or services from other sources (e.g., from wholesale suppliers), or when employees at local businesses spend their income at other businesses in communities surrounding the park to sustain their lifestyle (e.g., grocery shopping, entertainment). This secondary effect is often referred to as an economic "multiplier," because one dollar injected into the local economy often has more than one dollar's effect on the local economy.

The employment offered by the NPS and park partners, while currently a small number, also contributes to the local economy. The social and economic benefits of this job base are twofold. First, the jobs made available by the park and its partners provide employees with a steady income that helps sustain their lives and those



of their families. Secondly, similar to the economic effects of revenue generated by park visitation, the income earned by park and partner employees also has direct and secondary effects on the local economy. These employees contribute to the local economy by spending the money they earn on goods and services in the community. This spending directly supports local businesses and their growth. Local communities also benefit directly via the sales tax generated. In addition, secondary economic benefits (i.e., the multiplier effect) are realized when this money eventually circulates further beyond the local economy. Data to measure these to measure these direct and indirect contributions from NPS and park partner employment on local economies is not currently available for Paterson Great Falls NHP.

While the effects of visitor spending and employment are well understood, specific data regarding the magnitude of these beneficial direct and indirect contributions from visitors and employment to the city of Paterson's local economy are not currently available.

Business and Industry Trends

Most private employment in the city of Paterson occurs in a few key industries. Healthcare is the largest private employment industry, followed by manufacturing, retail, and administrative support and waste



management. Approximately 30% of all employment in the city comes from the public sector, of which the education services and public administration industries make up the largest two industries (City of Paterson 2014).

Employment sectors for the city of Paterson and Passaic County are somewhat similar. In Passaic County, trade transportation and utilities was the largest private employment industry in 2012, followed by education and health services and professional/business services (NJDLWD 2013b).

Park Operations

Staffing

The park is administered by a Superintendent, and headquarters are currently located in the S.U.M Administration Building adjacent to the Great Falls. The Superintendent's office currently includes a Superintendent, and a supervisory park ranger and a park ranger. The park is also supported administratively by a management assistant from a nearby unit of the national park system. Park staffing in 2015 is three full-time-equivalent (FTE) employees. The FTE number indicates NPS staff only, not volunteer and seasonal positions or positions funded by partners.

NPS staff currently co-operate the Welcome Center, located across the street from the Overlook Park, with Paterson Museum staff and volunteers. Currently the Paterson Museum and Ivanhoe Wheelhouse are operated by city staff, partners and volunteers.

Public Safety

Law enforcement throughout the park is currently handled by the city of Paterson police department. In addition to law enforcement, this park is dependent on the city for dispatch and emergency medical services. City agency staff respond to emergencies and currently the park is without law enforcement assistance to make routine park visitor contacts, ensuring that park regulations are understood and being met, as is checking for safety and resource violations, and responding to or directing visitor inquiries.

Maintenance

Currently, the city of Paterson and the PVWC provide maintenance of the landscape and structures in park areas. Local agencies, such as Passaic Valley Sewage Commission, and interested groups lead clean-up events in the park with volunteers.

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4. ENVIRONMENTAL CONSEQUENCES

Introduction

General Methodology for Analyzing Impacts

In accordance with the Council on Environmental Quality (CEQ) regulations, direct, indirect and cumulative impacts are described (40 CFR 1502.16) and the impacts are discussed in terms of their intensity in the context of the resource (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are also described and incorporated into the evaluation of impacts. The specific methods used to assess impacts for each resource may vary; therefore, these methodologies are described under each impact topic.

Type of Impact

The types of impacts discussed in this GMP/EA include the following:

Direct: Impacts that would occur as a result

of the proposed action at the same time and place of implementation

(40 CFR 1508.8).

Indirect: Impacts that would occur as a result

of the proposed action but later in time or farther in distance from the action

(40 CFR 1508.8).

Cumulative: Defined as "the impact on the enviro-

ment which results from the incremental impact of the action when added to other past, current and reasonably foreseeablefuture actions regardless of what agency (federal or non-federal) or person undertakes such other

actions" (40 CFR 1508.7).

Adverse: An impact that causes an unfavorable

result to the resource when compared

to the existing conditions.

Beneficial: An impact that would result in a positive

change to the resource when compared

to the existing conditions.

Cumulative Impact Analysis Methodology

Other actions in the surrounding area were identified that, although unrelated to Paterson NHP's GMP, may have impacts on the same resources or values, resulting in an additive (cumulative) effect when considered in combination with the impacts of the alternatives in this plan. Cumulative impacts were then determined by generally assessing the impacts of those other actions and combining those impacts with the impacts of the alternatives to estimate an overall cumulative impact and identify the contribution of the alternative.



The following list of plans and projects, which were described in the "Related Plans and Projects" section of chapter I, were identified as contributing to cumulative impacts in combination with the impacts of the alternatives evaluated in this GMP/EA:

 The Levine Reservoir Containment Project has the potential to contribute cumulative impacts to cultural landscapes, historic structures, water resources, and visitor use and experience.

Assessing Impacts Using CEQ Criteria

The conclusion section at the end of each impact analysis contains a discussion of the relative importance of the impacts of the alternatives in terms of the intensity of the impact in the context of the resource, according to the definitions found in the CEQ regulations (40 CFR 1508.27):

(a) Context—This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

Context provides comparative or surrounding information to help give impacts meaning. Context can be resource-specific; for example, the size or distribution of a population(local, regional, global); the uniqueness of the resource; the number of affected individuals; agency mandates; duration of the impact (permanent or temporary) and more.

There can also be overall context that applies to all affected resources. The NPS is an agency with a "conservation" mandate and identifies fundamental resources and values in its general management plans, defined as those resources or values that are critical to achieving a park's purpose or maintaining its significance. These resources and values collectively capture the essence of the park and provide overall context for evaluating the relative severity of an impact; e.g., the degree to which an alternative would help or hurt these resources would be important in assessing the relative importance of the impacts of that alternative. The fundamental resources identified for Paterson NHP, described in chapter I of this GMP/EA, and how they shape the park's purpose and significance, provide overall context for discussing the impacts of the alternatives. In addition, resource-specific context is presented in the "Methods" section

- under each resource topic and applies across all alternatives.
- (b) Intensity—This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:
 - (I) Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect would be beneficial.
 - (2) The degree to which the proposed action affects public health or safety.
 - (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetland, wild and scenic rivers, or ecologically critical areas.
 - (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
 - (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
 - (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
 - (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

 Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
 - (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register

- of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

Intensity of the impacts is discussed by considering the relevant factors from the list under CEQ definition item b, "Intensity," above. Intensity factors that do not apply to a given resource topic and/or alternative are not discussed.



Impacts on Cultural Resources

The NPS is charged with management and protection of cultural resources through a variety of guidance documents, policy, and legislation followed by NPS managers to avoid or minimize, to the greatest degree practicable, adverse impacts on park resources and values. Cultural resources are nonrenewable and adverse impacts can consume, diminish, or destroy these resources in such a way that they cannot be recovered. In addition to NEPA, for which this document has been prepared, the primary regulatory and policy framework for cultural resources managed by the NPS includes the following:

Director's Order 28: Cultural Resources Management Guidelines (NPS 1998a) is the fundamental guidance document for the management of cultural resources in the national park system and contains park management standards and other requirements for cultural resources.

Director's Order 28A: Archeology (NPS 1998b) provides a common management framework for planning, reviewing, and undertaking archeological activities and other activities that may affect archeological resources in the national park system.

NPS Management Policies (NPS 2006b) outlines NPS management policies for cultural resources including the identification and evaluation of cultural resources, the integration of this information in planning and decision making, and the stewardship to ensure that cultural resources are preserved and protected.

Executive Order 11593, "Protection and Enhancement of the Cultural Environment," requires federal agencies to support the preservation of cultural properties they manage and to direct their policies, plans, and programs in such a way that federally owned sites, structures, and objects of historical, architectural, or archeological significance are preserved, restored, and maintained. Agencies are required to locate, inventory, and nominate all properties under their jurisdiction or control that appear to qualify for listing in the National Register. It also directs agencies to reconsider any plans to transfer, sell, demolish, or substantially alter any property determined to be eligible for the National

Register and to afford the Advisory Council on Historic Preservation an opportunity to comment on any such proposal.

The Archaeological Resources Protection Act of 1979 complements requirements of the Antiquities Act through the strengthening of the permitting process for conducting archeological fieldwork on federal and Indian lands, establishing more rigorous fines/ penalties for unauthorized excavation on and removal of resources from federal and Indian lands, and prohibiting public disclosure of the nature and location of archeological resources on federal and Indian lands.

Cultural Landscapes

Preliminary evaluations of Paterson NHP describe the cultural landscape as a component of the larger NHL Historic District. No formal cultural landscape inventory or National Register nomination has been completed for the park to identify its significance and contributing features. Therefore, the National Register nomination for the NHL District (completed in 1976) will provide the basis for analysis of the park cultural landscape. A preliminary cultural resource study undertaken by the NPS in 2012 will be used to supplement the National Register nomination information for the analysis of impacts.

The resource-specific context for assessing the impacts of the alternatives includes the following:

- The degree to which the integrity of the cultural landscape containing fundamental resources those vital to the park's purpose and significance is retained as the plan is implemented.
- The degree to which the proposed management of cultural landscapes complies with the park's enabling legislation by providing for appropriate programs for preservation and interpretation of important cultural resources.
- The ability of a cultural landscape to continue to represent and convey historical events and themes determined to be fundamental to Paterson NHP these themes are related primarily to the industrial history of Paterson.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Cultural Landscapes) Under alternative A, the NPS would continue to manage the cultural landscape using existing policy and guidelines, including NPS Management Policies (NPS 2006b). The current condition of the cultural landscape would continue to be researched and the history of the site analyzed.

The stabilization of the former ATP site's river wall would result in beneficial impacts to cultural landscapes as the river wall is a predominant landscape feature of landscape and NHL District. Stabilization of the wall would return the wall to a state more closely resembling its historic appearance, would help to preserve the remaining character-defining features of the wall, and would bolster the stability of the associated landscape which it currently retains.

Construction of a walkway along the top of the river wall would result in both beneficial and adverse impacts. Beneficial impacts would result from the removal of overgrown and invasive vegetation which would open up historic viewsheds and prevent future deterioration of the river wall and some of the remaining mill foundations. Construction of the walkway, however, could potentially result in removal or alteration of other mill foundations or ruins. These foundations and ruins are generally considered to be in poor to very poor condition and have undergone previous historic documentation. While still considered an adverse impact, documentation of the resources would assist in mitigating adverse impacts and removal of unstable ruins would eliminate current safety concerns and allow greater public access to those areas of the former ATP site.

The remainder of the former ATP site would remain gated and blocked off from visitor access. Overgrown vegetation would continue to impact the viewsheds within the park and cause further damage to historic structures as roots pull foundations apart. The lack of vegetation control, along with the potential for continued vandalism and deterioration from lack of structural maintenance, would result in adverse impacts to the cultural landscape.

Other areas of Paterson NHP, such as Overlook Park, Valley of the Rocks and areas surrounding the raceway system, would continue to be managed as they are. Underused and deteriorated elements of the landscape, such as the S.U.M. Steam Plan Foundation and the raceway system would continue to detract from the landscape and differ greatly from their historic appearances resulting in adverse impacts. Additional adverse impacts associated with overgrown vegetation, litter, and graffiti in underutilized areas of the park, such as Upper Raceway Park, would continue, but partnership efforts to clean and maintain these areas would help to minimize the adverse impacts. Unchecked vegetation growth throughout the park would continue to adversely impact on the cultural landscape as key views that are an essential part of the cultural landscape would remain obstructed.

The NPS would continue to provide technical assistance to, and work with, property owners and the city of Paterson to encourage protection and preservation of the cultural landscape. These cooperative efforts, if successful, would result in beneficial impacts to cultural landscape. Minor aesthetic improvements, such as regular cleaning of statues and painting, would improve the appearance of the cultural landscape. This baseline management and preservation would help to lessen further deterioration or loss of elements of the landscape, but elements in disrepair, would continue to detract from the historic appearance of cultural landscape.

The partial rehabilitation of Hinchliffe Stadium would have beneficial impacts on the cultural landscape due to the stabilization of the historic structure. Although outside the boundary of the NHL District, the stadium is a major component of the viewshed and rehabilitation of the stadium's façade would help to return its appearance to its historic condition, thereby improving the appearance of the viewshed.

Cumulative Impacts

Past, present and reasonably foreseeable projects and activities that have had or could have adverse cumulative impacts on the cultural landscapes at Paterson NHP include the Levine Reservoir containment project. The Levine Reservoir containment project would result in the construction of two above-ground water tanks

to replace the existing in-ground open water containment system. The circa 1885 reservoir is considered to be a contributing feature to the NHL District. Its removal would alter the historic appearance of the cultural landscape and the new, above-ground tanks could create a visual distraction, changing the character of the viewshed. The SHPO recommended mitigation through the use of documentation, sensitive design, and additional vegetative screening. The adverse impacts resulting from changes to the character-defining features of the NHL District could be reduced if those mitigation measures are implemented.

The loss of a contributing resource to the NHL District would result in an overall adverse impact from these past, present, and reasonably foreseeable future actions. When combining the impacts of the reservoir project with the impacts of alternative A, the cumulative impact would be adverse. Alternative A would contribute an adverse increment to the cumulative impact on cultural landscapes.

Conclusion

Alternative A, overall, would result in both adverse and beneficial impacts to cultural landscapes. Adverse impacts would primarily be the result of a lack of overarching cultural landscape management planning ongoing deterioration of elements of the cultural landscape from overgrown vegetation, lack of use, vandalism, and a lack of regular maintenance. The adverse impacts would continue to distort the appearance of the cultural landscape, but the park would continue to work with partners to ensure that fundamental resources of the landscape are preserved and documented. Beneficial impacts would primarily result from stabilization of the river wall along the former ATP site and partial rehabilitation of Hinchliffe Stadium. These beneficial impacts would help to preserve fundamental resources associated with the landscape, but would not be expected to greatly improve the condition of the overall cultural landscape. These impacts would not threaten the integrity of the cultural landscape or the ability of the park to convey its historical significance. Technical assistance and cooperation between the NPS and its partners would continue to provide an appropriate level of programming to convey the significance of, and importance of protecting, the park's cultural resources.

Alternative B: Landscape Exploration

Impacts of Alternative B (Cultural Landscapes)

Under this alternative, the park's cultural landscape would be rehabilitated for visitor use, recreation, and interpretation. As with alternative A, beneficial impacts would result from the continued technical assistance support the NPS would provide to the city of Paterson and other land holders within the park.

Beneficial impacts associated with stabilization of the ATP river wall under alternative B would be the same as described under alternative A above. Alternative B would have additional beneficial impacts through improvements to the Scenic Falls and River Area would include repairing deteriorating landscape features, such as parking lots, sidewalks, and historic structures. Alternative B would include the removal of hazardous and particularly dilapidated ruins and industrial objects, especially in the ATP site in order to improve visitor safety; however, this would also result in some adverse impacts from removal of some historic materials and elements of the landscape. In the long term, the fundamental resources of the cultural landscape would be preserved and enhanced due to improved maintenance and visitor access, clearing of historically significant views, and removal of overgrown vegetation, resulting in beneficial impacts.

Proposed actions affecting contributing resources to the historic districts within the urban cultural landscape would generally involve studies and investigations that would provide additional material for public education and interpretation, increasing awareness and appreciation of the historic district resources, and support for their preservation. These actions would result in beneficial impacts to the cultural landscape through public education on the importance of those resources. Under this alternative, the rehabilitation of historic pathways and other site circulation systems for visitor access would result in beneficial impacts to the cultural landscape due to the stabilization and rehabilitation of these features resulting in an improved appearance. The addition of limited new pedestrian circulation routes in the Valley of Rocks and ATP site could result in temporary adverse impacts due to alteration of the existing historic landscape during construction of the new circulation, such as possible removal of historic

materials along the alignment of the new paths. However, some of the adverse impact of this action would be offset by the beneficial impacts resulting from improved access such as opening up historical views, and providing additional access for maintenance and stabilization of fundamental cultural landscape elements.

Under this alternative, the stabilization of ruins for preservation without additional rehabilitation for new uses would result in a negligible adverse impact on the cultural landscape, as some hazardous materials mitigation would likely be required. Hazardous materials mitigation required for visitor use of the landscape would result in temporary adverse impacts to the cultural landscape as historic materials such as industrial objects and ruins could be disturbed and/or may require removal for safety reasons. Following remediation, some adverse impacts could remain due to the removal of historic materials for safety reason, but improved conditions of remaining historic resources in the landscape would be a beneficial impact.

Vegetation management in this alternative would be undertaken to enhance and open views of the Passaic River, Great Falls, the industrial landscape of the city, and historic structures, resulting in beneficial impacts to the cultural landscape, as the existing vegetation is largely non-contributing to the historic character of the landscape. Under this alternative, the raceway features would be preserved and potentially reused for compatible uses; components of the raceways may be restored and re-watered for interpretation or other uses such as flood control and storm water management. It is possible that this new use of the raceways could have adverse impacts including increased chances of damage and wear to the raceways' historic materials. Rehabilitation would be anticipated to result in adverse impacts to the cultural landscape due to removal of historic material or other alterations to the raceways and surrounding landscape to accommodate re-watering or alternative uses. Beneficial impacts would occur as well, such as the return of a use closer to the original function of the raceways and the improvement of storm water management in the landscape, allowing better water management to prevent damage to the landscape and structures from flooding.

Cumulative Impacts

Past, present and reasonably foreseeable projects and activities would have adverse impacts on cultural landscapes as described under alternative A. It is believed that the management actions proposed under alternative B would contribute a beneficial increment to the overall cumulative impact, offsetting the adverse impacts of these other projects. When the impacts on cultural landscapes as a result of alternative B are combined with other projects in the study area, beneficial cumulative impacts would be expected.

Conclusion

Actions proposed under alternative B have the potential to result in adverse and beneficial impacts for cultural landscapes. Adverse impacts are possible due to the hazardous materials mitigation, demolition of ruins, and addition of non-historic features to the landscape to support new visitor uses. Implementation of mitigation measures for actions that have the potential to cause adverse impacts would likely result in a lessening of the degree of impact on cultural landscapes. Beneficial impacts include the creation over the long term of a landscape that more closely resembles its historic character and conveys the park's themes. Beneficial impacts would occur due to the opening up to visitors of currently closed areas and views following remediation, stabilization and rehabilitation of fundamental landscape resources, and improved maintenance of these resources over the long term. Beneficial impacts from the alternative, coupled with mitigation measures, would also help offset adverse impacts. Alternative B would improve the park's ability to interpret and protect the park's cultural landscape by preserving more of its character-defining features and improving the overall condition of the historical landscape. Preservation and rehabilitation efforts would increase the ability of the cultural landscape to convey its significance and provide visitors with a better understanding of the connections between the Passaic River and the industrial history of Paterson.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Cultural Landscapes)

This alternative's focus on an immersive visitor experience would result in a more intensive program of rehabilitation for use of fundamental cultural landscape features than other alternatives. More buildings and ruins would be rehabilitated for visitor access, with vegetation cleared and significant views re-established. The more intensive focus on access and use of structures, including the Colt Gun Mill, Ivanhoe Wheelhouse, S.U.M Building, and various ruins on the ATP site would emphasize the built landscape and its context.

Impacts to the cultural landscape from the addition of new pathways and vegetation removal would be similar to, but greater than, those described in alternative B above. Differing from alternative B, on the ATP site, stabilization and rehabilitation of historic structures and ruins for visitor access and new uses would be anticipated to result in adverse impacts during stabilization and soil remediation efforts. Actions to undertake increased visitor access under this alternative could also result in permanent adverse impacts on the cultural landscape, as additional non-historic features would need to be introduced to support visitor use, accessibility, utilities, and other requirements for reuse. Hazardous materials mitigation required for visitor use of the landscape and structures would be more intensive under this alternative, and could result in adverse impacts to the cultural landscape as contaminated soil and industrial objects may require removal for safety reasons.

Under alternative C, raceway features would be preserved and potentially reused for compatible uses as described above in alternative B. In alternative C, however, additional elements of the raceway system would be rehabilitated and re-watered, resulting in additional beneficial impacts from preserving additional historical material than under alternative B. The actions would also be anticipated to result in additional adverse impacts to the cultural landscape due to possible alterations needed to accommodate re-watering or alternative uses of the raceways and surrounding landscape. More of the historic materials would be preserved in alternative C with less risk of damage from re-watering, but at the same time, using less of

the system for uses such as storm water management could result in less effective management of the current flooding problems, which are expected to increase in frequency and severity due to global warming, meaning higher potential for damage in the future.

Cumulative Impacts

Past, present and reasonably foreseeable projects and activities could have adverse cumulative impacts on cultural landscapes as described under alternative A. It is believed that the management actions proposed under alternative C would contribute noticeable beneficial increments to impacts on cultural landscapes. When the impacts on cultural landscapes as a result of alternative C are combined with other projects in the study area, beneficial cumulative impacts would be expected. Alternative C would contribute a beneficial increment to the overall cumulative impact.

Conclusion

Actions proposed under alternative C have the potential to result in both adverse and beneficial impacts for cultural landscapes similar to those described for alternative B above, but slightly greater due to the increased scope of actions needed to support greater visitor access to the historic industrial landscape.

Alternative C would be expected to result in adverse impacts (addition of non-historic features to support access in the landscape and to rehabilitated structures; disturbance due to hazardous materials removal) and beneficial impacts (long-range planning for preservation; vegetation removal and enhanced access to support significant views). Beneficial impacts include the creation over the long term of a landscape that more closely resembles its historic character and conveys the park's themes.

Beneficial impacts from the alternative, coupled with mitigation measures, would help offset adverse impacts. Potential impacts on cultural landscapes would be expected to be greater in this alternative than under the no action alternative or alternative B. The proposed actions under alternative C would promote protection of the park's fundamental resources to a greater degree than under alternative A and would allow visitors the opportunity to more fully understand the historical themes and events which are fundamental to the park.

Historic Structures

The historic structures at Paterson NHP are fundamental resources of the park. Information on Paterson NHP's historic structures was obtained through the review of historic district nomination forms, determination of eligibility documentation, landmark designation documentation, technical assistance reports, and general Paterson history overview documents.

The resource-specific context for assessing the impacts of the alternatives includes the following:

- The degree to which the National Register significance and integrity of historic structures that are considered fundamental resources—those vital to the national historical park's purpose and significance—is retained as the plan is implemented.
- The ability of historic structures to continue to represent and convey historical events and themes determined to be important to Paterson NHP these themes are related primarily to the establishment of Paterson as a planned industrial city and the innovation which led to the city's success.
- The degree to which the proposed management of historic structures complies with the park's enabling legislation by providing for appropriate programs for the preservation, interpretation, and use of historic structures.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Historic Structures)

Under this alternative, decisions impacting historic structures would continue to be based on existing conditions and available information, but would, in general, continue to lack a comprehensive planning framework. The NPS would continue to provide technical assistance to, and work with, the city of Paterson and other land holders within the park's boundary to encourage protection and preservation of the exteriors of the park's fundamental historic structures, including the historic raceway system. In addition, the NPS would continue to work with others to document and research the park's historic structures to guide management

decisions. These cooperative efforts, if successful, would result in beneficial impacts to historic structures as the NPS works with others to promote preservation and rehabilitation of the documented exterior architectural values of the historic structures, as well as adaptive use of their interior spaces, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Historic structures that remain vacant or nonfunctioning, such as the S.U.M Steam Plant and the raceway system, could suffer a loss of historic fabric from vandalism, vegetative overgrowth, or deterioration from lack of maintenance, thus affecting their integrity and condition. Some of these adverse impacts would be minimized through regularly scheduled partner programs for "clean-up" of these areas.

Stabilization of the former ATP site's river wall would result in beneficial impacts to historic structures as that character-defining feature of the historic ATP mills would be preserved. In addition, stabilization of the wall would bolster the stability of the associated structures and ruins in which the wall supports resulting in beneficial impacts to historic structures which could be lost if the wall were to fail and collapse into the Passaic River. During stabilization construction, however, there could be adverse impacts to historic structures if structural stabilization requires removal or some or all portions of the mill foundations. The adverse impact associated with the damage or loss of historic fabric would be mitigated through additional documentation of the former ATP mill structures.

While stabilization of the river wall would require some removal of vegetation within the construction area, much of the remainder of the former ATP site would remain overgrown and gated off. As a result, the historic structures and ruins on the site would be expected to continue to deteriorate and lose integrity from continued vandalism and vegetation overgrowth that could damage historic structures, resulting in adverse impacts.

The partial rehabilitation of Hinchliffe Stadium would have a beneficial impact to historic structures. Rehabilitation of the stadium's façade would help to return its appearance to its historic condition and stabilize deteriorating features. Potentially opening the structure to the public for special events could lead to some damage to its contributing features, but this adverse impact would be mitigated through the park's and partner's efforts to educated the public and users of the site on the historical importance of the stadium.

Cumulative Impacts

Past, present and reasonably foreseeable projects and activities that have had or could have adverse cumulative impacts on the historic structures include the Levine Reservoir containment project. The Levine Reservoir containment project would result in the construction of two above-ground water tanks to replace the existing in-ground open water containment system. The circa 1885 reservoir is considered to be a contributing feature to the NHL District. Its containment would alter the historic appearance of the historic structure. The SHPO recommended mitigation through the use of documentation and sensitive design. The adverse impacts resulting from containment of the historic structure could be reduced if those mitigation measures are implemented.

The loss of the historic structure would result in an overall adverse impact. When combining the impacts of these projects with the impacts of alternative A, the cumulative impact would be adverse. Alternative A would contribute an adverse increment to the overall cumulative impact on historic structures.

Conclusion

Under alternative A, indirect adverse impacts (lack of overarching and resource management planning, leading to potential incremental deterioration of historic structures) and small direct adverse impacts as well as beneficial impacts (continued resource protection and mitigation) on historic structures would be expected. Beneficial impacts include the stabilization of fundamental historic structures and their continuing treatment based on appropriate historic preservation guidelines.

Adverse impacts on historic structures under alternative A would be expected to be slightly less than under the action alternatives in the short term due to fewer demo-

lition and construction activities, but greater in the long term due to incremental loss and deterioration resulting from a lack of overarching planning and prioritization. The impacts of alternative A on historic structures would be adverse, because loss would be expected to occur to fundamental resources such as the raceways and ATP site structures based on a lack of planned treatment. This adverse impact would be somewhat offset by mitigation actions as well as by beneficial impacts under this alternative. These adverse impacts, however, would not lead to the loss of integrity of key fundamental park resources and the park and its partners would continue to be able to provide interpretive programing for park visitors.

Alternative B: Landscape Exploration

Impacts of Alternative B (Historic Structures)

In addition to the Hinchliffe Stadium rehabilitation project described under alternative A, alternative B would stabilize and preserve additional fundamental historic structures within the park. Environmental remediation activities associated with stabilization of historic structures would likely result in both beneficial and adverse impacts to structures. In the short term, remediation could include removal or demolition of historic materials if they are found to be contaminated and a safety hazard. In the long term, remediation would enable the stabilization and rehabilitation of the historic structures and allow them to be accessed, resulting in increased options for their preservation. Rehabilitation of the Colt Gun Mill, Ivanhoe Wheelhouse, S.U.M. Buildings, and other fundamental historic structures would be preceded by survey and careful planning to avoid or lessen adverse impacts due to loss or damage of historic fabric during construction.

Rehabilitation of fundamental historic structures, along with the potential rehabilitation of other historic buildings and structures to accommodate programs such as community events or visitor education, is anticipated to result in beneficial impacts from the rehabilitation of these structures such as stabilization and repair, improved ability to maintain the structures, and new appropriate uses. There is also potential for adverse impacts: for example, during rehabilitation, historic fabric could be lost or destroyed, modifications needed for accessibility could alter the historic structures.

The Secretary of the Interior's Standards for the Treatment of Historic Properties would be used to mitigate adverse impacts.

Under this alternative, raceway features would be preserved and potentially reused for compatible uses depending on results of further studies of feasibility and condition of the raceways. It is possible that some sections of the raceways could be restored and rewatered for interpretation or other uses such as flood control and storm water management. The actions would be anticipated to result in adverse impacts to the raceway features due to possible alterations needed to accommodate re-watering or alternative uses, which could result in the loss or replacement of historic materials, as well as continuing adverse impacts of water contact on the historic materials, resulting in increased likelihood of deterioration and increased need for maintenance and condition monitoring. There would likely be beneficial impacts resulting from rehabilitation including stabilization, repair, and preservation treatment of the raceway features. Climate change is likely to result in increased frequency and severity of flooding, which could result in increased potential for damage to the raceways if they are rewatered, resulting in adverse impacts, although this could be mitigated through rehabilitation methods that reinforce and stabilize the raceways in a way that accommodates the increased potential for flooding. In addition, the rehabilitation of the raceways would provide an opportunity to repair the current issues with flood waters leaking into the adjacent historic structures, which would result in beneficial impacts to historic structures.

In this alternative, the ATP site would be rehabilitated as a park-like setting, with many of the historic structures stabilized and preserved in their current state as ruins. These efforts would result in beneficial impacts to historic structures as the remaining historic fabric would be preserved and maintained. Remaining structures on the ATP site that are determined to be in poor condition or pose safety hazards would be demolished, resulting in an adverse impact on historic structures. However, thorough documentation of the historic structures prior to demolition would mitigate some of the adverse impacts.

Proposed treatment of historic structures under this alternative would be developed further based on planned studies and investigations that would provide additional material for public education and interpretation, increasing awareness and appreciation of the historic structures at Paterson NHP, support for their preservation, and resulting in beneficial impacts to historic structures. The implementation of mitigation measures would minimize adverse impacts.

Cumulative Impacts

Cumulative impacts associated with alternative B would be similar to those described under alternative A. The loss of historic Levine Reservoir would result in an overall adverse impact. When combining the impacts of this project with the impacts of alternative B, the cumulative impact would be beneficial. Alternative B would contribute a noticeable beneficial increment to the overall cumulative impact on historic structures as other fundamental structures within the park boundary are stabilized or preserved.

Conclusion

Actions proposed under alternative B have the potential to result in adverse and beneficial impacts to historic structures. Beneficial impacts are expected when historic structures are stabilized, preserved, and rehabilitated under the guidance of the Secretary of Interior's Standards. Direct and permanent adverse impacts are possible due to the demolition of structures. However, many of these structures are in ruinous or poor condition already, and so their thorough documentation and investigation prior to demolition would help to mitigate the adverse impacts of their removal. Implementation of these and other mitigation measures for actions that have the potential to cause adverse impacts would likely result in a lessening of the degree of impact on historic structures.

Alternative B would be expected to result in small and direct adverse impacts (selected removal of structures) and beneficial impacts (long-range planning for preservation; stabilization, preservation, and rehabilitation of structures). Beneficial impacts from the alternative, coupled with mitigation measures, would help offset adverse impacts because fundamental resources would be protected and would be better able to convey important themes of the park.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Historic Structures)

Alternative C includes the most intensive reuse of the park's historic structures for active visitor use, resulting in additional adverse and beneficial impacts. This alternative emphasizes the rehabilitation of park historic resources for new uses. In this alternative, the emphasis would be on retaining and stabilizing historic structures, such as the ruins on the ATP site, for interpretive activities and possible visitor access as well as related new uses where appropriate.

Historic structures would be adapted to provide visitors with a unique view into the industrial setting of Paterson in a safe and accessible manner. The exteriors of historic structures would be preserved to the extent possible to maintain the historic scene, while building interiors are rehabilitated for visitor use, concessions, and interpretation. Modifications to the Colt Gun Mill, S.U.M. Building, Ivanhoe Wheelhouse, ATP site ruins, and other structures to accommodate these compatible uses could involve removal of historic materials in the process, as well as addition of new features to support new uses and accessibility. These alterations have the potential to result in adverse impacts to the historic integrity and character of fundamental historic structures, both temporarily in the construction period and potentially over the long term. However, the actions would also be anticipated to result in beneficial impacts to historic structures due to the stabilization and rehabilitation of these resources, and the retention of the fundamental historic resources that support the historic district and the park.

Under alternative C, raceway features would be preserved, and the upper portion of the system would potentially be partially re-watered for interpretation or other uses such as flood control and storm water management. This alternative would limit the uses of the raceway system structures. The actions would be anticipated to result in adverse impacts to the raceway features due to possible alterations needed to accommodate re-watering or alternative uses, similar to the impacts noted under alternative B, but smaller in scope, affecting only the upper raceway area. There would be anticipated to be beneficial impacts resulting from rehabilitation and preservation treatment of the race-

way features, reducing the potential for damage from flooding and wear.

Cumulative Impacts

Cumulative impacts associated with alternative C would be similar to those described under alternative A. The loss of the historic Levine Reservoir would result in an overall adverse impact. When combining the impacts of this project with the impacts of alternative C, the cumulative impact would be beneficial. Alternative C would contribute a noticeable beneficial increment to the overall cumulative impact on historic structures through the preservation of the park's fundamental historic structures.

Conclusion

Actions proposed under alternative C include a more intensive program of rehabilitation for use of historic structures within the ATP site than other alternatives. These actions have the potential to result in adverse impacts during construction activity, similar to alternative B, and greater beneficial impacts than under alternatives A and B as more of the park's historic structures are stabilized or preserved. Beneficial impacts are expected when historic structures are stabilized, preserved, and rehabilitated for new uses under the guidance of the Secretary of Interior's Standards. Direct and permanent adverse impacts are possible due to the demolition of low-priority structures, and if adaptation for reuse is not completed in accordance with appropriate standards. However, implementation of mitigation measures for actions that have the potential to cause adverse impacts would likely result in a lessening of the degree of adverse impact on historic structures.

Beneficial impacts from the alternative, coupled with mitigation measures, would help offset adverse impacts. The park's historic structures would be stabilized and preserved to a larger extent under alternative C and would allow the NPS and its partners to appropriately preserve and interpret these park resources. Stabilization and rehabilitation efforts of these alternatives would also serve to protect the integrity of the fundamental historic structures and allow those structures to adequately represent their place within the historical context of the park.

Archeological Resources

Information on archeological resources was obtained through background research which included review of existing reports provided by Paterson NHP—archeological overviews and assessments, various archeological reports related to development projects, National Register nomination forms, and general historical background documents for the park. Potential impacts on in situ archeological resources are assessed based on the amount of disturbance a resource has experienced and the level of remaining integrity of the resource.

The resource-specific context for assessing the impacts of the alternatives includes the following:

- The ability to provide meaningful information to the park's archeological record and provide opportunities for archeological research; the archeological record for Paterson NHP is relatively incomplete—numerous archeological resources have been destroyed or covered over by historical landfilling, grading, and other land modifications.
- The degree to which the management of archeological resources complies with the park's enabling legislation by providing for appropriate programs for preservation and interpretation of certain historical and cultural resources.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Archeological Resources)

Throughout the NPS-managed areas within the legislative boundary of the park, resource protections related to existing legislation and NPS policies would continue for archeological sites. Decisions affecting archeological sites would continue to meet NPS policies for resource protection, but would lack a comprehensive planning framework. Archeological resources would continue to be managed in a piecemeal fashion which could lead to adverse impacts if unknown archeological resources are allowed to deteriorate or be otherwise disturbed in heavily used areas of the park.

Archeological resources and submerged cultural resources would remain in situ and undisturbed,

resulting in beneficial impacts. If archeological resources are threatened with loss from the effects of natural processes, human activities, preservation treatments, park operations, or development activities, those archeological items would be recovered, recorded, or otherwise preserved. Removal of archeological resources could result in some adverse impacts as they could be damaged during the removal process, but NPS policies and guidelines would be followed to reduce adverse impacts as much as possible.

Cooperating Partnerships remain the same in all alternatives. The NPS would continue to work with its partners to undertake required archeological study and monitoring to protect subsurface resources in the park and surrounding areas. The NPS would provide technical assistance regarding the preservation and interpretation of archeological resources in the Great Falls Historic District, and work with private and public landowners and with the city of Paterson and its partners to interpret known resources. Beneficial impacts would result from technical assistance and education efforts as landowners and visitors to the park could gain a better understanding on the importance of preserving and protecting the park's archeological resources.

In the short term, the ATP River Wall/River Walk project has the potential to result in adverse impacts to archeological resources as the ground is disturbed during construction, but these adverse impacts would be offset by careful pre-construction monitoring and investigation to preserve or record any archeological material found within the construction area. In the long term, stabilization of the River Wall/River Walk is anticipated to be beneficial to the preservation of archeological resources by stabilizing the river wall that retains the ATP site and protects nearby subsurface resources from erosion and flooding. Natural processes, such as erosion and flooding, along other unprotected areas of the river could contribute to the loss or destruction of archeological resources in the park, resulting in additional adverse impacts to a rcheological resources.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on archeo-

logical resources; therefore, there are no cumulative impacts.

Conclusion

Under alternative A, indirect adverse impacts (lack of overarching resource management planning, leading to possible incremental deterioration of resources) and small direct adverse impacts (ground disturbance for individual projects) as well as beneficial impacts (continued resource protection and mitigation) on archeological resources would be expected. Adverse impacts on archeological resources under alternative A would be expected to be slightly less than under the action alternatives in the short term due to less demolition and construction activities, but greater in the long term due to incremental loss resulting from a lack of overarching planning and prioritization. The treatment of archeological resources under alternative A would still adhere to management policies in terms of preserving and interpreting the resources. Continued cooperative efforts with partners, specifically through pre-construction archeological investigations, would provide additional opportunities for archeological research and improve the park's archeological record.

Alternative B: Landscape Exploration

Impacts of Alternative B (Archeological Resources)

Under alternative B, stabilization of the ATP River Walk/River Wall would result in adverse and beneficial impacts as described under alternative A. In addition, the raceways and ATP site could undergo extensive stabilization and rehabilitation efforts which could impact archeological resources. The raceways could be preserved and re-watered which could require some excavation in addition to other ground-disturbing activities. Likewise, construction work at the ATP site could also require extensive ground-disturbing activities as contaminated soils are capped or removed, structures are stabilized, and unsafe structures and ruins are demolished. Pre-construction archeological surveys for both the raceways and ATP site would help to lessen the degree of adverse impacts to archeological resources in these areas, but some adverse impacts may still occur. Any archeological material found during construction would be appropriately stored and/or documented. If resources could not be avoided, an appropriate documentation strategy would be

employed. Additional beneficial impacts would also occur as a result of opening the ATP site to the public where it would be more accessible to access for security purposes, decreasing the opportunity for vandalism and theft as compared to alternative A.

Facility improvements at Overlook Park have the potential to adversely impact archeological resources as well as rehabilitation of the Ivanhoe Wheelhouse due to additional ground disturbance. Other ground-disturbing activities which could adversely impact archeological resources in the park would include vegetation removal and trail construction These activities would be preceded by survey and careful planning to avoid, or lessen, adverse impacts.

Archeological investigations completed before construction efforts under alternative B could also provide additional information and potential resources for public education and interpretation which could increase awareness and appreciation of the park's resources and promote their protection and preservation, resulting in beneficial impacts

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on archeological resources; therefore, there are no cumulative impacts.

Conclusion

Actions proposed under alternative B have the potential to result in adverse and beneficial impacts for archeological resources. Beneficial impacts are expected when archeological resources to remain undisturbed and adverse impacts could result from potential ground disturbance during construction, especially along the raceways and ATP site. Pre-construction surveys and implementation of mitigation measures for actions that have the potential to cause adverse impacts would likely result in a lessening of the degree of adverse impacts on archeological resources. Some beneficial impacts to archeological resources could be expected through preservation education as partners and visitors gain and better understanding and appreciation of the park's archeological resources.

Potential adverse impacts on archeological resources would be expected to be greater in this alternative than under the no action alternative. The additional archeological investigations required under the actions of alternative B, however, would provide the NPS and park partners an opportunity for expanding on existing archeological research and help to create an archeological record for the park. Any artifacts found could, in turn, provide additional historical and cultural resources to interpret.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Archeological Resources) Stabilization of the ATP River Walk/River Wall would also occur under alternative C and would result in adverse and beneficial impacts as described under alternative A. Alternative C would also include extensive preservation and rehabilitation efforts for the raceway system and the ATP Site. Treatment of the ATP Site under alternative C would be similar to alternative B, but on a greater scale as more structures are rehabilitated for use which could lead to additional structural and utility construction as compared to alternative B. Treatment of the raceway system under alternative C would also result in similar adverse impacts as compared to alternative B, but on a larger scale as more of the system could be rehabilitated and re-watered under alternative C. Additional components of the raceway system, including dams, gates, and wheelhouses, could also be rehabilitated where feasible. The NPS and partners would rely on pre-construction archeological investigations and surveys to determine the extent and location of archeological materials. Archeological resources would be avoided where possible and carefully removed, recorded, and stored as described under Chapter 2 where resources cannot be avoided. These mitigation measures would serve to reduce adverse impacts associated with ground-disturbing activities along the raceway system and the ATP site. Additional beneficial impacts would result following rehabilitation of the ATP site as it is open to the public and more easily accessed for security purposes, both of which could lead to fewer incidents of vandalism and theft of remaining archeological resources.

Other actions under alternative C which could impact archeological resources include the preservation of the S.U.M. Administration Building and Steam Plant Foundation as well as construction of new trails/paths and removal of vegetation where needed. Ground-disturbing adverse impacts to archeological resources under alternative C would be similar in scale and extent to alternative B and would be mitigated by pre-construction planning and archeological surveys (as described under alternative B above) to offset some of the adverse impacts.

As with alternative B, archeological investigations completed before construction efforts under alternative C could lead to additional research and information pertaining to the park's archeological resources and provide additional opportunities for public education and interpretation, increasing awareness and appreciation of the park's resources and helping to promote their protection and preservation. These actions have the potential to result in additional beneficial impacts.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on archeological resources; therefore, there are no cumulative impacts.

Conclusion

Alternative C would result in both adverse and beneficial impacts to archeological resources. Adverse impacts under alternative C would result primarily from ground-disturbing construction related to the raceway system rehabilitation efforts and rehabilitation of the ATP site. Adverse impacts from these actions would be similar to those under alternative B, but to a larger degree under alternative C as more of the raceway system is rehabilitated and re-watered. Other ground-disturbing activities, such as preservation of the S.U.M. Building and Steam Plant Foundation, would have similar adverse impacts to alternative B. Under alternative C, pre-construction planning and surveys would help to mitigate adverse impacts related to construction activities. Actions proposed under alternative C would serve to provide additional information to the park's archeological record and provide additional opportunities for research as new archeological surveys and investigations are conducted. Findings from these investigations would provide additional opportunities for interpretive and educational programming to comply with the park's enabling legislation.



Impacts on Natural Resources

Water Resources

Surface water and groundwater are managed by the NPS as integral components of park aquatic and terrestrial ecosystems. Water resources are legally regulated and protected under provisions of the Clean Water Act, including sections 305(b) and 303(d), which establish state water quality monitoring and reporting standards; section 402, which regulates pollution and sediment in runoff; and section 404, which regulates dredge and fill activities that affect wetlands. The NPS has several guiding principles with respect to water resources, as outlined in the "Water Resource" section of the NPS Management Policies (NPS 2006b). These include considering a watershed approach to managing water resources, minimizing human disturbances that adversely affect water resources, and working with appropriate agencies to obtain the highest possible standards available under the Clean Water Act. NPS policy also encourages developing cooperative agreements with other agencies as appropriate to help maintain or restore the quality of park water resources.

This is a primarily qualitative analysis of the beneficial or adverse impacts on water resources. Sources of information used to assess impacts on water resources under the proposed alternatives include USGS gage height measurements, NJDEP water quality reports, and watershed planning information. Resource-specific context for assessing the impacts of the alternatives on water resources includes the following:

- The Passaic River is named as a fundamental resource for Paterson NHP.
- Water resources affect the quality and availability of water-based recreation (e.g., fishing, selfpropelled watercraft).

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Water Resources)

Nonpoint source pollution and runoff from areas within the park would continue to be exacerbated during periods of heavy rain and flooding. Recreational use along the Passaic River would continue to cause some erosion and soil runoff along social trails on the

steep slopes of the Valley of the Rocks, resulting in localized and generally negligible adverse impacts to water quality due to increased sedimentation. Runoff and storm seepage from the site could result in adverse impacts to water resources if soil contaminants leach into the adjacent Passaic River. The current lack of permanent stormwater best management practices (trail and slope stabilization) throughout the park would result in adverse impacts to water resources as debris and runoff would continue to be deposited in the river.

Under alternative A, construction activities related to the ATP river wall stabilization project would require clearing, excavation, and grading activities which could result in adverse water quality impacts due to increased soil and sediment loads being released into the Passaic River. These adverse impacts would be lessened through an appropriate erosion and sediment control plan and best management practices in accordance with the New Jersey Soil Erosion and Sediment Control Act, The Standards for Soil Erosion and Sediment Control in New Jersey (NJ Department of Agriculture— State Soil Conservation Committee), and the New Jersey Stormwater Best Management Practices Manual (NJDEP Division of Watershed Management). These mitigation measures would minimize the potential erosion of exposed soils, slow the rate at which stormwater leaves the site, and capture eroded soils before they enter the downstream water flow.

As part of the ATP river wall stabilization project, the ATP site would be investigated for potential contaminants and undergo any remediation necessary for potentially contaminated soils (which could include actions such as covering and containing soils, removing soils, or remediating soils). Treatment of contaminated soils through removal or remediation could have beneficial impacts on water quality by reducing contamination levels in stormwater runoff. Following construction activities, areas along the ATP river wall would be replanted with grasses or other appropriate vegetation to prevent future soil runoff into adjacent stormwater systems and the river.

Water resources would continue to be managed under existing guidelines, including NPS Management Policies (NPS 2006b), and the park would continue to work with partners on completing baseline water quality surveys and studies. The baseline information and the park's continued cooperation with other local and state water resource protection agencies would result in beneficial impacts on water resources as these agencies increase public understanding of water resource protection and stewardship.

Climate change may add adverse impacts on water resources under alternative A through the possibility of increased duration, intensity, and frequency of storms. Extreme precipitation events linked to climate change are anticipated to affect the potential for heightened streamflow during relatively short periods. Additional water volume from these storms could increase riverbank erosion at the park, as well as increase the rate and volume of stormwater runoff into the Passaic River, adversely impacting water quality by increasing sedimentation and turbidity. Changes in the timing and location of precipitation due to climate change also have the potential to reduce streamflow at times. Impacts from reduced water levels during low flow or drought conditions caused by changes to precipitation patterns would reduce streamflow within the Passaic River passing through the park, including over the Great Falls. Low flows would reduce water available for all users, including that available to sustain riparian vegetation and aquatic life, and would leave less water to dilute pollutants from runoff.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions which have the potential to impact water resources within the park include the Levine Reservoir Containment Project. The Levine Reservoir project would include ground-disturbance during construction activities which could contribute to nonpoint source pollution and runoff. However, it is likely that the proposed project would be designed to incorporate measures to minimize adverse impacts on water resources, such as storm water management techniques.

The impact of these past, present, and reasonably foreseeable future actions would generally be adverse, but would only expect to last during construction activities. When combined with the impacts of alternative A, it is likely that the overall cumulative

impact would be adverse, with alternative A contributing a noticeable adverse increment to the overall cumulative impact.

Conclusion

Impacts on water resources associated with alternative A would range from beneficial to adverse. In general, ATP river wall construction activities and recreational trail usage along the Passaic River would result in adverse impacts to water resources due to nonpoint source pollution and runoff.

Beneficial impacts resulting from alternative A would include soil remediation efforts in the ATP site which would reduce the likelihood of contaminants discharging into the Passaic River. Additionally, the ATP river wall project would result in beneficial impacts as soils are stabilized with vegetation lessening the impacts of stormwater runoff and erosion. Additional beneficial impacts would result from the park's continued partnerships with local and state agencies to study and educate the public on creating and protecting healthy water ecosystems.

The cumulative impact would be adverse, and alternative A would contribute a noticeable adverse increment to the overall adverse cumulative impact. Impacts to water resources as a result of actions associated with alternative A would be beneficial primarily due to site improvements and soil remediation efforts at the ATP site. Alternative A would also result in adverse impacts on water quality; however, water quality conditions would not be expected to degrade below current conditions. When considered in the context of the standards set forth in NPS management policies, both the adverse and beneficial impacts would be relatively small and would not result in any noticeable changes in existing water quality.

Alternative B: Landscape Exploration

Impacts of Alternative B (Water Resources)

Under alternative B, expanded interpretive and educational programming would result in beneficial impacts to water resources as visitors learn more about protection of the natural resources associated with the Great Falls and Passaic River. Improvements to visitor facilities and programming would be expected to

increase visitation levels to the park. Over the longterm, increased visitation would have the potential to trample vegetation and expose soils in heavily used areas of the park resulting in adverse impacts as the potential for erosion and subsequent sedimentation into the river is increased. Where this occurs, management actions would stabilize soils and reestablish vegetation where possible.

Construction projects in and along the banks of the Passaic River, such as the stabilization of the Ryle Dam and enhancement of viewing areas, would result in adverse impacts during construction as ground is disturbed potentially resulting in increased river sedimentation. Flow direction and rates of the river could also be impacted during stabilization of the Ryle dam which could create additional adverse impacts on riparian vegetation and species. The park would work with partners to implement erosion and sediment control measures during these activities to reduce the severity and length of adverse impacts.

Trail improvements would include reconstruction of existing trails and construction of new trails. Trail construction activities, especially on steep slope areas, could increase the potential for soil erosion and sedimentation, with the potential to create localized adverse impacts to water quality. On-site investigation would occur prior to construction to determine soil stability, potential trail surfaces, and construction best management practices. Permanent stormwater management measures would be incorporated where feasible to reduce pollutants in stormwater discharged from the reconstruction or addition of new trails resulting in beneficial impacts. As a result of these measures, any adverse impacts to water quality resulting from construction of the trails would be negligible.

Construction activities related to the rehabilitation or stabilization of existing structures, such as the rehabilitation of the Steam Plant Foundation or stabilization of the ATP ruins, would temporarily disturb soils and could create an increased potential for soil erosion and transport of surface pollutants via stormwater runoff into adjacent water bodies. Similarly, demolition of select ATP ruins could result in adverse impacts as soils are disturbed and potential stockpiling of soils and debris could result in additional sediment runoff during

heavy precipitation. The park would work with partners to develop an erosion and sediment control plan prior to construction in order to reduce erosion of exposed soils, slow the rate at which water leaves the site, and capture eroded soils and concentrated nutrients before entering adjacent the Passaic River. Following construction, exposed soil areas would be vegetated or paved and permanent stormwater management measures would be used to reduce stormwater pollutants discharged from the park.

Beneficial impacts resulting from soil stabilization and remediation efforts as part of the ATP river wall stabilization project would be the same as described under alternative A above. Adverse impacts associated with this project would also be similar to those described under alternative A.

Portions of the raceways would be rehabilitated, re-watered, and used for interpretation purposes. During construction, temporary adverse impacts to water quality would be expected due to soil disturbances from construction equipment and vehicles, but the park would work with partners to ensure steps are taken to minimize impacts to water quality through silt fencing and other best management practices.

Once completed, water flowing through the partially re-watered raceways could collect additional debris or stormwater pollutants, especially in areas adjacent to roadways and sidewalks. In addition, the shallow, slower-flowing raceway water could create an increase in water temperature compared to that of the Passaic River. The increase in pollutants and warmer water temperature has the potential to adversely impact water resources of the Passaic River, including riparian habitat and aquatic life, as water from the raceways empties into the river.

River flow agreements and water allocation permits would continue to be in force to maintain passing flow requirements over the Great Falls. Adverse impacts related to available streamflow affecting riparian vegetation or aquatic life are not anticipated, as the raceway re-watering would be designed to preserve park fundamental resources and balance natural resource processes with cultural resource manage-

ment goals and visitor use objectives. The park and its partners would continue to work with other users that divert water from the Passaic River to manage an appropriate streamflow over the Great Falls.

Expanded water quality monitoring would provide information needed to better address management concerns. Sampling would occur in the Passaic River and, as funding permits, the NPS would increase the frequency and numbers of samples, particularly during high flows. This data would document existing conditions, help identify probable sources of contamination, and assist with determining appropriate management actions. These actions would result in beneficial impacts to water quality. Additional beneficial impacts would result from expanded technical assistance to agencies, organizations, and communities involved in water quality planning and management in vicinity of the park.

Cumulative Impacts

The sources of other impacts (i.e., those not related to alternative B) would remain the same as described under alternative A. When combined with the impacts of alternative B, the overall cumulative impact would be beneficial, with alternative B contributing a negligible adverse impact, primarily through construction projects, and an appreciable beneficial increment to the overall cumulative impact.

Conclusion

Overall, alternative B would result in beneficial impacts on water resources. The remediation of contaminated soils at the ATP site would eliminate a source of pollutants along the Passaic River. Improvements to the trail system within Valley of the Rocks would decrease existing surface runoff and sedimentation. Additional beneficial impacts on water quality would result from increased research and monitoring of water resources. Although these benefits would be expected to result in improvements to water quality, beneficial impacts as a result of alternative B would not likely substantially change or improve the overall quality of water resources within Paterson NHP.

Construction activities, including the presence of construction vehicles and equipment, could have

temporary adverse impacts on water resources depending on the nature and location of the action, but the use of mitigation measures would lessen the severity of the adverse impacts and impacts would only expect to occur during the time of construction. These impacts would be consistent with the regulations and policies that govern water resources and the overall quality of water resources would not be degraded below existing conditions. In addition, the use of mitigation measures to offset adverse impacts would likely result in less sedimentation and runoff as compared to existing conditions, resulting in a small improvement in existing water quality.

The cumulative impact would be beneficial, and alternative B would contribute negligible adverse and appreciable beneficial increments to the overall beneficial cumulative impact. Site improvements, soil remediation, and increased water quality monitoring would result in beneficial impacts while construction projects would result in the majority of the adverse impacts. Neither the beneficial or adverse impacts would be expected to improve or degrade water quality conditions above or below current condition. When considered in the context of the standards set forth in NPS management policies, both the adverse and beneficial impact would be relatively small and would not result in any noticeable changes in existing water quality.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Water Resources)

Several actions proposed under alternative B are also proposed under alternative C. These actions include: expanded interpretive and educational programming, stabilization of the Ryle Dam, improved viewing areas, trail improvement efforts at Valley of the Rocks, rehabilitation and stabilization of existing structures, ATP river wall and soil remediation efforts, continuation of river flow agreements, and water quality improvement coordination with external agencies. These actions would have similar beneficial and adverse impacts as were described under alternative B above.

Under alternative C, the entire raceway system, including the upper, middle, and lower raceways; middle tailrace; dams; gates; and wheelhouses, would

be rehabilitated and re-watered as a functional historic raceway landscape. Rehabilitation of the raceway system under alternative C, would be a much more extensive construction project than under alternative B which could result in increased temporary adverse impacts to water quality due to the soil disturbances from construction equipment and vehicles. The park would work with partners to ensure steps are taken to minimize impacts to surface and ground waters through silt fencing and other best management practices for water quality. Adverse impacts to water resources following construction (increased water temperature and pollutant levels) would be similar, although on a slightly larger scale, to those describe under alternative B.

Under alternative C, the rehabilitated raceway system could require a larger quantity of water flow in order to fill the entire raceway system and maintain the functioning system components. This could reduce water flow over and immediately downstream of the falls, especially during periods of drought when the Passaic River is already flowing low. This adverse impact would only expect to occur during limited times of the year and would only be expected to last a short period of time.

The ATP site would undergo a more extensive rehabilitation under alternative C than under alternative B with additional ruins being rehabilitated or stabilized for visitor use. Additional soil compaction and an increased potential for erosion would be expected during the construction process. Once completed, the rehabilitated ATP site would result in beneficial impacts to water resources as the site is cleared of debris and replanted with pervious material to slow and filter water runoff.

Cumulative Impacts

Cumulative impacts under alternative C would be the same as described under alternative A above. When combined with the impacts of alternative C, the overall cumulative impact would be beneficial, with alternative C contributing a negligible adverse impact, primarily through construction projects, and an appreciable beneficial increment to the overall cumulative impact.

Conclusion

Like alternative B, impacts on water resources associated with the individual components of alternative C would range from beneficial to adverse and similar to those described under alternative B Increased construction efforts related to rehabilitation of the raceway system and ATP site could result in temporary adverse impacts to water resources due to both compaction of soils and increase soil disturbance. Over the long-term, a reduction in water volume and flow over the Great Falls in order to maintain a functioning raceway system would result in intermittent adverse impacts to water resources during times of drought. These adverse impacts would not remain constant and would not be expected to degrade the overall quality of water resources below current conditions.

Benefits to water resources would result from soil remediation efforts and site improvements where efforts to stabilize and rehabilitate structures would remove excess debris and pollutants, as well as improve vegetative cover to reduce runoff and help to filter stormwater. Beneficial impacts to water resources in alternative C would be expected to result in improvements to water quality in the long-term, but would not likely substantially change or improve the overall quality of water resources within the park.

Cumulative impacts would be beneficial with alternative C contributing a negligible adverse and appreciable beneficial increment to the overall beneficial cumulative impact. Neither the beneficial or adverse impacts would be expected to improve or degrade water quality conditions above or below current condition. When considered in the context of the standards set forth in NPS management policies, both the adverse and beneficial impact would be relatively small and would not result in any noticeable changes in existing water quality.

Floodplains

This is a primarily qualitative analysis of the beneficial or adverse impacts on floodplain processes or conditions based on the known and potential floodplains within the study area and information provided by experts in the NPS and other agencies.

Resource-specific context for assessing the impacts of the alternatives on floodplains includes the following:

- Floodplains are not identified as a fundamental resource or value.
- Executive Order 11988 directs all federal agencies to avoid long and short-term impacts associated with occupancy, modification and development of floodplains when possible.
- NPS Director's Order 77-2 implements Executive Order 11988 and established NPS policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding.
- Floodplain functions and values (store floodwaters, minimize erosion of adjacent soils, provide riparian habitat, etc.) are intrinsic to floodplains and cannot be easily duplicated or replaced.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Floodplains)

The floodplains inside the park boundaries are primarily within and adjacent to the riverbanks, as well as along McBride Avenue. Regular storms would not generally result in flooding of these facilities; however, heavy storm events such as tropical storms or hurricanes could cause flooding. The possibility of increased duration, intensity, and frequency of storms due to climate change under alternative B would cause adverse impacts to floodplains by increasing the frequency and intensity of flooding within floodplains.

Under alternative A, the ATP River Wall would be stabilized and rehabilitated and a River Walk established along the historic wall to connect Overlook Park to the ATP site. This rehabilitation work would occur within the regulatory floodway; however, it would stabilize the existing wall which currently acts as a bulkhead along the river's edge and lessen the potential of bulkhead failure in the future. The project would not change the size, shape, or footprint of the existing wall and would not result in any increase in the wall's intrusion into the floodplain or reduce current floodplain functions or capacity. Stabilization of the river wall could result in adverse impacts during construction, but once the river wall is complete, a beneficial impact would result from

securing the wall and retaining a reliable bulkhead and maintain a consistent floodway through the park. All construction activities within the regulatory floodplain would be in compliance with all floodplain regulations and would not change the nature or function floodplain along the Passaic River.

Some existing structures, such as dams and elements of the raceway system, would remain within the floodway and would continue to alter the natural flow of water. While the natural flow of water through the floodplains would continue to be altered by these structures, the structures also provide the city protection from frequent flooding.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on floodplains; therefore, there are no cumulative impacts.

Conclusion

Alternative A would result in adverse and beneficial impacts. Adverse impacts would result during construction of the ATP river wall, but would only last during the duration of the project. Overall, alternative A would result in beneficial impacts to floodplains primarily resulting from the stabilization of the ATP river wall which acts as a river bulkhead and retention of other man-made structure which all help to protect the city from frequent floods. These beneficial impacts would preserve the floodplain and protect lower elevations in Paterson from flooding. Overall, neither the beneficial nor the adverse impacts of alt A would cause any change in the current size or footprint of the floodplain or its functions.

Alternative B: Landscape Exploration

Impacts of Alternative B (Floodplains)

In addition to the ATP river wall project described above under alternative A, alternative B would include a coordinated, comprehensive research and monitoring program to better understand and manage the broad range of natural resources, especially surrounding the elements of the Passaic River and its floodplain, including aspects of climate change and its impacts. These strategies would include educating NPS staff, its partners, and members of the communities and the general public about natural resource protection and

climate change to encourage responsible planning when development is proposed within the floodplain.

Under alternative B, site improvements and visitor amenities such as improved viewing areas, signage and wayfinding, wayside exhibits, interpretive walkways and trails, plantings, lighting, and fencing would be installed within the regulatory floodway and the 100 and 500-year floodplains in some locations around the Great Falls and along the river. Streetscape elements and improved intersections could also be installed within the park boundaries. These activities would occur within the 100-year floodplain if located along McBride Avenue; however, these elements would be placed within the existing streetscape, require little physical development, and would not result in changes to the existing size, function, or values of the regulatory floodway or the 100-or 500-year floodplains.

Overlook Park would be re-oriented and rehabilitated to provide an enhanced viewing area for the Great Falls and the Valley of the Rocks and improved space for informal and formal gatherings and events. The updated space would continue to function as it does today with respect to retaining and conveying floodwaters.

The partial re-watering and rehabilitation of the raceways could result in both adverse and beneficial impacts to floodplains. Dams and structures related to the raceway system would continue to impede the natural flow of water resulting as described under alternative B, but raceway rehabilitation efforts could include opportunities for the raceways to collect excess runoff or floodwaters during large storm events, creating beneficial impacts by increasing floodplain capacity and reducing the potential for flooding along McBride Avenue.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on floodplains; therefore, there are no cumulative impacts.

Conclusion

Overall, alternative B would result in both beneficial and adverse impacts on floodplains. Resource management efforts such as a comprehensive research and monitoring program, stabilization of the ATP site's

river, and new public education programs would result in beneficial impacts. Additional beneficial impacts could result from using the raceway system to divert floodwaters from McBride Avenue. Adverse impacts resulting from alternative B would be mostly attributable to construction activity relating to site improvements and the ATP river wall stabilization and the continued presence of structures within the floodplain. In the context of NPS policies to preserve floodplain functions and values, the beneficial and adverse impacts would be considered negligible because there would be no change in the existing flooplain capacity and function and there is likely to be a small increase in floodplain capacity over what currently exists.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Floodplains)

Alternative C would include beneficial and adverse impacts associated with site improvements within the area of the Great Falls and along the river, and stabilization of the ATP River Wall as described under alternative B above.

In addition, alternative C would rehabilitate elements of the raceway system that fall within the floodplain. Construction within the floodplain has the potential to alter existing flood lines and change the current course of water flow during construction. Once the rehabilitation project is complete, however, the floodplain should remain unchanged compared to its current state. As with alternative B, rehabilitation of the raceways could allow the raceways to be utilized for flood control purposes. Alternative C also allows for rehabilitation of other elements of the raceway system, like the control gates, which could provide additional capabilities to control or divert floodwaters through the raceways, increasing floodplain capacity over current conditions.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on floodplains; therefore, there are no cumulative impacts.

Conclusion

Similar to alternative B, alternative C would result in beneficial and adverse impacts on floodplains. Resource management efforts such as a comprehensive research and monitoring program, stabilization of the ATP site's river, and new public education programs would result in beneficial impacts. Beneficial impacts resulting from rehabilitation of the entire raceway system could increase the ability to divert floodwaters to or from the raceways and allow for the diversion of floodwaters from McBride Avenue during heavy storm events. Adverse impacts resulting from alternative C would be mostly attributable construction activity relating to site improvements and the ATP river wall stabilization and the continued presence of structures within the floodplain. As with alternative B, the impacts of alternative C would be negligible because the only change from existing conditions would be a small increase in floodplain capacity.

Visitor Use and Experience

NPS Management Policies (NPS 2006b) states that the enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks and that the NPS is committed to providing appropriate, high-quality opportunities for visitors to enjoy the national parks. Because many forms of recreation may not be suitable for a national park setting, the NPS would therefore seek to do the following:

- provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in a particular unit
- defer to local, state, and other federal agencies; private industry; and NGOs to meet the broader spectrum of recreational needs and demands that are not dependent on a national park setting

Unless mandated by statute, the NPS would not allow visitors to conduct activities that would have the following effects:

- impairing park resources or values
- creating an unsafe or unhealthful environment for other visitors or employees
- being contrary to the purposes for which the park was established
- unreasonably interfering with the atmosphere of peace and tranquility, or the natural soundscape

maintained in natural, historic, or commemorative locations in the park

Potential impacts on visitor use and experience are assessed based on the current description of visitor use and experience presented in chapter 3 of this document. Enjoyment of park resources and values by visitors is part of the fundamental purpose of all national parks.

Impacts on visitor use and experience were determined considering the best available information, and the following analysis is qualitative rather than quantitative due to the conceptual nature of the alternatives. Information on visitor use and opinions was taken from the public scoping information for this plan.

This impact analysis encompasses various aspects of visitor use and experience, including the effects on visitation levels; diversity of recreation opportunities and national park experiences; visual quality; visitor education, interpretation, and understanding; visitor health and safety; and soundscapes. Adverse impacts are those that most visitors would perceive as undesirable. Beneficial impacts are those that most visitors would perceive as desirable.

The resource-specific context for assessing the impacts of the alternatives on visitor use and experience includes:

- Visitor understanding of the history, significance, and contemporary connections of the park's cultural and natural resources.
- The opportunity for visitors to experience the natural scenic views and setting, the historic scenic views and setting, and the experiential element of the falls.
- The ability for visitors to enjoy recreation experiences such as walking and biking on trails; picnicking; and visiting historic sites.
- The ability for visitors to experience feelings associated with open space in a high-density area.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Visitor Use and Experience)

Cooperating partners would continue to work with the park to facilitate visitor understanding of park interpretive themes as well as promote active engagement with park resources. The continued expansion of education and interpretation programs and activities generated through partnerships would have a beneficial impact on visitor experience as visitors would have more opportunities to learn about the park's historic resources and the history of Paterson. Stabilization of the ATP River Wall/River Walk would create beneficial impacts by increasing the pedestrian connections within the park and facilitating access between Overlook Park and the ATP site, as well as increasing visitor access to the riverfront along the ATP site. Construction noise from these two projects could disrupt the visitor experience and these areas would be closed to the public during construction, causing adverse impacts.

Maintenance of the existing views within the park would create beneficial impacts on visitor experience; however, the visual quality and ability for the visitor to understand the historic setting of Paterson would continue to be adversely impacted by deteriorating historic structures. Views of un-rehabilitated historic structures would detract from the visual quality of the historic setting within the NHL Historic District and ATP site structures would continue to deteriorate, adversely impacting views to the ATP site. The existing streamflow over the Great Falls would continue and, depending on precipitation patterns, its visibility from visitor vantage points could change when water flows drop to lower levels than usual, adversely impacting views of the falls. In addition, water flow in the raceway system would remain restricted, adversely impacting visitors' ability to see how the raceway system works. Educational and interpretive programs and other visitor services provided by the park and park partners would continue at current levels at the park, within the Historic District, and remotely via some online interpretive programming. Visitor contact points would continue to be provided by partners and at the park's Welcome Center; however, visitors' ability to fully explore the

park and NHL Historic District could be adversely impacted by limited availability of staff to answer questions and guide tours, and limited waysides that provide interpretive information.

Beneficial impacts to community health and visitor physical fitness would occur by maintaining access to existing trails and constructing the new ATP river walk for fitness and wellness activities, such as walking, running, dog walking, and exercise routines, and by encouraging recreational use of the park.

Rehabilitation of Hinchliffe Stadium would have beneficial impacts on visitor experience as interpretive programming could be expanded to include the history of the stadium, its connection to the city, and the impact it had on the families who worked in the Paterson mills.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions which have the potential to impact visitor use and experience within the park includes the Levine Reservoir Containment Project. During construction, construction vehicles and activities could create noise disturbances which would detract from the visitor experience in nearby areas of the park. The impact of this action would generally be adverse, but would only expect to last during construction activities. When combined with the impacts of alternative A, it is likely that the overall cumulative impact would be adverse, with alternative A contributing a noticeable adverse increment to the overall cumulative impact.

Conclusion

Impacts to visitor use and experience associated with alternative A would be both beneficial and adverse. Expanding interpretive and educational programs would result in some beneficial impacts to visitor use and experience as visitors become more informed about the history of the park and resource protection. Overall, alternative A would result in adverse impacts as the continued disrepair of park resources and lack of exhibits and waysides would hinder visitors' ability to understand the history of the park and its relationship to the Great Falls and Passaic River. The cumulative impact would be adverse and alternative A would contribute and noticeable adverse increment to the overall adverse

cumulative impact. Based on this information, the largely adverse impacts of alternative A on visitor use and experience would reduce the overall visitor experience of learning about the history of the place, but visitors would still have the opportunity to experience some of the historic sites and many of the recreational opportunities open to the public. The opportunity of experiencing a recreational and natural open space within the context of an urban area would be available to visitors as well as the historic and natural scenic views within the park.

Alternative B: Landscape Exploration Impacts of Alternative B (Visitor Use and Experience)

Increased visitor opportunities, services, facilities and interpretative and educational programs proposed in alternative B would result in beneficial impacts on visitor use and experience because alternative B would include upgraded and new facilities designed to accommodate larger visitor numbers, as well as improved systems for moving visitors through, and potentially to, the park and increasing connectivity.

As visitation increases, use of the transportation systems that provide access to the park would also increase (vehicular, public transit, and pedestrian/bicycle facilities) which could cause crowding and congestion. In order to help mitigate these adverse impacts, the park and its partners would work together on new transportation planning to improve vehicular and pedestrian access and movement in the park and the NHL Historic District. These changes could include improved sidewalks, walking paths, lighting, and planting between these areas to provide for a safe and pleasant experience. Increased transit service would also be considered. Visitor experience in alternative B would be centered on the Great Falls Area and the park's cultural landscapes, with the addition of a new visitor contact facility in the area and a rehabilitated Overlook Park. Public access to park areas would be expanded with the opening of the ATP site for interpretive use at the exterior of the ATP structures and for passive recreation. In alternative B, the raceway system would be rehabilitated and the Upper Raceway would be re-watered, providing visitors the opportunity to experience the working raceway system and promote a better understanding of how the

system functions and how it powered the mills. These expanded opportunities for visitors to experience and understand park resources would have beneficial impacts on visitor experience.

Alternative B would use contact stations staffed by park rangers and park partners, wayside exhibits, interpretive media, improved signs and wayfinding, and improved streetscapes and sidewalks to better support access to park interpretive and recreation opportunities, and to help connect visitors with the information and support services they need to plan and enjoy their visit to the park. These efforts to make the park more welcoming, improve connectivity, and improve visitor orientation would result in a beneficial impact on experience at the park.

In alternative B, trails and pedestrian walkways would be improved in all areas, with a focus on access to natural resources, including the Passaic River and the Valley of the Rocks, and connections to other natural and scenic areas outside the park boundary, such as to the Morris Canal Greenway and Garrett Mountain. Making the ATP site safe and accessible to the public, increasing the number of trails and walkways parkwide, and providing different experiences and views along those trails would have a beneficial impact on visitor experience and recreation.

Construction activities related to new facilities and/or elements would have adverse impacts to visitor experience as they would cause some disruptions to visitor experience as specific areas of the park could have limited access or closures to ensure visitor safety while construction is completed.

Alternative B would offer visitors additional access to key views of the park: from new locations, from improved existing overlooks, through vegetation management, and via rehabilitation of historic structures. All of these actions would help to enhance the character and views of the park (scenic, natural, and historic), improving the visual quality and experience of historic and natural settings for visitors and resulting in beneficial impacts.

In alternative B, visitors would have new opportunities to understand the significance of the park's natural

resources as well as its historic sites and structures. Educational and interpretive programs and other visitor services provided by the park and park partners would be enhanced and the park would continue to seek additional partnerships to help provide new interpretive and educational programming. In order to expand interpretive themes and connect with resources outside park boundaries, the park and park partners would work together on educational and interpretive programming that supports the purpose and mission of the park. Alternative B would also provide increased opportunities for physical activity aimed at improving physical health. The addition of new trails and increased connectivity would facilitate physical activity and improve physical health. Opportunities for solitude and natural immersion experiences could increase mental health as well.

Cumulative Impacts

Cumulative impacts under alternative B would be similar to those described under alternative A. When combined with the impacts of alternative B, it is likely that the overall cumulative impact would be beneficial, with alternative B contributing a noticeable beneficial increment to the overall cumulative impact.

Conclusion

Impacts to visitor use and experience associated with alternative B would result in mostly beneficial impacts with some adverse impacts. Proposed improvements to the park's landscape and rehabilitation of the park's historic resources would result in benefits to the visitor experience as resources are preserved and interpretation and educational programs are expanded. Improvements and expansion of visitor facilities throughout the park would also contribute beneficial impacts to visitor use and experience. Adverse impacts would primarily result during construction as sites may be closed off to visitors during these times and could occur through overcrowding during peak visitation. Adverse impacts under alternative B would be relatively small because construction disturbance would only last for a short time and could be scheduled during times of low visitor use. The beneficial impacts under alternative B would be more substantial as a larger number and greater variety of opportunities for recreation, interpretation, and education of the park's resources are created.



These beneficial impacts would be in accordance with the park's overall purpose, significance, and mission.

Alternative C: Industrial Heritage Immersion Impacts of Alternative C (Visitor Use and Experience)

Impacts related to increased visitation, visitor transportation, visitor orientation, availability of educational and interpretive programs, visitor safety and community health, physical fitness, soundscapes, and impacts related to construction activities would be the same as those listed under alternative B above. Other impacts to visitor use, experience and recreation resources from alternative C would be similar to those described in alternative B; however, alternative C would focus visitor experience on Paterson's industrial history, the industrial landscape, and their relationship to the falls and river.

A contact station would be located within the Historic District and park historic resources would be rehabilitated and opened to the public to provide access and additional space for educational and interpretive programming. The raceways would be fully re-watered and associated structures opened to the public for interpretation and a range of activities under alternative C, providing visitors a more expanded experience of the working raceway system than under alternative B. The rehabilitated ATP site would be transformed into



a visitor destination, providing more interpretation of industrial uses than under alternative B and adding new amenities and interior and exterior visitor use spaces (for example, a restaurant or exhibit space). All of these elements would provide additional interpretation of park resources than that available under alternative B. The expanded park access, new interior and exterior space for visitor activities and increased opportunities for visitors to experience and understand park resources would have beneficial impacts on visitor experience. As in alternative B, trails and pedestrian walkways would be improved in all areas under alternative C; however the focus would be on the historic routes. paths, and roads within the site and connections to the Historic District and city neighborhoods and beneficial impacts to visitor experience and recreation would be similar to those in alterative B.

Like alternative B, key park views would be preserved. Alternative C would offer visitors additional access to key views of the park and from within the Historic District through rehabilitation and preservation of historic structures, vegetation management, and from enhancement of existing overlooks. All of these actions would help to enhance the character and views of the park (scenic, natural, and historic), improving the visual quality and experience of historic and natural settings for visitors and resulting in beneficial impacts.

Visitors would have new opportunities to understand the significance of the park's historic resources relating to industrial history and the connections between the natural and cultural components of the industrial system in alternative C. This would be accomplished through rehabilitation of historic structures that opens them to the public, expanded interpretation of the ATP site with additional space for visitor activities, and expanded interpretation of the park's cultural landscapes, buildings, and significance.

Cumulative Impacts

Cumulative impacts under alternative B would be similar to those described under alternative A. When combined with the impacts of alternative C, it is likely that the overall cumulative impact would be beneficial, with alternative C contributing a noticeable beneficial increment to the overall cumulative impact.

Conclusion

Overall, impacts to visitor use and experience under alternative C would be both beneficial and adverse impacts. A greater emphasis on historical and cultural resource management could result in greater knowledge and recognition of cultural resources and their interpretation. Locating visitor facilities within the NHL historic district could also result in a greater dispersal of visitors across multiple destinations within and around the city. Expanded public outreach, collaborative programming with partners, improvements to interpretive exhibits, and the development of new facilities that expand programming options within the park would result in beneficial impacts in terms of visitation numbers, a broader visitor audience, and expanded interpretive, educational, and recreational opportunities for visitors. Adverse impacts under alternative C would primarily result during construction activity as some areas of the park may require closure during those times. Improvements to the park's cultural and natural resources as well as expanded opportunities for interpretive and educational programming would provide visitors with a greater number of opportunities to understand the history and significance of the park and experience the park's historical setting. As new areas of the park open for public use, visitors would be able to experience a larger area of urban open space and views that had previously been unavailable.

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Impacts on Socioeconomics

Potential impacts on Paterson NHP's social and economic environment are assessed based on the current description of Paterson NHP's context presented in this GMP/EA. They are directly related to the proposed levels of visitor use that are anticipated under each alternative. The resource-specific context for assessing the impacts of the alternatives to the surrounding communities includes the following:

- the effect of visitor use and experience improvements on community setting and lifestyle in the surrounding communities
- the effect of visitor use and experience and partners' programming improvements on the community facilities and services in the surrounding populations
- the effect of changes in park spending to operate the park
- the effect of changes in the level of visitor use at the park, which contributes to visitor spending in the surrounding communities

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Socioeconomics)

Under alternative A, existing visitor uses and experiences would be maintained and, other than repairs and the improvements described in the common to all alternatives section in chapter 2, no new visitor facilities would be constructed.

Stabilization and construction of the ATP River Wall/River Walk would provide new site amenities, such as new pathways and access to the ATP site. The social impact from the improved community facilities would be beneficial. Park and park partner spending related to the ATP River Wall/River Walk project would have beneficial impacts on the construction and trade industry. The surrounding communities would still be impacted by heavy traffic and lack of parking in areas surrounding the park. As improvements are made under alternative A, these congestion issues could become worse resulting in adverse impacts to those communities.

Cumulative Impacts

The Levine Reservoir Containment Project would require construction activities that would generate spending in the area, resulting in cumulative beneficial impacts on the construction and trade industry. Alternative A would contribute beneficial impacts from limited construction spending by the park and park partners.

Conclusion

Impacts to the socioeconomic environment associated with alternative A would be largely localized and would result in both beneficial and adverse outcomes. Some beneficial impacts to community character would result from the stabilization of the ATP river wall and construction of the river walk. There are no proposed actions under this alternative that would have a noticeable adverse or beneficial impact on the local or regional economy. Based on this information, the beneficial and adverse impacts of alternative A on the socioeconomic environment would not be readily detectable and would not be expected to result in changes to the surrounding community's setting or lifestyle. A slight rise in visitation and local spending in the community could arise as some management actions are implements, but these changes would not be expected to produce noticeable elevations in the overall economy of the surrounding area.

Alternative B: Landscape Exploration

Impacts of Alternative B (Socioeconomics)

Implementing alternative B would occur against the same backdrop of economic and demographic conditions in the surrounding communities described in alternative A. The effects of alternative B would provide support for the surrounding communities' overall quality of life through the additional recreational and cultural activities. In addition, many of the proposed improvements are focused on preserving historic and natural resources, which provide settings that are considered to enhance the quality of life in the community, creating beneficial impacts for the community. In some instances, informal uses of currently unprogrammed space at the park would be removed and replaced with park programming and amenities. For example, the corner of the park at Wayne Avenue and Maple Street is currently informally used

for overnight parking, a use that would be removed under alternative B. While there could be localized adverse impacts due to replacement of these types of informal uses, the community would also gain additional recreational and open space. It is anticipated that the alternative would not directly affect population changes or housing inventory.

Under alternative B, it is estimated there would be an increase in visitation as well as overall activity in and around the city of Paterson. The variety and quality of visitor services and recreational opportunities at the park would be enhanced and improved under alternative B. The alternative would also establish connections to regional open space attractions such as Garrett Mountain. These actions are likely to increase visitor use and demand for and impact on available transportation facilities and systems. These increases could cause crowding and congestion within existing vehicular, transit, and pedestrian/bicycle networks. In addition, visitor use of street parking in residential areas, particularly on the north side of the park could increase. To mitigate these adverse impacts, the park and park partners would work to improve pedestrian connections and continue to support efforts to encourage the expansion of public transportation routes from existing bus and railroad stations to the park and other attractions in the area.

Additionally, for those services that are envisioned for joint management and maintenance between the NPS and the city of Paterson or other partners, there could be resultant increases in public service costs. While the fees and costs for additional visitor and/or transportation systems remain unknown, the cost offsets for the benefits provided cannot be determined. As a result, the economic impact of these facilities and services is unknown; however, the social impact from the increased availability of community facilities and services would be beneficial.

The impact of additional nonresident visitors in local accommodations would marginally affect water and wastewater treatment plants if there were incremental demand for the local area hotels. Tax revenues generated by visitor spending would help to provide resources to meet these future needs. Overall, there

would beneficial impacts on community facilities and services.

Park and park partner spending for improvements and operations would also be anticipated to increase under alternative B, although the funding could come from any of the management entities. Although spending levels are difficult to assess at this time, new development and rehabilitation spending, particularly at the ATP site, would be less under alternative B than under alternative C. Park spending on improvements would likely have a moderate beneficial impact on the construction and trade industry. In alternative B there would be fewer private sector business opportunities in areas such as concessions than in alternative C. Therefore, park spending on operations including employment, supplies and materials would be less. Overall construction, development, and expanded operations would have a beneficial impact on park spending and employment.

Under alternative B, there would be an increase in annual visitor use at the park over the long term, resulting in a benefit for visitor use spending. The rate of increase would be commensurate with the timing of proposed improvements and expansion. At this time, it is difficult to gauge what percentage of visitors would come from the local area and what percentage would come from outside the area, although several of the improvements (e.g., the visitor contact station and park-like interpretive ATP site) would likely attract additional nonresident visitors. Regardless of whether it is from local or nonresident visitors, the additional visitor use would result in additional retail and recreational expenditures. Depending on the demand profile of visitors drawn by the new facilities, there could be new lodging expenditures. State and local governments would collect additional sales tax from increased visitor spending, a beneficial impact for these agencies' budgets.

Cumulative Impacts

Impacts of the other actions that contribute to cumulative impacts are the same as described under alternative A. Taken together, these cumulative actions would contribute beneficial cumulative impacts on socioeconomic resources. When the impacts on

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socioeconomic resources as a result of alternative B are combined with these other projects in the study area, an overall beneficial cumulative impact would be expected. With an increase in visitation and resultant increase park and visitor spending, alternative B would contribute an imperceptible beneficial impact.

Conclusion

Overall, impacts to the socioeconomic environment associated with alternative B would be largely localized though some impacts may affect the regional tourist economy and would range from beneficial adverse. Beneficial impacts to community character and land use and development would be result from the rehabilitation and preservation of the park's cultural and natural resources and pursuing a cooperative stewardship model of governance. Proposed changes related to the park experience, particularly the inclusion of visitor facilities would be expected to result in an increase in visitation which could have beneficial impacts on the local and regional tourist economy.

Proposed construction under this alternative would be of benefit to the local and regional economy. Based on this information, the beneficial impacts of alternative B on the socioeconomic environment would improve the local and regional economy, but may be negligible considering the size of the regional area. Improved park facilities and recreational opportunities would provide the surrounding community with additional forms of recreational and educational experiences. Rehabilitation efforts throughout the park would also improve the setting and create a more welcoming open space for the surrounding community.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Socioeconomics)

Impacts under alternative C related to community setting and facilities; population and housing inventory; visitation increases; utilities; and visitor spending would be the same as those described above in alternative B. Alternative C would establish pedestrian connections to the Historic District and city neighborhoods, as well as thematic linkages to other historic sites in the region, thereby helping to stimulate heritage tourism. It is anticipated that there would be more private sector business opportunities in areas such as concessions

under alternative C due to the more intensive program of rehabilitation for use of historic and cultural resources within the ATP site.

Park and park partner spending for improvements and operations would also be anticipated to increase under alternative C, although the funding could come from any of the management entities. Although spending levels are difficult to assess at this time, new development and rehabilitation spending, particularly at the ATP site, would be greater under alternative C than under alternative B. Park spending on improvements would likely have a beneficial impact on the construction and trade industry. As there would be more private sector business opportunities in areas such as concessions in alternative C than the other alternatives, park and park partner spending on operations including supplies and materials, would be greater. Overall construction, development, and expanded operations would have a beneficial impact on park spending.

Cumulative Impacts

Impacts of the other actions that contribute to cumulative impacts (i.e., those not related to alternative B) are the same as described under alternative A. Taken together, these cumulative actions would contribute beneficial cumulative impacts on socioeconomic resources. When the impacts on socioeconomic resources as a result of alternative C are combined with these other projects in the study area, an overall beneficial cumulative impact would be expected. With an increase in visitation and resultant increase park and visitor spending, Alternative C would contribute an imperceptible beneficial impact.

Conclusion

Overall, impacts to the socioeconomic environment associated with alternative C would be largely localized though some impacts may affect the regional tourist economy. As described under alternative B, benefits to community character could be expected from the rehabilitation and preservation of the park's resources and cooperative stewardship. Similar to alternative B, beneficial impacts to the local and regional economy could result from increased visitation and construction activity under alternative C. Proposals to expand the park staff to meet the implementation requirements under this alternative would be an economic benefit.

Based on this information, the beneficial impacts of alternative C on the socioeconomic environment would improve the local and regional economy, but may not be readily detectable considering the size of the regional area. Improved visitor programming and facilities would have a positive impact on opportunities and lifestyle of the surrounding communities by providing additional educational and recreational resources. Improvements to the surrounding community's setting could also be expected as park facilities and resources are rehabilitated and preserved.



Impacts on Park Operations

Impact analyses are based on the current description of park operations and park facilities presented in "Chapter 3: Affected Environment" of this GMP/EA. Park operations and park facilities includes both the quality and effectiveness of the infrastructure and the park's ability to maintain the infrastructure used in the operation of the park in order to adequately protect and preserve vital resources and provide for an effective and safe employee and visitor experience.

The resource-specific context for assessing the impacts of the alternatives on park operations and park facilities includes the following:

 Parks must operate within the constraints of the unit-specific budget and number of staff positions

- that have been allocated by Congress and the NPS Director's Office; and
- Park staff members must provide for an effective and safe visitor experience and protect resources in the entire park.

Alternative A: Establishing a New National Park (No Action Alternative)

Impacts of Alternative A (Park Operations)

Under alternative A, park staff would continue to engage in public education, public outreach, research initiatives and development of partnership programs. The park would rely on nearby NPS units, regional office staff, and Washington Support Office staff to supplement the park for technical assistance and other needed plans or studies. In addition, park partnership agreements would continue to be employed to assist the NPS with research, education, interpretation, and maintenance efforts. These partnership efforts would have a beneficial impact on park operations by supplementing park programs and freeing up staff time to complete other projects and administrative duties. These efforts, however, require oversight and time commitments.

Park visitation may increase under alternative A as the park becomes more established and partnerships are further developed which could result in adverse impacts as additional tours are scheduled. This increase in park staff time, however, could be minimized through additional self-guided programming for park visitors.

The park is currently in the acquisition process to acquire several parcels of land surrounding the Great Falls. If NPS acquisition of land should occur, adverse impacts to park operations would result as additional workloads would be added to park staff and/or the existing operational budget would be stretched to maintain the newly acquired parcels. The ability of the park to plan for and respond to changing maintenance and operations needs of NPS owned property would be strained and park resources could slowly deteriorate.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on park operations; therefore, there are no cumulative impacts.

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Conclusion

Impacts associated with alternative A would be localized, and adverse. The majority of impacts are associated with the capacity of current staffing levels in terms of time constraints to expand on existing programming or a potential expansion of current NPS ownership of property. As park visitation and NPS-owned facilities grow, there would be no corresponding increase in operating funds to address the increased need for staffing or maintenance of facilities. The adverse impacts of alternative A on park operations, however, could be mitigated through partnerships or collaboration with NPS staff from other park units to supplement park operational needs. Under alternative A, the park would continue to create partnerships to assist with maintaining and preserving park resources as well as providing interpretive and educational programming. Working with partners to accomplish these goals would allow the park to meet their responsibilities while staying within the NPS's Congressionally-allocated budget.

Alternative B: Landscape Exploration

Impacts of Alternative B (Park Operations)

Alternative B places an emphasis on increased recreational use of the park's landscape with the addition of new activities, special events, and interpretive and educational programs. Park administrative functions would be part of an expanded visitor contact station in the Scenic Falls and River Area. The NPS and its partners would seek funding to employ additional full-time and seasonal employees to assist with new programming and maintenance of park property which could lower the staff time and financial comment of the park by itself.

Under alternative B, the NPS would work with park partners to preserve, stabilize, and rehabilitate some historic structures, add new trail systems, and rehabilitate portions of the landscape. The actions proposed under alternative B are greater in scale and extent than those proposed under alternative A and would require additional funding and staff support. These actions would result in an increased need for park staff time to assist with planning and maintenance of these amenities as well as supporting the potential increase in visitation, expanded activities, and new park uses.

While the increased costs and staffing needs resulting from actions under this alternative would have potential for an adverse impact on the park's operations, this would be combined with greater support and coordination with partners, which would partly offset the adverse impacts on park operations that the addition of new visitor facilities and recreation activities could create. As long as staffing levels increase at a commensurate level to match the needs of new facilities and programs, impacts to NPS operations would be negligible.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on park operations; therefore, there are no cumulative impacts.

Conclusion

Overall, operations impacts associated with alternative B would largely be localized and would have both beneficial and adverse impacts on park operations, maintenance, and facilities. Most of the adverse impacts related to alternative B would be associated with an increase in interpretation and maintenance needs with limited staffing increases. Increasing partnerships could mitigate staffing workloads. The impacts of many proposed actions that are considered would be readily detectable and many actions would result in noticeable improvements to park operations. Park partner relationships would be a strong component of alternative B and cooperation among the partners for completing proposed management actions would allow the park to accomplish goals set forth under alternative B while still remaining within the constraints of the park's budget. Collaborative efforts to rehabilitate and preserve key resources throughout the park and administer interpretive and educational programs would provide for a safe and effective visitor experience.

Alternative C: Industrial Heritage Immersion

Impacts of Alternative C (Park Operations)

Actions under this alternative place an emphasis on the adaptive reuse of historic structures, which could include the addition of concessions and other compatible uses. Concessions would provide a revenue stream that would potentially offset some of the added costs of maintaining rehabilitated buildings and structures, lessening the adverse impacts of increased costs on the park operations. The NPS would employ additional full-time and seasonal employees.

Under alternative C, historic structures, such as the raceways and other historic structures and ruins, would be stabilized and rehabilitated for visitor use as possible (see "historic structures" section above for details). A new visitor contact station would be added within an existing building in the Historic District, the Colt Gun Mill would be rehabilitated for new compatible uses, and the ATP site would be opened for visitor use. New paths and walks would expand visitor access throughout areas of the park that are currently off limits or limited access. All of these actions would result in increased needs for park maintenance, and for park staffing to support the increased visitation, expanded activities, and new uses.

While the increased costs and staffing needs resulting from actions under this alternative would have potential for an adverse impact on the park's operations, this would be combined with greater support and coordination with partners as well as addition of concessions, which would partly offset the adverse impacts on park operations that the

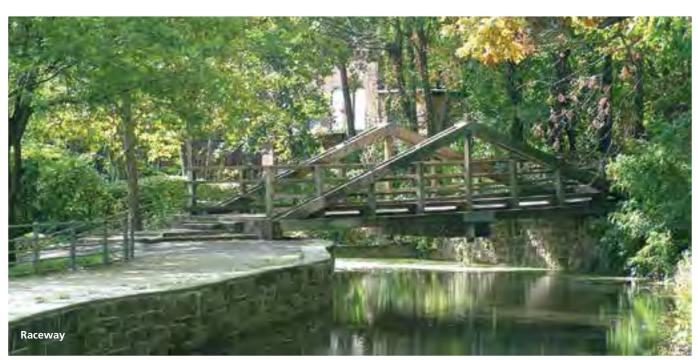
addition of new visitor facilities and recreation activities could create. As long as staffing levels increase at a commensurate level to match the needs of new facilities and programs, impacts to NPS operations would be negligible.

Cumulative Impacts

No other past, present, or reasonable foreseeable future projects were identified that have impacts on park operations; therefore, there are no cumulative impacts.

Conclusion

Under alternative C, the park would look to invest both time and funding into rehabilitating and preserving key park resources and expanding the interpretive and educational programming above current levels. These actions would have adverse impacts on park operations as funding and staffing are limited. Cooperation with existing partners and the creation of new partnerships, however, would alleviate the financial burden of proposed actions from park operations and allow the park to continue to operate within the constraints of its Congressionally-allocated budget. Additional partnership opportunities which would expand on current interpretive and educational programming would allow staff to provide and effective experience for visitors.



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5. CONSULTATION AND COORDINATION

History of Community Participation

Reaching out to the community for ideas and expertise and listening to concerns is an important step in the GMP planning effort. There are many different public agencies, local governments, non-profit organizations and individual citizens having an interest in this plan. Community participation and consultation efforts were ongoing throughout the process of preparing this Draft General Management Plan and Environmental Assessment. Public involvement methods included conducting open house meetings, holding stakeholder meetings, distributing newsletters, posting planning information on appropriate websites, publishing Federal Register notices and sending press releases.

Scoping: Listening to Ideas and Concerns

The Paterson Great Falls NHP GMP planning team launched the GMP planning process in 2011. The official public scoping period opened on November 17, 2011 and closed on March 16, 2011. A comprehensive scoping outreach effort elicited early public comment regarding issues and concerns, the nature and extent of potential environmental impacts, and possible alternatives that should be addressed in the GMP. Through various scoping and outreach activities, NPS welcomed information and suggestions from the public.

In November 2011, the planning team produced the first GMP newsletter. More than 3,000 copies were printed in English, Spanish, Arabic and Bengali. Newsletters were mailed to individuals and organizations on the GMP mailing list out, and distributed throughout the city of Paterson—to visitors at the park, neighbors in local communities, and attendees at open house meetings. The newsletter's purpose was to announce the start of the planning process; to inform the public on how they could participate; and to ask for thoughts, ideas and concerns about future planning, and what issues should be addressed in the GMP. The newsletter

also contained information on the date, time and location of open house meetings.

Announcements and Notices

The scoping newsletters were published and made available for comment on NPS's Planning, Environment and Public Comment (PEPC) website and the park's main website. Additional updates on the GMP were provided on the websites. An email list was also developed and maintained so that the public could receive updated information electronically.



Press releases announcing the GMP planning process were distributed to local newspapers and on local radio. NPS staff worked closely with the city of Paterson to increase outreach on public involvement opportunities. On November 14, 2011, a notice of intent to prepare a general management plan and environmental impact statement was published in the Federal Register. NPS staff posted and maintained announcements regarding the status of the GMP on the park's website and Facebook page.

Open House Meetings

From November 17 to 19, 2011 the planning team held scoping open house meetings at Paterson's Center City Mall, The Brownstone House and the New Jersey Community Development Corporation. Displays and stations were set up at the start of the meetings so that attendees could have one-on-one conversations with

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members of the planning team. Planning team members recorded comments on flipcharts and by video.

Community Contributions

Following the open house meetings, the city of Paterson submitted 50 pages of consolidated comments collected from various city department staff. Additional public presentations were held at William Paterson University and Clifton Public Library about the GMP process. Park staff worked with two elementary schools on special projects devoted to the GMP. Paterson's School No. 7 submitted the results of a writing assignment given to their fifth graders, asking what they would like to see in the park. School No. 5 built and submitted photos of models displaying student's ideas for park improvements.

Summary of Scoping Comments

During the scoping period, the park received over 700 hundred comments in a variety of forms. Most comments were from individuals and organizations in New Jersey. A second GMP newsletter, also in Arabic, Bengali, English and Spanish was distributed in November 2012 and provided a summary of comments received, along with a summary of planning issues. The following public comment summary reflects the wide range and diversity of comments received. The foundation for the plan's vision reflects all of these ideas.

Values

One of the sentiments described most frequently was the appreciation of the Great Falls and surrounding natural setting. People value this place for its beauty and serenity and many use this space as a place for solitude and reflection. Others appreciated the opportunity for recreational activities that the area provides including picnicking, hiking, and fishing. Many commenters indicated the NHL district's mill buildings to be of great value and a large number of comments pointed to these buildings as a reminder of how Paterson became such an important part of America's industrial history. Industrial Connection

Numerous comments referenced the connection between the natural power source of the Great Falls and its industrial connection to Paterson. Many expressed an appreciation of the ingenuity of Alexander Hamilton and others to harness that power for industrial use. The complete hydroelectric system, including raceways and dams, was of particular interest to many people as a way to interpret and learn about using water as a natural source of energy.

Concerns

Many commenters expressed concern with the overall cleanliness of the park including, the amount of litter and debris found along the banks of the river. Several comments stressed the need to improve water quality in and around the river. Others had concerns about the maintenance of the park's buildings and facilities and suggested that additional landscaping around the park would improve its appearance. Commenters suggested the need for additional lighting and surveillance, especially in more remote areas of the park. Many expressed the need for public restrooms, additional benches, picnic areas, and space for larger gatherings or community events. Finally, many people described the need for additional roadway signage to point visitors in the direction of the park and informational signage inside the park to orient the visitor and provide historical background.

Future Programming

Numerous suggestions were received for activities that many would like to see occur within the park. Many commenters asked for more recreational opportunities within the park including the addition of new hiking and biking trails, access to the river for boating and fishing, and additional sitting and picnicking areas. Commenters had several suggestions for outdoor open space which could be used by the public to hold special events such as festivals, art shows, and classes. Several people suggested the inclusion of a library and/or research facility for public use and more educational tours, brochures, and exhibits.

Partnerships

Several commenters stressed the importance of partnerships for the park including partnerships with local governments and private organizations to incorporate a wider variety of programming. Some examples provided were partnerships with museums to create historical tours, and partnerships with local historical groups to convey the story of labor struggles in the area.



Development of the Preliminary Management Alternatives

Alternatives describe a vision for a park's future conditions and provide a means to explore what the park could become under different management scenarios. They offer different ways of sharing the stories of Paterson, providing educational experiences at the park and within the surrounding NHL district and for managing the natural and cultural features of the park. In addition, GMP alternatives must be reasonable, achievable, consistent with the park's purpose, and conform to NPS laws, regulations, and policies.

To develop the draft alternatives, the GMP planning team reviewed reports and research on the park's historic landscapes, structures and raceway system, and considered elements of other planning studies. Four concepts for the alternatives were presented at the federal advisory commission meeting in January 2013. The federal advisory commission held a special meeting in March 2013 to discuss the alternative concepts and seek public comment. After consulting with the federal advisory commission, the city of Paterson, and other interested agencies, the planning team finalized the

draft management alternatives and presented them at the October 2014 federal advisory commission meeting.

Consultation with Other Agencies, Officials and Organizations

Cooperating Agency

The city of Paterson is formally participating in the GMP process as a cooperating agency. The general agreement (appendix B) established the city's role as a cooperating agency for the GMP/EA in November 2011. Specifically, the city will: appoint a liaison to NPS for the GMP, make non-privileged public records available to NPS, and provide official and consolidated city comments on GMP documents, newsletters and the draft GMP in a timely fashion.

City officials and staff participated in open house meetings, workshops, briefings and many discussions with the GMP planning team. In addition, city staff included NPS in the planning process for the 2014 Paterson Master Plan to ensure that future actions and policies would be consistent with the direction of the GMP. The expertise and assistance of the city staff greatly contributed to the GMP planning process.

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Consultation under Section 7 of the Endangered Species Act

Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat.

On March 15, 2012, Paterson Great Falls NHP sent a letter to the U.S. Fish and Wildlife Service (USFWS) informing them of preparation of the GMP and requesting information regarding federally-listed threatened and endangered species in accordance with Section 7 of the Endangered Species Act. NPS received a response from the USFWS with data resources related to the Indiana Bat (Myodis sodalis). NPS staff continued to coordinate informally with USFWS throughout the planning process, following which, NPS determined that actions proposed in the GMP "may affect, but are not likely to adversely affect" any federally threatened or endangered species or critical habitats. As part of the Section 7 consultation process, a letter was submitted to the USFWS for review and concurrence with the NPS determination of "may affect, not likely to adversely affect."

Consultation on State-listed Threatened and Endangered Species

NPS sent a letter on March 15, 2012 to the New Jersey Division of Fish and Wildlife requesting consultation on state-listed species of special concern to the New Jersey DEP. Paterson Great Falls NHP received a response on May 10, 2012 stating that no state-listed endangered, threatened or special concern species was found within the park boundary. NPS staff has also coordinated with this agency during the planning process and will provide a copy of the GMP/EA for their review and comment.

Consultation under Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires that federal agencies with direct or indirect jurisdiction take into account the effect of undertakings on National Register listed or eligible properties and



allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Toward that end, NPS will work with the NJSHPO and the ACHP to meet requirements of 36 CFR 800 and the November 2008 Programmatic Agreement among the National Conference of State Historic Preservation Officers, the ACHP, and NPS (Department of the Interior). This latter agreement requires NPS to work closely with the SHPO and the ACHP in planning for both new and existing national park areas.

While the GMP will be provided to the NJSHPO and many others, further section 106 consultation, including section 106 assessment of effects to historic properties, will take place once the GMP has been completed and the GMP Finding of No Significant Impacts has been signed, identifying the final alternative chosen. Implementation of the preferred alternative will require section 106 consultation. That consultation, including



inviting the ACHP to consult and identifying the appropriate consulting parties, will take place as the GMP is implemented.

Prior to any ground-disturbing action by park managers, a professional archeologist will determine the need for archeological activity or testing evaluation. Any such studies would be carried out in advance of construction activity and would meet the needs of the NJSHPO. Section 110 of the NHPA requires NPS 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 of Historic Places upon their establishment by law or executive order.

On March 15 2012, NPS sent a letter to the NJSHPO to initiate consultation for the GMP. In April 2012, NJSHPO staff participated in a workshop with NPS

staff, city representatives and federal advisory commission members to draft the park's foundation for planning. On March 23, 2014, a meeting was held with NJSHPO staff to brief them on the broad GMP concepts and preliminary management alternatives.

Consultation with Native American Tribes

NPS recognizes that indigenous peoples have traditional and contemporary interests and ongoing rights in lands now under NPS management, as well as concerns and contributions to make for the future via the scoping process for general management plans and other projects. Related to tribal sovereignty, the need for government-to-government Native American consultations stems from the historic power of congress to make treaties with American Indian tribes as sovereign nations. Consultations with American Indians and Native Americans are required by various federal laws, executive orders, regulations, and policies, including section 106 of the NHPA.

The Delaware Nation, Delaware Tribe of Indians and the Stockbridge-Munsee Community were invited to consult in March 2012. Letters inviting consultation to these federally- recognized tribes were sent on March 28, 2012. In addition, the Sand Hill Indians were invited to consult and were sent a letter on March 28, 2012. NPS will continue to consult with these traditionally associated tribes and groups during the public review period for this EA and throughout implementation of the GMP pursuant to requirements of 36 CFR 800, federal executive orders and agency management policies.

Future Compliance Requirements

NPS will conduct additional site-specific environmental analysis as individual projects or actions included in the preferred alternative are proposed for implementation. Some of the specific future compliance requirements of the preferred alternative are described in the alternatives and environmental consequences chapters. Included are NPS determinations of how those individual requirements relate to NEPA, the Endangered Species Act (Section 7 requirements), and requirements for compliance with Section 106 of the NHPA regarding historic properties (2008 programmatic agreement and 36 CFR 800).

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Public Officials, Agencies and Organizations Receiving this Plan

Copies of the draft GMP/EA were distributed to the following government officials, government agencies, and non-governmental organizations and institutions. Individuals on the GMP mailing list were contacted and copies distributed to people, groups, property owners and businesses who requested the document.

Congressional Delegation

New Jersey Senator Corey Booker

New Jersey Senator Robert Menendez

New Jersey Representative William Pascrell

New Jersey Legislative Delegation—District 35

Senator Nellie Pou Assemblywoman Shavonda E. Sumter Assemblyman Benjie E. Wimberly

City of PatersonOffice of the Mayor

City Council
Paterson Historic Preservation Commission
Paterson Free Library (Paterson Museum)
Paterson Public Schools/Board of Education

Passaic County

Board of Chosen Freeholders

Department of Parks and Recreation

Department of Planning and Economic Development

Passaic County Historic and Tourism Board

Regional Commissions

Passaic Valley Sewerage Commission
Passaic Valley Water Commission

New Jersey State Agencies

Department of Community Affairs

Department of Environmental Protection,
Division of Fish and Wildlife

Department of Environmental Protection,
Division of Parks and Forestry

Department of Environmental Protection,
Green Acres Program

Department of Environmental Protection,
Historic Preservation Office
Department of State, Division of Travel and Tourism
Department of Transportation
Governor's Office

Tribal Organizations

Delaware Nation
Delaware Tribe of Indians
Sand Hill Indians
Stockbridge-Munsee Community

U.S. Army Corps of Engineers

Federal Agencies

U.S. Environmental Protection Agency
U.S. Department of Agriculture,
Natural Resources Conservation Service
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of the Interior, U.S. Geological Survey
Advisory Council on Historic Preservation,
Office of Federal Agency Programs

Organizations and Institutions

American Labor Museum/Botto House
Friends of Hinchliffe Stadium
Hamilton Grange National Memorial
Hamilton Partnership for Paterson
Montclair State University
National Parks Conservation Association
National Trust for Historic Preservation
New Jersey Community Development Corporation
Passaic County Community College
Passaic County Historical Society
Passaic River Institute
Paterson Education Fund
William Paterson University

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Lawrence F. Kramer, former Mayor, City of Paterson
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Thomas Rooney, Councilman, City of Paterson
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SILK MACHINERY





6. APPENDICES

Appendix A: Paterson Great Falls National Historical Park Enabling Legislation

TITLE VII–NATIONAL PARK SERVICE AUTHORIZATIONS
Subtitle A–Additions to the National Park System
SEC. 7001. NOTE: 16 USC 410III. PATERSON GREAT FALLS NATIONAL HISTORICAL PARK, NEW JERSEY

- (a) Definitions.—In this section:
 - (1) City.—The term "City" means the City of Paterson, New Jersey.
 - (2) Commission.—The term "Commission" means the Paterson Great Falls National Historical Park Advisory Commission established by subsection (e)(1).
 - (3) Historic district.—The term "Historic District" means the Great Falls Historic District in the State.
 - (4) Management plan.—The term "management plan" means the management plan for the Park developed under subsection (d).
 - (5) Map.—The term "Map" means the map entitled "Paterson Great Falls National Historical Park-Proposed Boundary", numbered T03/80,001, and dated May 2008.
 - (6) Park.—The term "Park" means the Paterson Great Falls National Historical Park established by subsection (b) (1)(A).
 - (7 Secretary.—The term ``Secretary" means the Secretary of the Interior.
 - (8) State.—The term "State" means the State of New Jersey.
- (b) Paterson Great Falls National Historical Park.—
 - (1) Establishment.—
 - (A) In general.—Subject to subparagraph (B), there is established in the State a unit of the National Park System to be known as the "Paterson Great Falls National Historical Park".
 - (B) Conditions for establishment.—The Park shall not be established until the date on which the Secretary determines that—
 - (i) (I) the Secretary has acquired sufficient land or an interest in land within the boundary of the Park to constitute a manageable unit; or
 - (II) the State or City, as appropriate, has entered into a written agreement with the Secretary to donate-
 - (aa) the Great Falls State Park, including facilities for Park administration and visitor services; or
 - (bb) any portion of the Great Falls State Park agreed to between the Secretary and the State or City; and
 - (ii) the Secretary has entered into a written agreement with the State, City, or other public entity, as appropriate, providing that--
 - (I) land owned by the State, City, or other public entity within the Historic District will be managed consistent with this section; and
 - (II) future uses of land within the Historic District will be compatible with the designation of the Park.
 - 2 Purpose.—The purpose of the Park is to preserve and interpret for the benefit of present and future generations certain historical, cultural, and natural resources associated with the Historic District.
 - (3) Boundaries.—The Park shall include the following sites, as generally depicted on the Map:
 - (A) The upper, middle, and lower raceways.
 - (B) Mary Ellen Kramer (Great Falls) Park and adjacent land owned by the City.
 - (C) A portion of Upper Raceway Park, including the Ivanhoe Wheelhouse and the Society for Establishing \ Useful Manufactures Gatehouse.
 - (D) Overlook Park and adjacent land, including the Society for Establishing Useful Manufactures Hydroelectric Plant and Administration Building.
 - (E) The Allied Textile Printing site, including the Colt Gun Mill ruins, Mallory Mill ruins, Waverly Mill ruins, and Todd Mill ruins.
 - (F) The Rogers Locomotive Company Erecting Shop, including the Paterson Museum.
 - (G) The Great Falls Visitor Center.

- (4) Availability of map.--The Map shall be on file and available for public inspection in the appropriate offices of the National Park Service.
- (5) Publication of notice.--Not later than 60 days after the date on which the conditions in clauses (i) and (ii) of paragraph (1)(B) are satisfied, the Secretary shall publish in the Federal Register notice of the establishment of the Park, including an official boundary map for the Park.

(c) Administration.—

- (1) In general.--The Secretary shall administer the Park in accordance with--
 - (A) this section; and
 - (B) the laws generally applicable to units of the National Park System, including--
 - (i) the National Park Service Organic Act (16 U.S.C. 1 et seq.); and
 - (ii) the Act of August 21, 1935 (16 U.S.C. 461 et seg.).
- (2) State and local jurisdiction.--Nothing in this section enlarges, diminishes, or modifies any authority of the State, or any political subdivision of the State (including the City)--
 - (A to exercise civil and criminal jurisdiction; or
 - (B) to carry out State laws (including regulations) and rules on non-Federal land located within the boundary of the Park.
- (3) Cooperative agreements.--
 - (A) In general.--As the Secretary determines to be appropriate to carry out this section, the Secretary may enter into cooperative agreements with the owner of the Great Falls Visitor Center or any nationally significant properties within the boundary of the Park under which the Secretary may identify, interpret, restore, and provide technical assistance for the preservation of the properties.
 - (B) Right of access.--A cooperative agreement entered into under subparagraph (A) shall provide that the Secretary, acting through the Director of the National Park Service, shall have the right of access at all reasonable times to all public portions of the property covered by the agreement for the purposes of--
 - (i) conducting visitors through the properties; and
 - (ii) interpreting the properties for the public.
 - (C) Changes or alterations.--No changes or alterations shall be made to any properties covered by a cooperative agreement entered into under subparagraph (A) unless the Secretary and the other party to the agreement agree to the changes or alterations.
 - (D) Conversion, use, or disposal.--Any payment made by the Secretary under this paragraph shall be subject to an agreement that the conversion, use, or disposal of a project for purposes contrary to the purposes of this section, as determined by the Secretary, shall entitle the United States to reimbursement in amount equal to the greater of--
 - (i) the amounts made available to the project by the United States; or
 - (ii) the portion of the increased value of the project attributable to the amounts made available under this paragraph, as determined at the time of the conversion, use, or, disposal.
 - (E) Matching funds .--
 - (i) In general.--As a condition of the receipt of funds under this paragraph, the Secretary shall require that any Federal funds made available under a cooperative agreement shall be matched on a 1-to-1 basis by non-Federal funds.
 - (ii) Form.--With the approval of the Secretary, the non-Federal share required under clause (i) may be in the form of donated property, goods, or services from a non-Federal source.
- (4) Acquisition of land.--
 - (A) In general.--The Secretary may acquire land or interests in land within the boundary of the Park by donation, purchase from a willing seller with donated or appropriated funds, or exchange.
 - (B) Donation of state owned land.--Land or interests in land owned by the State or any political subdivision of the State may only be acquired by donation.
- (5) Technical assistance and public interpretation.—The Secretary may provide technical assistance and public interpretation of related historic and cultural resources within the boundary of the Historic District.

- (d Management Plan.—
 - (1) In general.--Not later than 3 fiscal years after the date on which funds are made available to carry out this subsection, the Secretary, in consultation with the Commission, shall complete a management plan for the Park in accordance with--
 - (A) section 12(b) of Public Law 91-383 (commonly known as the "National Park Service General Authorities Act") (16 U.S.C. 1a-7(b)); and
 - (B) other applicable laws.
 - (2) Cost share.--The management plan shall include provisions that identify costs to be shared by the Federal Government, the State, and the City, and other public or private entities or individuals for necessary capital improvements to, and maintenance and operations of, the Park.
 - (3) Submission to congress.--On completion of the management plan, the Secretary shall submit the management plan to--
 - (A) the Committee on Energy and Natural Resources of the Senate; and
 - (B) the Committee on Natural Resources of the House of Representatives.
- (e) Paterson Great Falls National Historical Park Advisory Commission.—
 - (1) Establishment.--There is established a commission to be known as the "Paterson Great Falls National Historical Park Advisory Commission".
 - (2) Duties.--The duties of the Commission shall be to advise the Secretary in the development and implementation of the management plan.
 - (3) Membership.--
 - (A) Composition.--The Commission shall be composed of 9 members, to be appointed by the Secretary, of whom--
 - (i) 4 members shall be appointed after consideration of recommendations submitted by the Governor of the State;
 - (ii) 2 members shall be appointed after consideration of recommendations submitted by the City Council of Paterson, New Jersey;
 - (iii) 1 member shall be appointed after consideration of recommendations submitted by the Board of Chosen Freeholders of Passaic County, New Jersey; and
 - (iv) 2 members shall have experience with national parks and historic preservation.
 - (B) Initial appointments.—The Secretary shall appoint the initial members of the Commission not later than the earlier of--
 - (i) the date that is 30 days after the date on which the Secretary has received all of the recommendations for appointments under subparagraph (A); or
 - (ii) the date that is 30 days after the Park is established in accordance with subsection (b).
 - (4) Term; vacancies.--
 - (A) Term.--
 - (i) In general.--A member shall be appointed for a term of 3 years.
 - (ii) Reappointment.--A member may be reappointed for not more than 1 additional term.
 - (B) Vacancies.--A vacancy on the Commission shall be filled in the same manner as the original appointment was made.
 - (5) Meetings.--The Commission shall meet at the call of--
 - (A) the Chairperson; or
 - (B) a majority of the members of the Commission.
 - (6) Quorum.--A majority of the Commission shall constitute a quorum.
 - (7) Chairperson and vice chairperson.--
 - (A) In general.--The Commission shall select a Chairperson and Vice Chairperson from among the members of the Commission.
 - (B) Vice chairperson.--The Vice Chairperson shall serve as Chairperson in the absence of the Chairperson.
 - (C Term.--A member may serve as Chairperson or Vice Chairman for not more than 1 year in each office.
 - (8) Commission personnel matters.--
 - (A) Compensation of members.--
 - (i) In general.--Members of the Commission shall serve without compensation.
 - (ii) Travel expenses.--Members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for an employee of an agency under subchapter I

of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the Commission.

- (B Staff.--
 - (i) In general.--The Secretary shall provide the Commission with any staff members and technical assistance that the Secretary, after consultation with the Commission, determines to be appropriate to enable the Commission to carry out the duties of the Commission.
 - (ii) Detail of employees.--The Secretary may accept the services of personnel detailed from-
 - (I) the State;
 - (II) any political subdivision of the State; or
 - (III) any entity represented on the Commission.
- (9) FACA nonapplicability.--Section 14(b) of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.
- (10) Termination.--The Commission shall terminate 10 years after the date of enactment of this Act.
- (f) Study of Hinchliffe Stadium.—
 - (1) In general.--Not later than 3 fiscal years after the date on which funds are made available to carry out this section, the Secretary shall complete a study regarding the preservation and interpretation of Hinchliffe Stadium, which is listed on the National Register of Historic Places.
 - (2) Inclusions.--The study shall include an assessment of—
 - (A) the potential for listing the stadium as a National Historic Landmark; and
 - (B) options for maintaining the historic integrity of Hinchliffe Stadium.
- (g) Authorization of Appropriations.--There are authorized to be appropriated such sums as are necessary to carry out this section.

P.L. 113-291

The Carl Levin and Howard P. `Buck' McKeon National Defense Authorization Act for Fiscal Year 2015

SEC. 3037. HINCHLIFFE STADIUM ADDITION TO PATERSON GREAT FALLS NATIONAL HISTORICAL PARK.

- (a) Paterson Great Falls National Historical Park Boundary Adjustment.--Section 7001 of the Omnibus Public Land Management Act of 2009 (16 U.S.C. 410III) is amended as follows:
 - (1) In subsection (b)(3)--
 - (A) by striking "The Park shall" and inserting "(A) The Park shall";
 - (B) by redesignating subparagraphs (A) through (G) as clauses (i) through (vii), respectively; and
 - (C) by adding at the end the following: ``(B) In addition to the lands described in subparagraph (A), the Park shall include the approximately 6 acres of land containing Hinchliffe Stadium and generally depicted as the `Boundary Modification Area' on the map entitled `Paterson Great Falls National Historical Park, Proposed Boundary Modification', numbered T03/120,155, and dated April 2014, which shall be administered as part of the Park in accordance with subsection (c)(1) and section 3 of the Hinchliffe Stadium Heritage Act.".
 - (2) In subsection (b)(4), by striking "The Map" and inserting "The Map and the map referred to in paragraph (3)(B)".
 - (3) In subsection (c)(4)—
 - (A) in subparagraph (A), by striking "The Secretary" and inserting "Except as provided in subparagraphs (B) and (C), the Secretary"; and
 - (B) by inserting after subparagraph (B) the following: `(C) Hinchliffe stadium.--The Secretary may not acquire fee title to Hinchliffe Stadium, but may acquire a preservation easement in Hinchliffe Stadium if the Secretary determines that doing so will facilitate resource protection of the stadium.".
- (b) Additional considerations for Hinchliffe Stadium.—
 - (1) In general.--In administering the approximately 6 acres of land containing Hinchliffe Stadium and generally depicted as the "Boundary Modification Area" on the map entitled "Paterson Great Falls National Historical Park, Proposed Boundary Modification", numbered T03/120,155, and dated April 2014, the Secretary of the Interior—
 - (A) may not include non-Federal property within the approximately 6 acres of land as part of Paterson Great Falls National Historical Park without the written consent of the owner;
 - (B) may not acquire by condemnation any land or interests in land within the approximately 6 acres of land; and
 - (C) shall not construe the inclusion of Hinchliffe Stadium made by this section to create buffer zones outside the boundaries of the Paterson Great Falls National Historical Park.
 - (2) Outside activities.--The fact that activities can be seen or heard from within the approximately 6 acres of land described in paragraph (1) shall not preclude such activities outside the boundary of the Paterson Great Falls National Historical Park.

113TH CONGRESS 2D SESSION

H. R. 2430

IN THE SENATE OF THE UNITED STATES

July 23, 2014

Received; read twice and referred to the Committee on Energy and Natural Resources

AN ACT

To adjust the boundaries of Paterson Great Falls National Historical Park to include Hinchliffe Stadium, and for other purposes.

Section 1. Short title

This Act may be cited as the Hinchliffe Stadium Heritage Act.

Sec. 2. Paterson Great Falls National Historical Park boundary adjustment

Section 7001 of the Omnibus Public Land Management Act of 2009 (16 U.S.C. 410III) is amended as follows:

- (1) In subsection (b)(3)—
 - (A) by striking The Park shall and inserting (A) The Park shall;
 - (B) by redesignating subparagraphs (A) through (G) as clauses (i) through (vii), respectively; and
 - (C) by adding at the end the following:
 - (B) In addition to the lands described in subparagraph (A), the Park shall include the approximately 6 acres of land containing Hinchliffe Stadium and generally depicted as the *Boundary Modification Area* on the map entitled Paterson Great Falls National Historical Park, Proposed Boundary Modification, numbered T03/120,155, and dated April 2014, which shall be administered as part of the Park in accordance with subsection (c)(1) and section 3 of the Hinchliffe Stadium Heritage Act.
- (2) In subsection (b)(4), by striking The Map and inserting The Map and the map referred to in paragraph (3)(B).
- (3) In subsection (c)(4)—
 - (A) in subparagraph (A), by striking The Secretary and inserting Except as provided in subparagraphs (B) and (C), the Secretary; and
 - (B) by inserting after subparagraph (B) the following:
 - (C) Hinchliffe Stadium—

The Secretary may not acquire fee title to Hinchliffe Stadium, but may acquire a preservation easement in Hinchliffe Stadium if the Secretary determines that doing so will facilitate resource protection of the stadium.

Sec. 3. Additional considerations for Hinchliffe Stadium

In administering the approximately 6 acres of land containing Hinchliffe Stadium and generally depicted as the Boundary Modification Area on the map entitled Paterson Great Falls National Historical Park, Proposed Boundary Modification, numbered T03/120,155, and dated April 2014, the Secretary of the Interior—

- (1) may not include non-Federal property within the approximately 6 acres of land as part of Paterson Great Falls National Historical Park without the written consent of the owner;
- (2) may not acquire by condemnation any land or interests in land within the approximately 6 acres of land; and
- (3) shall not construe this Act or the amendments made by this Act to create buffer zones outside the boundaries of the Paterson Great Falls National Historical Park. That activities or uses can be seen, heard or detected from areas within the approximately 6 acres of land added to the Paterson Great Falls National Historical Park by this Act shall not preclude, limit, control, regulate or determine the conduct or management of activities or uses outside of the Paterson Great Falls National Historical Park.

GENERAL AGREEMENT

TO ESTABLISH AND PRESERVE THE PATERSON GREAT FALLS NATIONAL HISTORICAL PARK

Between

U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

THE CITY OF PATERSON, NEW JERSEY, AND THE PATERSON MUNICIPAL UTILITIES AUTHORITY

I. BACKGROUND, AUTHORITY, AND PURPOSE:

This agreement is entered into by and between the U.S. Department of the Interior, National Park Service("NPS"); the City of Paterson, New Jersey ("City"); and the Paterson Municipal Utilities Authority ("PMUA") (collectively "the Parties") for the purpose of formalizing the parties' intention to establish the Paterson Great Falls National Historical Park ("Park") and to preserve, by and to the extent permitted by applicable law, the surrounding Great Falls National Historic Landmark District ("National Historic Landmark District").

Congress authorized the Park's establishment in § 7001 of the Act of March 30, 2009 ("Act"), Pub. L. No. 111-11, 123 Stat. 1183, codified at 16 U.S.C. § 410///, Under the Act the Park's formal establishment requires (1) the Secretary of the Interior ("Secretary") to acquire sufficient lands or an interest in lands within the Park's boundary "to constitute a manageable unit" or (2) the State of New Jersey or the City to enter into an agreement with the Secretary to donate lands to the United States within the Park boundary. Additionally, the Act requires that the City and PMUA agree to manage the lands and future uses of lands that they own within the National Historic Landmark District in a manner consistent and compatible with the Park's purpose.

As of the date of this agreement, the Great Falls State Park has been envisioned but has not been authorized or established (Exhibit IA - Great Falls State Park - Concept, 2008 - Map). Within the envisioned state park area, as well as within the National Historic Landmark District, the City is the major landowner, along with its affiliate the PMUA. Accordingly, the Secretary has determined it appropriate to enter into this agreement with the City and with the PMUA in fulfillment of the terms of 16 U.S.C. § 410lll(b)(1)(B)(i)(Ii)(bb). Beyond the fulfillment of the terms of the cited section, this agreement is not intended to preclude any potential future agreements with the State regarding State-owned lands in or near the National Historic Landmark District.

This agreement provides for the establishment of a manageable unit and donation of lands and interests in lands to the United States. Part V of the agreement prescribes the manner in which the City and the PMUA will ensure that uses of non-NPS public and private lands within the Park and the National Historic Landmark District are consistent and compatible with the Park's purpose.

The Parties wish to collaborate and cooperate in the preservation of the National Historic Landmark District in furtherance of the Park's enabling law, the NPS's resource protection mandates and policies, and the City's Historic Preservation Ordinance.

II. DEFINITIONS:

- A. NPS: National Park Service.
- B. City: City of Paterson. New Jersey.
- C. Contaminants: Any substance that is defined as a "pollutant or contaminant" pursuant to 42 U.S.C. § 9601(33).
- D. PMUA: Paterson Municipal Utilities Authority.
- E. National Historic Landmark District: Great Falls National Historic Landmark District.
- F. HPC: Paterson Historic Preservation Commission.
- G. Manageable Unit: As defined in P.L. 111-11 67001.
- H. Land Status Map: NPS Lands map that shows the tracts and ownerships within a park boundary.
- Land Protection Plan: A plan that determines land acquisition priorities and interests to be acquired in conjunction with the Park General Management Plan.
- J. LARS: Land Acquisition Ranking System is the process by which Land and Water Conservation Funds (LWCF) are requested. LWCF funds are appropriated by Congress for land acquisition and any due diligence services required for land acquisition.
- K. GMP: A plan as described in 16 U.S.C. § 1a-7(b).
- L. Advisory Commission: The Paterson Great Falls National Historical Park Advisory Commission.
- M. Preliminary Segment Map: The Map that depicts the individual land ownerships found within the approved boundary.
- N. Major work: Any external modification of the type that under the Uniform Construction Code (UCC) would require a federal, state, or local development approval or permits, or any construction of new "structures" as defined by the UCC. On publicly-owned lands, any work that may not require local development approvals or permits shall be considered as major work if such work on private lands would require a local development approval or permit.

III. PATERSON GREAT FALLS NATIONAL HISTORICAL PARK RESPONSIBILITIES OF PARTIES.

A. LAND ACQUISITION WITHIN THE PARK:

1. Purpose:

To ensure that NPS, the City and the PMUA clearly understand the federal land acquisition process and acquisition phases that will allow for progressive resource protection of core properties, as funding is available, and as due diligence requirements are satisfied consistent with all applicable laws, regulations and policies for federal land acquisition. All federal land acquisitions, including donations, are subject to federal due diligence requirements.

2. CITY AND PMUA AGREE:

- a. To donate and convey to the United States and its assigns all vested fee simple interests or lesser interests that they hold to the lands described in <u>Exhibit 2</u>—
 <u>Paterson Great Falls National Historical Park Preliminary Segment Map</u>, or a portion of those lands to be determined by the NPS. <u>Specifically excepted are the areas and access easements indicated in <u>Exhibit 3- Initial Land Acquisition Plan Prior to GMP</u> as being exempted from said donation. With regard to the exception for the structure known as the "Hydroelectric Plant," the NPS hereby confirms that it shall under no circumstances block access to the structure's front and rear doors (also known as its east and west doors).</u>
- b. That the said lands and or interests in lands will be donated in Phases (<u>Exhibit 3-Initial Land Acquisition Plan Prior to GMP</u>), which may include partial donation, with remaining interests possibly donated in the future subsequent to the completion of the Park General Management Plan.
- c. The real-property interests that the City or the PMUA may donate to the United States include, but are not limited to: fee, easement, right of way, water rights, and scenic or preservation easements.
- d. Other public lands that remain under the ownership of the City or the PMUA within the boundaries of the Park will be administered and managed consistently with the Park's purpose.
- e. Deleted by the parties.
- f. Donations of lands and buildings may be accepted by the United States at any time subsequent to the completion of the federal requirements for lands acquisition.
- g. All taxes, assessments, judgments, and encumbrances that are a lien against the lands at the time of conveyance to the United States must be satisfied as of record at or before the transfer of title. NPS may in its discretion decline to take title to a given lot unless all liens or encumbrances are cleared from the lands. The City and or the PMUA shall not be required to use their general revenues to remove any such liens but shall operate in good faith to secure grant funding from federal or state sources for such removal. Alternatively, the parties may agree to the donation of a mutually acceptable alternate lot or tract in order to satisfy the legislative mandate of a manageable unit.
- h. Upon the request of the NPS, to execute, record, and deliver appropriate, legally sufficient deed(s) to the United States.

- i. That loss or damage to any real or personal property by fire, vandalism, or acts of God shall be at the risk of the City and PMUA until the title to the lands and deed(s) to the United States have been accepted by the United States through its duly authorized representative. In the event that such loss or damage occurs, the United States may, without liability, refuse to accept conveyance of the title or the United States may elect to accept conveyance of title to such real property "as is." The City or the PMUA shall have no responsibility to repair, replace, or renovate any such affected structure unless dedicated insurance proceeds are available for such work.
- j. That the United States may acquire title to said land(s) by condemnation or other judicial proceedings in order to clear title, in which event the City agrees to cooperate with the United States in the prosecution of such proceedings and agrees that no consideration shall be payable by the United States.
- k. From the date hereof, officers and accredited agents of the United States shall have, at all proper times, rights and privileges to survey, obtain a condition assessment and enter upon said lands for all lawful purposes in connection with the donation.
- The terms and conditions of this agreement apply to and bind the successors and assigns of the City and PMUA.
- m. That any lands acquisition by the United States of America is contingent upon the consent of the NPS to the acquisition, the appropriation of sufficient funds, the satisfactory completion of required due diligence by the NPS, and NPS acceptance of the physical condition of the real property. Determination as to whether the physical conditions are acceptable shall be in the sole discretion of the NPS. If the NPS deems unacceptable any material facts relating to any of the real property owned by the City or the PMUA and proposed for donation to the United States, then the NPS, in its sole discretion, may decline to accept the donation of the property

3. NPS AGREES:

- a. To acquire on behalf of the United States lands or interests in lands owned by the State or any political subdivision thereof within the boundary of the Park by donation. The NPS intends to pursue fee ownership of all lands.
- b. To accept lands from the PMUA and the City subject to access easements as are needed to enable utilization and maintenance of the PMUA's and the City's respective properties, subject to an NPS determination that such actions will not result in the impairment of Park resources.
- c. To prepare the deed(s) to the United States and obtain the title examination of the lands to be conveyed at its own expense.

d. To perform the required due diligence and begin the lands acquisition process in Phases, once funds have been appropriated for this purpose.

IV. PROPOSED INITIAL LANDS ACQUISITION - (Exhibit 3)

A. Phase 1- Core Properties

Essential tracts surrounding the falls will be used for Park Headquarters (SUM Building). Interpretation and Education. Tract 01-109 shall be conveyed subject to a reservation for use and occupancy of the second floor of the building (approximately 500 square feet) that will allow PMUA to continue its occupancy of office space in the SUM building (Tract 01-109), for so long as it is a functioning entity. The PMUA shall pay its own utilities and a mutually agreeable portion of maintenance costs commensurate to the portion of space retained and common areas utilized. In the alternative, the NPS may take control of the entire building, provided that the NPS offers to the PMUA an agreement for an equivalent amount of office space in an NPS-owned building within the Park Boundary, on the same terms and conditions. The said agreement shall include terms and conditions agreed to between the parties, including but not limited to the following: "PMUA shall indemnify. defend, and save and hold harmless the United States of America, its employees, agents, successors, and assigns, from and against, and reimburse the United States of America for any and all claims, demands, damages, injuries, losses, penalties, fines, costs, liabilities, causes of action, judgments, and expenses, including without limitation expenses incurred in connection with, or arising in any way with the reservation of use, occupancy or manner of use or occupancy of the premises by the PMUA."

- A total of four (4) Tracts will be acquired (donated) mostly in fee interest with some carve-outs, reservations and preservation easements subject to all applicable laws, regulations and policies:
 - a. 01-103 (substantially corresponding with Block 801, Lots 2 and 3);
 - b. 01-104 (substantially corresponding with Block 801, Lot 4);
 - c. 01-109 (substantially corresponding with Block 4601, Lots 1 and 2); and
 - 1-112 (substantially corresponding with Block 4609, Lot 1).

B. Phase II -

Acquire scenic easements on all other parcels with exclusive rights for NPS to acquire additional lands/interest after the completion of the GMP.

- Federal due diligence requirements necessary to accept the donation of lands are as follows:
 - Title of the donation tracts must be in compliance with the Department of Justice Title Standards, 2001, which can be found at www.justice.gov/enrd/2001-titlestandards.pdf.

- b. Environmental Site Assessment must be in compliance with policies and guidelines found in the Department of the Interior Manual (602 DM 2). Any contaminant, as defined above, which is found on or under lands may be grounds for nonacceptance of the lands by the United States. http://elips.doi.gov/elips/release/3047.htm.
- c. Where applicable, any appraisals required will conform to the Uniform Appraisal Standards for Federal Land Acquisitions, which can be found at http://www.justice.gov/enrd/ENRD_Assets/Uniform-Appraisal-Standards.pdf. The landowner may waive the requirement of an appraisal.
- d. NPS may, in its discretion, elect not to proceed with an acquisition if it is determined that the lot, a portion thereof, or an adjacent parcel, contains a contaminant, as defined above. In such an instance, the NPS and the donor (PMUA or City) shall collaborate in good faith in procuring grant funding for remediation, so that the lot may be re-offered to the NPS. If the lot is remediated to the full extent required by all applicable Federal and State laws, then the previously-donated lot may be re-offered to the NPS by PMUA or City, and in that event shall be accepted by the NPS. This Agreement shall impose no additional remediation duties upon a landowner, other than those already imposed by Federal law and/or New Jersey law. The City and the PMUA shall not be required to use their general revenues for remediation of any kind but shall operate in good faith to secure grant funding from Federal or State sources for such remediation. Alternatively, the parties may agree to the donation of a mutually acceptable alternate lot or tract in order to satisfy the legislative mandate of a manageable unit.
- The NPS will recognize the City/PMUA's roles in the establishment of the Park when the same is officially established as a unit of the National Park System.
- The NPS agrees to receive and manage donated lands in accordance with the applicable laws, regulations, and policies governing the National Park System.
- 4. The NPS, pursuant to 16 U.S.C. § 410lll(c)(3)(E)(ii), further agrees that personal property (but not real property or interests therein), goods or services donated by a non-Federal source for the purpose of creation of the Great Falls National Historical Park will form a non-Federal source of matching funds.

C. GENERAL MANAGEMENT PLAN:

L. Purpose:

A GMP is prepared to ensure that park managers and stakeholders share a clearly defined understanding of the conditions and strategies for resource protection, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and significance.

2. NPS AGREES:

- a. To complete, subject to available funding, a GMP no later than three (3) fiscal years after the date on which funds are made available in accordance with the Statute, other applicable federal laws, NPS Management Policies, and relevant NPS Director's Orders. All Management Options for all lands within the boundary will be fully explored during the GMP.
- b. The GMP shall address means by which the NPS can collaborate with State and Local governmental and non-governmental entities devoted to Historic Preservation and Cultural Heritage.
- c. The GMP shall be guided by the Park's statutory goal of addressing "historical, cultural, and natural resources associated with the Historic District." Accordingly, the GMP through the foundation document process will identify the park's fundamental resources, values, and interpretive themes, which may include:

(1) Historic:

- (a) INDIGENOUS AMERICANS: any available information regarding the relation of the Lenni Lenape tribes to the Falls.
- (b) INDUSTRIAL ORIGINS: origins of industrial use of the Falls, from the era of Alexander Hamilton through the entire time known as the American Industrial Revolution, including political, economic and engineering aspects of development.
- (c) SILK: growth of the silk industry in the City of Paterson.
- (d) LABOR: the 1925 silk strike.
- (e) ARMAMENTS: growth of defense industries in the City of Paterson, from Colt revolvers, through mobilization for the Second World War.

(2) Cultural:

- (a) IMMIGRATION AND ADAPTATION: cultures of the various immigrants drawn to the City of Paterson by the silk industry, including migration from other regions within the United States, and how those cultures adapted.
- (b) LITERATURE: the Great Falls and the City of Paterson as a topic and setting of 20th and 21st century literature, such as varying images of the Great Falls within William Carlos Williams's book-length poem, Paterson; references in the poetry of Allen Ginsberg to his upbringing in Paterson; Paterson's role as the first locale addressed within On the Road by Jack Kerouse; and depictions of Paterson in the more recent Pulitzer-Prize-winning novel The Brief Wondrous Life of Oscar Wao, by Junot Díaz.
- (c) PAINTING: the Great Falls as a topic of landscape portraiture.

(3) Natural:

- (a) PHYSICAL ORIGINS OF THE GREAT FALLS: including geologic descriptions.
- (b) POLLUTION AND RECLAMATION: the efforts to restore the Passaic River's water quality and wildlife.
- (c) PAST AND FUTURE SOURCE OF RENEWABLE ENERGY: the transition from water-powered factories to hydroelectric generation.
- CITY and PMUA AGREE: In order to facilitate development of the GMP, the City and the PMUA shall each have the following independent duties:
 - Make non-privileged public records available to the NPS.
 - Provide personnel to supply the NPS with any needed explanations of the said records, provided this will not interfere with required duties;
 - Provide public meeting facilities, where the facilities are not otherwise needed by the City and the PMUA;
 - d. Provide official and consolidated City comments on GMP documents, newsletters, and the draft GMP in a timely fashion as specified by periods prescribed by the NPS or federal laws or regulations;
 - e. Serve as a cooperating agency in the GMP; and
- f. Appoint a liaison to the NPS for the GMP.

D. MAINTENANCE & OPERATIONS:

1. Purpose: This section is intended to ensure that NPS, the City, and the PMUA clearly understand the maintenance and operational responsibilities for lands or improvements within the Park's boundary both before and after the United States acquires those lands or improvements, in order to achieve the Park's purpose and to fulfill the NPS's mandate to conserve its resources unimpaired for the enjoyment of future generations.

2. NPS WILL:

a. Not acquire the fee interest in any given real property until the NPS in fact has access to the appropriated funds needed to maintain the said property. The City understands, however, that the NPS cannot guarantee that Congress will appropriate any particular amount of funds for maintenance of the Park in future fiscal years.

3. CITY and PMUA WILL:

a. Continue to maintain and operate all real and personal property within the boundary until fee interest or other legal controlling interests are conveyed to the United States.

E. VISITOR SERVICES:

1. Purpose: To ensure that NPS and City/PMUA clearly understand the interpretation and education responsibilities that will best achieve the park's purpose and significance and conserve its resources unimpaired for the enjoyment of future generations.

2. NPS WILL:

- a. Continue to coordinate and or manage volunteer and youth programs, in cooperation with groups including the Paterson Public Schools in order to specifically engage local youth in the new national park unit, contingent upon funding and consistent with all applicable laws, regulations, and policies.
- Upon execution of this agreement, and prior to NPS ownership, design and develop web and media content for the Park consistent with all applicable laws, regulations, and policies.
- Upon execution of this agreement, make a good faith effort to coordinate with the City's visitor information services.
- d. Upon acquisition of fee ownership or NPS legal controlling interest, provide interpretation and education of the core properties subject to all applicable laws, regulations, NPS policies and availability of funding.
- e. When the NPS acquires a manageable unit, the NPS will issue special event permits, or other appropriate authorizations for special events, where consistent with all applicable laws, regulations and policies, and subject to the availability of funding.

3. CITY WILL:

 Together with PMUA, coordinate with NPS on all visitor information services in the Park.

F. LAW ENFORCEMENT:

Purpose: Given the Park's size and its setting in an urban area, and given that any law
enforcement personnel would have to traverse public streets in order to move between the
Park's noncontiguous areas, appropriate use of local police would be advantageous to the
Park's management.

2. NPS WILL:

a. Install and monitor fire and intrusion alarms in all NPS owned structures;

- Consult with the Paterson Police Department to explore mutually advantageous working relationships;
- c. Enter into an appropriate agreement or contract with the Paterson Police Department to establish appropriate protocols for additional law enforcement service on lands owned by the United States or administered by the NPS, subject to the availability of appropriated funds. The agreement or contract shall outline the financial resources for services as permitted by law, regulation and policies.

3. CITY WILL:

- Retain jurisdiction for its Police Department and emergency services to respond to emergencies, conduct law enforcement investigations and enforce the law as permitted by Federal and State law.
- Work with NPS and other applicable Federal law enforcement agencies to establish appropriate protocols with the Paterson Police Department in the Park.

V. NATIONAL HISTORIC LANDMARK DISTRICT.

- A. <u>Purpose</u>: The enabling legislation authorized the establishment of Paterson Great Falls: National Historical Park when two additional actions have been completed. The second action, subject to the provisions of this Part, is that:
 - Lands owned by the state, City, or other public entity within the National Historic Landmark District will be managed consistent with the Statute; and
 - Future uses of lands within the National Historic Landmark District will be compatible with the designation of the Park.
- B. <u>Cooperation:</u> In furtherance of this requirement, the Parties wish to collaborate and cooperate in the preservation of the National Historic Landmark District, through the following process:

1. THE CITY AND THE PMUA AGREE THAT:

- a. Public lands that remain under the ownership of the City or the PMUA within the boundaries of the National Historic Landmark District will be administered and managed by the City and the PMUA consistent with the purposes and intent of the legislation and agreements creating and establishing the Park.
- b. The City and the PMUA agree to seek NPS advice and concurrence on major work (as defined in this agreement) on these properties. All such major work on these properties must be brought to the attention of the NPS at the earliest stage of consideration, and the NPS must be given the opportunity to comment on and concur with the proposed major work within thirty days of receiving notice of such major work via confirmed e-mail or confirmed fax transmission. NPS concurrence shall not be required in the event of an imminent hazard in need of immediate action or remediation.

2. CITY WILL:

- a. Strengthen its Land Use Ordinances and Design Standards in order to protect the historic and natural resources of the National Historic Landmark District and will agree to the following provisions to meet its responsibilities for the establishment of the Park:
 - (1) The City will complete a re-examination of its 2003 Master Plan in accordance with the New Jersey Municipal Land Use Law. The Master Plan establishes the vision, goals, and priorities for the City. The re-examination will provide an opportunity for a comprehensive study of the City's development regulations, including but not limited to appropriate lands uses in all zones of the City, all redevelopment areas and their boundaries, and all regulations that define and control the City's historic preservation policy.
 - (2) The City Administration will work with the City Council to amend the City's lands use and subdivision ordinances in order to strengthen the role of historic preservation within the community. The ordinances will be amended, if required, to include:
 - (a) Specific criteria to be used for the historic designation of a site:
 - (b) Procedures to be used to designate a site as historic;
 - (c) Eligible uses for historically designated and preserved properties;
 - (d) Procedures for removing the historic preservation designation from properties;
 - (e) Application procedures; and
 - (f) Standards for review, design guidelines, and preventive maintenance.
- b. Re-establish a functioning Division of Redevelopment within the Department of Community Development. The Division will institute a Community Advisory Board as it considers re-development projects and make a good faith effort to incorporate the Board's recommendations in any Administrative decisions or in any recommendations for action to the City Council. NPS will be offered a seat on the Redevelopment Community Advisory Board.
- Enforce, through the Department of Community Development, its lands use ordinances
 as defined by the Code of the City of Paterson.
- d. In the event any real estate asset currently in public ownership within or adjacent to the historic areas whose redevelopment might impact the National Park is to be conveyed out of public ownership, submit a management and or development plan undertaken by the current or prospective owner for review and approval in writing by the NPS, within 60 days of the receipt of such management plan via certified mail or other acknowledged form of transmission. Under no circumstances shall such assets be conveyed without the management plan being submitted and approved by NPS. The approved management plan shall be included as a recorded restriction within the deed, as an attachment thereto.

- or it shall be recorded with the County Registrar of Deeds separately and incorporated by reference.
- e. Notify the NPS of any proposed lands use development, or proposed alteration to any historic resource, land, building, or structure that may affect the National Historic Landmark District. The City shall deliver, mail, fax, or email such notice within 14 days of its receipt of an application for development, subdivision, building permit, variance application, or any other non-privileged document expressing intent to undertake such a project for any lands located within the National Historic Landmark District.
- f. Work with the NPS to foster appropriate and compatible uses and building treatments within the National Historic Landmark District that will serve the objectives of preservation, education, and visitor accommodations.

3. NPS WILL:

- a. Work closely with the land owners to identify and encourage appropriate uses and treatments for the properties within the District.
- b. Participate in an advisory capacity with local land use review and offer written opinions on matters involving issues within the NHL District when appropriate. NPS advisory review and comment will be offered in a timely and efficient manner. NPS periods for consultation shall not interfere with the due process or compliance requirements of the Statutes of the State of New Jersey or of the City land use Ordinances, especially those concerning formal time limits for and action by executive staff and statutory boards.
- c. Assist the City in its lands use planning. NPS will advise the City and its land use statutory boards regarding the implementation of proposed lands uses and projects within the National Historic Landmark District.
 - d. Work with the City to foster appropriate and compatible uses and building treatments within the National Historic Landmark District that will serve the objectives of preservation, education, and visitor accommodations.
 - e. Designate the NPS Superintendent or other designee to serve as a community liaison, who in cooperation with a community committee will address the community's interest in various specific attractions and activities for the Park.
- f. Make available the NPS lead GMP planner to advise the City and its lands use independent statutory boards on the implementation of proposed lands uses and projects within the National Historic Landmark District during the GMP planning process.
- g. Work together with the City to foster appropriate and compatible uses and building treatments within the National Historic Landmark District that will serve the objectives of preservation, education, and visitor accommodations.

VI. AMENDMENTS OR MODIFICATIONS:

Amendments or modifications to the agreement may be proposed at any time by any Party and shall become effective only upon written approval by all Parties whose rights under this Agreement are affected by the proposed modification; but any such Amendment shall not require approval by alleged third party beneficiaries, if any.

VII. TERM OF AGREEMENT:

This agreement will be effective on the date of final signature and will remain in effect for so long as the Park is administered by the NPS as a unit of the national park system.

VIII. KEY OFFICIALS AND LIAISONS FOR SERVICE OF DOCUMENTS:

1. For DOL NPS: Northeast Region Regional Director

2. For the City: Mayor. City Clerk, Corporation Counsel, all to be served at 155 Market

Street, Paterson, N.J. 07505.

For the PMUA: Chairman, Executive Director, General Counsel.

IX. GENERAL PROVISIONS

A. Non-Discrimination: During the term of this Agreement, the parties will comply with applicable laws prohibiting discrimination on the grounds of race, color, national origin, disability, religion, or sex in employment and in providing for facilities and services to the public.

B. NPS Appropriations: Nothing contained in this Agreement shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress and available for the purposes of this Agreement for that fiscal year, or as involving the United States in any contract or other obligation for the future expenditure of money in excess of such appropriations or allocations.

C. Lobbying with Appropriated Money: No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone. letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress ("Member"), a jurisdiction, or an official of any government. to favor, adopt, or oppose, by vote or otherwise, any legislation, law, ratification, policy, or appropriation, whether before or after the introduction of any bill, measure, or resolution proposing such legislation, law ratification, policy, or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to any such Member or official, at his request, or to Congress or such official through the proper channels, requests for any legislation, law, ratification, policy, or appropriations that they deem necessary for the efficient conduct of public business, or from making any communication whose prohibition by this Section might, in the opinion of the Attorney General, violate the Constitution or interfere with the conduct of foreign policy. counter-intelligence, or national security activities. Violations of this section shall constitute violations of U.S. Code Title 31, Section 1352(a).

- D. Third Parties Not to Benefit: This Agreement does not grant rights or benefits of any nature to any third party.
- E. Compliance with Applicable Laws: This Agreement and performance hereunder are subject to all applicable laws, regulations, or official policies of the NPS existing on this date or as amended, modified, or superseded. Nothing in this Agreement shall be construed as in any way impairing the general powers of the NPS for supervision, regulation, and control of its property and resources under such applicable laws, regulations, and management policies. Nothing in this Agreement shall be inconsistent with or contrary to the purpose of or intent of any Act of Congress.
- F. Merger: This Agreement, including any attachments hereto, and/or documents incorporated by reference herein, contains the sole and entire agreement of the Parties.
- G. Waiver: Failure to enforce any provision of this Agreement by either party shall not constitute waiver of that provision. Waivers must be express and evidenced in writing.
- H. Counterparts: This Agreement may be executed in counterparts, each of which shall be deemed an original (including copies sent to a party by facsimile transmission) as against the party signing such counterpart, but which together shall constitute one and the same instrument.
- I. Partial Invalidity: If any provision of this Agreement or the application thereof to any party or circumstance shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement or the application of such provision to the parties or circumstances other than those to which it is held invalid or unenforceable shall not be affected thereby, and each provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.
- J. <u>Captions and Headings</u>: The captions, headings, article numbers, and paragraph numbers and letters appearing in this Agreement are inserted only as a matter of convenience and in no way shall be construed as defining or limiting the scope or intent of the provisions of this Agreement nor in any way affecting this Agreement.
- K. No Member of or Delegate to Congress, or Resident Commissioner, shall be admitted to or share any part of this agreement, or to any benefits that may arise from; but this provision shall not be construed to extend to any agreement if made with a corporation for its general benefit.

X. AUTHORIZING SIGNATURES:

The persons signing and executing this agreement hereby represent that that they have duly obtained the authority required by law to execute this Agreement.

IN WITNESS HEREOF, the Parties hereto have signed their names and executed this agreement.

DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE.

Ву	Con Salager	11
100	en Salazar, Secretary of the Interior, United States	of America

CITY OF PATERSON, NEW JERSEY

Acknowledged:

Date

UNICIPAL UTILITIES AUTHORITY

Erik Lowe, Chairman

Date



NATIONAL PARK SERVICE Patrona Orea Falls National Historical Para 72 McBride Avenue Estampion Patrona, NJ 03501

March 28, 2012

Dr. Brice Obermeyer Delaware Tribe Historic Preservation Office 1420 C of E Drive, Suite 190 Emporia, KS 66801

Dear Dr. Obermeyer:

I am writing to inform you about the formation of a new unit of the National Park Service in northern New Jersey, which is named Paterson Great Falls National Historical Park (NHP). I invite you to consult about a General Management Plan and Environmental Impact Statement currently underway for the site. The purpose of a general management plan is to ensure that park managers and all interested parties including Indian tribes share a clearly defined understanding of the resource conditions, apportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and conserve its resources. This will be Paterson Great Falls NHP's first general management plan.

The 33-acre Paterson Great Falls NHP was designated as America's 397th national park on November 7, 2011. This place was set aside by Congress to preserve and interpret the majestic Great Falls of Paterson, NJ, and the related Historic District's natural, historic, and cultural resources. While the National Park Service (NPS) does not currently own any property within the boundary, the NPS will accept donations from willing property owners. For the foreseeable future, we anticipate that the majority of land and resources will remain under the ownership of others, but the NPS may provide management and technical assistance as needed.

I am very interested in information about the historical and cultural significance of the site to the Delaware Tribe, and other American Indian tribes, so that we can take it into consideration in the management of the site, as well as to inform the public education activities we are planning. According to a recent publication on the Munsce Indians, the falls was a place where "thousands" of Indians would gather during the annual shad run, after harvest time (p. 37). Also, the industrial operations at Paterson included wampum manufacturing for the Indian trade. "Continuing Indian demand for the beads during the nineteenth century would be satisfied by factories purpose-built in Paterson, New Jersey, and other cities" (p. 307). This information is taken from *The Munsce Indians: A History*, by Robert Grumet, a publication developed by the National Park Service (a copy of which was given to you during an earlier consultation). We do not have a lot of information other than this at the present time.

individuals, organizations, elected officials, Indian tribes and public agencies, and are reaching out to these parties to identify issues and opportunities for this new park. Over the course of this process, we will use these comments to inform our general management plan.

If you have information or comments about the site, or questions about the planning process, places feel from to contact me at (973) 523-2630 or Durren. Both@aps.gov. I look forward to speaking with you and collaborating with your tribe during this planning process. I will have a member of the planning team telephone you in a couple of weeks, to follow-up with this respect. I would be happy to show Chief Psechonick and you around the site if you are able to visit sometime.

Sincerely

Derren Bock, Superintrodent

Paterson Great Falls National Historical Park



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From Cong Falls National Historical Fash

72 McGiride Avenue Fixonicon

Paternine, NJ 07501

March 28, 2012

Sam W. Beeler, III, Chinf Sand Hill Indians, Inc. c/o P.O. Box 955 Paterson, 10 07544

Dear Chief Beeler,

I am writing to follow up as our recent telephone conversation about Paterson Great Falls National Historical Park (NHP), and to invite you to consult about a General Management Plan and Environmental Impact Statement correctly underway for the site. The purpose of a general management plan is to countries that park management and all interested parties share a clearly defined understanding of the resource conditions, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and conserve its resources. This will be Paterson Great Falls NHP's first general management plan.

The 33-acre Paterson Great Fails NHP was designated as America's 397th national park on November 7, 2011. This place was set uside by Congress to preserve and interpret the majestic Great Falls of Paterson. NJ, and the related Historic District's natural, historic, and cultural resources. While the National Park Service (NPS) does not currently own any property within the boundary, the NPS will accept donations from willing property owners. For the foresceable future, we anticipate that the majority of land and resources will remain under the ownership of others, but the NPS may provide management and technical assistance as needed.

I am seeking information about the historical and cultural significance of the site to all interested purties, so that we can take it into consideration in the management of the site, as well as to inform the public education activities we are planning. I would be interested to learn more about the kinds of information you described in our phone conversation about the importance of the site to members of the Sand Hills Indians, with proper regard for any topics that might be considered private and confidential in nature. According to a recent publication on the Numee Indians, the talls was a place where "thousands" of Indians would gather during the annual shad run, after harvest time (p. 37). Also, the industrial operations at Paterson included wampum manufacturing for the Indian trade. "Continuing Indian demand for the breads during the nineteenth century would be satisfied by factories purpose-built in Paterson, New Jersey, and other cities" (p. 307). This information is taken from The Munical Indians: A History, by Robert Gramet. We do not have a lot of other information related to American Indians at the present time.

In accordance with National Environmental Policy Act requirements and the National Historic Preservation Act, scoping efforts are currently underway to identify the concerns and interests of individuals, organizations, elected officials and public agencies, and are reaching out to these parties to identify issues and opportunities for this new park. Over the course of this process, we will use them comments to inform our general transgement plan.

If you have further information or comments about the aim, or questions about the planning process, please feel free to contact me at (973) 523-2638 or Darren_Beathfairps gov. I look forward to spanking, with you and collaborating with you during this planning process. I will have a member of the planning team telephone you in a couple of weeks, to follow-up with this request. I would be happy to show you around the site if you are able to visit sometime.

Sinogrally:

Dezen Both, Seperintendent

Paterson Crest Falls National Historical Pers

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PARTICINAL PARK SERVICE Factors Great Faith Managed Managed Factor 72 Selficial Avenue Extension Francisco, NJ 87281

March 28, 2012

Ms. Tamara Francis Cultural Preservation Director The Delaware Nation 31064 State Highway 281 Amadurko, OK 73005

Dear Ms. Francis:

Lans writing to inform you about the formation of a new unit of the National Park Service in northern. New Jersey, which is memod Paterson Great Falls National Historical Park (NHP). I invite you to consult about a General Management Plan and Environmental Impact Statement currently underway for the site. The purpose of a general management plan is to ensure that park managers and all interested parties including Indian tribes share a clearly defined understanding of the resource conditions, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and conserve its resources. This will be Paterson Great Falls NHP's first general management plan.

The 33-serie Paterson Great Falls NHP was designated as America's 397th national park on November 7, 2011. This place was set aside by Congress to preserve and interpret the majestic Great Fails of Paterson, NJ, and the related Historic District's natural, historic, and cultural resources. While the National Park Service (NPS) does not currently own any property within the boundary, the NPS will accept donations from willing property owners. For the foresonable future, we anticipate that the majority of land and resources will remain under the ownership of others, but the NPS may provide management and technical assistance as needed.

I am very interested in information about the historical and cultural significance of the site to the Delaware Nation, and other American Indian tribes, so that we can take it into consideration in the management of the site, as well as to inform the public education activities we are planning. According to a recent publication on the Manasce Indians, the falls was a place where "thousands" of Indians would gather during the annual shad run, after harvest time (p. 37). Also, the industrial operations at Paterson included wampum manufacturing for the Indian mode. "Continuing Indian demand for the beads during the nineteenth century would be satisfied by factories purpose-built in Paterson. New Jersey, and other cities" (p. 307). This information is taken from The Advance Indians: A History, by Robert Grumet, a publication developed by the National Park Service (a copy of which was given to you during an earlier consultation). We do not have a lot of information other than this as the present time.

In accordance with National Environmental Policy Act requirements and the National Historic Preservation Act, scoping efforts are currently underway to identify the concerns and interests of individuals, organizations, elected officials, Indian tribes and public agencies, and are reaching out to these parties to identify issues and opportunities for this new park. Over the course of this process, we will use these comments to inform our general management plan.

If you have information or comments about the site, or questions about the planning process, please feel from to contact me at (973) 523-2630 or Darren_Boch@nps.gov. I look forward to speaking with you and collaborating with your tribe during this planning process. I will have a member of the planning team telephone you in a couple of weeks, to follow-up with this request. I would be happy to show President Holton and you around the site if you are able to visit sometime.

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Sincerely

Darren Boch, Superintendent Paterson Great Falls National Historical Park



PATRIMAL PARK SERVICE
Transaction (Inch National Ministrator Feb.
TZ McDinds, Avenue Todamicos
Patrimas, NJ 17701)

March 28, 2012

Sherry White, Tribal Historic Preservation Officer Tribal Historic Preservation Office Stockbridge-Munsce Community P.O. Box 70 Bowler, WI 54416

Dear Ms. White:

I am writing to inform you about the formation of a new unit of the National Park Service in northern New Jersey, which is named Paterson Great Falls National Historical Park (NHP). I invite you to consult about a General Management Plan and Environmental Impact Statement currently underway for the site. The purpose of a general management plan is to ensure that park managers and all interested parties including Indian tribes almost a clearly defined understanding of the resonance conditions, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and conserve its resources. This will be Paterson Great Falls NHP's first general management plan.

The 33-acre Paterson Great Falls NHP was designated as America's 397th national park on Nevember 7, 2011. This place was set aside by Congress to preserve and interpret the majestic Great Falls of Paterson, NJ, and the related Historic District's natural, historic, and cultural resources. While the National Park Service (NPS) does not currently own any property within the boundary, the NPS will accept domains from willing property owners. For the forescenble future, we anticipate that the majority of land and resources will remain under the ownership of others, but the NPS may provide management and technical assistance as needed.

I am very interested in information about the historical and cultural significance of the site to the Stockbridge-Munsee Community, and other American Indian tribes, so that we can take it into consideration in the management of the site, as well as to inform the public education activities we are planning. According to a recent publication on the Munsee Indians, the falls was a place where "thousands" of Indians would gather during the annual shad run, after harvest time (p. 37). Also, the industrial operations at Paterson included wampum manufacturing for the Indian trade, "Continuing Indian demand for the beads during the incitetenth contary would be satisfied by factories purpose-built i Paterson, New Jersey, and other cities" (p. 307). This information is taken from The Manuse Indians: A History, by Robert Gramet, a publication developed by the National Park Service (a copy of which was given to you during an earlier consoltation). We do not have a lot of information other than this at the present time.

In accordance with National Environmental Policy Act requirements and the National Historic Preservation Act, scoping efforts are currently underway to identify the concerns and interests of individuals, organizations, elected officials, Indian tribes and public agencies, and are reaching out to these parties to identify issues and opportunities for this new park. Over the course of this process, we will use these comments to inform our general management plan.

If you have information or comments about the site, or questions about the planning process, please feel free to contact me at (973) 523-2630 or Darren_Bock@nps.gov. I look forward to speaking with you and cullaborating with your tribe during this planning process. I will have a member of the planning team telephone you in a couple of weeks, to follow-up with this request. I would be happy to show President Chicks and you around the site if you are able to visit sometime.

Sincerely;

Dirron Boch, Superintendent

Pageson Great Falls National Historical Park



NATIONAL BARK SURVICE From Gross Fells National Minimum Park 77 Machinia Arenna Casmides Partners NO 07/50

March 15, 2012

Daniel Saunders, Deputy State Historic Preservation Office New Jersey Department of Environmental Protestion Historic Preservation Office P.O. Box 420 Trenton, NJ 08625-0420

Dear Mr. Sunnders,

As a follow up to our initial meeting on March 14, 2012, the purpose of this letter is to begin formal consultation and brief you about a General Management Plan and Environmental Impact Statement currently underway for Paterson Great Falls National Historical Park (NHP). The purpose of a general management plan is to ensure that park managers and stakeholders share a clearly defined understanding of the resource conditions, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and conserve its resources. This will be Paterson Great Falls NHP's first general management plan.

Paterson Great Falls NHP was designated as America's 397th national park on November 7, 2011. This place was set aside by Congress to preserve and interpret the majestic Great Falls of Paterson, NJ and the related Historic District's natural, historic, and cultural resources. The legislated boundary for the park includes approximately 33 publicly owned acres, including the sates known as Mary Ellen Kramer Park, Overlook Park, the Allied Textile Printing (ATP) site and most of the raceways. While the National Park Service (NPS) does not currently own any property within the boundary, the analyting legislation provides for the NPS to accept donations from willing property owners. While land acquisition for some parcels has begun, for the foresceable future we anticipate that the majority of land and resources will remain under the public ownership of others. However, the NPS may provide management and technical assistance as needed, in particular as the City seeks to expend available State Green Acres and other funds within the park boundaries.

In accordance with National Environmental Policy Act requirements and the National Historic Preservation Act, scoping efforts are currently underway to identify the concerns and interests of individuals, organizations, elected officials, and public agencies. We held a series of open houses in November 2011 to introduce the public and other interested parties to the planning process and solicit comments. Since November, we have continued to reach out to individuals, organizations, and agencies to identify issues and opportunities for this new park. Over the course of this process, we will use those comments to inform our general energement plan.

We look forward to meeting with the New Jersey State Historic Preservation Officer and staff to discuss the planning process, the unique resources located within the boundary, and any issues that might be addressed in the plan. We are enclosing a copy of the Paterson Great Falls NHP General Management Plan Newsfetter #1 which will provide you with a general overview of the planning process. You can also find additional information on our park website at http://www.aps.gov/pagr. If you have any questions, please feel free to counse me at (973) 523-2630 or Darren_Boch@nps.gov. I look forward to speaking with you and collaborating with your office during this planning process.

Sincerely:

Darren Block, Superintendent

Paterson Great Falls National Historical Park



NATIONAL PARK SERVICE
Fatorian Gross Fato National Houseant Fact
T2 McDride Avenue Entereday
Fatorian, NE (TS9)

March 15, 2012

Eric Davis, Supervisor U.S. Fish and Wildlife Service New Jersey Field Offica 927 North Main Street, Building D Pleasantville, New Jersey #8232 ATTENTION: ESA Consultation

Dear Mr. Davis.

The purpose of this letter is to inform you about a General Minugement Plan and Environmental Impact
Statement currently underway for Paterson Great Falls National Historical Park (NHP). The purpose of a
general management plan is to ensure that park managers and stakeholders share a clearly defined
understanding of the resource conditions, opportunities for visitor experiences, and general kinds of
management, access, and development that will best achieve the park's purpose and conserve its
resources. This will be Paterson Great Falls NHP's first general management plan.

Puterson Great Falls NHP was designated as America's 397th national park on November 7, 2011. This place was set aside by Congress to preserve and interpret the majestic Great Falls of Paterson, NJ and the related Historic District's natural, historic, and cultural resources. The legislated boundary for the park includes approximately 33publicly owned acros, including Mary Ellen Kramer Park, Overlook Park, and the Allied Textile Printing site. While land acquisition for some parcels has begun, for the foresceable have we anticipate that the majority of land and resources will remain under the public ownership of others. However, the NPS may provide management and technical assistance as needed, in particular as the City of Paterson sceles to expend available State Green Acres and other funds within the park boundaries.

This letter is to inform you that we have begun the National Environmental Policy Act (NEPA) process and serve as a record that the NPS is initiating consultation with your agency pursuant to the requirements of the 1973 Endangered Species Act, as amended. According to information available on your website, we believe that one endangered species potentially occurs within the general vicinity of Paterson Great Falls NHP: the Indiana Bat (Myotis sodalls). We are requesting information concerning the potential for additional federal and state rare, threatened, and endangered species; special status species; or designated critical habitats documented or reasonably suspected within 0.5 miles of the project site, which is depicted on the enclosed map. We are also coordinating with the New Jersey Division of Fish and Wildlife's Endangered and Nonjume Species Program to obtain and review their file information.

We look forward to hearing from you and will send copies of the draft general management plan and environmental impact statement when that becomes available. If you have any questions or need additional information, please feel free to contact me at (973) 523-2630 or Durren_Boch@nps.gov.

Sincerely:

Durren Boch, Superintendent

Paterson Great Falls National Historical Park

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NATIONAL PAIRS SERVED Pursuan Creat Falls National Historical Fark 12 Materials Avenue Entertains Patentials, NJ (1750)

March 15, 2012

Dave Jenkins, Chief
New Jersey Division of Fish and Wildlife
Bureau of Endangared and Nem-game Species
Mail Code 501-03
PO Box 420
S01 East State Street
Jrd Floor
Trenton, NJ 08625-0420

Dear Mr. Jenkins,

The purpose of this letter is to inform you about a Geogral Management Plan and Environmental Impact Statement currently underway for Paterson Great Falls National Historical Park (NHP). The purpose of a general management plan is to costare that park managers and stakeholders share a clearly defined understanding of the resource conditions, opportunities for visitor experiences, and general kinds of management, access, and development that will best achieve the park's purpose and sonserve its resources. This will be Paterson Great Fails NHP's first general management plan.

Paterson Great Falls NHP was designated as America's 397th national park on November 7, 2011. This place was set aside by Congress to preserve and interpret the imajestic Great Falls of Paterson, NJ and the related Historic District's natural, historic, and cultural resources. The legislated boundary for the park includes approximately 33 publicly owned scres, including Mary Ellen Kramer Park, Overlook Park, and the Altied Textile Printing site. While land acquisition for some parcels has begun, for the foresceable future we anticipate that the majority of land and resources will remain under the public ownership of others. However, the NPS may provide management and technical assistance as needed, in particular as the City of Paterson seeks to expend available State Green Acres and other funds within the park boundaries.

We have begun the National Environmental Policy Act (NEPA) consultation process with the U.S. Fish and Wildlife Service (FWS) pursuant to the requirements of the 1973 Endangered Species Act, as amended, According to information available on the U.S. FWS website, we believe that one federally-listed endangered species potentially occurs within the general vicinity of Paterson Great Falls NHP; the Indiana But (Adjoits socialis). We are requesting additional information from your office concerning the potential for state sure, threatened, and endangered species; special status species, or designated critical labitats documented or remonably suspected within 0.5 miles of the project site, which is depicted on the molessed man.

We took forward to hearing from you. If you have any questions or need additional information, please feel free to contact me at (973) 523-2630 or Darren Boch@aps.gov.

Sincerely:

Darren Boch, Superintendent

Paterson Great Falls National Historical Park

coclosures

Appendix D: Interpretive Theme Matrix

What are Interpretive Themes?

- Park interpretive themes are organization tools.
- Themes are a framework for interpretive decisions.
- Themes reveal meaning and help explore the question, "What do the events of the past have to do with me and my times?" Themes help explain why park stories are relevant to people unconnected to them.
- Themes aren't intended for public consumption. What matters to the public is how themes are fulfilled through interpretation services.

About the Interpretive Theme Matrix:

An interpretive theme matrix is a chart that shows the scope of potential stories that can be told in a park within the framework of the park interpretive themes.

The chart format offers an easy way for people to see the concepts, ideas, and stories that are represented by the park interpretive themes. It is especially useful as a guide for park staff and others who develop interpretive programming and media. The matrix shows a theme title, the interpretive theme statement, and examples of concepts and stories that could be covered under that theme.

What to look for: Themes are designed to accommodate a range of stories, perspectives, and ongoing scholarship. The "concepts" and "topics and stories" are examples of the types of stories that could illustrate the themes. This is not all-inclusive (in fact it could never be) nor do they exclude any topic. An interpretive theme is successful only if other concepts and stories could be included within it.

The Natural Beauty that Inspired and Powered a Revolution

The Great Falls in the heart of Paterson have drawn people and inspired them—both for its natural beauty and for the power and the energy that it promises.

About this theme: This theme focuses on the falls, including natural history, their power, and potential to inspire.

Concepts Topics and Stories

Theme # 1

Natural History

- Illustrate how Paterson's Great Falls has been recognized as a national treasure for its natural beauty as well as for its cultural and historic significance. Investigate how the natural environment and the built environment are inextricably intertwined.
- Describe the size and scale of falls and its situation along the
 Passaic River; "unusual" as waterfalls go, i.e. second highest waterfall
 in the eastern United States. Describe the unique geology that created
 the falls. Show the exposed volcanic rock beneath the falls. Explain
 and illustrate the geology of the site and the larger watershed and
 river valley. Explain the natural history of the site.
- Explore how the falls has long been both a source of manufacturing growth and intense industrial development as well as a refuge for city dwellers and workers seeking relief from the industrial city and continues to provide a refuge in the post industrial city.

- National Natural Landmark (1966)
- National Historic Landmark (1976)
- Height and volume of water dropping at the falls
- Geology
- Hydrology
- Columnar basalt; basaltic cliffs illustrate formation of region
- Fragility of natural resources
- History and use of water power (then and now)

The Natural Beauty that Inspired and Powered a Revolution

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Concepts	Topics and Stories
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Theme # 1

Energy

- Describe the many attempts to harness the natural power of the river and the falls— from L'Enfant's unrealized design though the S.U.M.'s successful alterations in the 19th and 20th centuries (raceways, sluice gates, etc.) Describe the (natural and kinetic) power of the river and how it and the raceways can be converted to energy for manufacturing and other uses. Describe how water is used as a resource and converted to energy. Explore the engineering and different ways people used the river and falls area for power over time.
- Illustrate how the Passaic River and falls area has served as a center
 for energy production—waterpower, steam power, hydroelectric power
 —and provides a place to understand the role of energy production
 and consumption in American society: the limits of growth;
 the environmental consequences; the changing technologies,
 and the ongoing demand for energy in the modern global economy.
- Compare and contrast how water power has been used; "then and now". Describe the transition from mechanical water power to electrical generation.
- Explain and debate conservation and energy issues. Challenge people about how the US uses energy and resources. Explain water power as a "green" resource; renewable energy resource and issues related to it.

Inspiration

- Describe the juxtaposition of the inspirational falls and natural landscape both in the heart and as the "heart" of a densely populated industrial city and illustrate how the falls could be an oasis, a place for respite and a place to contemplate "Magnificent Acts of Nature". Explore how the tangible and visible connections between the power of nature and the power of industry (all within a city center) make Paterson unique.
- Explore the aesthetics of the falls and the people who used it for inspiration (individuals, people of the city, artists, etc.).
- Connect artistic creations in literature and other arts to their authors' inspiration in Paterson.

Tourism and Gathering Place

- Describe the use of the falls over time as an attraction and for recreation and tourism—especially in the 19th century.
- Explain American Indian Lenni Lenape views about the water as sacred.
- Describe steps taken to "maintain" a "natural wonder" and keep it in balance over time

- Technology; changes in technology over time
- The raceway system
- Water power, then and now
- Industrial use of water to dump and carry away effluents
- Power plant
- Global vs. local: water for power has to be local.
- Edison-designed (?) hydro-electric plant
- Cycle from nature to industry to pollution to clean-up
- Human attraction to falls—aesthetics; what draws people to the falls (and has for 10K+ years).
- American Indian history and cultural significance of the falls and river
- Man's interpretation and use of natural resources for the:
 - Sacred
 - Industrial
 - Political + social (the environmental movement)
 - Artistic/artists
- Vacation memorabilia
- Paterson in popular culture

The Economic Vision that Shaped America

Paterson was founded on Alexander Hamilton's vision that freedom and independence for the United States would be based in a manufacturing economy that required a diversity of talents with promises of a better life for its people.

About this theme: This theme is about Alexander Hamilton's vision and how it shaped a US manufacturing economy.

Concepts Topics and Stories

Theme # 2

Hamilton's Vision and the S.U.M.

- Describe how Alexander Hamilton's vision for economic independence as the practical source of freedom and independence for the United States. Explain why this vision is complicated and contested by scholars.
- Describe the origins, history and local, regional and national impacts
 of the Society of Useful Manufactures (SUM). Describe the
 infrastructure created by the S.U.M. as a utility, land developer and
 power supplier. Debate how Hamilton's vision survived, but the SUM
 offered "rocky" alternatives.
- Compare and contrast Hamilton's practical views of industry/ manufacturing with Jefferson's philosophical ideal for an agrarian America. Evaluate if Jefferson's vision for democracy could have been fully realized without Hamilton's vision for industry as a base for economic independence. Evaluate the impact of Hamilton's industrial/manufacturing economy ideas in the context of 18th century agrarian economy.
- Explore Hamilton's ideas about how economic independence would make the U.S. independent of foreign supplies—especially for military purposes. Describe Paterson's landscape as a planned manufacturing city and a center for a major concentration of industry (scale and intent) and as the physical embodiment of Hamilton's vision.
- Provide historical and global context for Hamilton's vision and for the Paterson story. Describe the relationships between British mercantilism and democracy. (For example: French Revolution, fears of England's manufacturing power; US situation at the end of the 18th century; skilled labor from Europe; international silk story; responses to global-local/global commerce.)
- Describe fears of large scale ventures including dumping goods and capital capacity production. Describe the backlash from what was considered an elitist venture in Paterson.
- Describe that powering American manufacturing is not a triumphal vision; the evidence that it is a conflicted vision is that today it is in ruin, rather than driving the modern economy. [per scholars]

- Alexander Hamilton
- Hamilton's vision for industry and economic independence affected the country
- How economic independence is connected to military independence.
- Industrial revolution
- Hamilton and Paterson; Paterson as Hamilton's experiment and proving ground
- Society for Useful Manufacturers (SUM)
- The effect of the longevity of SUM (1791-1945)
- Emergence of "American Corporation" model vs. government model; albeit an organization with quasi-government powers; NJ's first corporation
- Manufacturing and importance of specific industries: locomotives, silk, jacquard, guns (1st Colt Revolver site), sail cloth (innovation and production), paper: continuous roll innovation and production; dyes, etc.
- Volatility of speculation
- First viable submarine test by Holland
- Inventors and innovations
- Engineering
- The US national economy- growth and change over time
- Industry leaders-People (such as):
- Samuel Colt
- John Ryle
- Pierre L'Enfant
- Thomas Rogers
- John Holland
- Raceway system as first attempt to harness power of a major river; engineering complexity
- Sluice gates (how things work)

The Economic Vision that Shaped America

Paterson was founded on Alexander Hamilton's vision that freedom and independence for the United States would be based in a manufacturing economy that required a diversity of talents with promises of a better life for its people.

About this theme: This theme is about Alexander Hamilton's vision and how it shaped a US manufacturing economy.

Concepts Topics and Stories

Theme #2

Innovation

- Describe how opportunity, problem-solving, and innovation characterized a series of technology improvements and inventions associated with Paterson. Describe the pioneering role of individual industries and their effect on Paterson, the region, the nation and the world. For example: silk, jacquard, locomotives, guns, sailcloth, paper, dyes, and others.
- Describe how industry, innovation and manufacturing in Paterson affected the nation, corporation, workers, and ordinary Americans (in both positive and negative ways).
- Compare and contrast Paterson and its industries to other manufacturing centers such as Trenton, Philadelphia, and Lowell.

The Economy and Trade

- Explore the concept of the modern "silk road"—describe how international connections between people and cultures are forged based on trade. Describe how economies are based in terms of networks, "networks of enterprise"; not a single action (incubator).
- Describe how Paterson's proximity and connections to New York City are historically important and persist today (population, immigration, markets, transportation, etc.). Discuss markets; strike of 1913; supply chains and intellectual connections between the cities.

- Describe how Paterson mirrored the American industrial / manufacturing age in its rise and fall
- Industrial and human stories of :
- Struggles and set-backs
- Successes
- Archaeology
- Immigration
- Tench Cox
- English towns that exported their labor [force] to Paterson
- · Building trade workers
- "Who built America"?
- · Skilled labor center
- Cotton era and workers (women, children)
- Skills to certain types of immigrants.
- 1890's: N. Italians-experience in silk
- Anarchist traditions (trade union activists that fee labor struggles)
- Worker training as an expensive undertaking.
- Anarchists (various)
- JP Machtane, Paterson Labor Standard; connect to Samuel Gompers
- Saul Stenton (1930's) Polish dye worker, worked in 1920's
- Socialist mayor
- Labor cycles
- Union and labor history and impacts
- Labor leaders
- Industry leaders
- Child labor
- Labor history, exploitation (of people, resources), reform
- Manufactured goods: the effect of luxury goods that were readily accessible to middle and lower classes.
- Abolition/industry/Hamilton and his views on slavery

Innovation and Opportunity—the Power of American Manufacturing

Through diversification of industries, technological innovation, and successive waves of industry and immigration, for more than two centuries Paterson continued to exemplify and reinvent Hamilton's vision of a planned manufacturing center.

About his theme: This theme is about deindustrialization and the opportunities that come with reinvention

Concepts Topics and Stories

Theme #3

Cycles of Industry and Changing Economy

- Illustrate that while Paterson marks a beginning for US industry, the landscape tells a story of an "unplanned end" to European immigration and manufacturing in the United States. It begs the question—what comes next?
- Examine manufacturing as the model for the American economy (19th to 20th centuries) and how shifting or reimagining that model also means rethinking our nation's place in the world. Challenge people to consider where does the US go next to base its economy?
- Illustrate in the built environment the social and environmental legacy of the "unplanned end" of manufacturing in Paterson.
- Show how the story of the ATP site, its history, demise, and contemporary choices and decisions about its restoration are illustrations of Paterson's cycle of reinventing its economic base.
- Explore the issues, choices, and ramifications of the question, where does a society invent and invest itself—and how?
- Contrast Paterson's cycles of industrial "boom and bust" with the
 more limited or single industry cycles that characterized most other
 American manufacturing cities. Explore what made Paterson
 different. How did/does Paterson show that resilience and strength?
 What has remained unchanged in the city? What has been reinvented?
 Compare and contrast changes in Paterson and the continuity in the
 community. [Scholars discussion "continuity and change".]
- Explore if it is prudent/how to extend the life of a dying industry.
 Discuss the cycles and compare and contrast what happens under
 different scenarios. Examples: uneven pace of development in
 different sectors and places. Illustrate what happens when industry
 resists changing processes or labor (Philadelphia example). What
 happens in forced liquidation from national companies (a form of
 corporate takeover; Trenton example). When Finance Capital buys
 and sell firms (1960's examples) and capital flight—when people just
 go elsewhere (1970's examples).
- Discuss deindustrialization that was specific to Paterson. Finishing
 and dying needed water so skilled work stayed in Paterson; lower
 skills went to [where] Pennsylvania. Describe both the progress
 and successes brought by change and industry and the struggles and
 setbacks.

- US manufacturing economy
- Immigration stories
- People of the city/diversity/changes in immigration and settlement over time
- Labor milestones and their effect such as the 8 hour work day (8 hrs work, 8 hrs rest, 8 hrs "What we may");
 Labor Day
- Cultural significance of the site to the Dutch
- Rags to riches stories
- Diversity
- Factory and other historic buildings
- Explore how Paterson's industrialists exemplified Hamilton's vision for America—immigrants who can be mobile and rise to wealth and status.
- Ethnic tensions/strife
- What archaeology reveals about manufacturing/life in Paterson
- Inventions and Inventiveness
- Inventors
- Role of religion, school, community, food, culture
- History of technology
- Industrial espionage
- Labor publications
- Context of what was happening in the US and how that was reflected in Paterson
- What makes silk different from other textiles. (Constant attention and fixing; fragile textiles; dying; weaving went to PA, finishing was done in Paterson.)
- Link Paterson labor movements to NYC, Greenwich Village; Madison Square Garden

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John Reid

APPENDIX D: Interpretive Theme Matrix

Innovation and Opportunity—the Power of American Manufacturing

Through diversification of industries, technological innovation, and successive waves of industry and immigration, for more than two centuries Paterson continued to exemplify and reinvent Hamilton's vision of a planned manufacturing center.

About his theme: This theme is about deindustrialization and the opportunities that come with reinvention

Concepts	Topics and Stories
Theme #3	
 Discuss deindustrialization that was specific to Paterson. Finishing and dying needed water so skilled work stayed in Paterson; lower skills went to [where] Pennsylvania. Describe both the progress and successes brought by change and industry and the struggles and setbacks. 	 Dangerous work for big payoffs. (Modern relevance of this) Natural resources required for manufacturing. Textile info
 Debate what was/is the power of American manufacturing? Describe the interrelationships between machine trade and textiles—how they were fully integrated—and how this paralleled other places (such as Lowell, Philadelphia). 	 Debate-is/should Paterson today be a place of hope or sorrow? Painter Thomas Cole's "Course of Empire" five painting series.
 Human Impacts Explore how industry and manufacturing promised a better life for Americans and immigrants and drew people to Paterson. Evaluate if/ how that promise was kept and where (and for whom) it fell short. 	
 Explore how successions of people looking for a better life for themselves and their families came to Paterson. Examine what shifts and transitions are happening now? How does that compare and contrast with previous transitions? 	
 Describe the "factory experience" for workers and trace how it reflected its own times and how it changed over time. Compare and contrast the factory experience through stories of management and labor, the skilled and unskilled, managers and owners, etc. 	

Race, Recreation, and Respite

While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

About this theme: While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

Concepts Topics and Stories

Theme #4

Recreation

- Explore how activities at Hinchliffe Stadium gave working-class citizens
 of Paterson access to world-class spectator sports such as Negro League
 baseball, professional football, Diamond Gloves boxing matches, car
 and motorcycle races, and soccer matches. Describe how these
 recreational opportunities had an effect on quality of life and provided
 mill and factory workers with respite from work.
- Describe how Hinchliffe Stadium (a.k.a. "City Stadium") was both a municipal and an aspirational enterprise built by public funds at the start of the Great Depression and meant as a sports haven for a generation of working-class kids struggling through hard times in a city dependent on industry. Illustrate the ways in which the stadium helped to foster civic pride and hope among the working-class citizens of Paterson. Explain why the stadium was nicknamed "The House that Silk Built," as it was paid for by the donations and sacrifice of Paterson workers; constructed by and for the people of the industry. Describe how workers laid off from the mills found work under a New Deal financed program to provide enhancements to the stadium (1932–34). Describe how dye workers held union meetings at the stadium during the Depression.
- Describe the location of the stadium—sited above the Great Falls by the Olmsted Brothers firm—so patrons would have a view of Paterson's industrial, social, and natural landscape.
- Describe the ways in which Hinchliffe Stadium served as a social outlet. For example, it provided balance for factory workers "eight hours for work, eight hours for rest and eight hours of what we will"; it provided a venue for professional level play for African and Latino Americans in a segregated society; and provided opportunities for Patersonians to enjoy sports and entertainment. Describe the economic and social impact of a professional sports venue in Paterson. Explore how high-profile events and athletes sparked regional and national interest in Paterson.

- · Leisure for the working class
- "Jim Crow" laws and their social impact
- Segregation of baseball
- Negro League Baseball
- Larry Doby
- Satchel Paige
- Josh Gibson
- Judy Johnson
- Oscar Charleston
- James "Cool Papa" Bell Teams:
- NY Black Yankees
- NY Cubans
- Other sports
 - Eleanor Egg (runner)
 - Albert Vande Weghe (swimmer-Olympic silver-medalist).
- Sports in the 20th century
- Community spirit
- Race relations
- WPA and economic opportunities during the Great Depression
- Diversity
- Entertainment in Paterson
- High school sports—racial integration
- Local sports stars who became professionals
- Entertainment and sports as a "social safety valve"
- WPA
- Olmsted Brothers landscape architects
- Union Meetings
- Duke Ellington
- Auto Racing
- Boxing
- Soccer
- Abbott and Costello

Race, Recreation, and Respite

While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

About this theme: While the nation struggled with issues of race and civil rights, Paterson's Hinchliffe Stadium was home field for two Negro League baseball teams—the New York Black Yankees and New York Cubans—and a municipal sports and entertainment venue that offered respite from factory work and fostered civic pride.

Concepts

Theme #4

Negro League Baseball

- Examine how Negro League baseball came to Paterson. Explain how Hinchliffe Stadium was home to
 professional black sports during the Jim Crow era and featured some of the greatest ballplayers in America
 who were denied access to the major leagues based on their race. Describe how Paterson's municipal stadium
 hosted Negro League baseball games and served as the home field for the New York Black Yankees and New
 York Cubans.
- Describe how play at the stadium impacted careers of Negro League baseball players and especially many future Hall-of-Fame players, such as Josh Gibson, Judy Johnson, Oscar Charleston, James "Cool Papa" Bell, Satchel Paige, and Paterson's Larry Doby.
- Explore the social impact on Paterson by having two Negro League teams use Hinchliffe Stadium as home field.
- Weigh and evaluate the effects of segregated baseball and of desegregating major league baseball.

Recreation and Entertainment as Economic Drivers

- Describe how Hinchcliffe Stadium was created to be a "paying investment" for Paterson. Evaluate effect of Hinchcliffe Stadium over time as an economic driver for the city of Paterson over time (from its construction through its heyday until today).
- Describe the context and creation of Hinchliffe Stadium. Weigh historical and contemporary justifications for investing significant amounts of public funding for project with periodic, specialized use such as a stadium.
 Trace how tourist dollars help to support local economies. Describe the economic opportunities (jobs) created by construction of the stadium.
- Weigh and debate the relative costs and value of historic preservation as an economic driver for a city and region. Pose and explore questions such as: Who decides what's saved? How are preservation priorities made?
- Describe how, when major league baseball was desegregated, the stadium began a new role as a sports and entertainment center. Explain how, with a 10,000-seat capacity (more with temporary bleacher seating) the stadium was able to become a venue for a range of sports and entertainment events such as: football, boxing, auto-racing, and track and field as well as functioning as a stadium for Paterson schools. Describe how Paterson honored two of its most-celebrated athletes—runner Eleanor Egg and swimmer Albert Vande Weghe (Olympic silver-medalist).
- Trace the demise of Hinchcliffe Stadium as an active venue. Discuss the fiscal choices made [by the School District] that diverted funding to maintain the stadium. Describe the challenges and current efforts to restore the stadium.

Entertainment

- Discuss the use of Hinchliffe Stadium as an entertainment venue. Describe the performers, concerts, and shows that took place there. Identify the musicians, comedians, and other entertainers who came to Paterson to perform.
- Examine the non-sporting community events and activities (such as use by the Paterson School District) and how
 they fostered community spirit and pride.

Note: The concepts, ideas, and topics listed here are a representative, partial list. They represent *some* examples representing *types* of stories that *could* illustrate the concepts. They are not all-inclusive (in fact they could never be) nor are they intended to exclude any topic. A park interpretive theme is successful only if other topics and stories could be included within it.

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